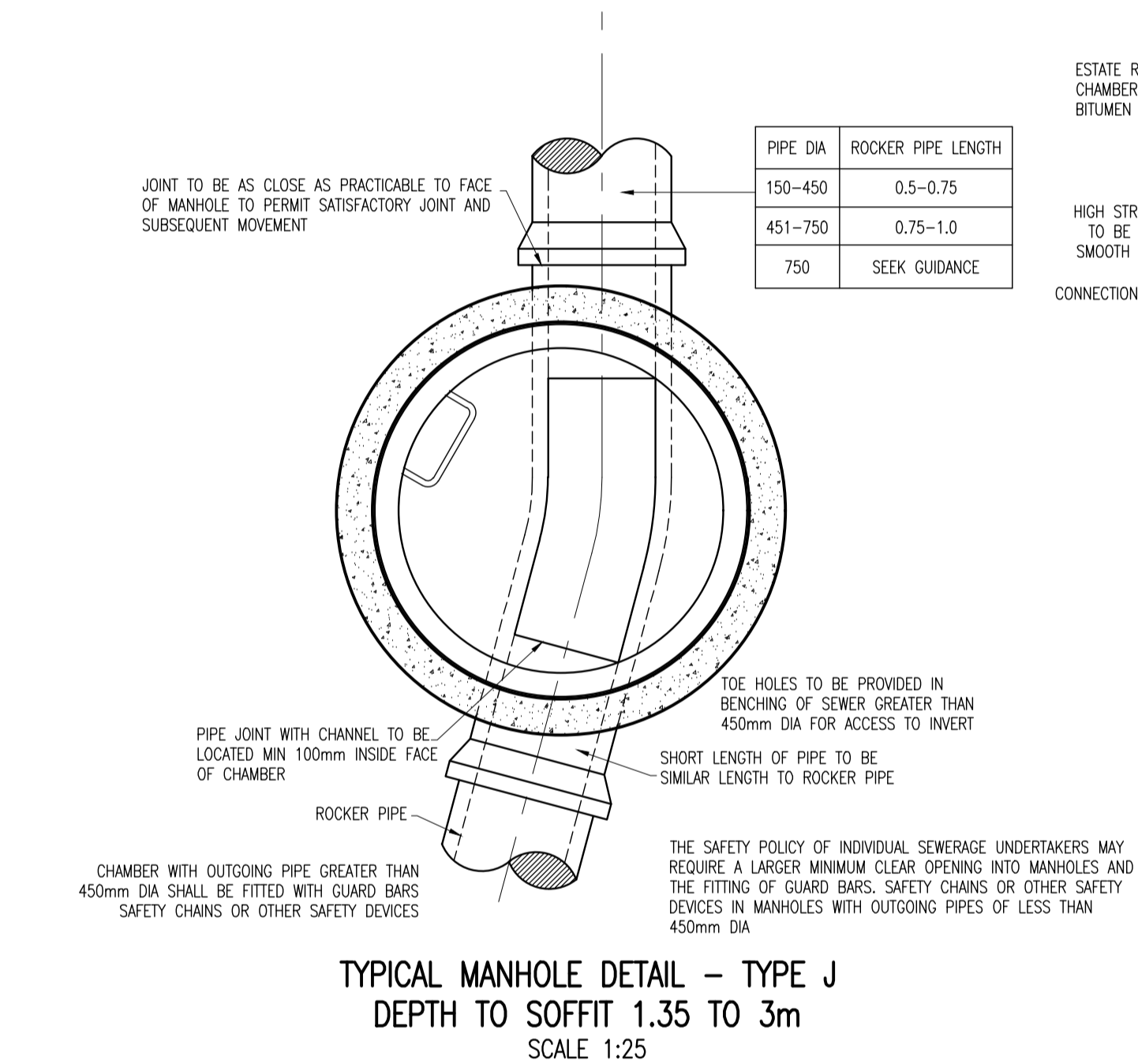
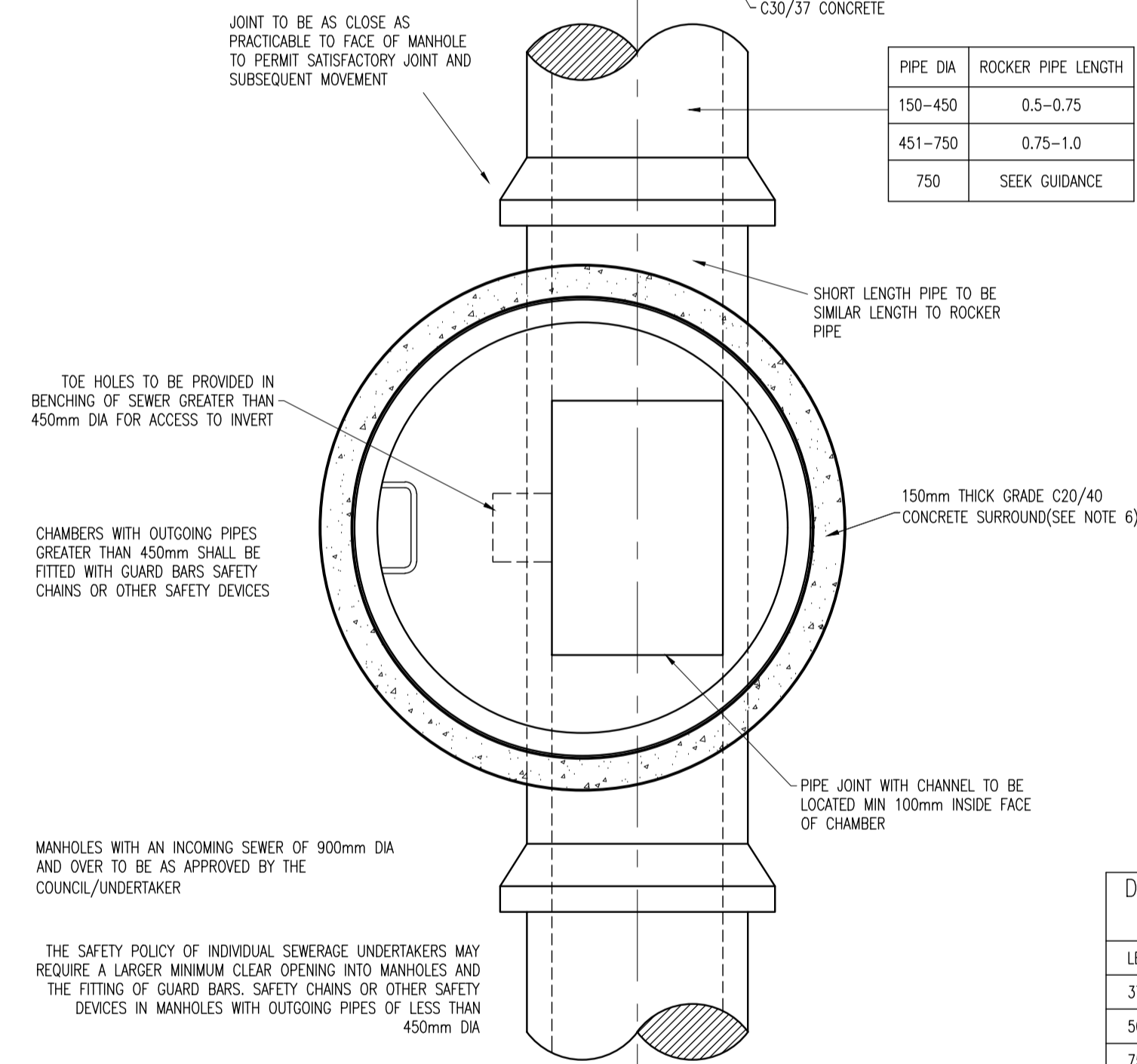
