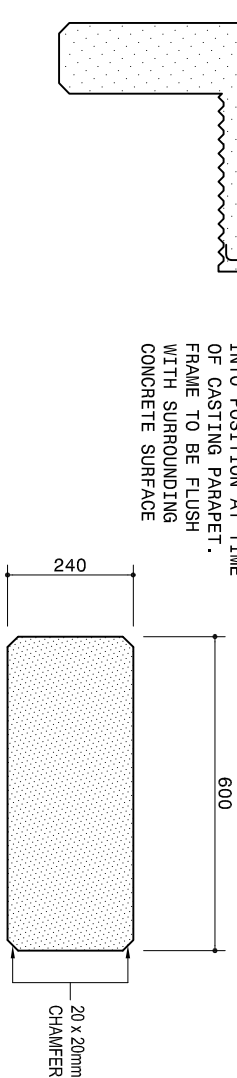
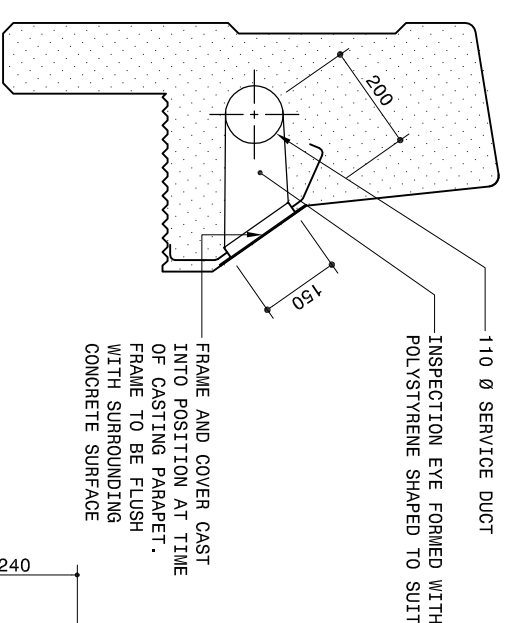
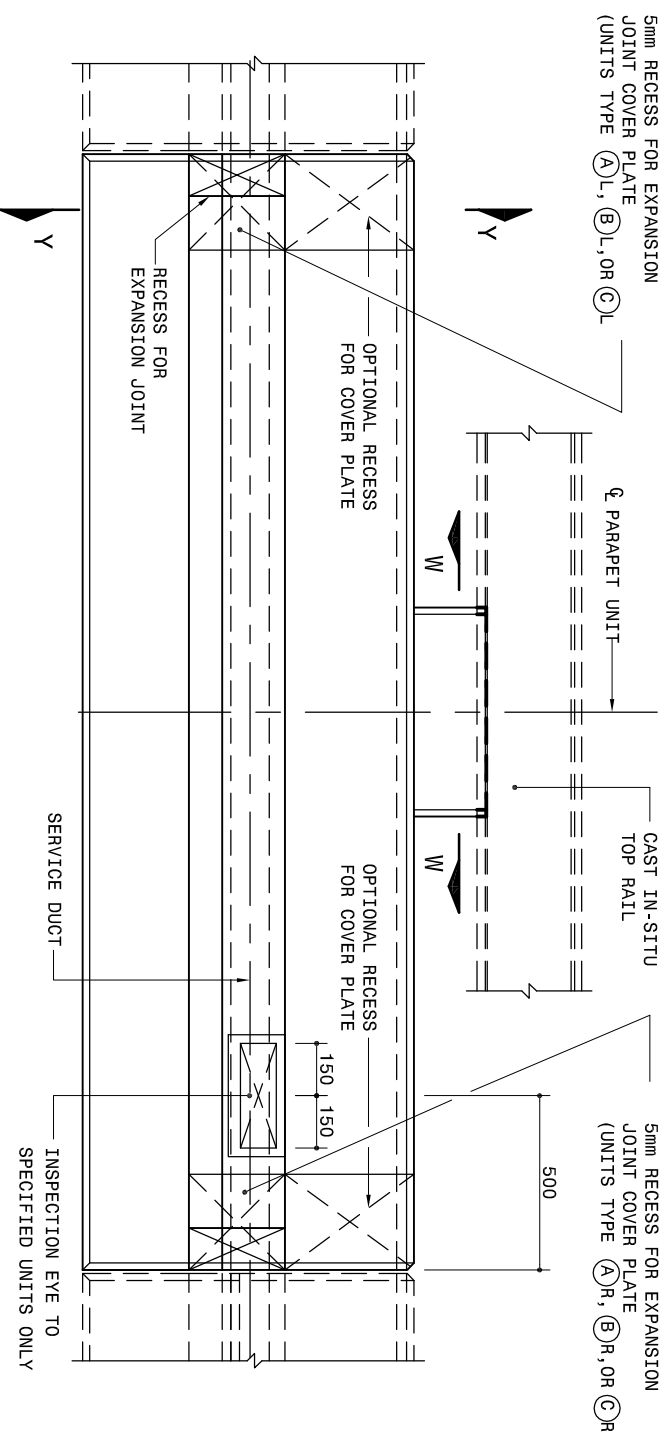


