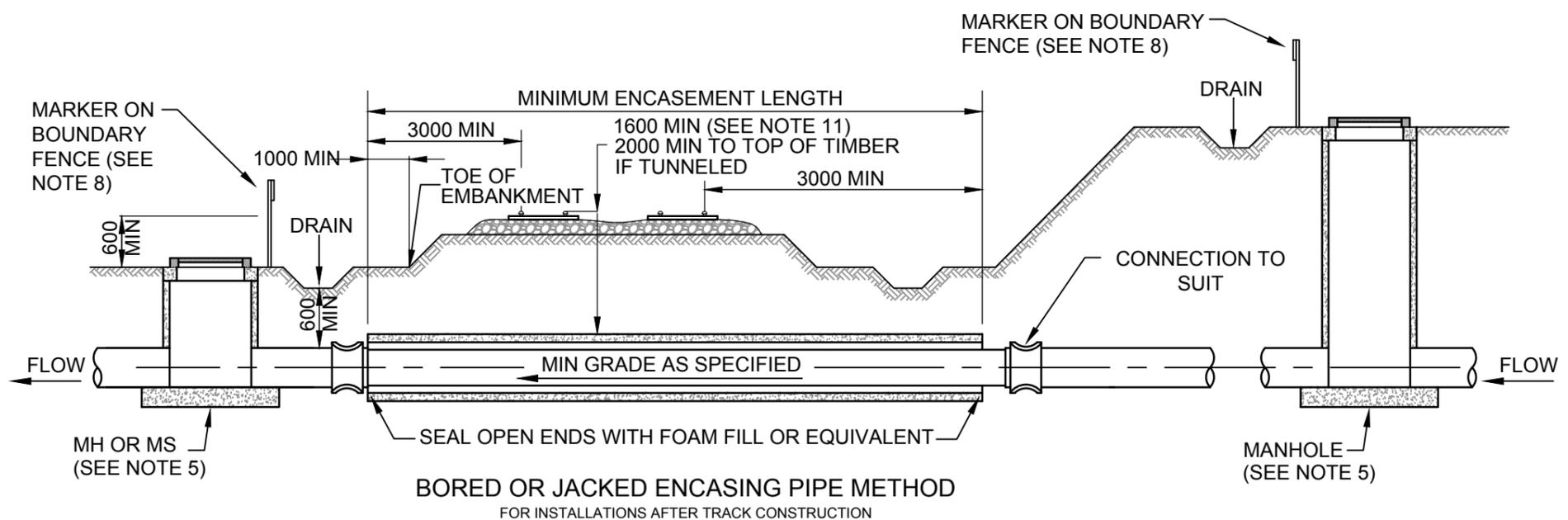


**CONCRETE ENCASED METHOD**  
FOR INSTALLATIONS PRIOR TO TRACK CONSTRUCTION

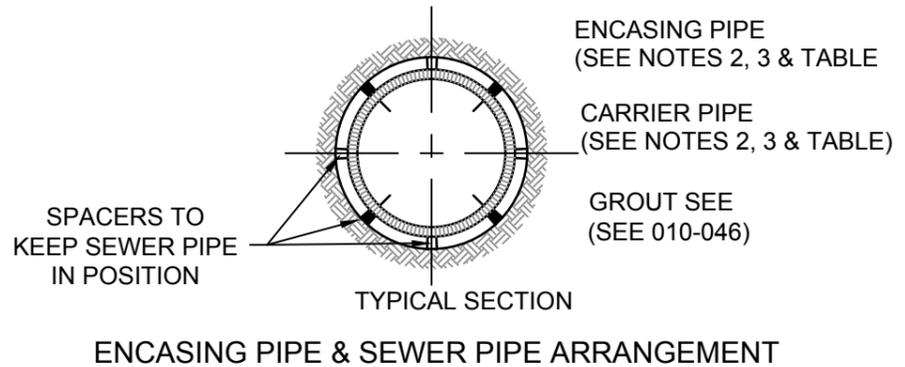


**BORED OR JACKED ENCASED PIPE METHOD**  
FOR INSTALLATIONS AFTER TRACK CONSTRUCTION

**NOTES**

1. ALL DIMENSIONS IN MILLIMETERS.
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 2100 SERIES PN 35  
- PVC CLASS SN 8  
- PE CLASS PN 12.5  
- GRP CLASS SN 5000 MIN
3. JACKING  
ENCASING PIPE  
- REINFORCING CONCRETE CLASS 4 BUTT JOINT WITH STEEL LOCATING BANDS OR GRP JACKING PIPE  
SEWER PIPE  
- STEEL CEMENT LINED WITH FUSION BONDED PE COATING  
- DI WITH POLYMERIC LINING CLASS PN 35  
- PVC (SWJ) 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 010-046.
5. MANHOLE 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 DIRECTLY 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 THE 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 RAIL LINES:  
- NOT LESS THAN 1600 BELOW RAIL LEVEL  
- NOT LESS THAN 600 BELOW FORMATION LEVEL  
  ie THE GROUND LEVEL IMMEDIATELY BELOW THE RAIL BALLAST  
- NOT LESS THAN 2000 BELOW RAIL LEVEL TO TOP OF TIMBER FOR TUNNEL
12. FOR ELECTRIFIED RAILWAY SYSTEMS PREFERENCE SHOULD BE GIVEN TO THE USE OF NON-METALLIC PIPES

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



<b>Armidale</b> Dept of Public Regional Council <b>Infrastructure</b>	APPROVED	D. MAUNDER	31/08/2016	SHEET 1 OF 1
	MANAGER ENGINEERING AND STANDARDS SUPPORT		DATE	
	SURV	AS SHEET SIZE	DRAWING No	AMDT No
	DRWN GW	A3	010-042	
DES				
BURIED SEWER CROSSING RAILWAYS		CHKD MW	CADFILE 010-042.dwg	DATE 31/08/2016

ENCASING PIPE & SEWER PIPE ARRANGEMENT