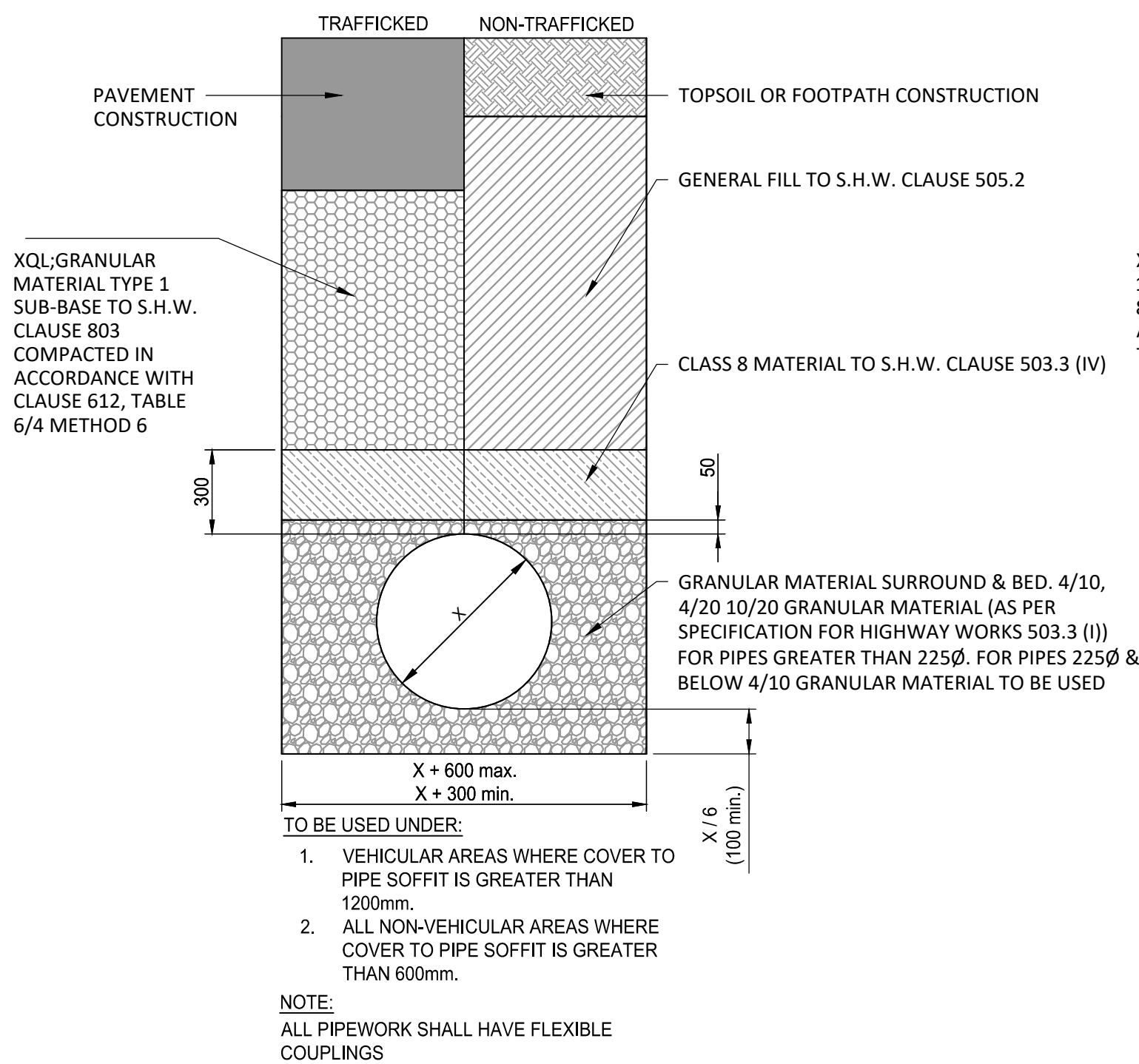


FILE LOCATION PATH: P:\PROJECTS\HOT11076-27 MAYFIELD, MANCHESTER - PLOT M004 BM/CIVILS\DRAWINGS\0197_MAY-CIV-SWI-XXXX-DR-C-310004_PLOT M EXTERNAL WORKS TYPICAL DRAINAGE DETAILS SHEET 4.DWG