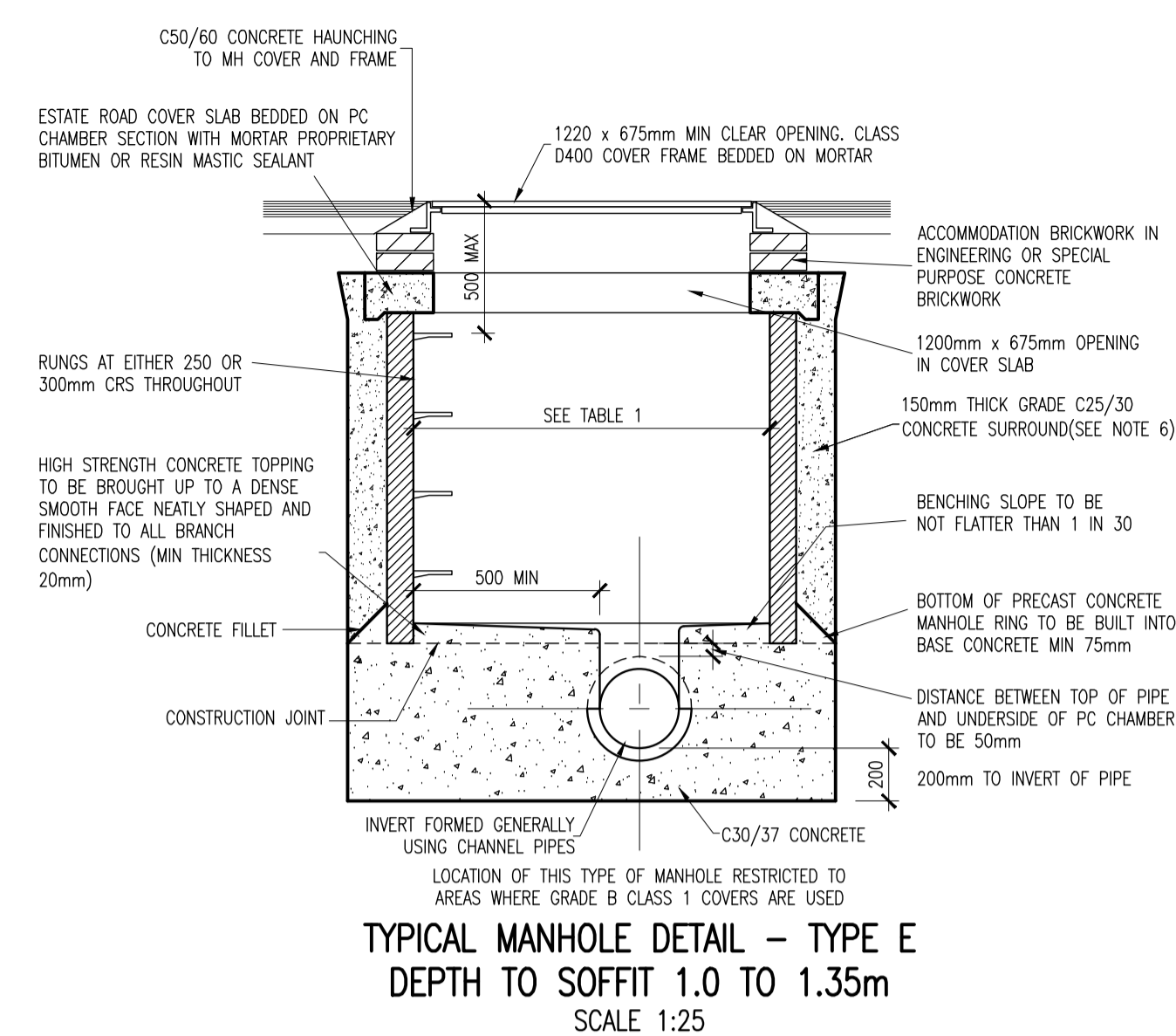
