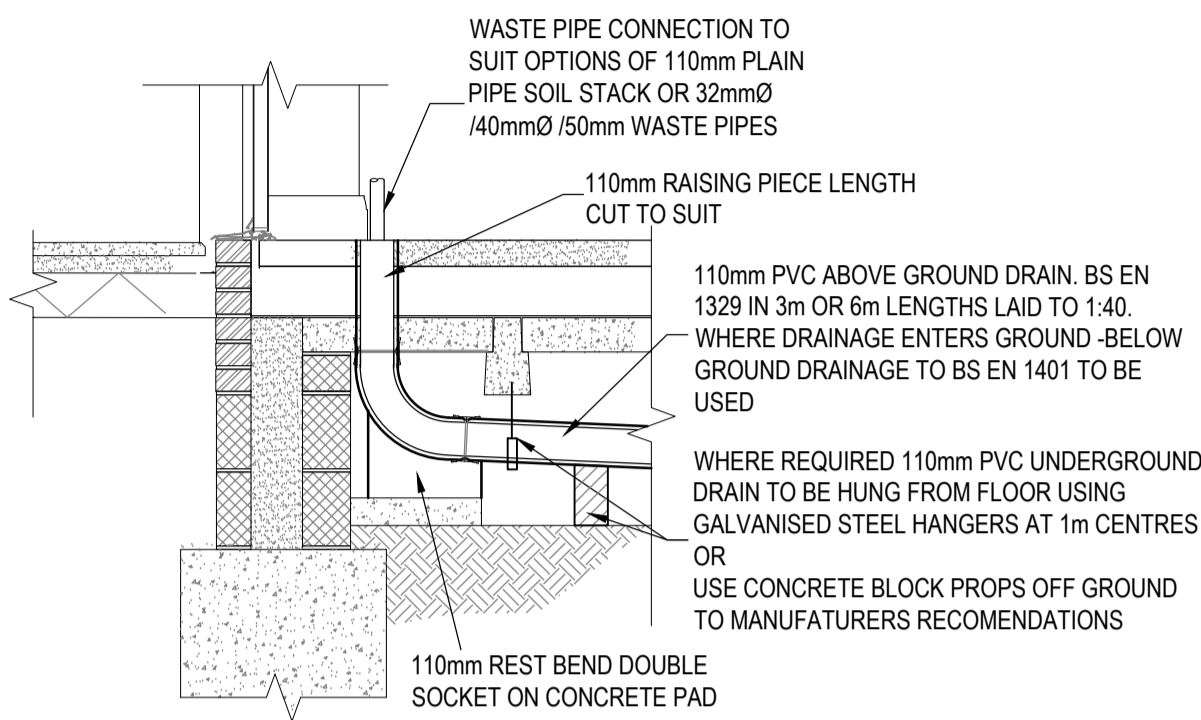


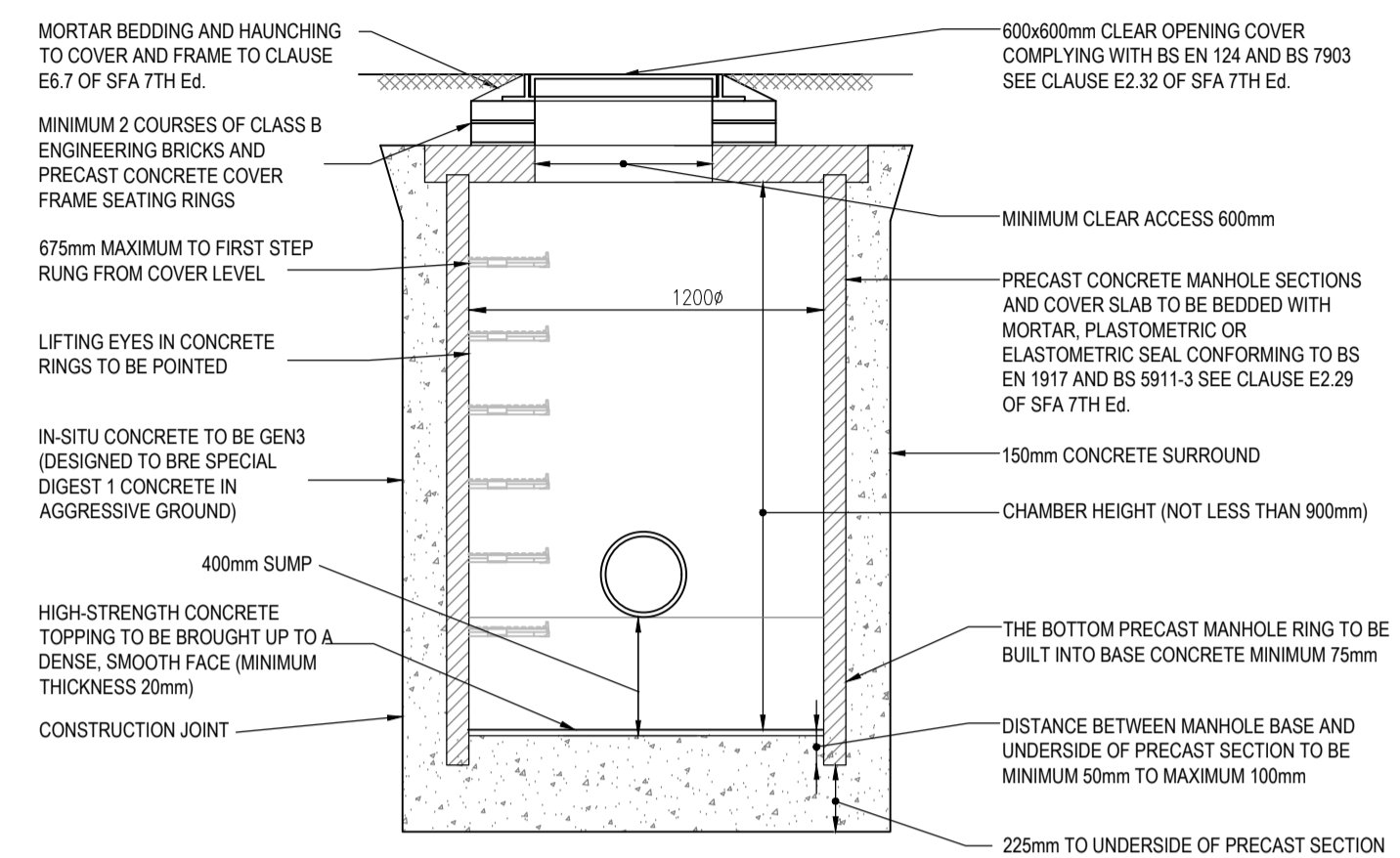
**DETAIL OF INTERNAL SS/SVP**

OPTION 2 (DEEP VOID)  
