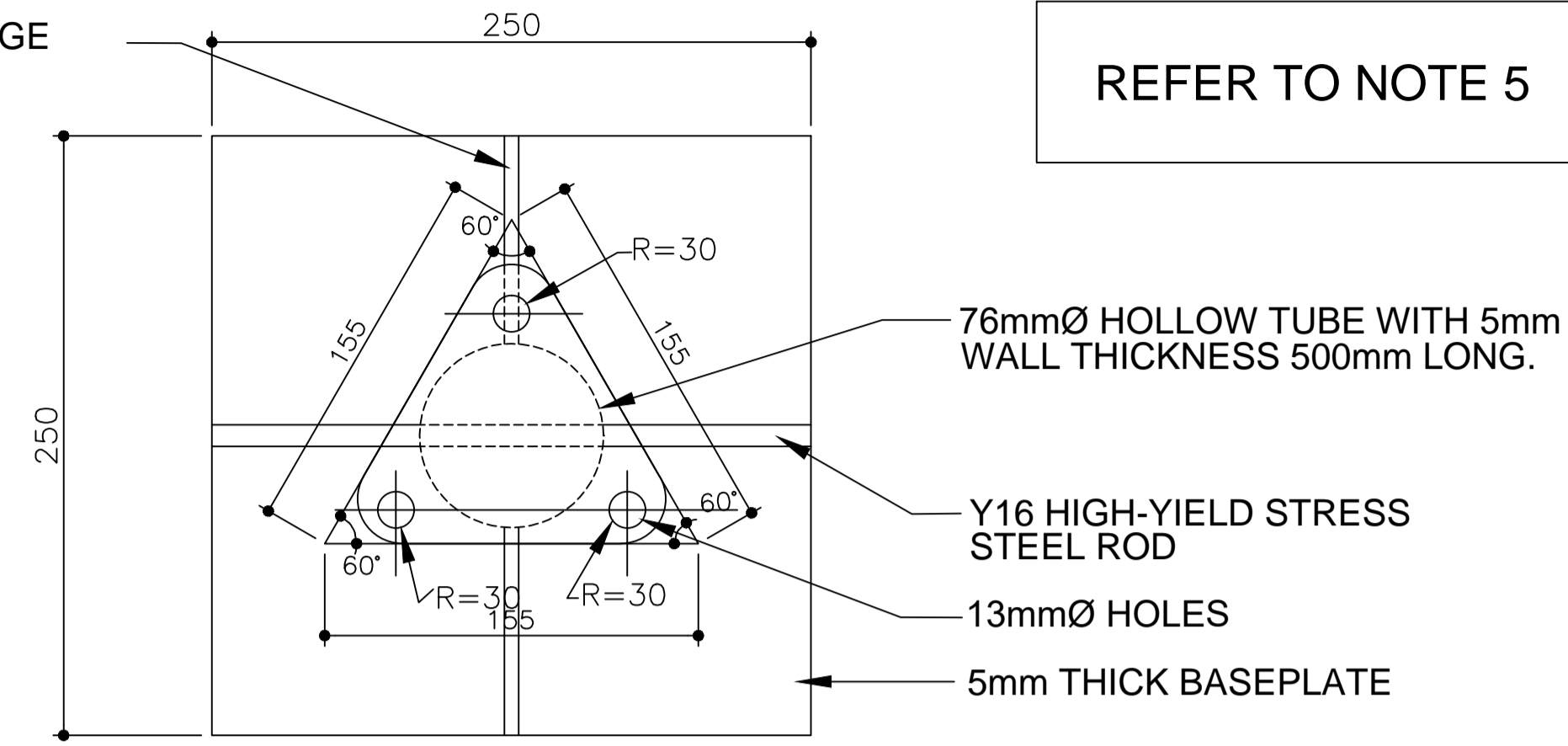