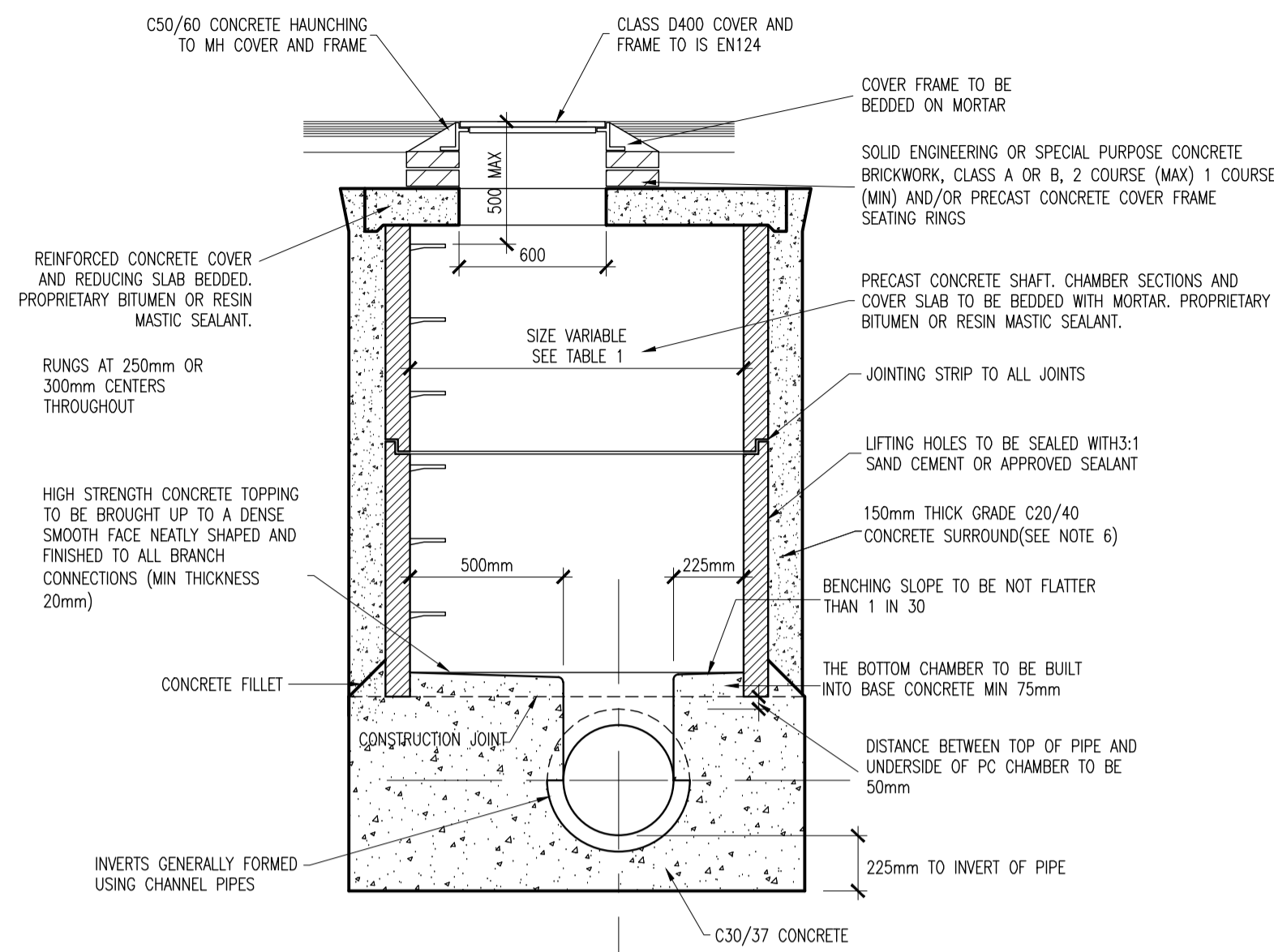
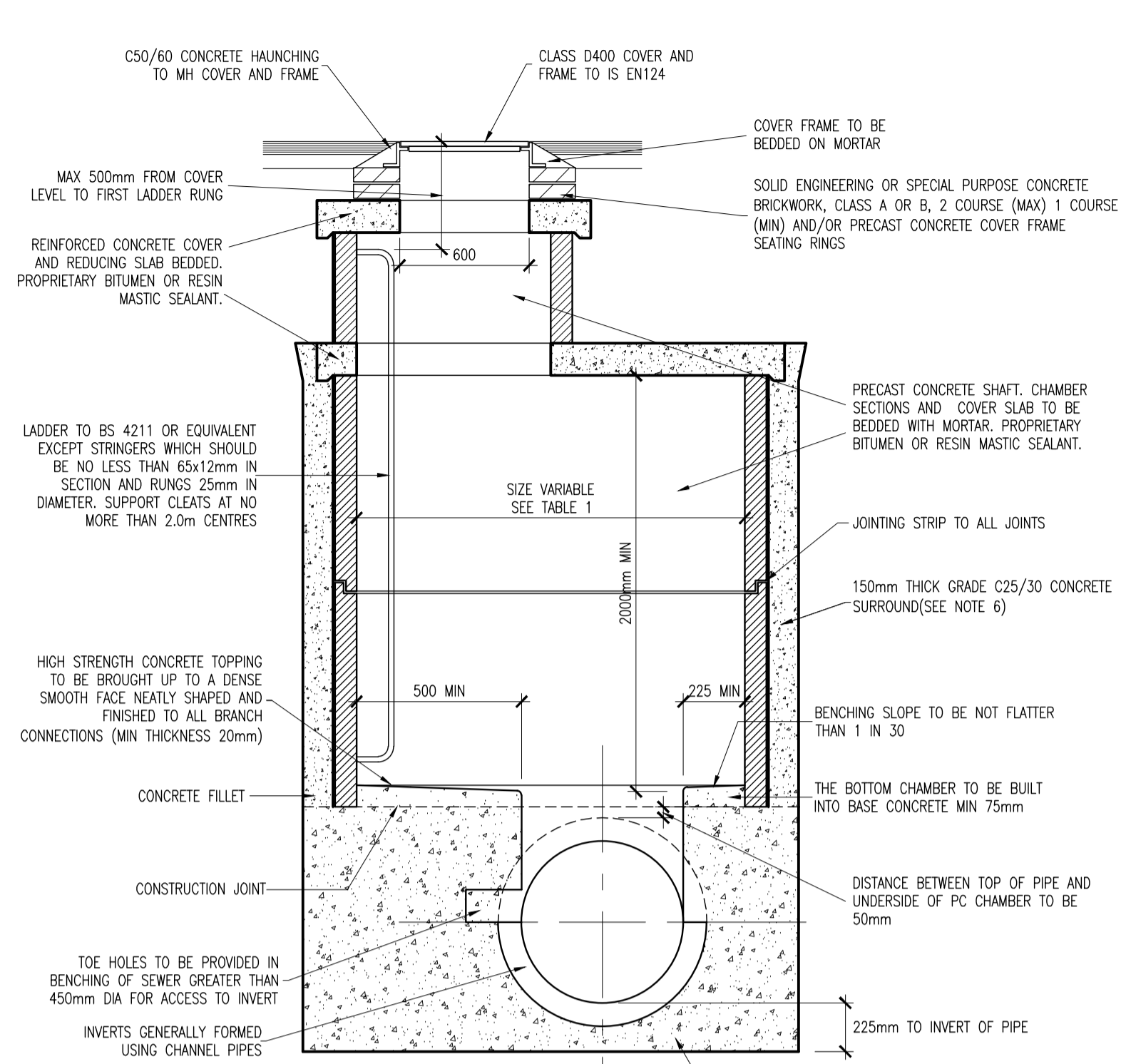


