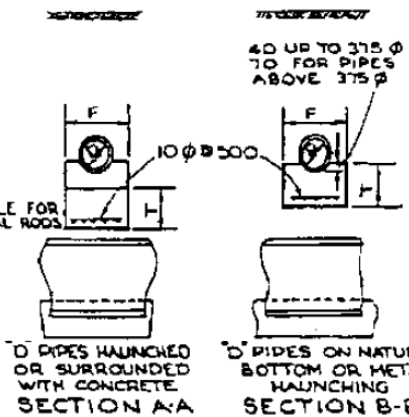


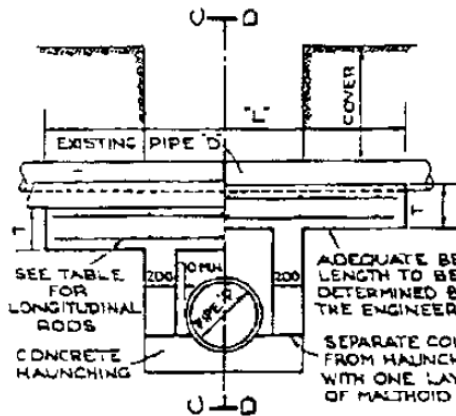
SECTIONAL ELEVATION

**TYPE 1 PIPE SUPPORT IN STABLE GROUND**



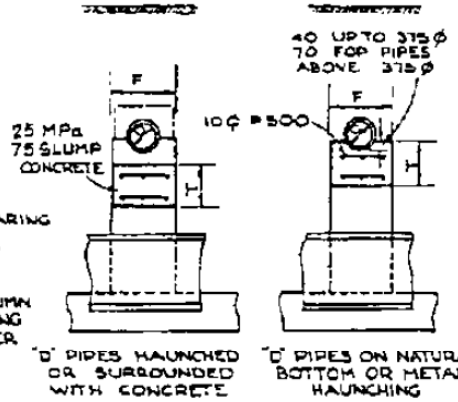
'D' PIPES HAUNCHED OR SURROUNDED WITH CONCRETE SECTION A-A

'D' PIPES ON NATURAL BOTTOM OR METAL HAUNCHING SECTION B-B



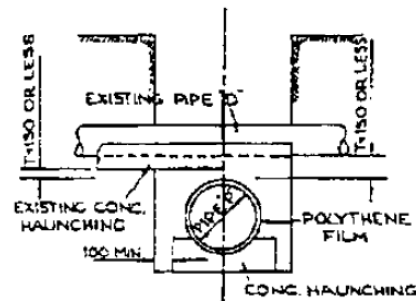
SECTIONAL ELEVATION

**TYPE 2 PIPE SUPPORT IN UNSTABLE GROUND**

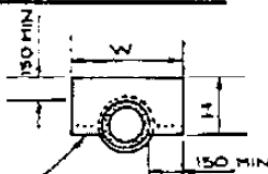


'D' PIPES HAUNCHED OR SURROUNDED WITH CONCRETE SECTION C-C

'D' PIPES ON NATURAL BOTTOM OR METAL HAUNCHING SECTION D-D



**TYPE 3 SUPPORT IN LIMITED CLEARANCE**



DIMENSIONS & REINFORCING TO BE DETERMINED BY THE ENGINEER

**TYPE 4**

- Type 4** The engineer may select type 4 pipe support which can be constructed prior to excavating under the pipe.
- Type 5** The engineer may order specially compacted approved backfill in place of concrete support structures. Such fill may include specially vibrated suitable granular backfill. This will usually be used under existing asbestos cement pipelines.
- Dimension 'L' for types 1 and 2 shall be determined by the engineer.
- For type 2 and 3 if metal haunching is specified for the proposed pipe, it shall be replaced with concrete haunching to the nearest pipe joint in each direction. Dimension 'F' shall be the minimum.

TABLE GIVING BEAM THICKNESS 'T' AND REINFORCING FOR TYPE 1 AND 2 PIPE SUPPORT		T = 250			T = 300			For all other T = 400		
COVER TO PIPE "D"	OVERALL LENGTH "L"	LESS THAN 1 m			GREATER THAN 1 m					
		< 3 m	3 m to 4 m	4 m to 5 m	< 3 m	3 m to 4 m	4 m to 5 m			
D	F									
150	450	6 - 20φ	5 - 24φ	4 - 24φ	5 - 20φ	6 - 20φ	5 - 24φ			
200 to 250	500	"	"	"	"	"	"			
300	580	7 - 20φ	"	"	6 - 20φ	6 - 20φ	"			
375	660	"	"	"	"	"	"			
450	720	5 - 20φ	"	"	"	"	"			
525	840	"	"	"	4 - 24φ	"	"			
600	900	"	"	7 - 24φ	"	"	"			
675	1000	"	"	"	"	"	"			
750	1060	"	6 - 24φ	"	"	"	5 - 24φ	7 - 24φ		

- NOTES:**
- The Engineer shall be the sole judge of the stability of the ground and shall decide which support shall be used.
  - Where pipes cross the trench on an angle dimension "F" shall be taken at 90° to such pipes.
  - Type 1** support to be used in stable ground and beam width, depth & reinforcing to be in accordance with table.
  - Type 2**
    - Support to be used in unstable ground and beam width, depth & reinforcing to be in accordance with table.
    - Not less than half the required reinforcing shall be used in each the top and bottom of the beam.
    - Pipes shall be clear of pipe collars.
  - Type 3**
    - Support to be used where the clearance between the 2 pipe barrels or concrete haunching is less than T+150.
    - 35 MPa 75 slump conc. shall extend to the horizontal diameter of the upper pipe, & for the full width of trench. Trench width shall include minimum dimension of 100 mm each side of haunching.
    - 0.05" Polythene & concrete to extend distance along trench in "F" in table.

SCALE

NTS



SHEET TITLE

**PIPE SUPPORT DETAILS**

PLAN NO. 6000 SHEET 26

DATE STORED 14 JAN 2000

ISSUE A Sheet No. 1 of 1