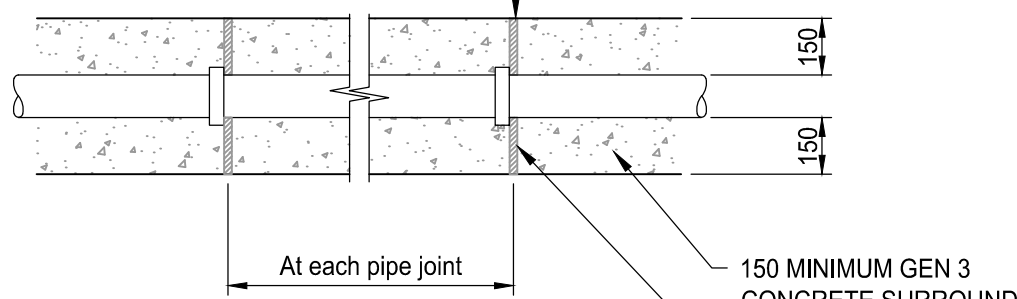


CLASS S PIPE BEDDING & SURROUND

LAY & COMPACT TO A THICKNESS OF NOT LESS THAN 50mm FOR SLEEVE JOINTED PIPES, 100mm FOR SOCKET JOINTED PIPES, OVER FULL WIDTH OF TRENCH. WHERE TRENCH BOTTOM IS UNEVEN DUE TO HARD SPOTS OR OTHER REASON, INCREASE DEPTH BY 100mm. SCOOP OUT LOCALLY AT COUPLINGS/SOCKETS AND LAY PIPES DIGGING SLIGHTLY INTO BED & RESTING UNIFORMLY ON THIER BARRELS. ADJUST TO LINE & GRADIENT. AFTER INITIAL TESTING, LAY & COMPACT MORE GRANULAR MATERIAL UNIFORMLY TO HALFWAY UP EACH SIDE OF PIPE. BACKFILL (250mm FOR ADOPTABLE SEWERS) ABOVE CROWN OF PIPE WITH PROTECTIVE CUSHION OF MOT TYPE 1 OR SELECTED FILL FREE FROM VEGETABLE MATTER, RUBBISH, FROZEN SOIL & MATERIAL RETAINED ON A 40mm SIEVE. COMPACT BY HAND (OR LIGHT MECHANICAL RAMMER) IN 100mm LAYERS.

