

NOTES

- ALL DIMENSIONS ARE IN MILLIMETERS (MM) UNLESS NOTED OTHERWISE.
- THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 750 MM FOR SERVICE CONNECTIONS, 800 MM FOR WATER MAINS, GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE MAXIMUM COVER SHOULD NOT EXCEED 1200 mm WHERE PRACTICABLE.
- CLASS B88 MATERIAL IN ACCORDANCE WITH THE T1 SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER MAIN IS LOCATED IN ROAD FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1000 mm OF THE PAVED EDGE OF THE ROADWAY. CLASS B88 IS TO BE COMPACTED AS PER CLAUSE B2 OF THE T1 SPECIFICATION FOR ROAD WORKS.
- SELECTED QUANTITIES OF MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF THE EMPLOYER REPRESENTATIVE.
- PIPE BEDDING SHALL COMPLY WITH WS 4-09-02 AND ISN 4-08-01 GRANULAR MATERIAL SHALL BE 14 mm TO 15 mm GRADED AGGREGATE OR 10 mm SINGLE SIZED AGGREGATE TO IS 1242.
- IN SOFT GROUND CONDITIONS (CBR < 1) THE MATERIAL SHOULD BE EXCAVATED OUT AND DEPOSITED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLASS B88 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL BE LAID ABOVE THE EXCAVATED MATERIAL. TEXTILE WRAPPING, ALTERNATIVELY SPECIAL PIPE SUPPORT ARRANGEMENTS INCLUDING PLUNGES ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO AGREEMENT BY EMPLOYER REPRESENTATIVE BEFORE ADVANCING WITH THE WORK.
- PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 100 mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLASS B88 MATERIAL IN ACCORDANCE WITH THE T1 SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
- SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.
- MARKER TAPE TO BE 400 mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH THE T1 SPECIFICATION. SPECIAL PIPE SUPPORT ARRANGEMENTS INCLUDING PLUNGES ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO AGREEMENT BY EMPLOYER REPRESENTATIVE BEFORE ADVANCING WITH THE WORK.
- PIPES SHALL HAVE 200 mm WIDE RED HEAVY TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.
- TRENCH WIDTHS FOR PIPE SIZES $\le 80\text{ mm}$ MAY BE $\le 400\text{ mm}$ SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.

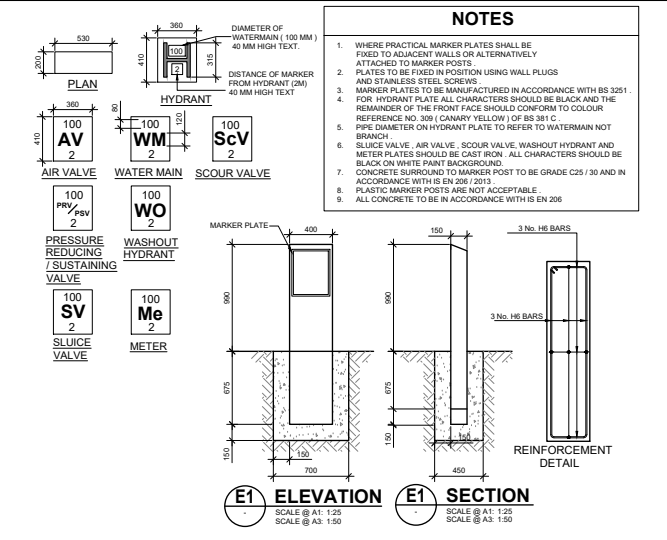
TABLE A

PIPE DIAMETER 'A' (mm)	WIDTH OF TRENCH 'B' (mm)	DEPTH OF BEDDING 'C' (mm)
≤ 80	SEE NOTE 10	150
100	500	200
150	600	250
200	700	300
250	750	350
300	750	400
350	800	400
400	900	400

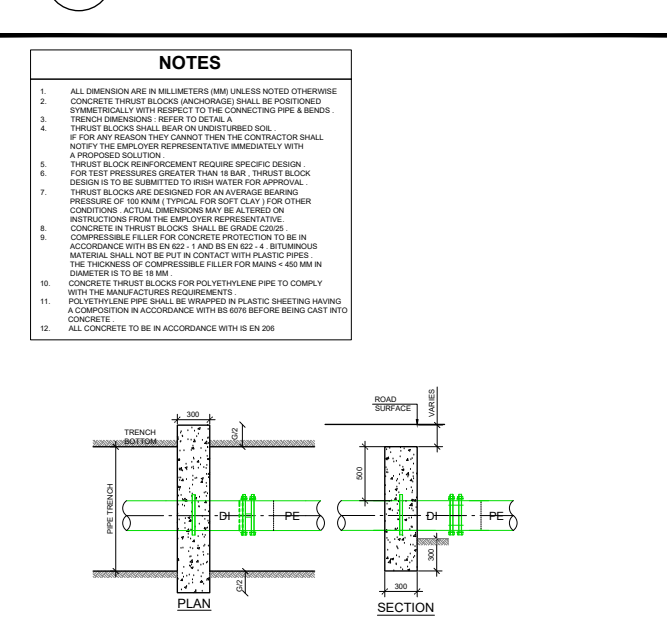
TABLE B

PIPE DIAMETER 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
≤ 200	150
> 200	200

A TYPICAL TRENCH BACKFILL & BEDDING DETAILS



B TYPICAL SLUICE VALVE DETAILS FOR A POLYETHYLENE (PE) PIPE



C TYPICAL ON-LINE HYDRANT DETAILS FOR A POLYETHYLENE (PE) PIPE

