

Table 1	
Nominal internal diameter of largest pipe in manhole (mm)	Minimum nominal internal dimension of manhole (mm)
Less than 375	1200
375-450	1350
500-700	1500
750-900	1800
Greater than 900	Pipe diameter + 900

Table 2	
Pipe Diameter (mm)	Effective Length of rocker pipe (m)
150 to 600	0.6
601 to 750	1.0
Over 750	1.25

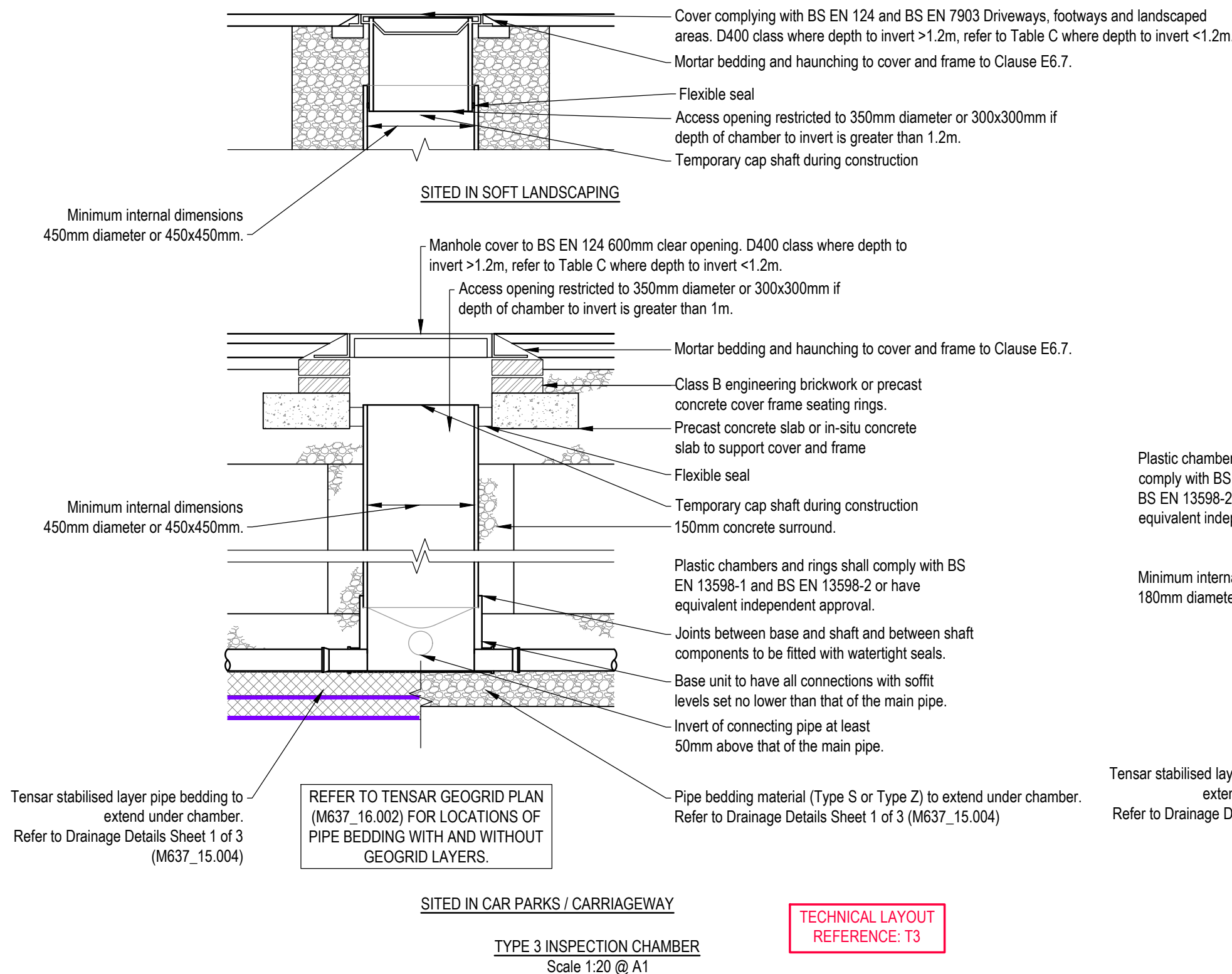
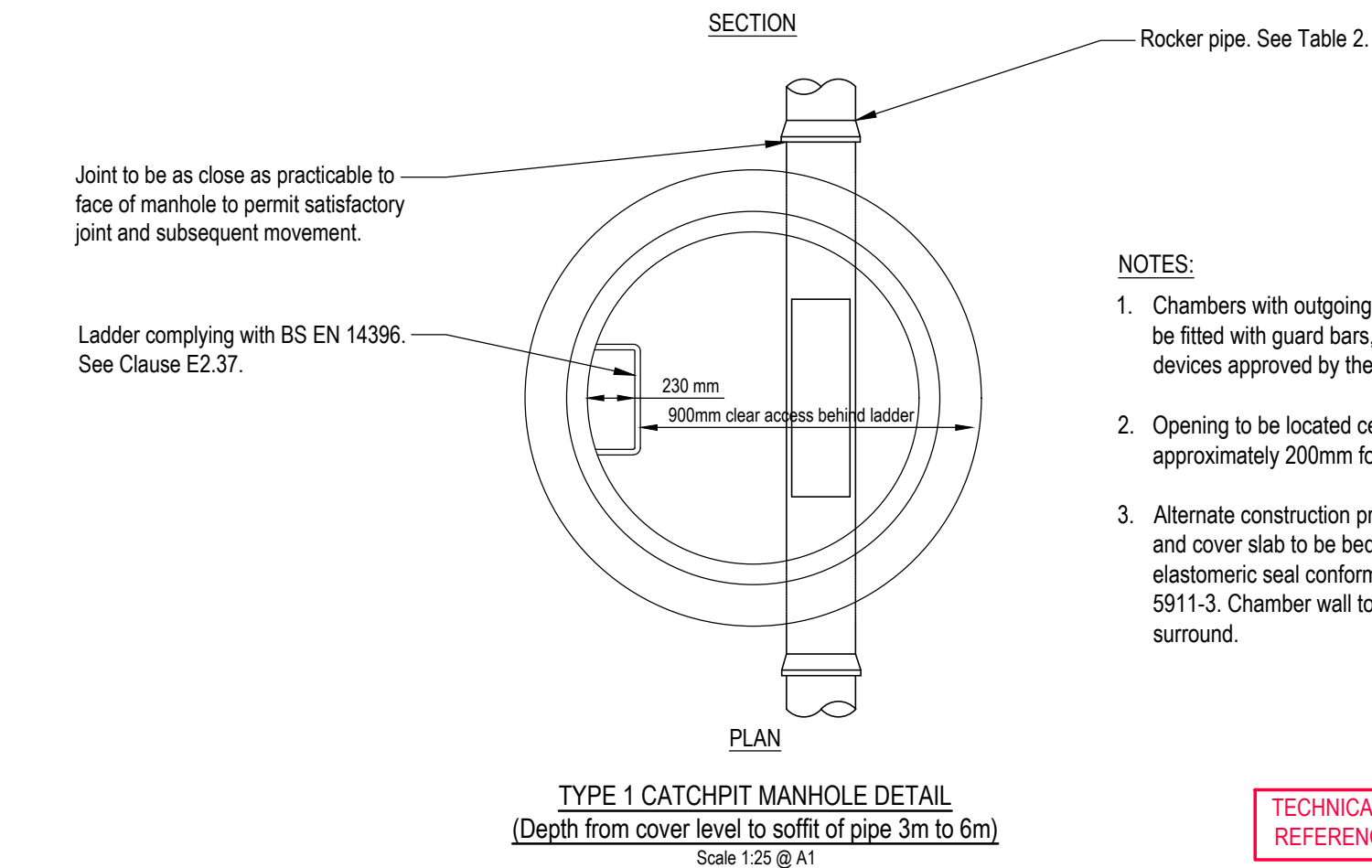
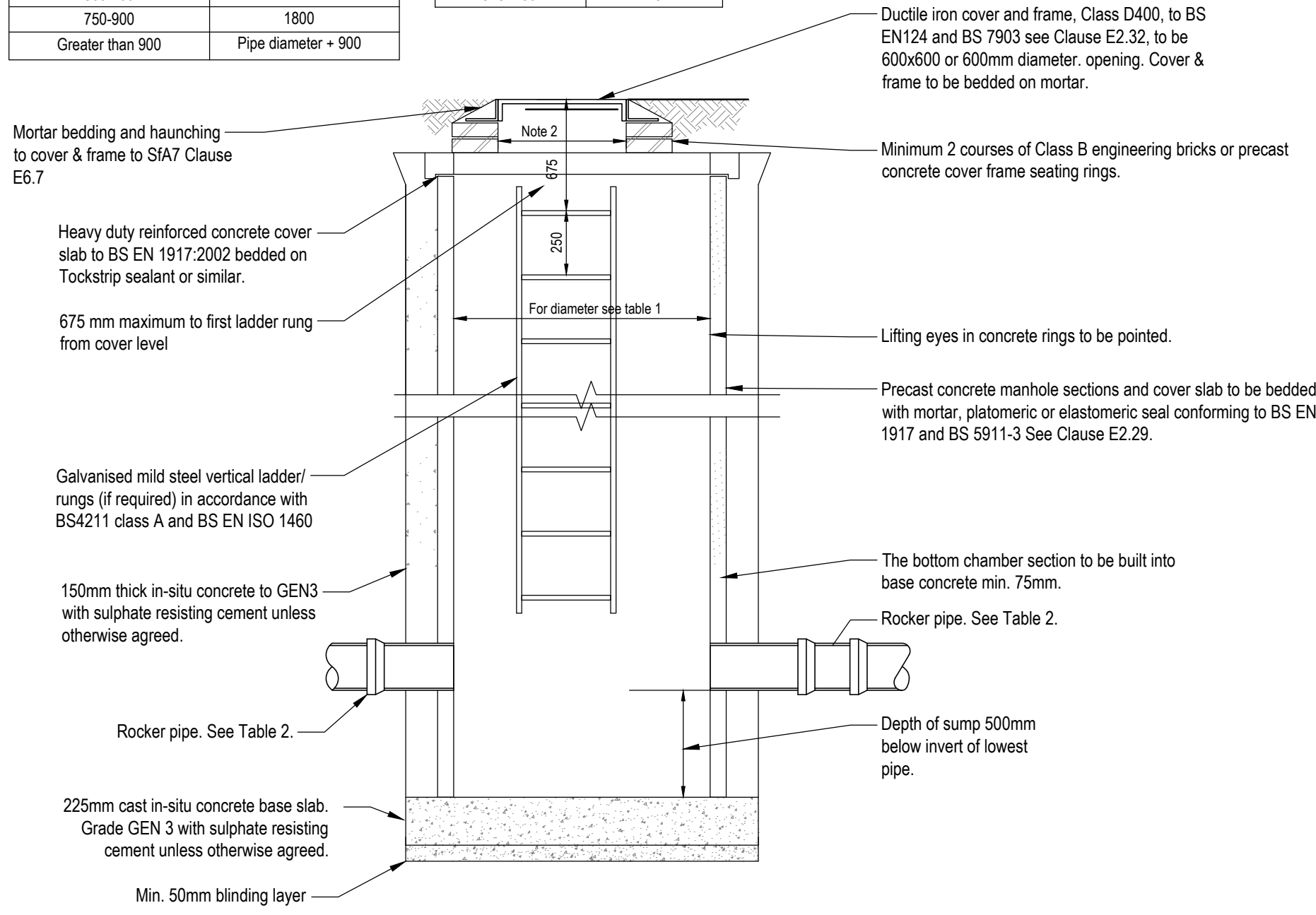


