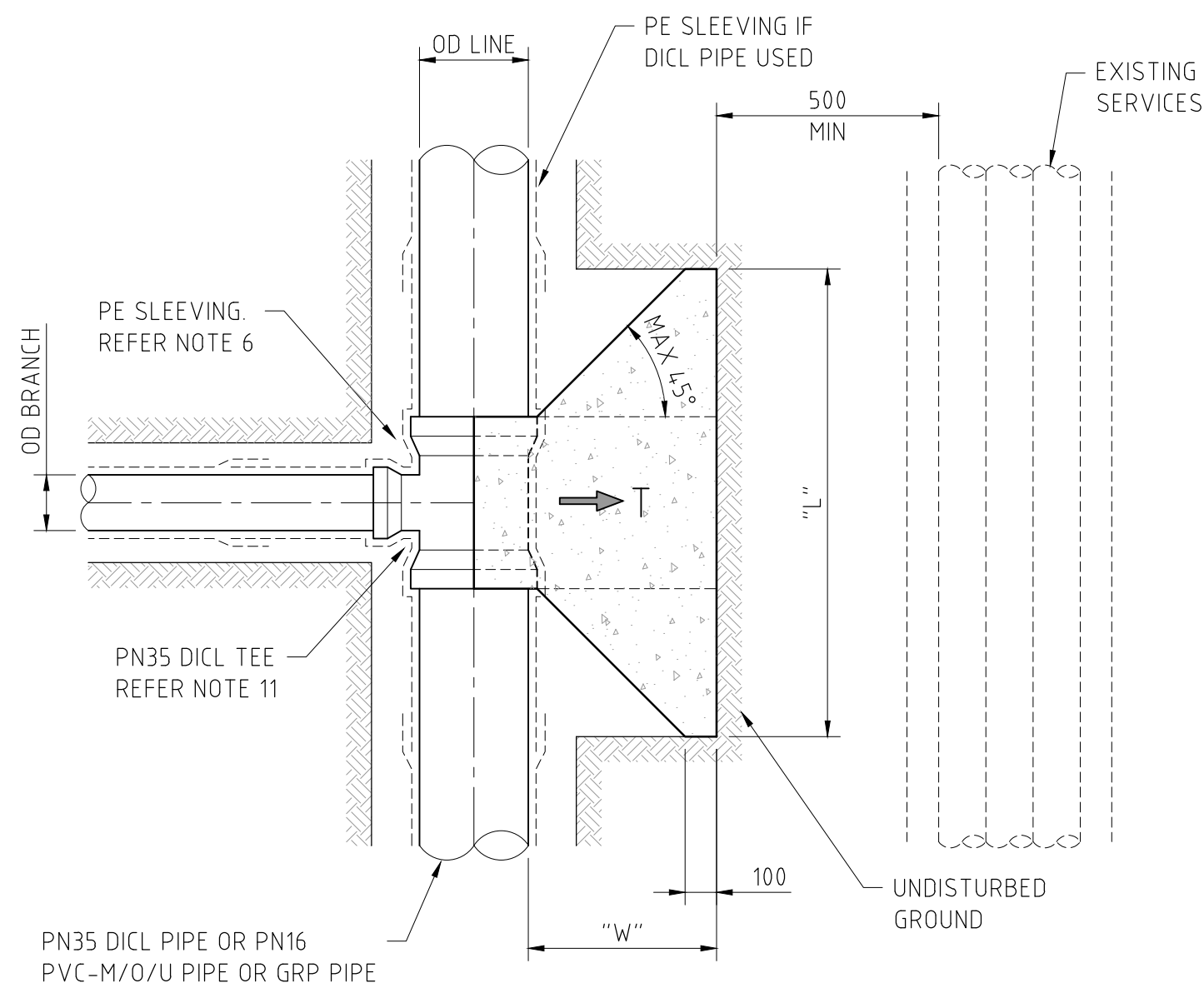