SCALE 1:20



**DETAIL OF INTERNAL SS/SVP**

OPTION 1 (SHALLOW VOID)  
SCALE 1:20

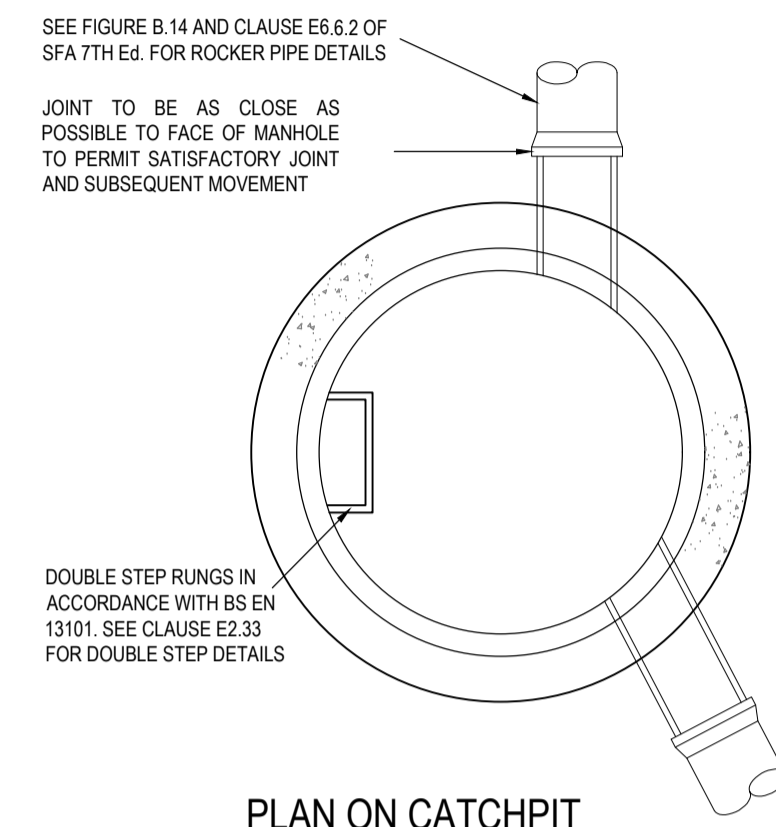