NOTES:

- ALL REINFORCED CONCRETE ON THIS DRAWING SHALL BE U.N.O.: S3N20 COVER = 50mm MIN.
- SURFACE FINISHES FOR CONCRETE:
 - CLASS F1 FOR ALL CONCRETE 100mm OR MORE BELOW GROUND LEVEL.
 - CLASS F3 FOR ALL EXPOSED CONCRETE ABOVE 100mm BELOW GROUND LEVEL.
- ALL EXPOSED CORNERS ON CONCRETE SHALL BE CHAMFERED WITH 25mm x 25mm CHAMFERS.
- ALL STRUCTURAL CONCRETE (HEADWALLS, RC MANHOLES, PETROL INTERCEPTOR SLABS) TO RECEIVE MC DUB 1680 (OR SIMILAR APPROVED TAR MODIFIED EPOXY RESIN) TO ALL BURIED SURFACES, TO FINISH 100mm BELOW GROUND LEVEL.
- ALL SEWERS SHALL BE PRESSURE TESTED PRIOR TO BACKFILLING.
- TYPE 1 GRANULAR MATERIAL: BROKEN STONE OR GRAVEL TO PASS 10mm SIEVE AND BE RETAINED ON 5mm SIEVE.
- TYPE 2 GRANULAR MATERIAL: BROKEN STONE OR GRAVEL TO PASS 10mm - 25mm SIEVE, ACCORDING TO PIPE SIZE, (SEE TABLE) AND BE RETAINED ON 5mm SIEVE.
- TYPE 3 SELECTED FILL: UNIFORM READY COMPACTED MATERIAL FREE FROM TREE ROOTS, VEGETABLE MATTER, BUILDING DEBRIS, AND FROZEN SOIL AND EXCLUDING CLAY LUMPS RETAINED ON A 75mm SIEVE AND STONES RETAINED ON A 37.5mm SIEVE.
- RIGID PIPES SHALL MEAN CAST OR SPUN IRON, CONCRETE, ASBESTOS CEMENT OR CLAY.

