

FIGURE 206-A: CONCRETE BULKHEAD (SECTION)

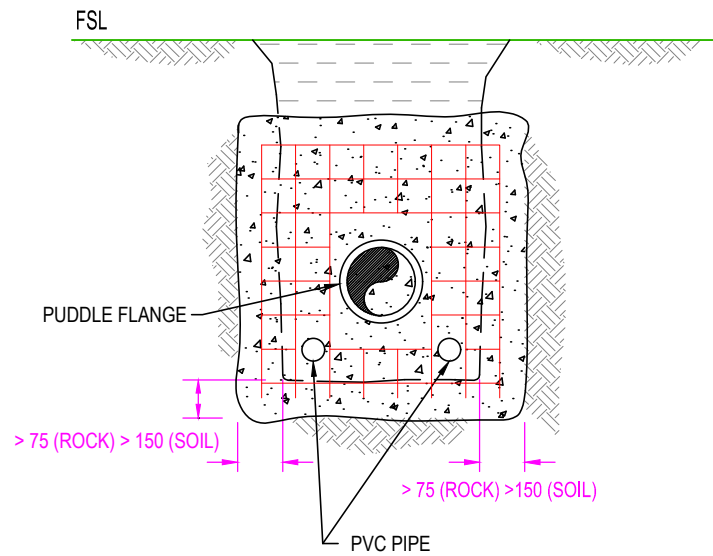


FIGURE 206-B: CONCRETE BULKHEAD (ELEVATION)

NOTES on Figures 206-A & B:

1. Bulkhead at a retaining wall to be under the wall.
2. Key concrete bulkheads into sides and bottom of trench against a bearing surface of undisturbed soil.
3. Concrete to be class N20.
4. Do not deform pipes during placement of concrete.
5. For bulkheads adjacent to kerbs, a polystyrene or neoprene membrane of at least 3mm thick shall be wrapped around the barrel of the pipe.
6. For bulkheads and trenchstops on slopes, an elastomeric membrane at least 3mm thick shall be used.
7. Concrete bulkhead reinforcement is to consist of min SL81 grade mesh and N10 grade bar (as per AS/NZS 4671).

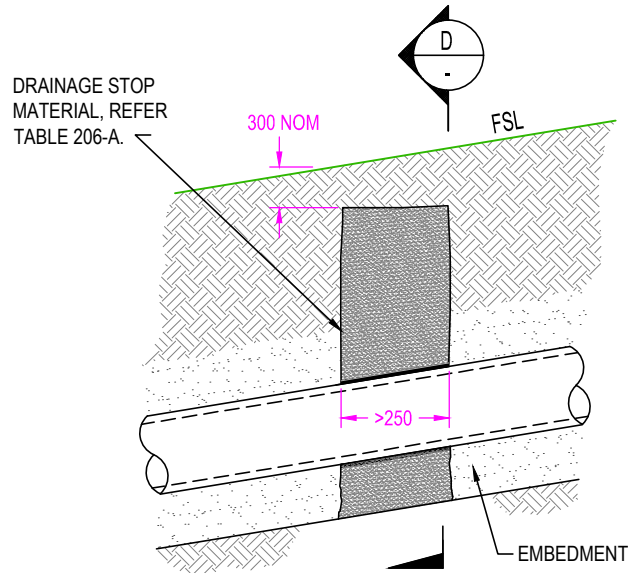


FIGURE 206-C: EARTHWORK TRENCH STOP (SECTION)

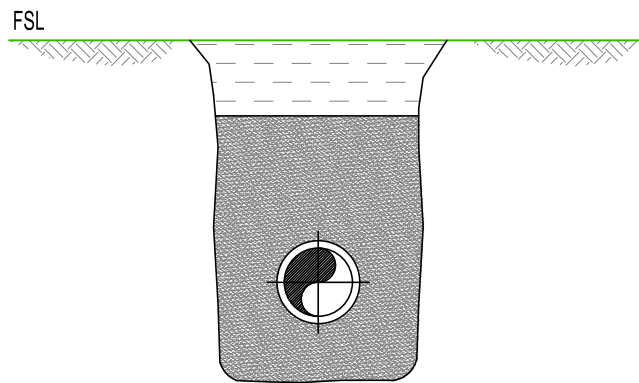


FIGURE 206-D: EARTHWORK TRENCHSTOP (ELEVATION)

TABLE 206-A: DRAINAGE STOP MATERIAL

MATERIAL	* PROPORTION
BENTONITE	1 (4%)
CEMENT	1 (4%)
CONCRETE SAND	23 (92%)

OR

COMPACTED CLAY	95% R _D
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* PROPORTION BY VOLUME OF DRY MATERIALS.

