



COMMITTED TO A
SUSTAINABLE
PENINSULA

SPECIFICATION FOR ROADS AND DRAINS

SECTION I SUBSOIL DRAINS

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SECTION I: SUBSOIL DRAINS

I.1 GENERAL

Subsoil drains shall be used in all areas other than areas of free flowing sand. The Contractor shall lay a line of subsoil drain pipes where indicated on plans, or where directed by the Superintendent. Subsoil drains shall be constructed as detailed on Standard Drawing MP227 and below.

NOTE: SUBSOIL DRAINS MUST NOT BE CONSTRUCTED UNTIL AFTER THE KERB OR EDGE STRIP IS CAST.

I.2 MATERIALS

(a) Subsoil Pipes

Subsoil pipes shall be 100 mm diameter Corrugated Perforated Polyethylene (P.E.) Class 400 laid on trench bottom true to alignment and graded uniformly to drainage pits or other outlets as directed.

(b) Filter Material

Filter material shall be 20mm basaltic screenings.

Where settlement of granular filter materials can not be tolerated e.g. under pavement areas, a "No-Fines Concrete" shall be used.

"No-Fines Concrete" shall consist of 20mm one-sized basaltic or granitic aggregate mixed with 4.0% by mass of cement and 3.5% by mass of water in an approved mixing plant and placed within a hour of mixing.

Filter material shall comply with the requirements of AS 2758.1-1998 Aggregates and rock for engineering purposes - Concrete aggregates.

I.3 TRENCHING

The trenches shall be 300mm wide with 300mm clearance from the back of kerb. The excavated depth will be as determined by a suitably qualified Geotechnical Engineer or as nominated on the Construction Plans, measured below top of kerb. A deeper trench may be required to avoid other services or conduits or where dictated by ground conditions as determined by the Superintendent.

I.4 BACKFILLING

The trench shall be filled in the following manner, care being taken not to disturb the pipes:

- (a) Fill trench to a height 150 mm below finished level with 20mm screenings or to underside of road pavement with 20mm “No-Fines Concrete”.
- (b) Place terram 700 or equivalent filtration fabric to completely cover screenings and an additional 150mm either side of the trench. No screening backfilled trench shall remain uncovered for more than 24 hours.
- (c) Complete the final filling of trench with 150 mm of approved topsoil or, on shoulders, (where no kerbing and channelling) complete filling with 150 mm of fine crushed rock.

NOTE: SCREENINGS CONTAMINATED BY SOIL OR OTHER FINES DURING INSTALLATION SHALL BE REMOVED AS DIRECTED BY THE SUPERINTENDENT.