NOTES

GENERAL
1. INVERT LEVELS AND REFERENCE POINT DATA ARE SPECIFIED IN THE DESIGN DRAWINGS.
2. INLET/OUTLET PIPES MAY JOIN STRUCTURE AT SKIN ANGLES.
3. THIS STRUCTURE IS NOT APPROPRIATE FOR DIRECT CONNECTION TO WATER CORPORATION DRAIN UNLESS PROVIDED WITH SILT TRAP OR INCOMING SURFACE DRAINAGE HAS BEEN 'TRAPED' UPSTREAM.
4. FOR INFORMATION RELATING TO GROUND PREPARATION OF STRUCTURES REFER TO MAJOR ROADS TENDER DOCUMENT - PREPARATION No. 415 (DRAINAGE STRUCTURES).

CONCRETE & REINFORCEMENT
5. ALL IN-SITU CONCRETE SHALL BE CLASS N2 IN ACCORDANCE WITH AS3600.
6. ALL IN-SITU CONCRETE CORNERS SHALL HAVE A 20 CHAMFER UNLESS OTHERWISE NOTED.
7. ALL MORTAR SHALL CONSIST OF ONE PART PORTLAND CEMENT [OR SIMILAR] AND THREE PARTS SAND.
8. Silt Reinforcement shall conform with hard drawn fabric to AS4471.
9. MINIMUM CLEAR COVER TO REINFORCEMENT SHALL BE 50.

LINED
10. THE LINER SHALL BE CONCRETE SPUN TO AS4058.
11. THE MAXIMUM INLET/OUTLET PIPE OUTSIDE DIAMETER MUST BE LESS THAN 60% OF THE LINER INTERNAL DIAMETER. (SEE TABLE 2).
12. MINIMUM SPACE OF 200 BETWEEN HOLES IN LINER.
13. HOLES TO BE PUNCHED/DRILLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION.
14. THE LINER SHALL BE EQUALLY DIVIDED ON ALL SURFACES TO AVOID THE REINFORCEMENT BEING CIRCULAR.

STEP IRONS
15. FOR STRUCTURES DEEPER THAN 1500, STEP IRONS OR PREBENTED GALVANISED STEEL LADDER SHALL BE FOLDED. THE LADDER SHALL BE FIXED TO STAINLESS STEEL MOUNTED ANCHORS IN ACCORDANCE WITH AS4077.
16. ORIENTATE STEP IRONS OR LADDER TO ENSURE EASY ACCESS AND TO FACE ONCOMING TRAFFIC.

COVER & APRON
17. COVER & APRON SHALL SATISFY THE FOLLOWING CRITERIA:
   VERTICAL OPENING: 120 MIN 150 MAX
   HORIZONTAL OPENING: 80 MIN APRON GRADE
   3% WITH VERTICAL DEFLECTORS
18. COVER SHALL BE CLASS C TO AS3990.
19. APRON SHALL BE A COMBINATION OF PROPRIETARY MATCHING FRAME UNIVERSAL SIDE ENTRY FRAME OR APPROVED EQUIVALENTS AND AN APPROVED APRON DEFLECTOR SLAB.
20. WHERE A SHARED PATH ABS BACK OF KERB, NO PART OF THE STRUCTURE'S FRAME OR COVER SHALL BE LOCATED WITHIN THE PATHS TRAFFICABLE LAYERS.

OPEN GRADED ASPHALT
21. REFER TO DRAWINGS 200231-012 IF OPEN GRADED ASPHALT IS USED FOR THE FINISHED SURFACE.

SUPERSeded DRAWINGS
22. THIS DRAWING SUPersedes DRAWINGS 1993-5027 & 1993-5030.

DRAINAGE STANDARD DRAWINGS

TEN & TEN STRUCTURES CONSTRUCTED WITH LINERS

DRAWING NUMBER: 200231-091-2
REVIEWED: J. Reneau 10/9/84
APPROVED: 10/200 11/10/84

Liner Thickness: 67-08-52

DRAINAGE ENGINEERING BRANCH

200231-091-2