COMPRESSIBLE FILLER AND PACKING, AS SPECIFIED, TO BE FORMED AT EACH PIPE JOINT IN CONCRETE SURROUND

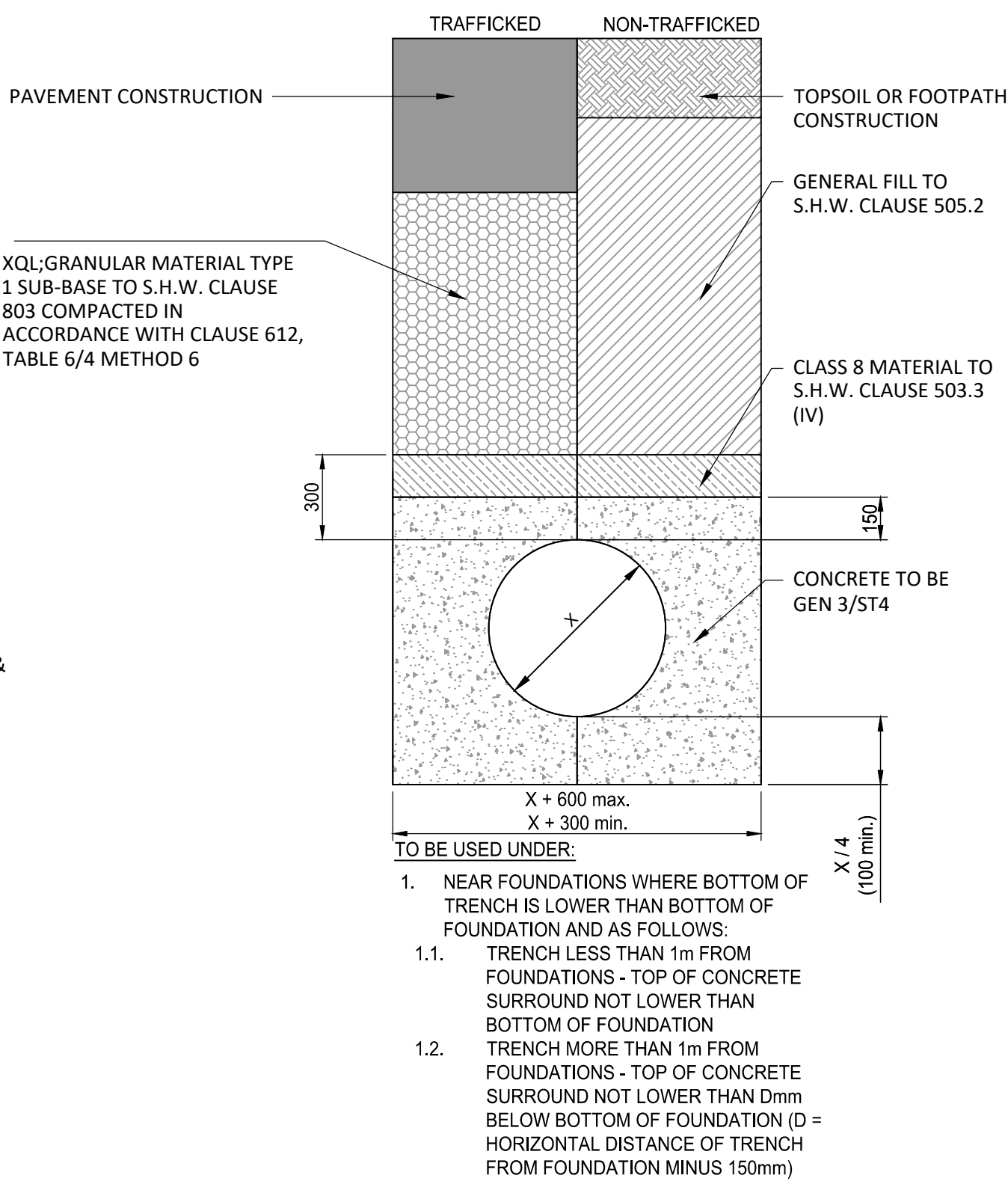
DIA. OF PIPE	THICKNES OF FILLER
LESS THAN 450	18
450 - 1200	36
EXCEEDING 1200	54



CLASS Z SURROUND

FLEXIBLE JOINTS IN CONCRETE SURROUND

FOR PLASTIC PIPES CARE IS TO BE TAKEN IN PLACING CONCRETE TO AVOID DEFORMATION OR DISPLACEMENT OF PIPE.