**SECTION THROUGH CATCHPIT**

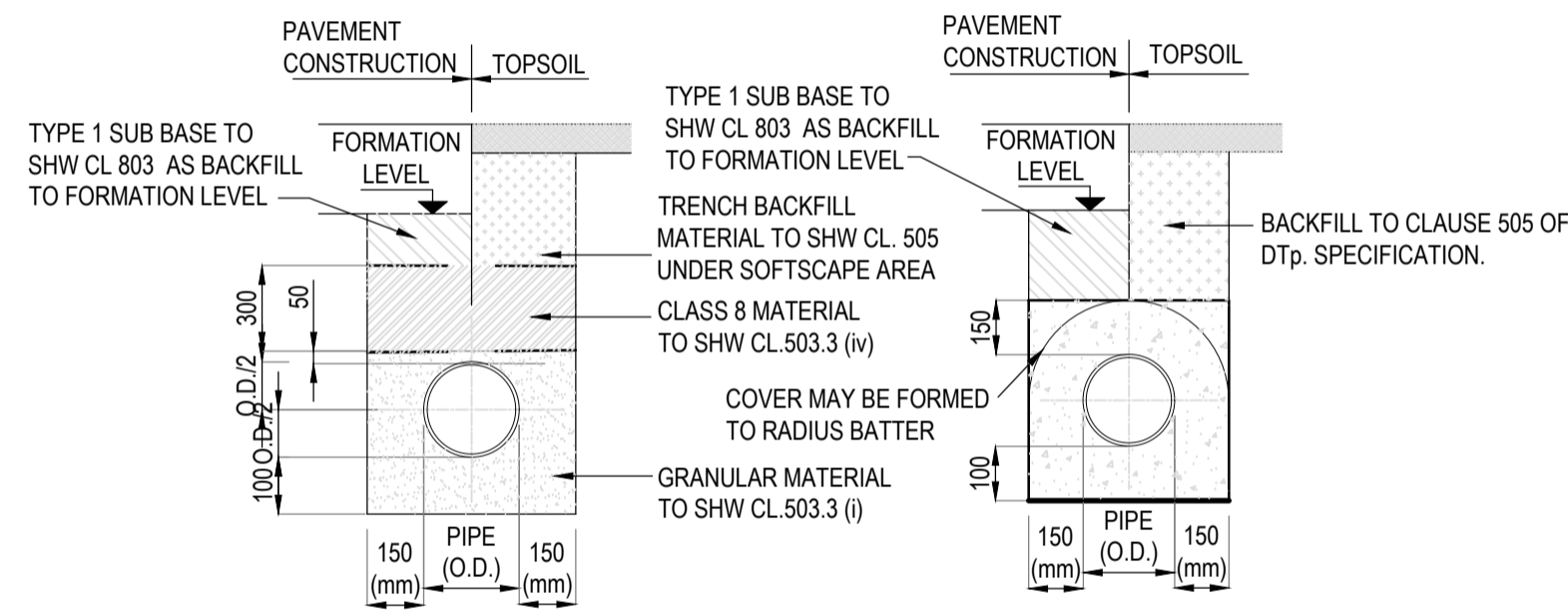
**MANHOLE DETAIL TYPE 2  
CATCHPIT WITH 400mm SUMP**

MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0m

PIPE DIA (mm)	ROCKER PIPE LENGTH
150-600	0.60m
675-750	1.00m
OVER 750	1.25m



**PLAN ON CATCHPIT**



**TYPE S BEDDING  
GRANULAR BED AND SURROUND**

(BEDDING FACTION = 2.2)  
SCALE 1:20

**TYPE Z BEDDING  
GRANULAR BED AND SURROUND**

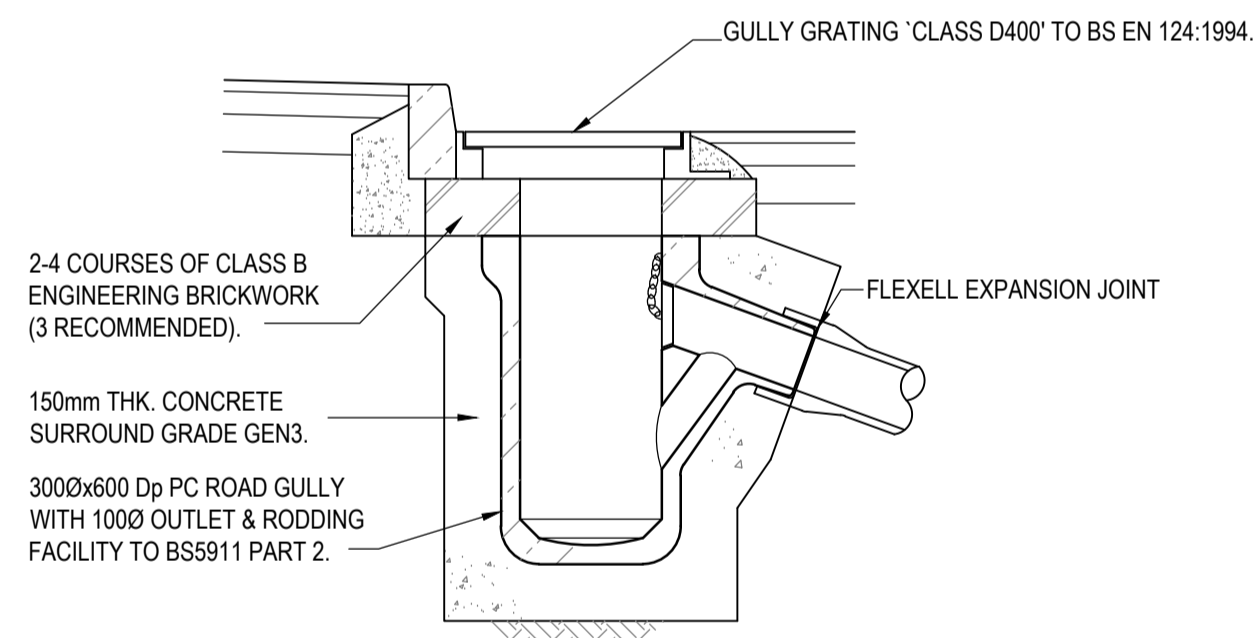
(BEDDING FACTION = 2.6)  
SCALE 1:20

- NOTES:
- REFER TO SHW TABLE 5/3 AND SHW TABLE 6/1
  - BEDDING BENEATH AND AT SIDES OF THE PIPE TO BE WELL COMPACTED IN ACCORDANCE WITH CL 505
  - CONCRETE CRADLES AND ARCHES MAY BE EXTENDED TO THE SIDES OF THE TRENCH
  - GEOTEXTILES MAY BE USED WHERE DIRECTED OR APPROVED BY THE ENGINEER TO CONTAIN BEDDING MATERIAL IN CERTAIN SOILS EG. RUNNING SAND.
  - IN VERY WET CONDITIONS, WHERE DIRECTED OR APPROVED BY THE ENGINEER A TEMPORARY LAND DRAIN MAY BE LAID WITHIN THE GRANULAR BED.

- NOTES: (TYPE Z ONLY)
- WHERE PIPES WITH FLEXIBLE JOINTS ARE USED, THE 6. CONCRETE PROTECTION IS TO BE INTERRUPTED OVER ITS FULL CROSS SECTION AT INTERVALS NOT EXCEEDING 5 METRES (OR AS DIRECTED BY THE ENGINEER) BY A SHAPED FORMER OF BITUMEN IMPREGNATED COMPRESSIBLE FILLER. THESE INTERRUPTIONS SHALL COINCIDE WITH PIPE JOINTS. SEE DIMENSIONS FOR PIPE BEDDING TABLE FOR THICKNESS OF COMPRESSIBLE FILLER.
  - CONCRETE TO BE GRADE GEN 3. WHERE FLEXIBLE PIPES ARE USED, CARE MUST BE TAKEN
  - TO PREVENT THE PIPES FROM FLOATING.