**SECTION Y-Y**

SCALE 1:15



**INSIDE ELEVATION - UNITS TYPE 3 - (A) IE, (B) IE OR (C) IE**

SCALE 1:15

**TYPICAL DETAIL OF INSPECTION EYE**

SCALE 1:10

**SECTION W-W**

SCALE 1:10

**NOTES**

**1.0 GENERAL**

- 1.1. THE PARAPET UNITS DETAILED ARE FOR BRIDGES WITHOUT RAISED SIDE WALKS AND ALLOW FOR THE DECK CROSSFALLS UP TO 10% AND 200mm THICK CANTILEVER EDGES.
- 1.2. FOR THE LAYOUT OF THE PARAPET UNITS AND REQUIRED UNIT QUANTITIES AND LENGTHS REFER TO THE DETAIL DRAWINGS OF THE BRIDGE.
- 1.3. IT IS RECOMMENDED THAT THE REQUIRED LENGTH OF PARAPET BE CONFIRMED AFTER THE BRIDGE HAS BEEN CAST AND STRESSED.
- 1.4. PRECAST PARAPET UNITS WITH INSPECTION EYES SHALL BE PROVIDED AT DISTANCES NOT EXCEEDING 50m. (UNITS MARKED WITH (A) IE, (B) IE ect.)
- 1.5. THE RECESSES FOR EXPANSION JOINT CONSTRUCTION AND THE E.J. COVER PLATES ARE SUBJECT TO THE DETAILS OF THE EXPANSION JOINT SYSTEM FINALLY APPROVED. THE CONTRACTOR SHALL CONFIRM THE DIMENSIONS OF THE RECESSES WITH THE ENGINEER PRIOR TO THE MANUFACTURING OF THE PARAPET UNITS. (UNITS MARKED WITH (A)R; (B)R; etc.)
- 2.0 MATERIAL AND FINISHES
- 2.1. CONCRETE CLASS (MPa/mm) : W40/19
- 2.2. SERVICE DUCTS : 110 Ø UPVC NORMAL DUTY (SDR 51) PIPES TO SANS 791:2004
- 2.3. GROUT AND BREATHER PIPES: - LOW DENSITY POLYETHYLENE PIPES TO SANS 533-1:1982
- 2.4. SURFACE FINISHES : (EXPOSED FACES)
  - CLASS F3 - STEEL SHUTTER FINISH
  - CLASS U3 - STEEL TROWEL FINISH
- 2.5. ALL EXPANDED VERTICAL SHARP CORNERS SHALL BE CHAMFERED 20mm x 20mm AND ROUNDED 20mm HORIZONTALLY EXCEPT WHERE OTHERWISE INDICATED ON DETAIL DRAWING.
- 2.6. THE DRAW WIRE PROVIDED IN THE SERVICE DUCTS SHALL BE IN ONE CONTINUOUS LENGTH, EXTENDING NOT LESS THAN 3m BEYOND THE END FACE OF THE ABUTMENT END BLOCKS. THE DRAW WIRE SHALL BE NON CORRODABLE NYLON ROPE OR PVC COATED STEEL WIRE OF NOT LESS THAN 5000N TENSILE STRENGTH.

**3.0. MANUFACTURE :**

- 3.1. THE PRECAST PARAPET UNITS SHALL CONFORM TO ALL DETAILS, INCLUDING DIMENSIONAL TOLERANCES SHOWN ON DETAIL DRAWINGS.
- 3.2. THE FOLLOWING IDENTIFICATION MARKING SHALL APPEAR ON END OF EACH UNIT:
  - a) THE MOULD NUMBER, TYPE OF UNIT AND BRIDGE NUMBER (WHERE APPLICABLE)
  - b) THE DATE OF CASTING
- 4.0. TOLERANCES :
  - 4.1. DIMENSIONS:
    - TRANSVERSAL : +5mm - 0mm
    - LONGITUDINAL : +0mm - 5mm
  - 4.2. SURFACE IRREGULARITIES AND WARP MEASURED BY MEANS OF A STRAIGHT EDGE:
    - TRANSVERSE : -2mm
    - LONGITUDINAL : -3mm OVER LENGTH OF UNIT
  - 4.3. SQUARENESS OF ENDS:
    - NO DIMENSIONS SHALL DEVIATE BY MORE THAN 3mm FROM THE THEORETICAL SQUARE PLANE CORRESPONDING TO THE FURTHEST PROJECTING CONCRETE.
  - 4.4. TOLERANCES APPLICABLE TO ERECTION OF UNITS:
    - 4.4.1. DIMENSION FROM SETTING OUT LINE TO FRONT FACES : 10mm OUTWARDS, 0mm INWARDS
    - 4.4.2. STEPS IN CONCRETE FRONT FACES AT ABUTTING UNITS : 3mm
    - 4.4.3. DEVIATION FROM LINE AND LEVEL MEASURED OVER ANY 5 UNITS : 5mm
- 5.0. REFERENCE DRAWINGS
  - 5.1. FOR THE REINFORCEMENT DETAILS OF PARAPET UNITS REFER TO DWG. NO. TD-S-P-212
  - 5.2. FOR DETAILS OF INSPECTION EYE AND COVER PLATES REFER TO DWG. NO. TD-S-P-604

**SANRAL TYPICAL DRAWINGS**

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No.	DATE	REVISION
V1	2005/09/01	ORIGINAL VERSION

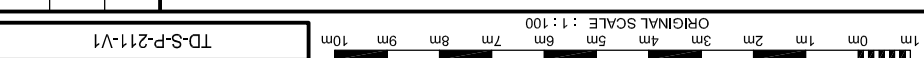
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**TYPICAL DRAWINGS - STRUCTURES**

F-SHAPE-PARAPET  
 1.0m HIGH PRECAST  
 UNITS TYPE 3 - CONCRETE DETAILS 2

SANRAL DOC. No. (PPF)  
 164886-V1  
 SANRAL DOC. No. (DWG)  
 164887-V1  
 SANRAL DRAWING No.  
 TD-S-P-211-V1



TD-S-P-211-V1