TABLE A: POLYPIPE CATCHPIT AND SILT TRAP DIMENSIONS AND SPECIFICATION					
	POLYSTORM CATCHPIT	RIDGISTORM SILT TRAP: MINI	RIDGISTORM SILT TRAP: BASIC	RIDGISTORM SILT TRAP: ADVANCED	RIDGISTORM CATCHPIT
Chamber Diameter (mm)	600	320	460	460	450 - 3000
Precast Chamber Depth (mm)	1500	600	1220	830	To suit*
Extender Unit Depth (mm)	-	215	215	215	-
Pipe Diameters (mm)	150/225/300	110	160	160	100 - 3000
Sump Depth (mm)	300	250	420	280	To suit (min. 500mm)

* Steps to be provided at depths >1.5m (refer to RAM detail). Ladder to be provided at depths >3m (refer to T1-CP detail).

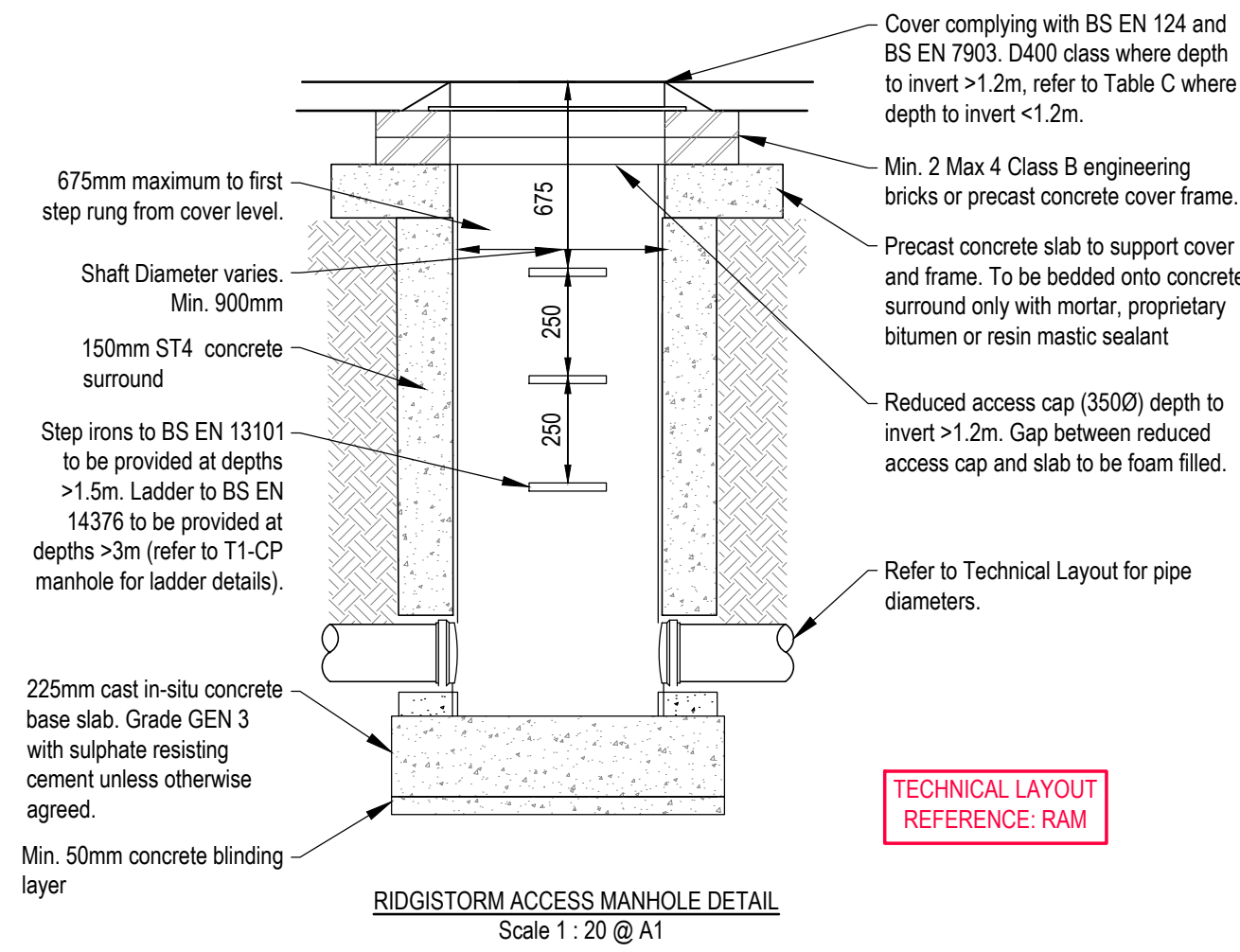
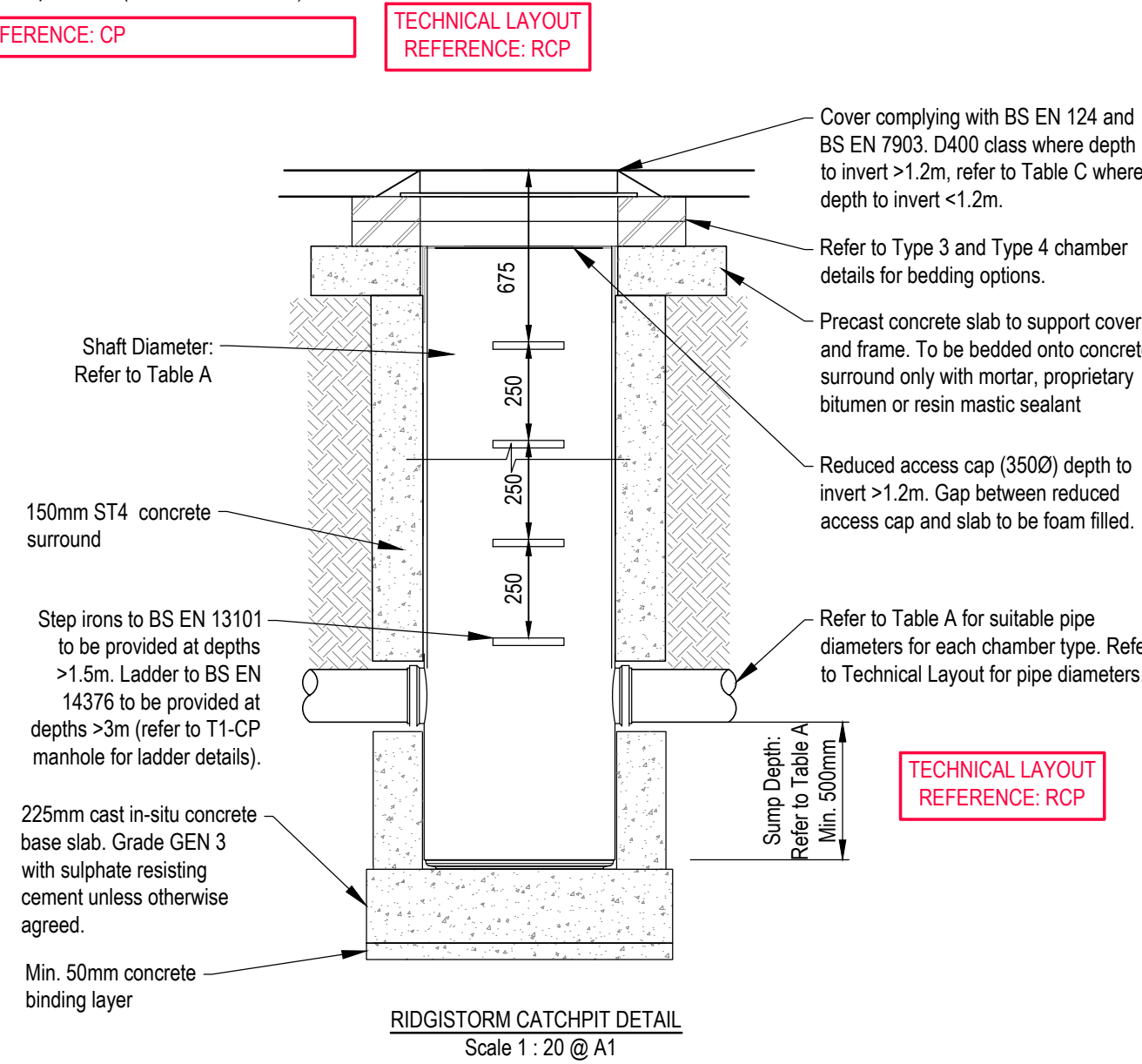
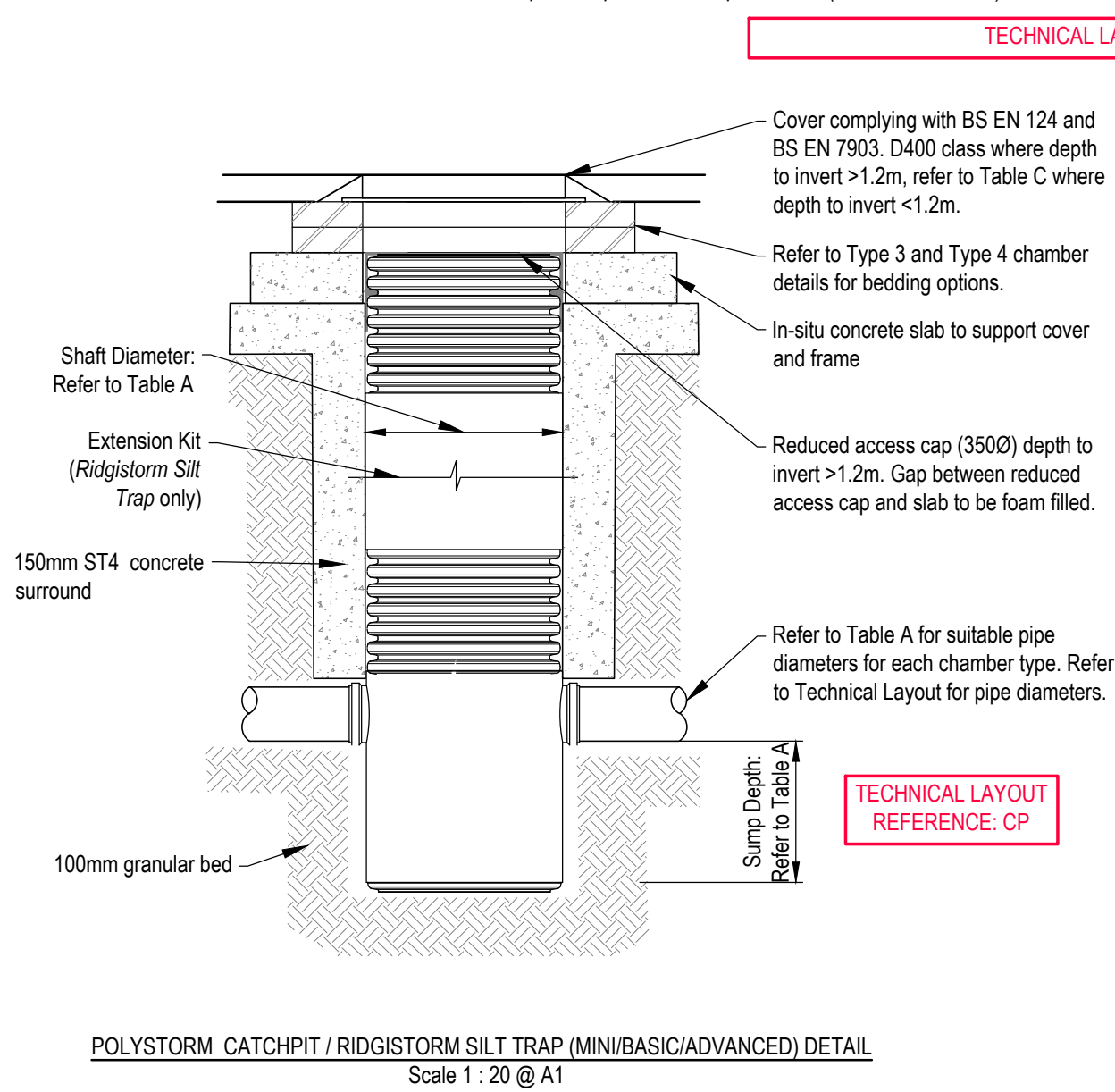