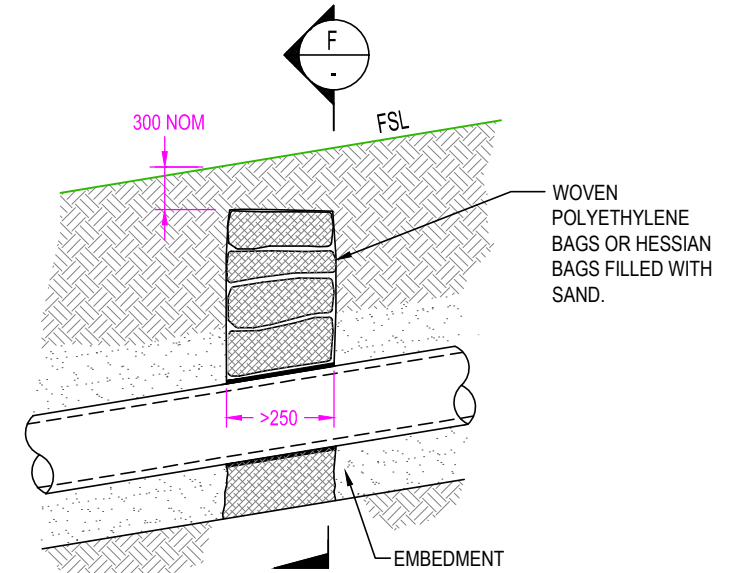


FIGURE 206-E: BAGGED TRENCH STOP (SECTION)

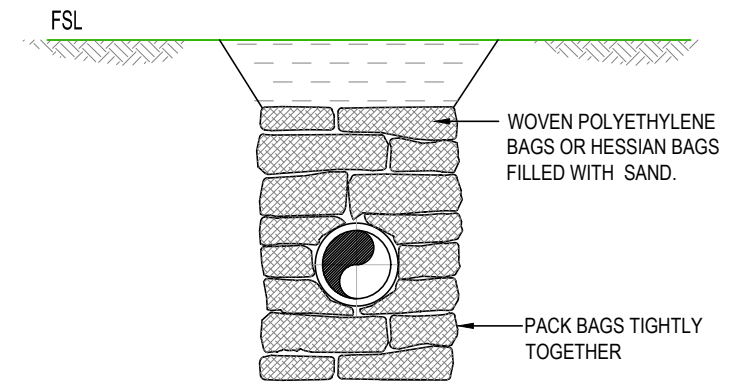


FIGURE 206-F: BAGGED TRENCHSTOP (ELEVATION)

GENERAL NOTES:

1. Construct concrete bulkheads and trench stops at locations specified in design drawings.
2. Trenchstops (either type) are preferred for slopes < 20%. Concrete bulkheads preferred for slopes > 20%.
3. Seal bags to prevent leakage of contained material.
4. For slopes > 5% refer to MRWA-S-205.

ALL DIMENSIONS IN mm UNLESS STATED OTHERWISE

DESIGNED:	R. JAGGER	DATE:	1 JULY 2015
DRAWN:	R. JAGGER	DATE:	1 JULY 2015
CHECKED:	NAME	DATE	APPROVED: NAME
	D. MOORE	01/09/15	<input checked="" type="checkbox"/> CWW R. CARRUTHERS 01/09/15
	C. PAXMAN	01/09/15	<input checked="" type="checkbox"/> SEW D. O'DONOVAN 01/09/15
	K. DAWSON	01/09/15	<input checked="" type="checkbox"/> YVW J. TOMASI 01/09/15
ISSUED	2015	VERSION	1

MELBOURNE RETAIL WATER AGENCIES



MRWA SEWERAGE STANDARDS

TRENCH BULKHEADS AND TRENCHSTOPS

NOT TO SCALE

MRWA-S-206

Planning	Design	Construction
		<input checked="" type="checkbox"/>