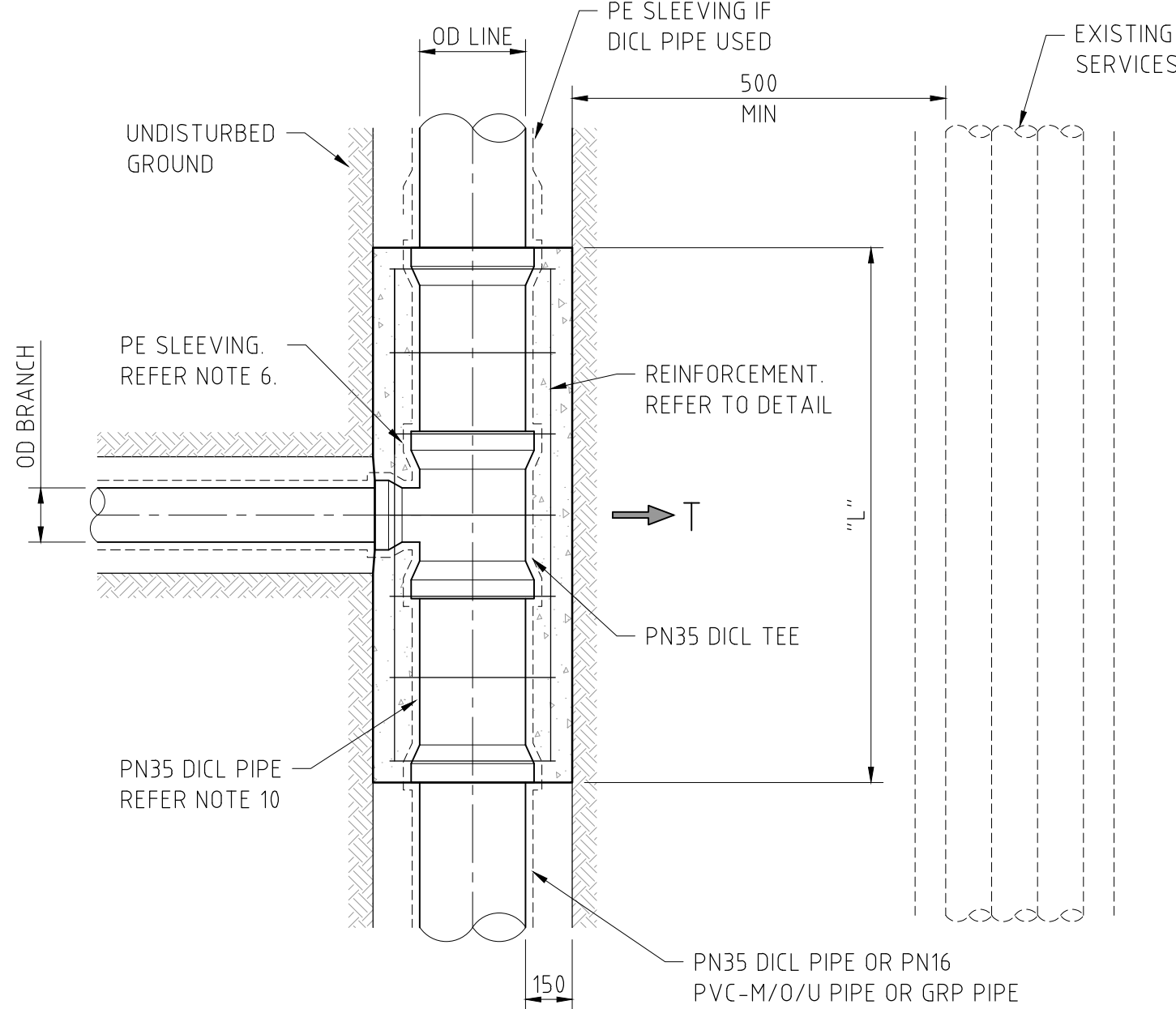