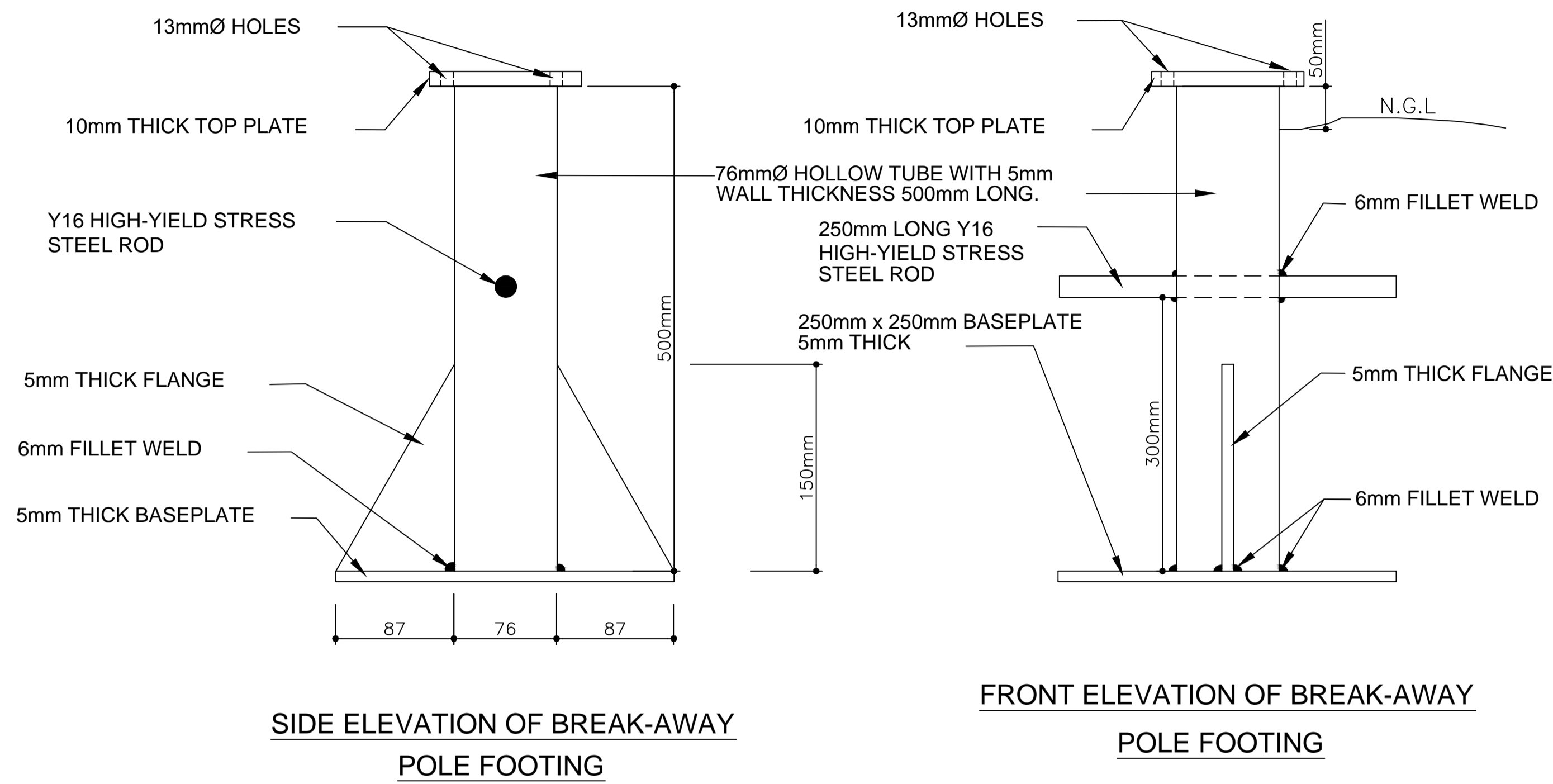