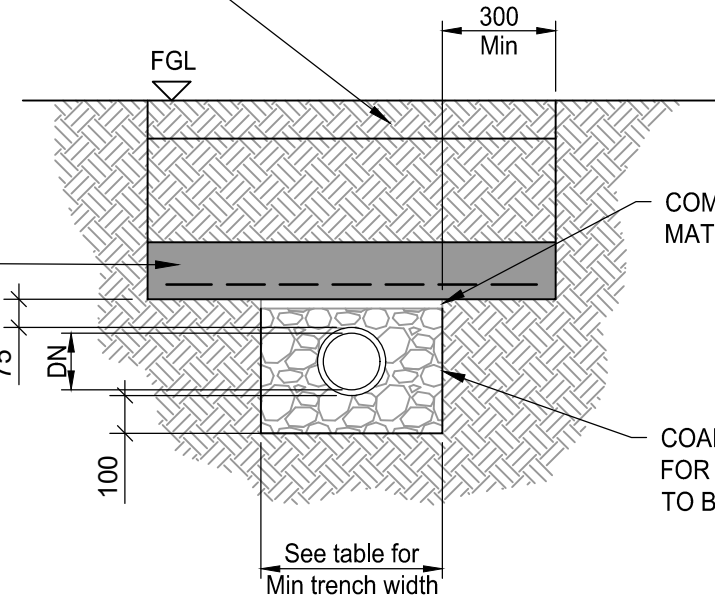
CLASS Z PIPE BEDDING & SURROUND

NOTE: ALL PIPEWORK WITH CLASS Z (GEN 3/ST4) CONCRETE SURROUND SHALL HAVE FLEXIBLE COUPLINGS WITH FLEXI-BOARDS ON ALL JOINTS (REFER TO DETAIL)

BACKFILL:

- X1-3.L3.T3* UNDER PRIVATE ROADS AND PAVEMENTS; WITH TYPE 1 GRANULAR SUB-BASE MATERIAL
- UNDER PUBLIC ROADS AND PAVEMENTS; TO DEPT OF TRANSPORT 'SPECIFICATION FOR THE REINSTATEMENT OF OPENINGS IN HIGHWAYS'
- ELSEWHERE; WITH MATERIAL EXCAVATED FROM TRENCH.

100 REINFORCED CONCRETE SLAB WITH LAYER A193 MESH, 40 COVER BOTTOM



TO BE USED UNDER:

- VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS EQUAL TO OR LESS THAN 1200mm.
- ALL NON-VEHICULAR AREAS WHERE COVER TO PIPE SOFFIT IS EQUAL TO OR LESS THAN 600mm.

CLASS Q GRANULAR SURROUND

TABLE 1

	MINIMUM TRENCH WIDTH (OD + X)		
	SUPPORTED TRENCH	UNSUPPORTED TRENCH	
		# > 60°	# < 60°
LESS 225	600	600	600
225 TO 350	800	800	800
350 TO 700	OD + 700	OD + 700	OD + 400
700 TO 1200	OD + 850	OD + 850	OD + 400
GREATER 1200	OD + 1000	OD + 1000	OD + 400

IN THE VALUES OD + X, X/2 EQUALS THE MINIMUM WORKING SPACE BETWEEN THE PIPE AND THE TRENCH WALL OR SUPPORT, WHERE:
OD IS EXTERNAL DIAMETER.
IS ANGLE OF UNSUPPORTED TRENCH SIDE MEASURED TO THE HORIZONTAL.