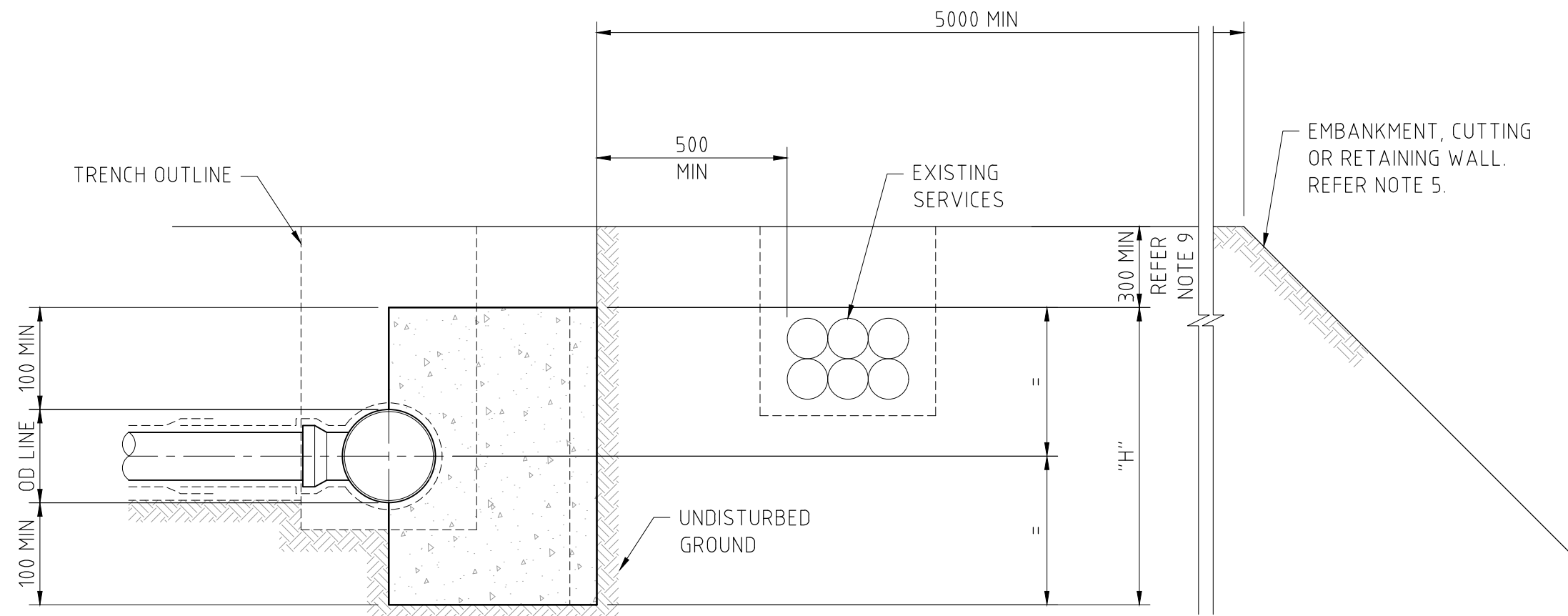
THIS DRAWING MAY ONLY BE USED IN THE COURSE OF AND FOR THE PURPOSE OF CREATING SYDNEY WATER ASSETS. USE THIS DRAWING WITH CARE. THE USER IS RESPONSIBLE FOR THE CORRECT APPLICATION OF THIS DRAWING. DEEMED TO COMPLY DRAWINGS ARE SUBJECT TO TERMS AND CONDITIONS OF USE AS PUBLISHED BY SYDNEY WATER.