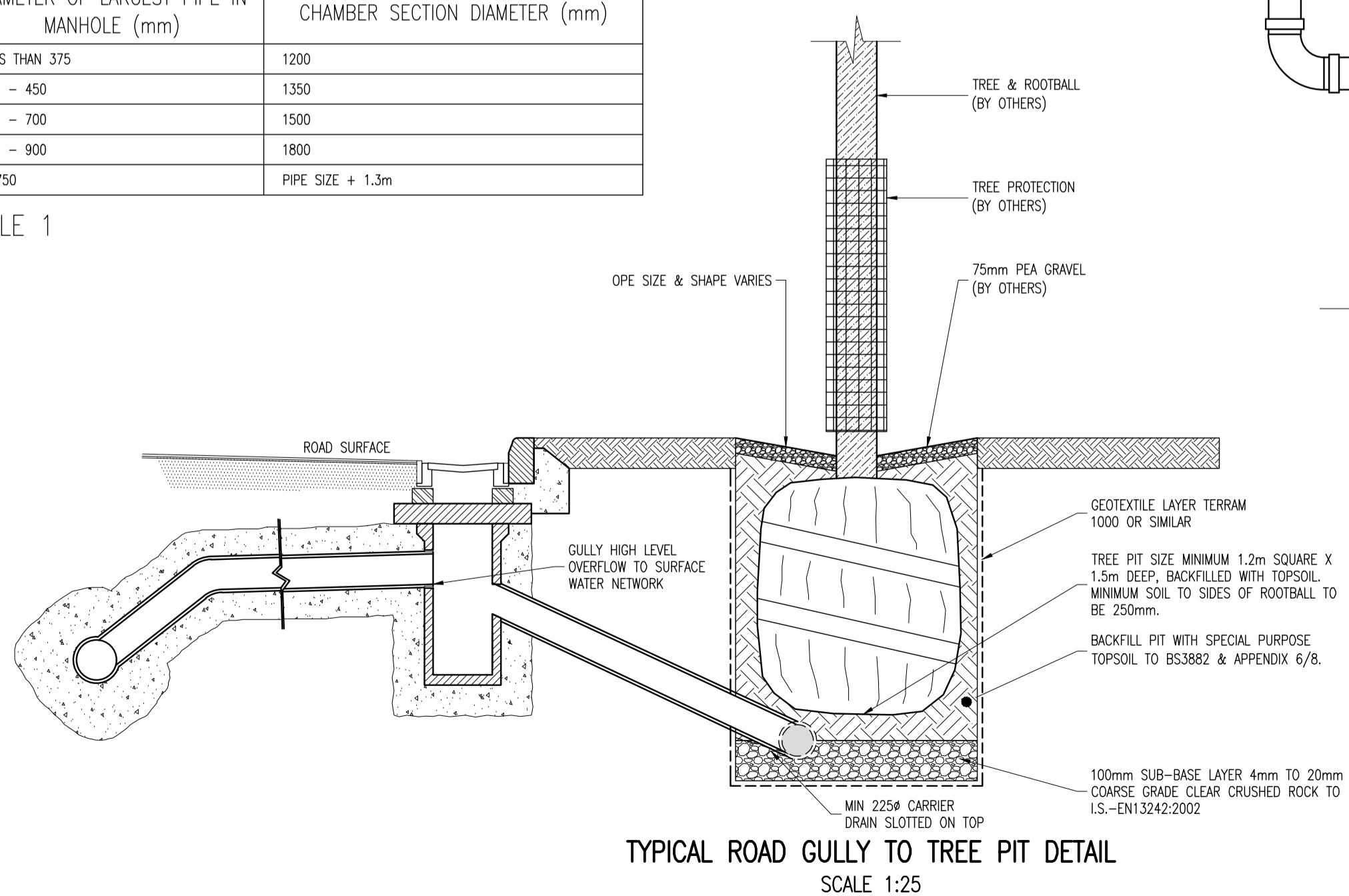
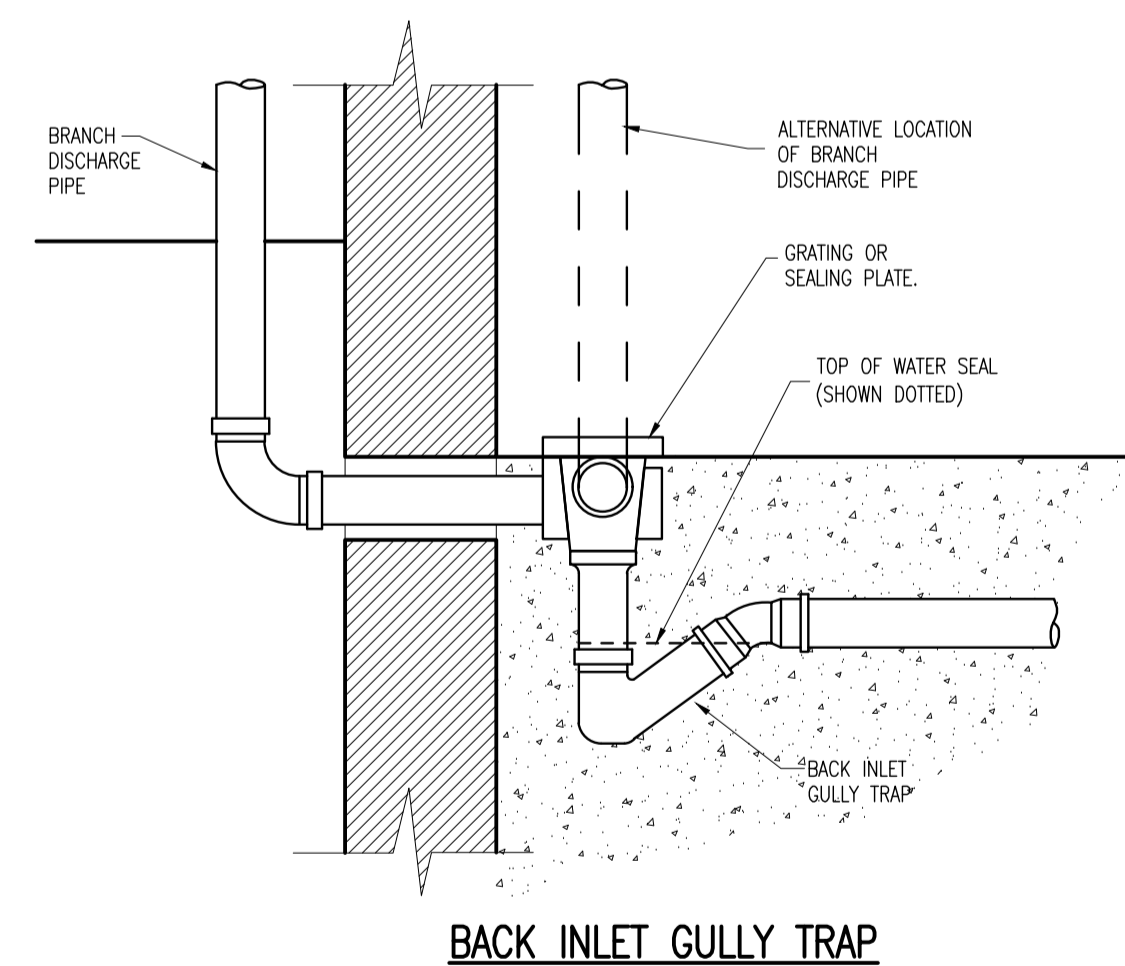
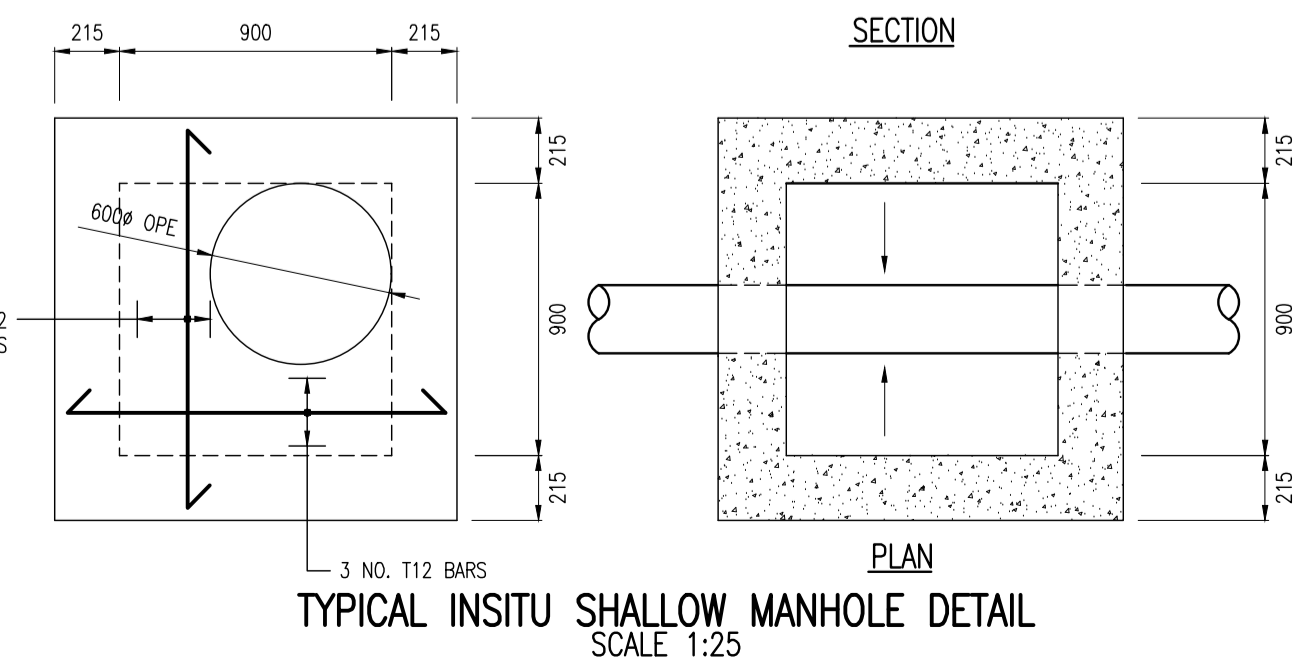