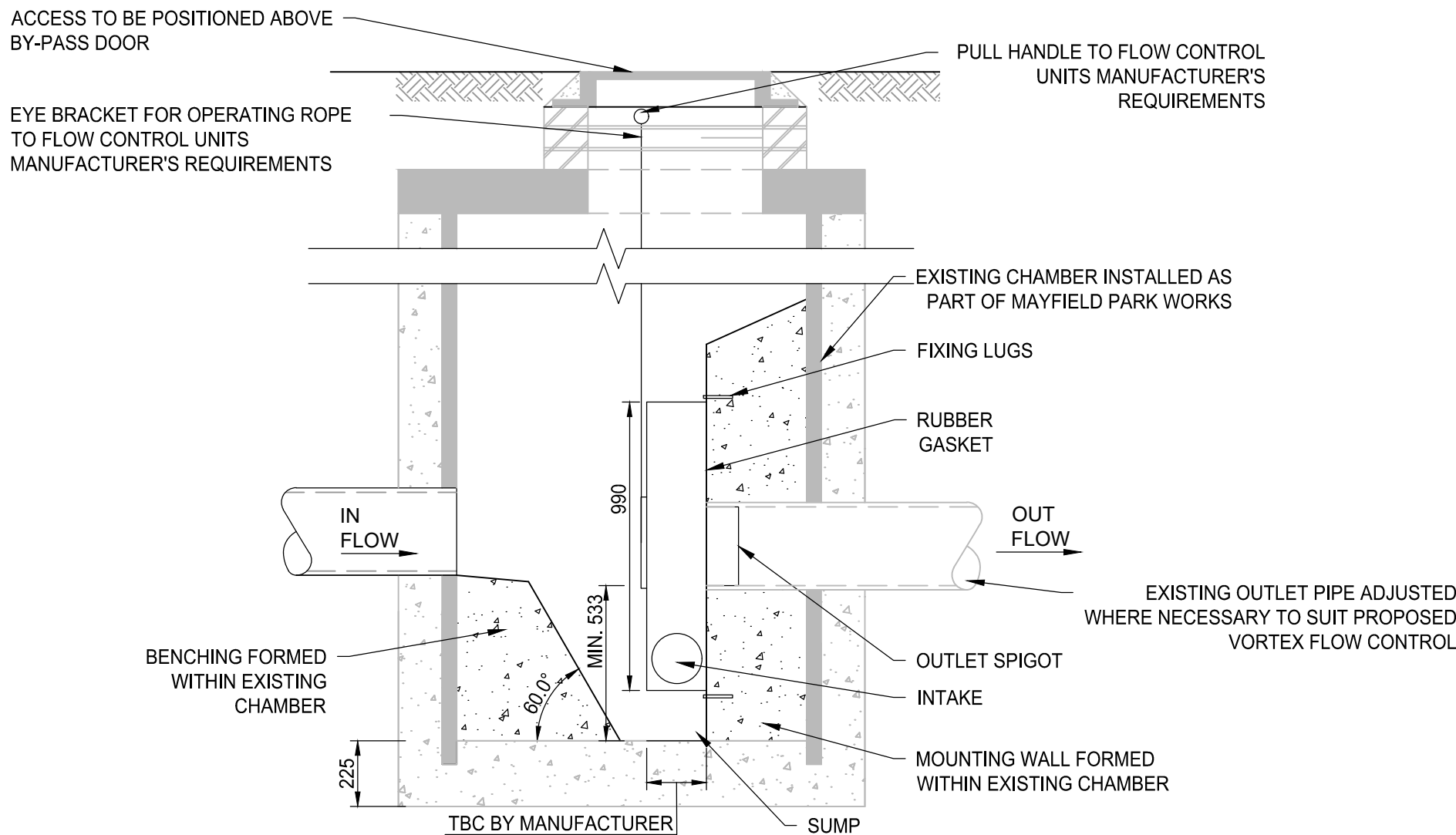
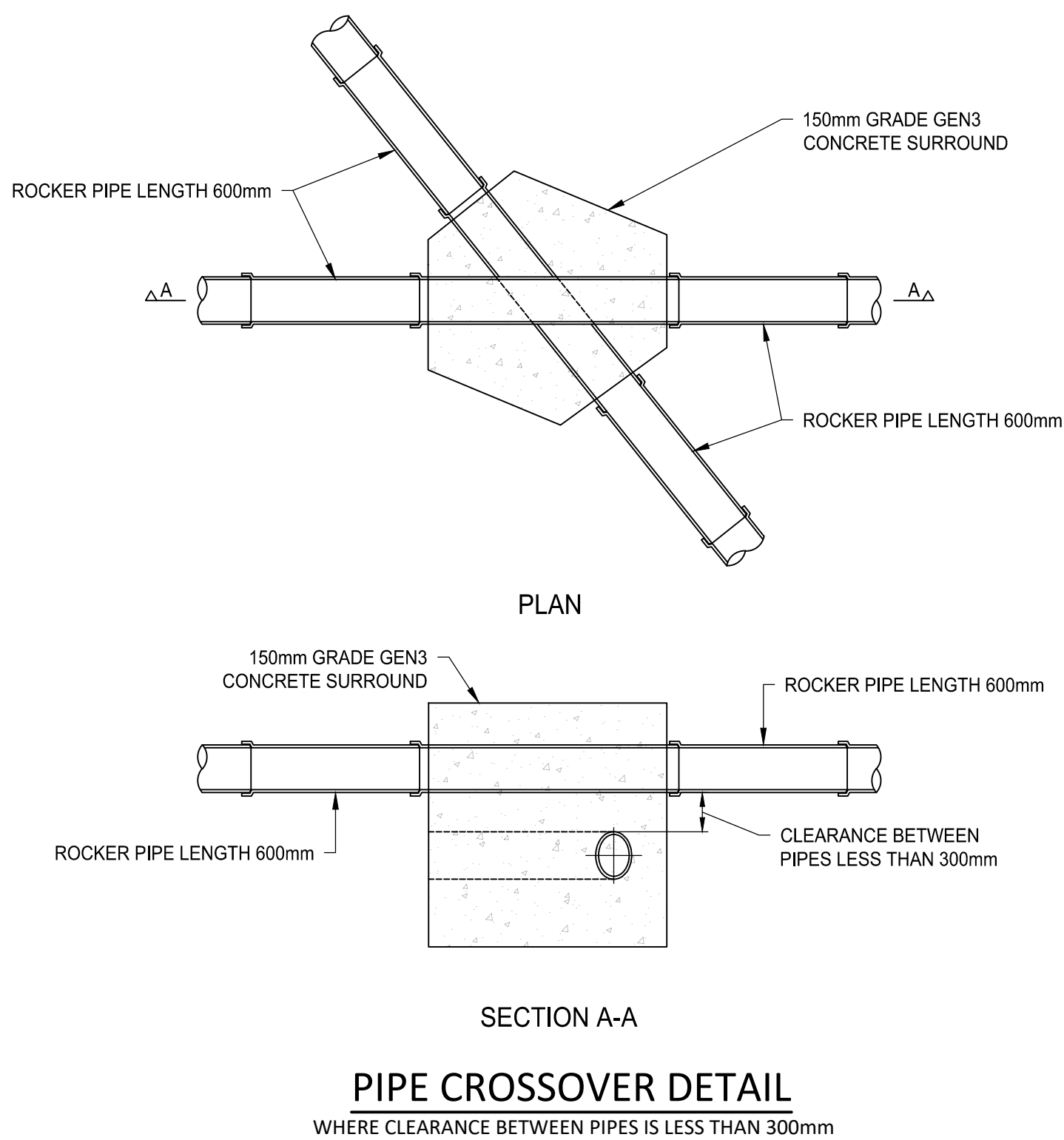
MINIMUM TRENCH WIDTH IN RELATION TO NORMAL SIZE DN

