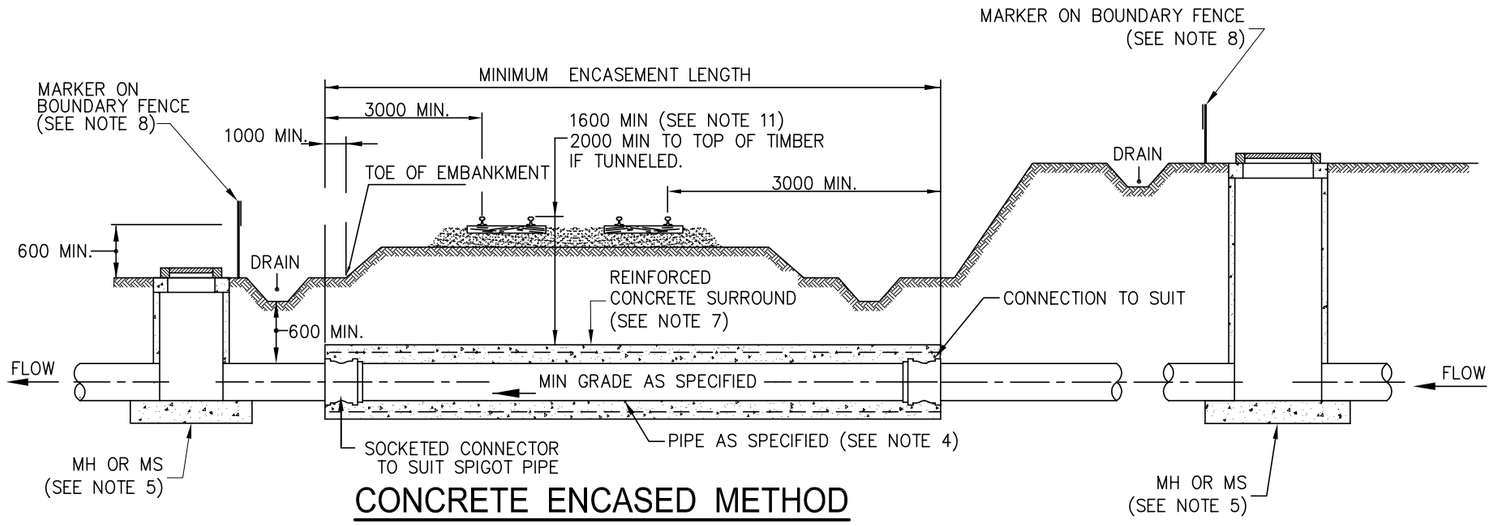
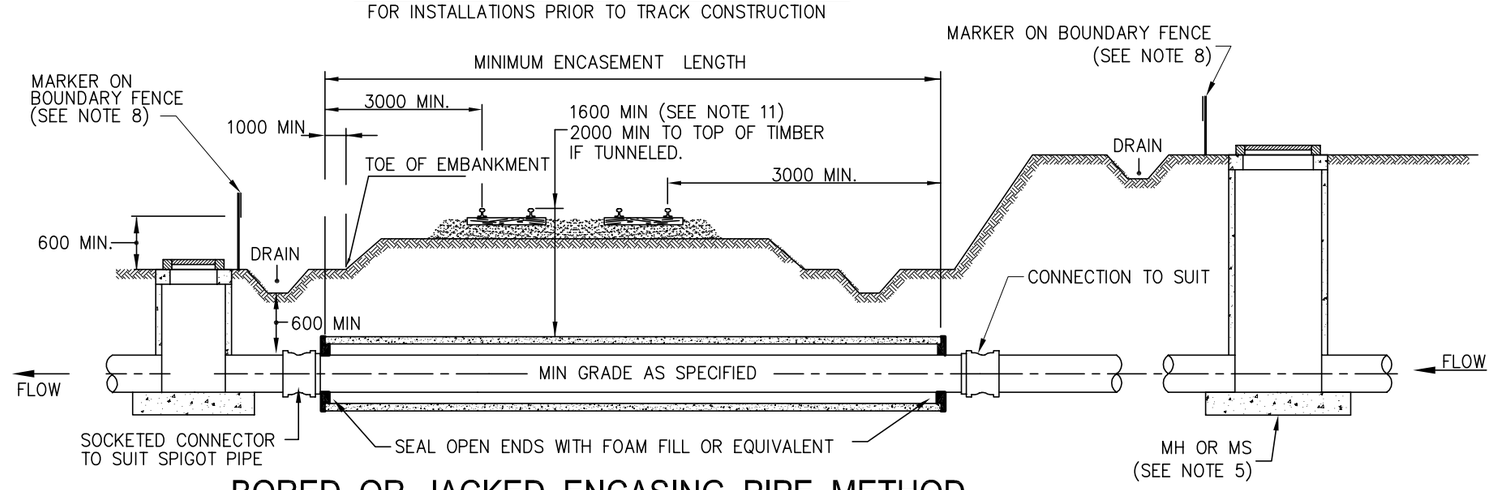