TABLE B: MINIMUM DIMENSIONS FOR MANHOLES					
TYPE OF ACCESS	SIZE OF LARGEST PIPE (DN)	MINIMUM INTERNAL DIMENSIONS (1)		MINIMUM CLEAR OPENING SIZE (1)	
		RECTANGULAR LENGTH x WIDTH (mm x mm)	CIRCULAR DIAMETER (mm)	RECTANGULAR LENGTH x WIDTH (mm x mm)	CIRCULAR DIAMETER (mm)
MANHOLE LESS THAN 1.5m DEEP TO SOFFIT	LESS THAN OR EQUAL TO 150	750 x 675 (7)	1000 (7)	750 x 675 (2)	N/A (3)
	225	1200 x 675	1200	1200 x 675 (2)	
	300	1200 x 750	1200		
	GREATER THAN 300	1800 x (DN+450)	THE LARGER OF 1800 or (DN+450)		
MANHOLE GREATER THAN 1.5m DEEP TO SOFFIT	LESS THAN OR EQUAL TO 225	1200 x 1000	1200	600 x 600	600
	300	1200 x 1075	1200		
	375-450	1350 x 1225	1200		
	GREATER THAN 450	1800 x (DN+775)	THE LARGER OF 1800 or (DN+775)		
MANHOLE SHAFT (4) GREATER THAN 3.0m DEEP TO SOFFIT OF PIPE	STEPS (5)	1050 x 800	1050	600 x 600	600
	LADDER (5)	1200 x 800	1200		
	WINCH (6)	900 x 800	900		