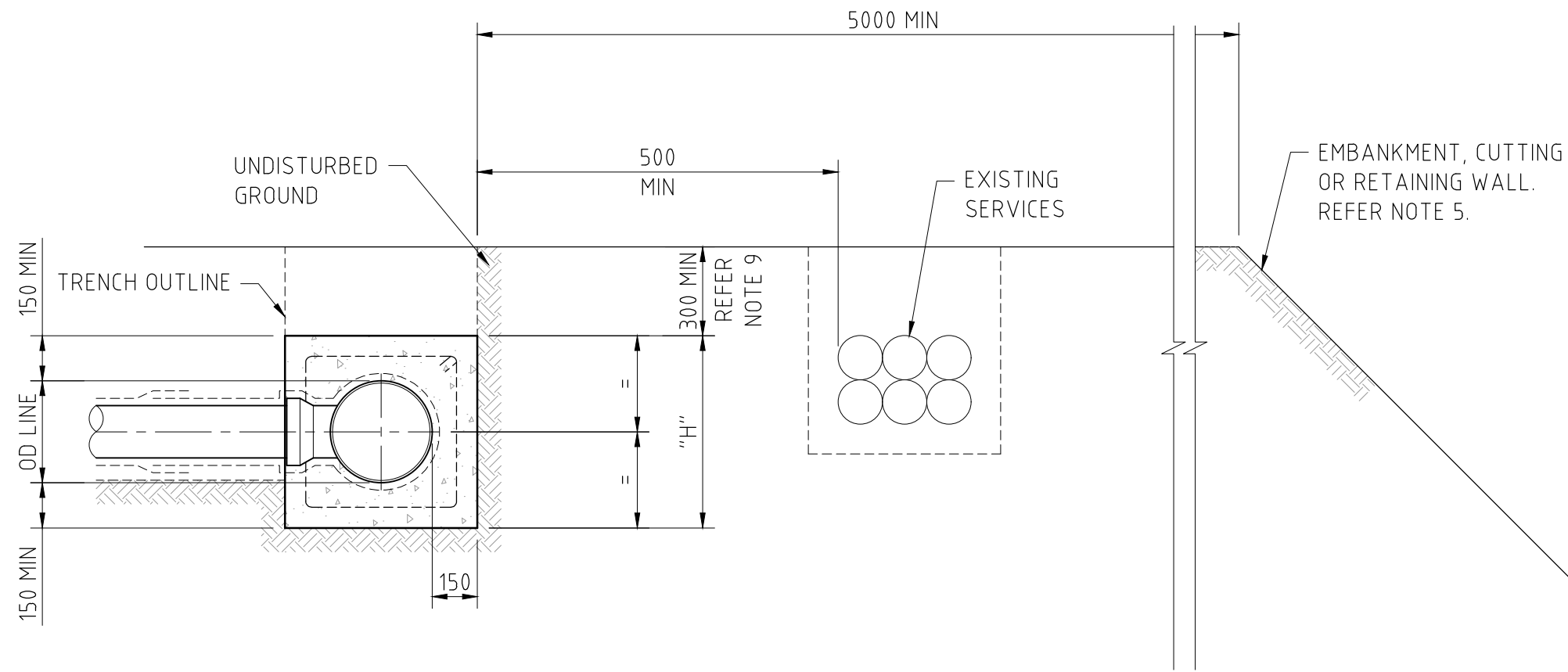
TEE THRUST BLOCK TYPE 1 PLAN
SCALE 1:20



TEE THRUST BLOCK TYPE 2 PLAN
SCALE 1:20



TEE THRUST BLOCK TYPE 1 ELEVATION
SCALE 1:20



TEE THRUST BLOCK TYPE 2 ELEVATION
SCALE 1:20

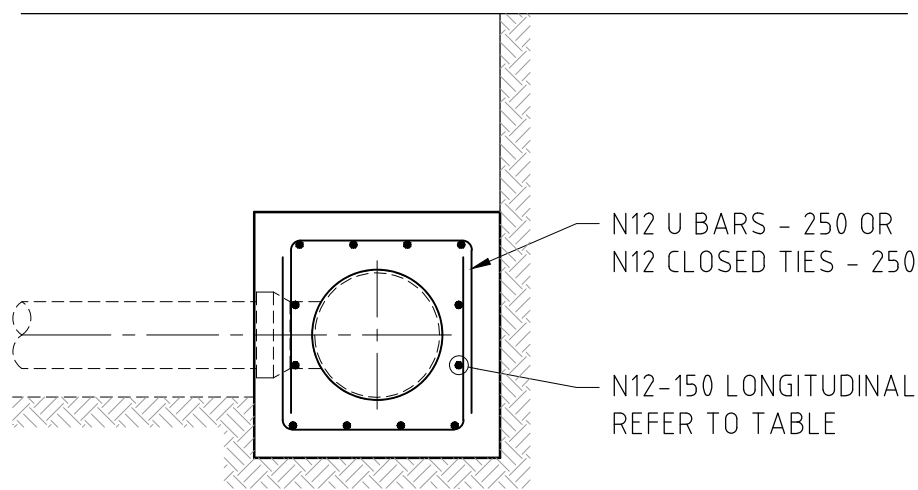
THRUST BLOCK AREAS & DIMENSIONS FOR TEES - TYPE 1 (m²)

DN BRANCH	OD BRANCH	DESIGN PRESSURE HEAD	TEST PRESSURE HEAD	THRUST T	SOIL TYPE (REFER TO NOTE 8)	H*	L	W	REQUIRED BEARING AREA
(mm)	(mm)	(m)	(m)	(kN)		(mm)	(mm)	(mm)	(m²)
100	122	120	150	17.2	S1	500	700	400	0.344
100	122	120	150	17.2	S2	400	450	250	0.172
100	122	120	150	17.2	S3	400	400	300	0.086
150	177	120	150	36.2	S1	700	1100	600	0.724
150	177	120	150	36.2	S2	500	750	400	0.362
150	177	120	150	36.2	S3	450	600	350	0.181
200	232	120	150	62.2	S1	850	1500	700	1.243
200	232	120	150	62.2	S2	700	900	400	0.622
200	232	120	150	62.2	S3	500	650	250	0.311
250	286	120	150	94.5	S1	REFER TO TYPE 2			1.889
250	286	120	150	94.5	S2	800	1200	500	0.945
250	286	120	150	94.5	S3	600	800	300	0.472
300	345	120	150	137.5	S1	REFER TO TYPE 2			2.749
300	345	120	150	137.5	S2	1000	1400	550	1.375
300	345	120	150	137.5	S3	700	1000	350	0.687

* H DIMENSION MAY NEED TO BE INCREASED TO PROVIDE 100mm OF CONCRETE ABOVE AND BELOW THE MAIN LINE PIPE AS SHOWN IN THE ELEVATION.