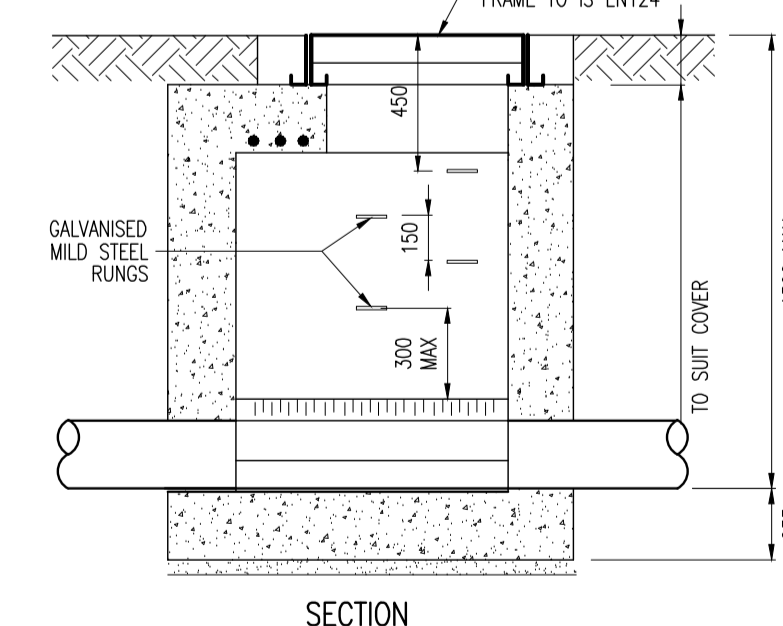
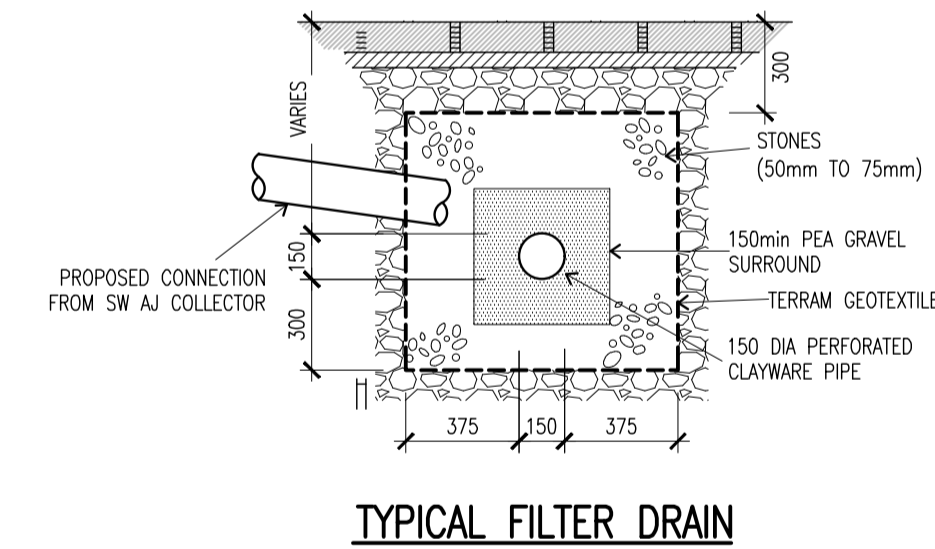