NOTES:
(1) LARGER SIZES MAY BE REQUIRED FOR MANHOLES ON BENDS OR WHERE THERE ARE JUNCTIONS.
(2) MAY BE REDUCED TO 600x600mm WHERE REQUIRED BY HIGHWAY LOADING CONSIDERATIONS, SUBJECT TO A SAFE SYSTEM OF WORK BEING SPECIFIED.
(3) NOT APPLICABLE DUE TO WORKING SPACE NEEDED.
(4) MINIMUM HEIGHT OF CHAMBER IN SHAFTED MANHOLE 2m FROM BENCHING TO UNDERSIDE OF REDUCING SLAB.
(5) MINIMUM CLEAR SPACE BETWEEN LADDER OR STEPS AND THE OPPOSITE FACE OF THE SHAFT SHOULD BE APPROXIMATELY 900mm.
(6) WINCH ONLY - NO STEPS OR LADDERS, PERMANENT OR REMOVABLE.
(7) THE MINIMUM SIZE OF ANY MANHOLE SERVING A SEWER (i.e. ANY DRAIN SERVING MORE THAN ONE PROPERTY) SHOULD BE 1200x750mm RECTANGULAR OR 1200mm DIAMETER.

TABLE C: PRIVATE MANHOLE/INSPECTION CHAMBER COVER GRADES AND AREAS OF USE		
FACTA CLASS	COVER GRADE TO BS EN: 124	LOCATION
D	D400	FOR USE IN INDUSTRIAL ROADS AND PARKING AREAS ACCESSIBLE TO ALL TYPES OF ROAD VEHICLES INCLUDING HGV'S. FOR USE WHERE DEPTH TO SOFFIT >1.2m
C	C250*	FOR USE IN PRIVATE ROADS OR PARKING AREAS eg. CAR PARKS AND MINOR PRIVATE ROADS ACCESSIBLE TO REFUSE VEHICLES, FIRE APPLIANCES ETC WITH POSSIBLE OCCASIONAL HGV USE. FOR USE ONLY WHERE DEPTH TO SOFFIT <1.2m
B	B125	FOR USE IN FOOTWAYS, PEDESTRIAN AREAS, DRIVEWAYS AND CAR PARKS ACCESSIBLE BY LIGHT VEHICLES ONLY. FOR USE ONLY WHERE DEPTH TO SOFFIT <1.2m
AAA	A15	FOR USE IN AREAS WHICH CAN ONLY BE USED BY PEDESTRIANS AND CYCLISTS. FOR USE ONLY WHERE DEPTH TO SOFFIT <1.2m
* D400 MAY BE USED IN LIEU OF C250 IF PREFERRED.		