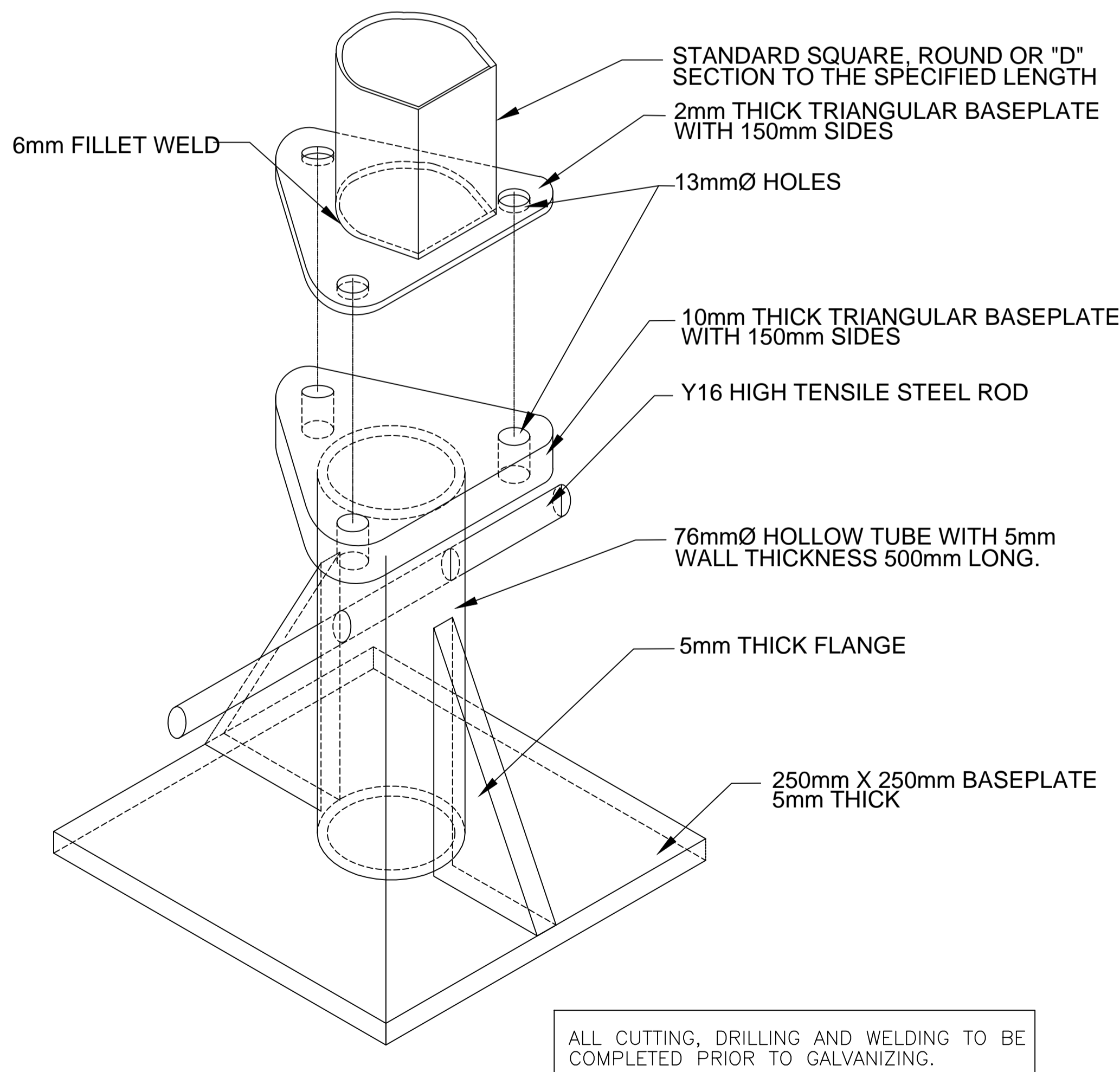