**BEDDING DETAILS**

SCALE 1:20



**ROAD GULLY DETAIL**

SCALE 1:20

- GULLY NOTES
- GULLY TOP SHALL COMPLY WITH BS EN 124: 1994 FOR INSTALLATION WITHIN AREAS SUBJECTED TO PEDESTRIAN AND/OR VEHICULAR TRAFFIC.
  - GULLY TOP SHALL BE OF APPROPRIATE CLASS AND BE DEPENDANT UPON THE PLACE OF INSTALLATION WITH THE ADDITIONAL PROVISION THAT ALL GULLY TOPS LOCATED IN AREAS WHERE VEHICLES CAN ACCESS (VERGES ETC.) SHALL BE CLASS D400 MINIMUM.
  - ALL GULLY TOPS SHALL BE SINGLE PIECE, CAPTIVE HINGED, NON-ROCKING AND FREE FROM DEFECTS WHICH MAY IMPAIR THEIR FITNESS FOR USE.
  - THE SLOT DIMENSIONS IN THE GULLY GRATING SHALL BE SELECTED HAVING REGARD OF THE HYDRAULIC CAPACITY AND SHALL BE EVENLY DISTRIBUTED OVER THE CLEAR AREA. THE WATER CLEAR AREA AS GIVEN IN THE MANUFACTURER'S CATALOGUE.
  - NORMAL WIDTH OF GULLY GRATING SHALL BE 450mm MINIMUM AREA OF WATERWAY SHALL BE 1000cm<sup>2</sup> OF THE TOTAL WATERWAY AREA, THERE SHALL BE A MIN WATERWAY AREA OF 45cm BETWEEN THE KERB FACE OF THE FRAME AND A PARALLEL LINE 50mm DISTANT AND THERE SHALL BE A MIN WATERWAY AREA OF 65cm<sup>2</sup> BETWEEN THE KERB FACE OF THE FRAME AND A PARALLEL LINE 90mm DISTANT. THE FRAME SHALL BE AT LEAST 100mm DEEP AND SHALL HAVE A BASE FLANGE OF AT LEAST 1400sq cms.
  - CLEANSING ACCESS - THE OPENED UNIT SHALL PROVIDE A RECTANGULAR CLEAR OPENING 400mm x 250mm.
  - IF SLOT ORIENTATION TO DIRECTION OF TRAFFIC IS BETWEEN 0° & 45° & 135° TO 180°, THE MAX LENGTH OF SLOT IS WIDER THAN 16mm.
  - ALL COVERS, GRATINGS AND FRAMES SHALL BEAR APPROPRIATE MARKINGS TO COMPLY WITH CLAUSE 9. BS EN 124: 1994 AND SHALL BE CERTIFIED BY CERTIFICATION BODIES APPROVED BY THE AUTHORITY AND SHALL BE BEDDED ON CLASS B ENGINEERING BRICK TO BS 3921 (CLASS 1 MORTAR 12MM THICK) - 2 COURSE MIN - 4 COURSE MAX. BRICKWORK TO BE 225mm THICK ENGLISH BOND.
  - GULLY POT TO HAVE 150mm DIAMETER TRAPPED OUTLET, HAVING A GALVANISED METAL CHAIN AND CONCRETE STOPPER.
  - GULLY POT TO BE BEDDED AND SURROUNDED WITH 150mm CONCRETE GRADE GEN 3.
  - PIPE COVER TO BE 750mm MINIMUM BELOW CARRIAGEWAY TO ALLOW FOR SERVICES TO CLEAR GULLY CONNECTIONS AND REDUCE THE RISK OF DAMAGE TO PIPES USE TO SETTLEMENT.
  - WHERE DEPTH OF RUN IS LESS THAN 1.2m BELOW FINISHED C/WAY LEVEL A FLEXCELL JOINT IS TO BE USED AT EVERY JOINT.

C3	20.09.16	CATCHPIT DETAIL REVISED	SJ	CP
T2	10.02.16	TENDER ISSUE	AH	CP
T1	10.02.16	TENDER ISSUE	AH	CP
Rev	Date	Description	By	Apvd

Project  
**BRYN EITHIN  
DINAS POWYS**

Title  
**DRAINAGE CONSTRUCTION DETAILS  
SHEET 2**

Client  
**PORTABELLA**

Scale @ A1  
**AS SHOWN**

Project Ref <b>C15241</b>	Drawing No <b>506</b>	Rev <b>C3</b>
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REVISION REFERENCING  
P = Preliminary A = Approval T = Tender C = Construction