THRUST BLOCK AREAS & DIMENSIONS FOR TEES - TYPE 2(m²)

DN BRANCH	OD BRANCH	DESIGN PRESSURE HEAD	TEST PRESSURE HEAD	THRUST T	SOIL TYPE (REFER TO NOTE 8)	H	L	REQUIRED BEARING AREA
(mm)	(mm)	(m)	(m)	(kN)		(mm)	(mm)	(m²)
100	122	120	150	17.2	S1	650	1150	0.344
100	122	120	150	17.2	S2	650	1150	0.172
100	122	120	150	17.2	S3	650	1150	0.086
150	177	120	150	36.2	S1	750	1200	0.724
150	177	120	150	36.2	S2	650	1200	0.362
150	177	120	150	36.2	S3	650	1200	0.181
200	232	120	150	62.2	S1	800	1600	1.243
200	232	120	150	62.2	S2	650	1250	0.622
200	232	120	150	62.2	S3	650	1250	0.311
250	286	120	150	94.5	S1	900	2150	1.889
250	286	120	150	94.5	S2	900	1300	0.945
250	286	120	150	94.5	S3	900	1300	0.472
300	345	120	150	137.5	S1	1050	2700	2.749
300	345	120	150	137.5	S2	1050	1400	1.375
300	345	120	150	137.5	S3	1050	1400	0.687



TEE THRUST BLOCK TYPE 2
CONCRETE ENCASEMENT DETAIL
SCALE 1:20

CONCRETE ENCASEMENT
REINFORCEMENT DETAILS

MAIN SIZE	MINIMUM LONGITUDINAL REINFORCEMENT
DN100	8N12
DN150	8N12
DN200	12N12
DN250	12N12
DN300	16N12

NOTES:

- THIS DRAWING MUST BE READ IN JUNCTION WITH DTC/1100.
- THRUST BLOCKS DESIGNED TO WITHSTAND A DESIGN PRESSURE OF 120m AND A TEST PRESSURE OF 150m HEAD OF WATER.
- CAST THE THRUST AREA OF ALL THRUST BLOCKS AGAINST A CLEAN FACE OF UNDISTURBED NATURAL SOIL. THRUST BLOCKS NOT TO INTERFERE WITH OTHER SERVICES.
- DO NOT USE THRUST BLOCKS AS SPECIFIED IN THIS DRAWING IN SOILS WHERE THE NATURAL SOIL DOES NOT MEET THE MINIMUM REQUIREMENTS IN TABLE F6 ON DTC/1100.
- DO NOT USE THRUST BLOCKS SPECIFIED IN THIS DRAWING WITHIN 5m OF AN EMBANKMENT, CUTTING OR RETAINING WALL. A GEOTECHNICAL ASSESSMENT AND INDIVIDUAL DESIGN IS REQUIRED FOR THESE CONDITIONS.
- DI PIPES AND FITTINGS TO BE WRAPPED IN PE SLEEVING. WHEN CONNECTING TO PVC OR GRP PIPE (WITHOUT PE SLEEVE), PE SLEEVE TO BE TAPED TO PIPE 500mm PAST JOINT TO DI CL SOCKET. FOR TYPE 2 THRUST BLOCKS, TAPE 700 LONG PE SLEEVING TO FIRST PIPE BEYOND CONCRETE ENCASEMENT. SLEEVING TO EXTEND 150 INTO ENCASEMENT.
- DO NOT APPLY ANY THRUST LOADS FOR AT LEAST 14 DAYS AFTER POURING CONCRETE.
- REFER TO TABLE F6 ON DTC/1100 FOR SOIL TYPES.
- MINIMUM COVER OF 750mm MUST BE PROVIDED WHERE A THRUST BLOCK SIZED FOR SOIL TYPE S2 IS INSTALLED IN THE CORRESPONDING SAND MATERIAL (REFER TO NOTE 8). ALTERNATIVELY, USE A THRUST BLOCK SIZED FOR SOIL TYPE S1.
- SP-SP DI CL PIPE WITH SO-SO DI CONNECTOR MAY BE USED IN LIEU OF SP-SO DI CL PIPE, WITH SO-SO CONNECTOR INSTALLED AT THE END OF THE CONCRETE ENCASEMENT.
- TYPE 1 THRUST BLOCK MAY BE USED WHERE A SO-SO-FL TEE IS INSTALLED (E.G. FOR CONNECTION TO A FLANGED STOP VALVE).
- CONCRETE FOR UNREINFORCED (TYPE 1) THRUST BLOCKS MUST BE CLASS N25