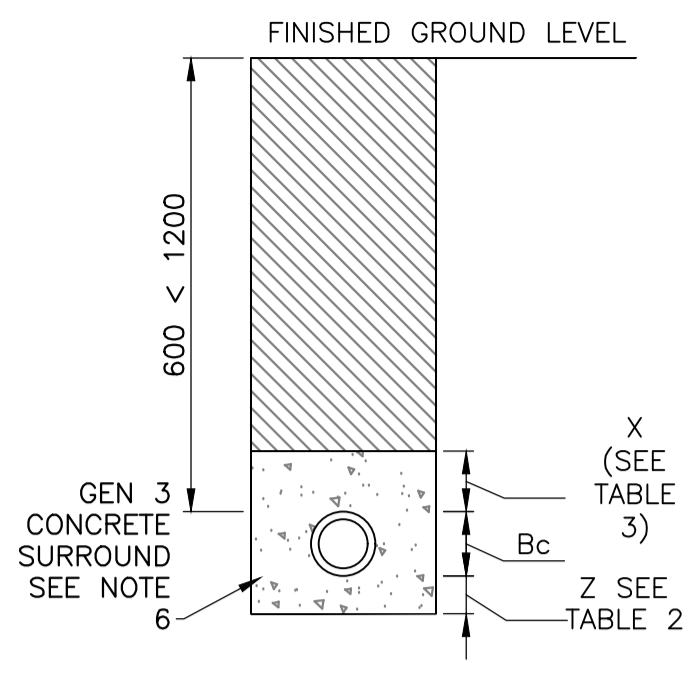


NOMINAL INT PIPE DIA	DIMENSION Y1 (EVEN TRENCH BOTTOM)	DIMENSION Y2 (ROCK OR UNEVEN TRENCH BOTTOM*)	MINIMUM EFFECTIVE TRENCH WIDTH B <sub>d</sub> (SEE NOTE 5)
<400	100	200	B <sub>c</sub> +300
400-700	150	250	B <sub>c</sub> +450
725-900	200	300	B <sub>c</sub> +600
925-1200	250	350	B <sub>c</sub> +800