# BREAK-AWAY POLE FOOTINGS



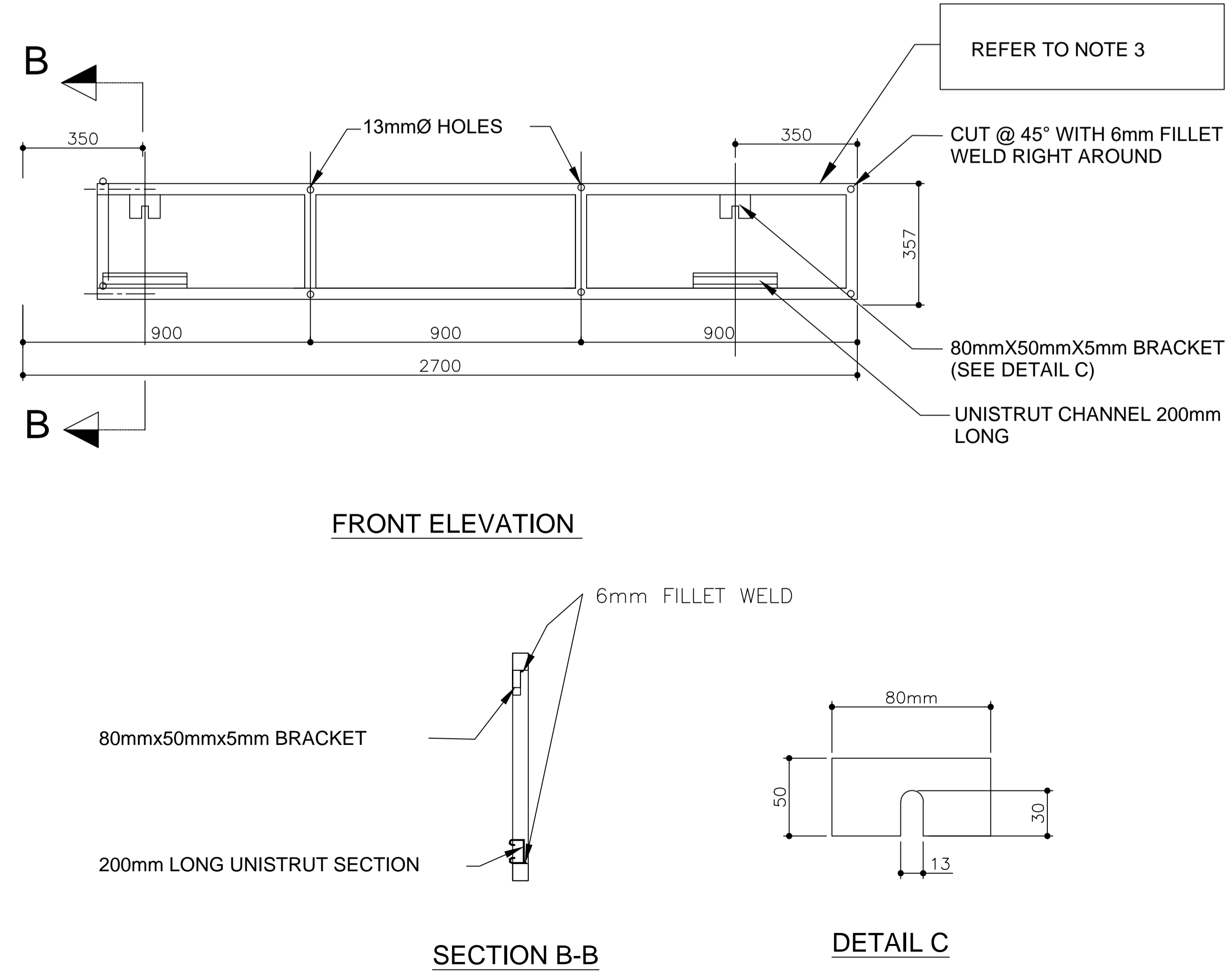
PLAN OF BREAK-AWAY POLE FOOTING



ISOMETRIC VIEW OF BREAK-AWAY POLE FOOTING

- ### NOTES AND SPECIFICATIONS
- POLES, SIGNS, FRAME PANEL AND BREAKAWAY DETAIL**
- POLES
    - FOR STANDARD REGULATORY AND WARNING SIGNS, POLES USED SHALL BE OF A "D" SECTION OBTAINED BY ROLLING FLAT MILD STEEL PLATE OF 2MM WALL THICKNESS TO THE DESIRED FORM, AND SEAM WELDING IT ALONG THE ENTIRE LENGTH (THE D-SECTION EXTRUDE FROM STANDARD PIPE SECTION IS NOT ACCEPTABLE).
    - THE D SECTION MUST HAVE A FLAT BASE OF APPROXIMATELY 63MM MEASURED EXTERNALLY AND THE CIRCULAR PART AN EXTERNAL DIAMETER OF 76MM. EACH POLE IS TO BE BLANKED OFF AT THE TOP BY MEANS OF AT LEAST 2MM MILD STEEL PLATE WELDED TO THE TOP, WITH THE SAME FORM AS THE D SECTION. THE WELDING JOINT MUST BE WATERTIGHT AND SMOOTHED OFF AFTER WELDING.
    - THE BASE PLATE FOR D SECTION POLES AND 76MM Ø ROUND POLES TO BE 150MM SQUARE AND 2MM THICK, AND WELDED TO THE BASE OF EACH POLE BY MEANS OF 4 EVENLY SPACED WELDS, EACH NOT LESS THAN 20MM LONG. THE BASE PLATE FOR 100MM Ø ROUND POLES TO BE 200MM SQUARE.
    - THE POLES SHALL BE HOT DIPPED GALVANIZED.
    - ALL POLES > 3.6M IN LENGTH TO BE 100MM Ø ROUND POLES WITH 3MM WALL THICKNESS.
    - POLES USED FOR SIGNS > 1.5M TO BE DESIGNED IN LINE WITH SARTSM VOLUME 2 CHAPTER 15.
    - ALL POLES USED FOR STREET NAME SIGNS SHALL BE 3.6M ROUND CONCRETE ISLANDS.
    - POLES MUST BE INSTALLED ONTO BREAKAWAY FOOTINGS ON PAVED CONCRETE ISLANDS.
    - HOLES TO BE DRILLED AS DIRECTED BY THE ENGINEER.
    - SIGN DATE NEEDS TO BE APPLICABLE TO THE FRONT OF THE POLE 50MM HIGH VINYL.
    - NO JOINTING OF POLES ALLOWED.
  - SIGNS
    - ALL SIGNS TO BE MANUFACTURED WITH CLASS 1 ENGINEERING GRADE PRISMATIC MATERIAL HAVING A 7 YEAR WARRANTY PERIOD, WHILE ALL HAZARD MARKERS TO BE MANUFACTURED WITH CLASS 3 HIGH INTENSITY PRISMATIC MATERIAL HAVING A 10 YEAR WARRANTY PERIOD.
    - ALL PANEL SIGNS TO BE CLASS 3 REFLECTIVE GROUND MOUNTED AND CLASS 4 REFLECTIVE FOR OVERHEAD SIGNS.
    - ALL TEMPORARY SIGNS TO BE CLASS 3 REFLECTIVE MATERIAL.
    - NO UNISTRUTS ON SIGNS ARE ALLOWED FOR 600MM R SERIES AND UP TO 900MM W SERIES SIGNS, WHILE SIGNS > 1200MM REQUIRE UNISTRUTS.
    - ALL SIGN CORNERS TO BE ROUND R=25MM (EXCLUDING R1).
    - ALL SIGNS TO BE FIXED FLAT AGAINST THE POLES.
    - ALL VINYL TO BE CAST VINYL WITH 1 YEAR WARRANTY FOR ROAD SIGNS.