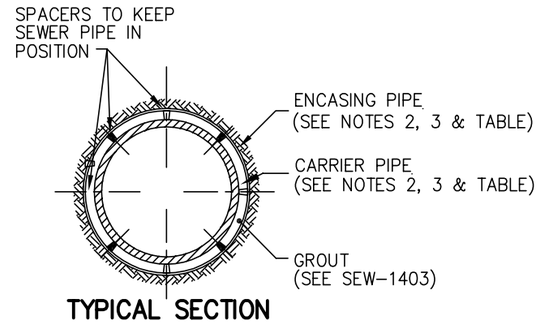
CONCRETE ENCASED METHOD

FOR INSTALLATIONS PRIOR TO TRACK CONSTRUCTION



BORED OR JACKED ENCASING PIPE METHOD

FOR INSTALLATIONS AFTER TRACK CONSTRUCTION
(SEE SEW–1403)



TYPICAL SECTION

BORED & JACKED ENCASING/SEWER PIPE SIZES										
SEWER PIPE (DN)	100	150	225	300	375	400	500	550	650	800
BORED ENCASING PIPE MIN (DN)	300	375	425	500	575	600	700	750	850	1000
JACKED ENCASING PIPE (DN)	N/A					1200 MIN.				

NOTES:

1. ALL DIMENSIONS IN MILLIMETRES.
2. HORIZONTAL BORING
   ENCASING PIPE
   – REINFORCED CONCRETE CLASS 4 BUTT JOINTED WITH STEEL LOCATING BAND OR MILD STEEL OR GRP PIPE
   SEWER PIPE
   – STEEL CEMENT LINED WITH FUSION BONDED PE COATING
   – DI WITH POLYMERIC LINING CLASS K9
   – PVC CLASS SN 8
   – PE CLASS PN 12.5
   – GRP CLASS SN 5000 MIN.
3. JACKING
   ENCASING PIPE
   – REINFORCED CONCRETE CLASS 4 BUTT JOINTED WITH STEEL LOCATING BAND OR GRP JACKING PIPE
   SEWER PIPE
   – STEEL CEMENT LINED WITH FUSION BONDED PE COATING
   – DI WITH POLYMERIC LINING CLASS K9
   – PVC CLASS SN 8
   – PE CLASS PN 12.5
   – GRP CLASS SN 5000 MIN.
4. CONCRETE ENCASED
   – THE PIPE MATERIAL TO BE:
     • STEEL WITH FBPE INTERNAL COATING
     • PE CLASS PN 12.5
     • PVC (SWJ) CLASS SN 8
     • GRP CLASS SN 5000 MIN.
   – NO SERVICE CONNECTIONS TO BE MADE TO ENCASED SECTION OF PIPELINE.
   – ENCASING AS SHOWN ON SEW–1205
5. MH OR MS TO BE LOCATED AT LEAST 6000 FROM THE TOE OF EMBANKMENT OR TOP OF CUT.
6. FOR DI MAINS, ALL FITTINGS TO BE FUSION BONDED COATED.
7. SEWER PIPE <DN 150 CAN BE DIRECTIONALLY BORED USING PE PIPE.
8. PLACE MARKERS ABOVE PIPELINE AT THE POINTS WHERE IT ENTERS AND LEAVES THE PROPERTY.
9. PROVIDE CATHODIC PROTECTION AS DIRECTED BY RAILWAY AUTHORITY.
   PROVIDE ELECTRICAL CONTINUITY AND INSULATION AS SPECIFIED IN DESIGN DRAWINGS.
10. DESIGN TO BE IN ACCORDANCE WITH AS 4799 – RAILWAY REQUIREMENTS.
11. MINIMUM COVER FOR ALL PIPELINES BELOW RAILWAY LINES:
    – NOT LESS THAN 1600 BELOW RAIL LEVEL
    – NOT LESS THAN 600 BELOW FORMATION LEVEL
      ie THE GROUND LEVEL IMMEDIATELY BELOW THE RAILWAY BALLAST
    – NOT LESS THAN 2000 BELOW RAIL LEVEL TO TOP OF TIMBER FOR TUNNELS.
12. FOR ELECTRIFIED RAILWAY SYSTEMS PREFERENCE SHOULD BE GIVEN TO USE OF NON–METALLIC PIPES.

ENCASING PIPE & SEWER ARRANGEMENTS

THIS DRAWING REPLACES 96–0180–06
BASED ON WSAA SEWERAGE SUPPLY CODE OF AUSTRALIA DRAWINGS (WSA–02)

Chg		Amendment –	Des			By G Rosser for Gen. Man. E&P 1/ 8/02 ENGINEERING & PROJECTS	SOUTH AUSTRALIAN WATER CORPORATION SA Water
Drn			Drn				SEWER CONSTRUCTION MANUAL PAGE H3 RAILWAY CROSSINGS
Ckd			Exm	GRR			Not to Scale
Unit Ldr.			Unit Ldr.				2000 02-0288-01

02-0288-01 H3 ISSUED 1st AUGUST 2002