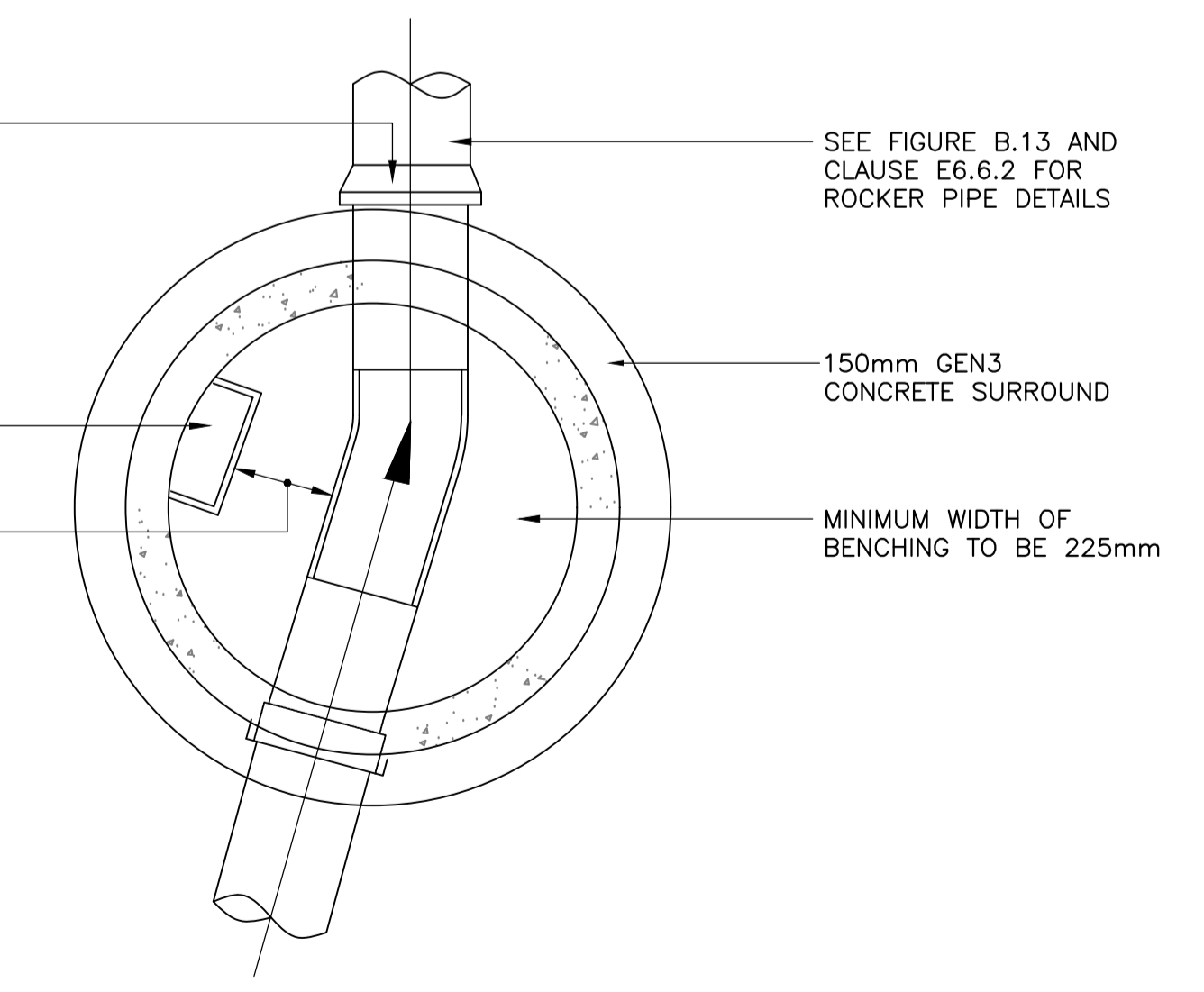
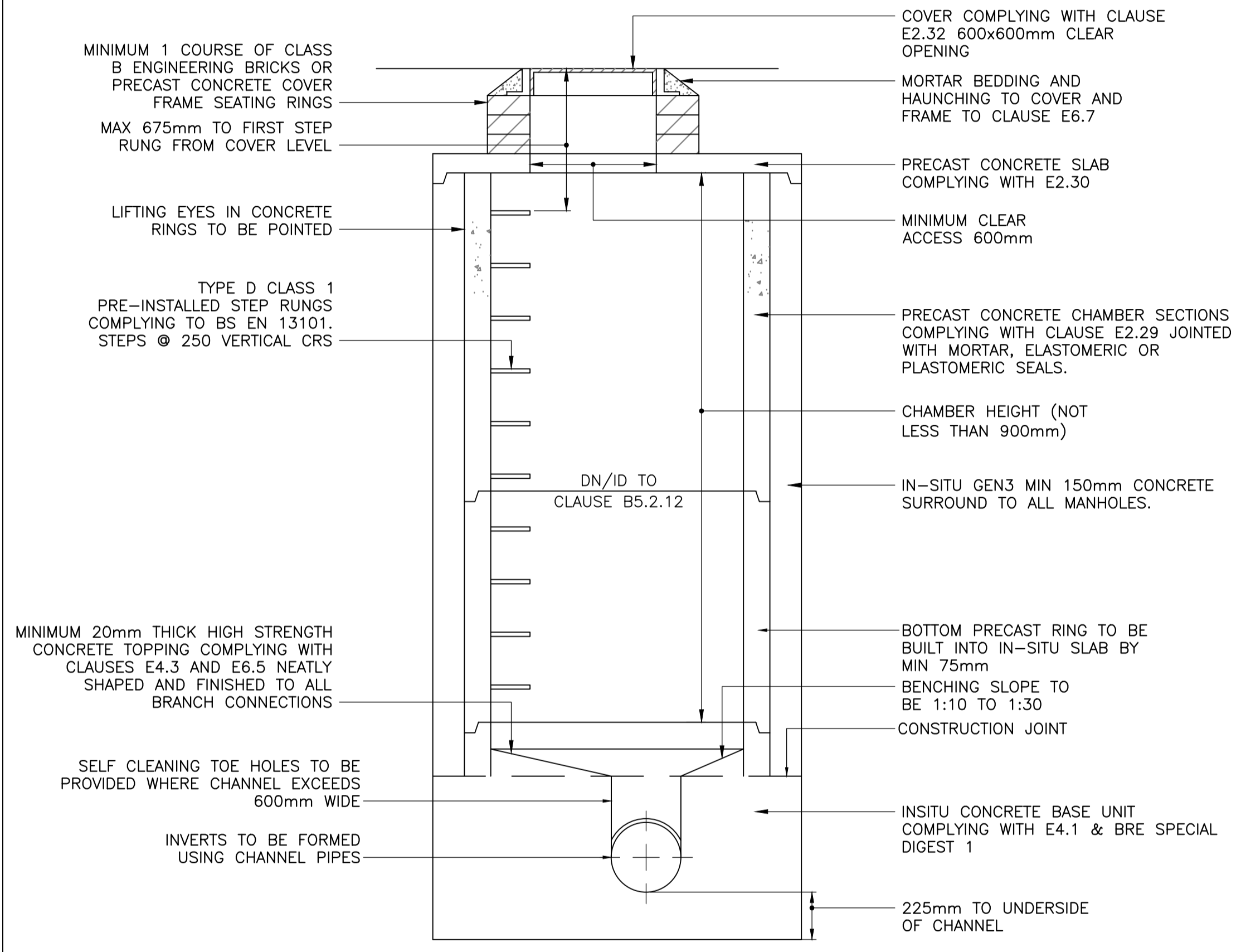
\*NOTE  
THE MINIMUM DEPTH OF PROCESSED GRANULAR MATERIAL UNDER PIPE SOCKETS SHALL BE 50mm FOR EVEN TRENCH BOTTOM AND 150mm FOR UNEVEN TRENCH BOTTOM