    - ALL INK USED FOR SILK SCREENING MUST BE FROM THE SAME SUPPLIER AS THE REFLECTIVE MATERIAL.
    - SYMBOLS FOR W4167 TO BE SILK SCREENED.
    - STREET NAME FONT TO BE DIN 'A' AS PER SARTSM VOL. 4
    - TYPE 2 & 3 STREET NAMES > 1500MM REQUIRE 2 POLES AND BRACKETS.
    - REFLECTIVE SHEET ONLY TO BE APPLIED ONTO THE VERTICAL SECTION OF THE STREET NAME PLATE.
    - NO JOINTING OF REFLECTIVE MATERIAL ALLOWED ON SIGN FACE.
    - ALL BOLTS TO HAVE WASHERS.
  - FRAME DETAIL
    - FRAMES ONLY TO BE USED FOR W409 TO W411
    - THE FRAME SHALL BE OF A 38mm x 38mm HOLLOW SQUARE SECTION OF 2mm WALL THICKNESS.
    - FRAMES SHALL BE HOT DIPPED GALVANIZED.
    - ALL WELDING SHALL BE 6mm FILLET RIGHT AROUND.
    - FRAME SHALL BE COMPLETE WITH A 50mm x 80mm BRACKET AS PER DETAIL C AT THE TOP OF THE FRAME AND 200mm LONG UNISTRUT SECTION AT THE BOTTOM OF THE FRAME.
    - UNISTRUT TO BE SUPPLIED COMPLETE WITH CLAMPS, BOLTS, NUTS AND WASHERS.
    - ALL CUTTING, WELDING AND DRILLING TO BE DONE BEFORE THE GALVANIZING. ALL CORNERS TO BE CUT AND JOINED AT 45°.
  - PANEL DETAIL
    - ALL HIGH VISIBILITY, GUIDANCE INFORMATION SIGNS TO BE PANEL SIGNS
    - ALL PANELS SHALL BE MANUFACTURED FROM 1.0mm THICK CHROMADEK MILD STEEL PLATE FOR PANELS < 200mm
    - A SIGN FACE WHICH EXCEEDS 6.3m IN LENGTH MAY BE MANUFACTURED IN 2 SECTIONS, THE JOINT SHALL NOT EXCEED 2mm. PANELS TO BE JOINED WITH M10 NUT WITH SPRINGNUT. REFER TO SARTSM VOLUME 2 CHAPTER 15 FOR DETAIL.
    - 1.4mm CHROMADEK CHANNEL TO BE USED AT THE VERTICAL SIDES OF THE SIGN.
    - BLIND RIVETS SHALL BE 4.8mm Ø CADMIUM PLATED MILD STEEL.
    - STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS: MILD STEEL: BS 4360 GRADE 43A; OR SABS 1431, GRADE 350W. HIGH-YIELD STRESS STEEL: BS 4360 GRADE 50B; OR SABS 1431, GRADE 350W.
    - ALL WELDING OF STEELWORK SHALL BE CARRIED OUT IN ACCORDANCE WITH BS 5135.
    - WELDING, CUTTING AND DRILLING SHALL BE DONE BEFORE GALVANIZING.
  - BREAK-AWAY POLE FOOTING
    - STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS: MILD STEEL: BS 4360 GRADE 43A; OR SABS 1431, GRADE 350W. HIGH-YIELD STRESS STEEL: BS 4360 GRADE 50B; OR SABS 1431, GRADE 350W.
    - ALL WELDING OF STEELWORK SHALL BE CARRIED OUT IN ACCORDANCE WITH BS 5135.
    - WELDING, CUTTING AND DRILLING SHALL BE DONE BEFORE GALVANIZING.
  - ALSO REFER TO SECTION 612 AND 809 OF THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, 3rd EDITION, 2005.