TABLE 2

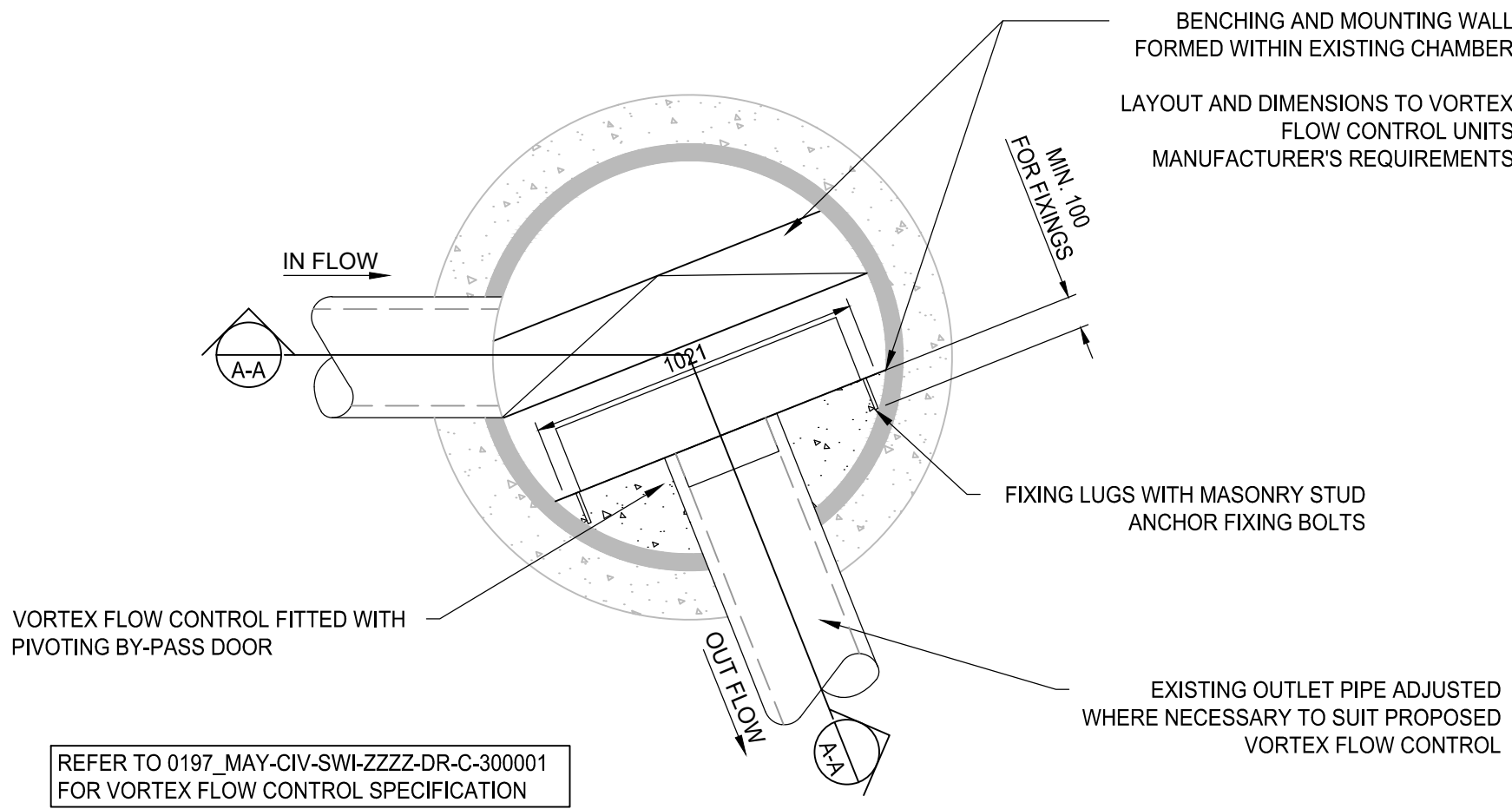
TRENCH DEPTH	MINIMUM TRENCH WIDTH
LESS 1000	AS TABLE 1
1000 TO 1750	800
1750 TO 4000	900
GREATER 4000	1000

THE MINIMUM TRENCH WIDTH SHALL BE THE GREATER OF THE VALUES TAKEN FROM TABLES 1 & 2.

MINIMUM TRENCH WIDTH IN RELATION TO TRENCH DEPTH



VORTEX FLOW CONTROL CHAMBER - SECTION A-A TO MANUFACTURER'S REQUIREMENTS



VORTEX FLOW CONTROL CHAMBER (S-MH40)

STANDARD NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
- THIS DRAWING SHOULD NOT BE SCALED.
- ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
- ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

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08.03.25	P02	ADDED VORTEX CONTROL DETAIL	HCM	CK
12.07.24	P01	STAGE 4 ISSUE	CD	HM
DATE	REV	DESCRIPTION	DRAWN	CHKD

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PROJECT
MAYFIELD PLOT M
THE REPUBLIC
MANCHESTER

TITLE
EXTERNAL WORKS
TYPICAL DRAINAGE DETAILS
SHEET 4

DRAWING STATUS				STATUS CODE	
STAGE 4				S2	
CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED	
1076-27	1:20	JULY 24	CD	HCM	
DRAWING No.				REV	
0197_MAY-CIV-SWI-XXXX-DR-C-310004				P02	