TABLE D: MINIMUM DIMENSIONS FOR ACCESS FITTINGS AND INSPECTION CHAMBERS					
TYPE OF ACCESS	DEPTH TO INVERT FROM COVER LEVEL (m)	MINIMUM INTERNAL DIMENSIONS (1)		MINIMUM CLEAR OPENING SIZE (1)	
		LENGTH x WIDTH (mm x mm)	CIRCULAR (mm)	LENGTH x WIDTH (mm x mm)	CIRCULAR (mm)
RODDING EYE	-	AS DRAIN BUT MINIMUM 100mm	-	-	SAME SIZE AS PIPEWORK
ACCESS FITTING SMALL 150mm DIA. SMALL 150x100mm LARGE 225x100mm	0.6m OR LESS EXCEPT WHERE SITUATED IN A CHAMBER	150 x 100 225 x 100	150 225	150 x 100 (1) 225 x 100 (1)	SAME SIZE AS ACCESS FITTING
INSPECTION CHAMBER					
SHALLOW	0.6m OR LESS	225 x 100	190 (2)		190 (1)
MEDIUM	1.2m OR LESS	450 x 450	450	MIN 430 x 430	430
DEEP	GREATER THAN 1.2m	450 x 450	450	MAX 300 x 300 (3)	ACCESS RESTRICTED TO MAX 350 (3)

NOTES:
(1) THE CLEAR OPENING MAY BE REDUCED BY 20mm IN ORDER TO PROVIDE PROPER SUPPORT FOR THE COVER AND FRAME.
(2) DRAINS UPTO 150mm DIAMETER.
(3) A LARGER CLEAR OPENING COVER MAY BE USED IN CONJUNCTION WITH A RESTRICTED ACCESS. THE SIZE IS RESTRICTED FOR HEALTH AND SAFETY REASONS TO DETER ENTRY.

NOTES:
1. This drawing is to be read in conjunction with all other relevant documents and specifications.
2. Do not scale from this drawing.
3. Buried concrete to be Design Sulphate Class DS-2 and ACEC AC-2 within Made Ground, and DS-1 and AC-1 within River Terrace Deposits or Chalk Bedrock.
4. Any discrepancies between this drawing and any other engineering drawings should be reported to the Project Engineer immediately.
5. Unless specifically noted otherwise, clauses and tables refer to the Specification for Highway works (SHW) Volume 1 of the Manual for Contract Documents for Highway Works.

Drawing reference no.
M637_11.001 - 11.005
M637_12.001
M637_13.001/13.002/13.003/13.004
M637_14.001/14.002/14.003/14.004
M637_15.001/15.002/15.003
M637_15.004/15.005/15.006/15.007
M637_16.001
M637_16.002
M637_17.001/17.002
M637_18.001/18.002/18.003/18.004
THA21635-03A
GY4624/1001A

Drawing Title
- Setting Out
- Longitudinal Sections
- Technical Layout
- Surface Finishes Layout
- Engineering Details
- Drainage Details
- Cut and Fill
- Tensar Geogrid Plan
- S278 Agreement Plans
- Combined Services
- Tree Protection Plan, 2018.08.11
ACD Environmental.
- Topographical Survey, 2017.11.27
Sunshine Survey Ltd.

T5	Drawing title updated.	30.08.19 MLM	CS
T4	Tensar stabilised layer added to Type 3 and 4 chambers.	03.06.19 MLM	CS
T3	Cover grades notes and table updated. T1-C detail amended. RAM detail added.	04.04.19 MLM	CS
T2	Table C updated and note added.	14.03.19 MLM	CS
T1	Tender Issue.	25.02.19 MLM	CS
Rev.	Description	Date	Chkd



Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel. (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client : 

Project : Cornfield Close, Littlehampton

Title : Drainage Details Sheet 3 of 4

Project Engineer : C.Salt Scale : As Shown @ A1

Project Director : J.Birch Date : February 2019

Status : TENDER

Drawing No. M637_15.006 Rev T5