# TYPICAL LOCALITY SIGN FRAME DETAIL



FRONT ELEVATION

SECTION B-B

DETAIL C

AMENDMENTS				
Nr.	DATE	APPROVED	DESCRIPTION	PAR.

DESIGNED BY J. CRONJE Pr. Tech Eng.	DRAWN BY S. AUDIE
DESIGN CHECKED BY S. NAIDOO Pr. Tech Eng.	INFRASTRUCTURE TECHNICAL INFORMATION MANAGEMENT D.J. CHALMERS

**CITY OF TSHWANE**  
ROADS AND TRANSPORT DEPARTMENT

GROUP HEAD: Mr Letlotkane P. (Pheko)  
P.O. BOX 1409, PRETORIA 0001

DIVISIONAL HEAD: Mr Marven K Thagale  
P.O. BOX 1409, PRETORIA 0001

TRANSPORT INFRASTRUCTURE DESIGN AND CONSTRUCTION DIVISIONAL HEAD: Mr K Thagale (Marven)

TRANSPORTATION PLANNING DIVISIONAL HEAD: Mr L. Swaneppel (Lourens)

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

DRAWING APPROVED BY GROUP HEAD: Mr Letlotkane P. (Pheko)  
SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

LOCATION OF PROJECT:  
**TYPICAL STANDARD DETAILS**

DESCRIPTION OF PROJECT:  
**SIGN BOARDS**  
CHEVRON SIGNS AND BREAKAWAY FOOTING

CONTRACT No.:	PROJECT No.:
DATE: 17 NOVEMBER 2022	SCALE: NOT TO SCALE
DRAWING NO. <b>STD018</b>	SHEET NO. 4 OF 6
ORIGINAL PAPER SIZE: A1	REVISION