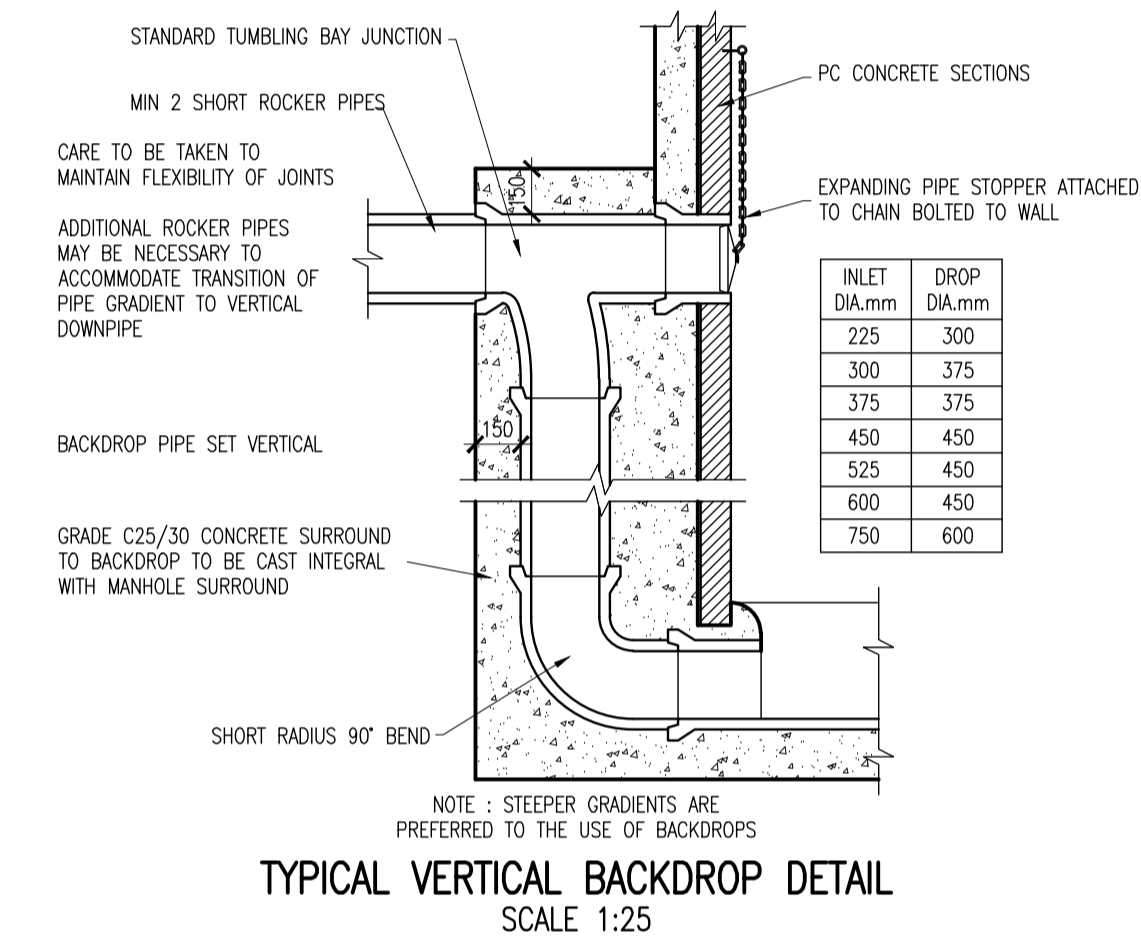
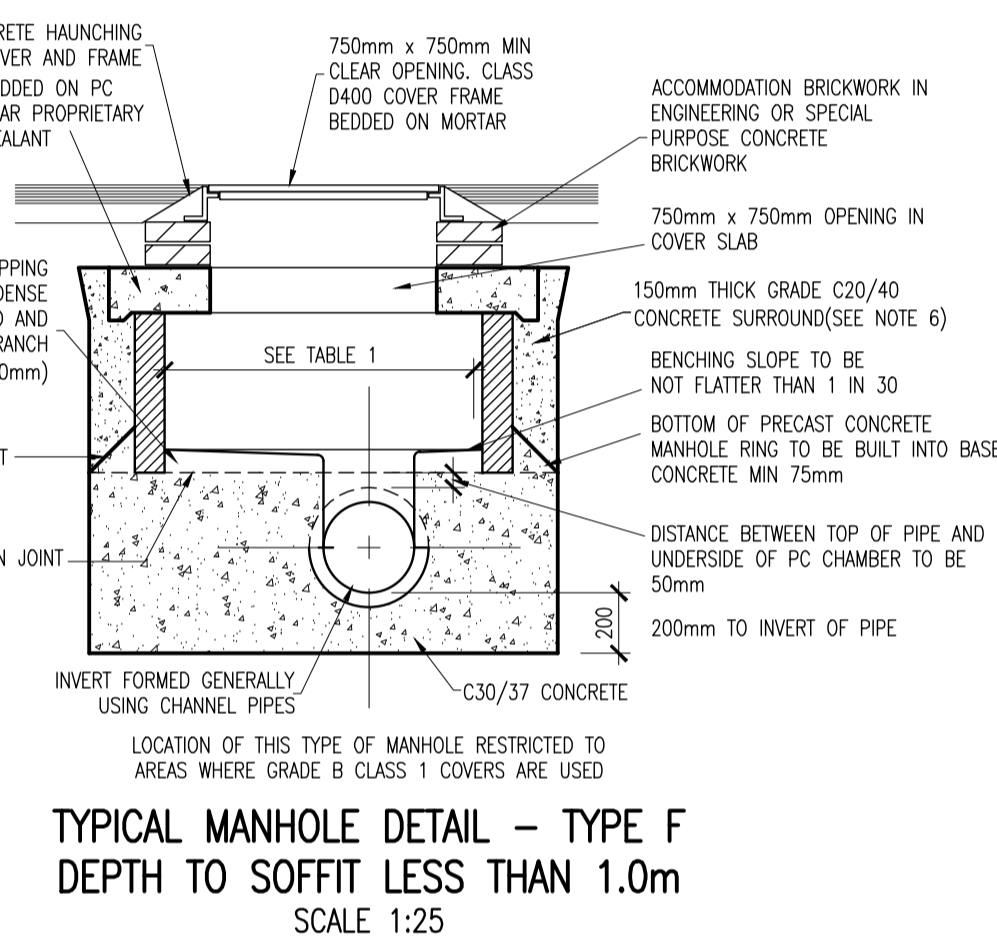
TYPE 2 GRANULAR MATERIAL:

PIPE SIZE	100% PASSING
UP TO 225mm	10mm SIEVE
225 TO 450mm	20mm SIEVE
ABOVE 450mm	25mm SIEVE



DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	CHAMBER SECTION DIAMETER (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 750	PIPE SIZE + 1.3m

TABLE 1



IRISH WATER STANDARD DETAILS FOR WATER NETWORKS BROUGHT INTO CONTRACT BY REFERENCE

Drawing Ref	Title
STD-W-01	Water Service Connection Responsibility
STD-W-03	Customer Connection and Boundary Box (25mm OD Pipe)
STD-W-04	General pipe connections (sheet 1 of 7)
STD-W-05	General pipe connections (sheet 2 of 7)
STD-W-06	General pipe connections (sheet 3 of 7)
STD-W-07	General pipe connections (sheet 4 of 7)
STD-W-08	General pipe connections (sheet 5 of 7)
STD-W-09	General pipe connections (sheet 6 of 7)
STD-W-10	General pipe connections (sheet 7 of 7)
STD-W-11	Typical service layout indicating separation distances
STD-W-12	Restrictions on trees / shrubs planting adjacent to watermains
STD-W-13	Trench backfill & bedding
STD-W-14	Sluice valve for ductile iron (D.I.) pipe (<350mm dia.) (sheet 1 of 2)
STD-W-15	Sluice valve for polyethylene (P.E.) pipe (<350mm dia.) (sheet 2 of 2)
STD-W-18	On-line hydrant for polyethylene (P.E.) pipe (sheet 3 of 4)
STD-W-19	Off-line hydrant for polyethylene (P.E.) pipe (sheet 4 of 4)
STD-W-26	Meter chamber (≤300mm dia.)
STD-W-27	Marker posts / plates
STD-W-28	Water main thrust & support blocks
STD-W-35	Pipe Repair to Existing Mains
STD-W-36	Telemetry and Wet Kiosk

B	14-09-21	FOR SHD APPLICATION	JVS	BK
A	16-07-21	REVISD LAYOUT	JVS	BK
REV.	DATE	DESCRIPTION	BY	CHKD.

PLANNING

DESIGNED	BK	PREPARED	GMC
DATE	AUG 2019	CHECKED	DJR

DBFL
Dublin Office: Ormond House, Upper Ormond Quay, Dublin 7, Ireland.
PHONE: +353 1 400 4000
FAX: +353 1 400 4050

Waterford Office: Unit 2, The Chandlery, 1-2 O'Connell Street, Waterford, Ireland.
PHONE: +353 51 309 500
FAX: +353 51 844 913

DBFL Consulting Engineers email: info@dbfl.ie site: www.dbfl.ie

PROJECT: LANDS AT CLONMINTCH, TULLAMORE, CO OFFALY

DRG. TITLE: TYPICAL DRAINAGE CONSTRUCTION DETAILS SHEET 1

CLIENT: STEINFORT INVESTMENTS FUND

SCALE: AS SHOWN @A1 FILE REF: 180002-3010

DRG. NO.: 180002-3010 B