



TABLE TO SELECT APPROPRIATE BEDDING TYPE

TYPE OF SOIL	APPROXIMATE BEARING CAPACITY KN/m ²	BEDDING TYPE
HARD SOIL/ROCK	>200	A
NORMAL SOIL	100-200	B
LOOSE SOIL	<200	C
CLAY	>75	C
	<75	D
PEAT/MASHY AREAS	<75	D

DETAIL OF TRENCH FOR D.I PIPES

DIA(Ø) (mm)	WIDTH(W) (m)	DEPTH(H) (m)
80	0.60	0.95
100	0.60	0.95
150	0.60	1.00
200	0.60	1.20
250	0.60	1.25
300	0.60	1.30
350	0.75	1.35
400	0.90	1.40
450	0.90	1.45
500	0.90	1.50
600	1.10	1.60

DETAIL OF TRENCH FOR P.V.C PIPES & PE PIPES

DIA(Ø) (mm)	PVC		PE	
	WIDTH(W) (m)	DEPTH(H) (m)	WIDTH(W) (m)	DEPTH(H) (m)
63	0.30	0.90		
90	0.45	1.10	0.30	1.00
110	0.45	1.20	0.40	1.12
125	-	-	0.40	1.14
140	-	-	0.40	1.15
160	0.60	1.20	0.45	1.17
180	-	-	0.45	1.19
200	-	-	0.45	1.21
225	0.60	1.30	0.50	1.24
250	-	-	0.50	1.26
280	0.60	1.30	0.60	1.29

NOTE:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- FOR NORMAL SOIL BACKFILLING MATERIAL SHALL BE SOIL (TYPE 1 MATERIAL) HAVING THE MAXIMUM DRY DENSITY UNDER STANDARD CONDITIONS OF PROCTOR COMPACTION NOT LESS THAN 1600 KG/M³. WITH THE PROPERTIES OF PLASTIC LIMIT LESS THAN 15, LIQUID LIMIT LESS THAN 40 AND CBR > 20. EXCAVATED SOIL CAN BE USED AS BACK FILLING MATERIAL IF THEY CONFORM TO THE REQUIRED SPECIFICATION MATERIAL TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98% OF MAXIMUM DRY DENSITY .
- FOR PIPES IN SOFT OR PEATY GROUND THE GRANULAR BEDDING SHALL BE COMPLETELY SURROUNDED BY A GEOTEXTILE AS SHOWN IN THE DRAWING AND AS DIRECTED BY THE ENGINEER TO PREVENT THE INGRESS OF FINES GEOTEXTILE FABRIC SHALL BE WOVEN POLYPROPYLENE THERMALLY BONDED HAVING FOLLOWING PROPERTIES
 WEIGHT 150 G/M (MINIMUM) (ASTM D5261)
 TENSILE STRENGTH 9KN/m (MINIMUM) (ASTM D4595) @ 5% ELONGATION
 PERMEABILITY 30L/m²/S (MINIMUM) (BS 6906/3)(100mm WATER HEAD)
 PORE SIZE (0₉₀) <300 MICRONS (BS 6906/2)

	CLIENT: MINISTRY OF ENVIRONMENT AND ENERGY	CONSULTANCY SERVICES FOR DESIGN OF WATER SUPPLY FACILITIES IN Ha.HORAFUSHI, Hdh.HANIMAADHOO, Sh.MILANDHOO, R.UNGOOFAARU, Lh.NAIFARU, Dh.KUDAHUVADHOO, Th.GURAIHOO AND Ga.VILLINGILI, MALDIVES	DESIGN ENGINEER	DRAWN	CHECKED DESIGN CHIEF	APPROVED	SL.NO	DRWING NO	DESCRIPTION
			GREENTECH CONSULTANTS (Pvt.) Ltd IN ASSOCIATION WITH DEVELOPMENT COLLABORATION PARTNERSHIP (Pvt.) Ltd MALDIVES AND OPTIMUM SOLOUTIONS (Pvt) Ltd, MALDIVES	DATE	DRG.NO: UNGOOFARU/STD/02		SCALE: NOT TO SCALE		