- NOTE**
- DRAINAGE TO BE 150 CONCRETE ENCASED WHERE COVER IS LESS THAN 1200mm.
  - THE PIPE EMBEDMENTS INDICATE MIN TRENCH DIMENSIONS WHICH SHOULD BE ASSUMED FOR INITIAL DESIGN. THE MIN TRENCH WIDTHS SHOWN WILL USUALLY BE SUFFICIENT TO ALLOW ADEQUATE COMPACTION OF THE EMBEDMENT MATERIAL. ALL PIPE WORK TO BE DESIGNED TO BS EN 1295-1
  - GEN3 CONCRETE SHALL BE USED IN NON AGGRESSIVE GROUND ELSEWHERE THE CEMENT TYPE & MIX DESIGN SHOULD BE SELECTED TO SUIT SULPHATE CONTENT & PH OF THE GROUND & GROUND WATER
  - GROUND COVER TO ALL PLANT TO BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS

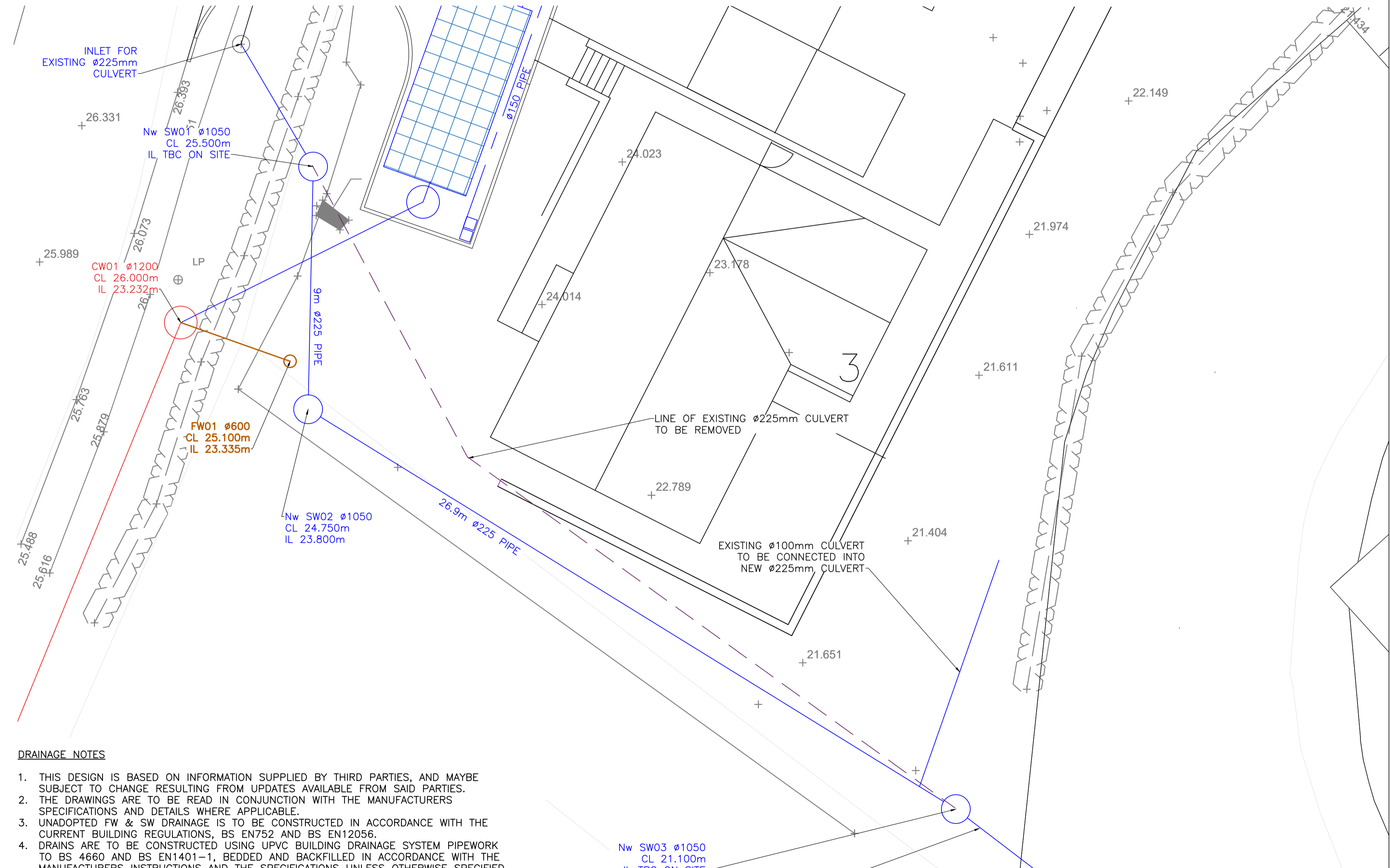


NOMINAL INT PIPE DIA	DIMENSION Y1 EVEN TRENCH BOTTOM (MIN)	DIMENSION Y2 ROCK OR UNEVEN TRENCH BOTTOM (MIN)	PROCESSED GRANULAR MATERIAL	DIMENSION Z (MIN)	MAX PERMITTED TRENCH WIDTH
150	100	200	10mm single sized or 14mm to 5mm graded	100	750
225	100	200		100	825
300	100	200		100	925
375	100	200	14mm single sized or 14mm to 5mm graded	100	1050
450	150	200		150	1150
525	150	250		150	1200
600	150	250	20mm single sized or 20mm to 5mm graded	150	1350
675	150	250		150	1450
750	225	300		225	1500

nominal internal pipe dia	DIM "X"mm	compressible filler Lmm
< 400	160mm	18mm
400 - 700	200mm	36mm
725 - 1200	300mm	36mm
> 1200	300mm	54mm



**TYPICAL MANHOLE DETAIL - TYPE B**  
DEPTH TO PIPE SOFFIT 1.5m TO 3.0m  
TYPICAL DETAIL SHOWN IS FOR TYPE B - RIGID CONSTRUCTION MANHOLE. OTHER CONSTRUCTION METHODS ARE AVAILABLE AS PER THE DETAILS IN THE SEWERAGE SECTOR GUIDANCE  
TYPICAL DETAIL FOR MANHOLES IN HIGHWAY AND ALONG HIGHWAY VERGE (I.E. ALL COMBINED MANHOLES OUTSIDE SITE BOUNDARY)



- DRAINAGE NOTES**
- THIS DESIGN IS BASED ON INFORMATION SUPPLIED BY THIRD PARTIES, AND MAYBE SUBJECT TO CHANGE RESULTING FROM UPDATES AVAILABLE FROM SAID PARTIES. THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE MANUFACTURERS SPECIFICATIONS AND DETAILS WHERE APPLICABLE.
  - UNADOPTED FW & SW DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS, BS EN752 AND BS EN12056.
  - DRAINS ARE TO BE CONSTRUCTED USING UPVC BUILDING DRAINAGE SYSTEM PIPEWORK TO BS 4660 AND BS EN1401-1. BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND THE SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
  - BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDINGS OR OTHER STRUCTURES IS TO BE IN ACCORDANCE WITH DIAGRAM 8 OF THE BUILDING REGULATIONS.
  - DRAINAGE TO BE 150 CONCRETE ENCASED WHERE COVER IS LESS THAN 1200mm.
  - THE PIPE EMBEDMENTS INDICATE MIN TRENCH DIMENSIONS WHICH SHOULD BE ASSUMED FOR INITIAL DESIGN. THE MIN TRENCH WIDTHS SHOWN WILL USUALLY BE SUFFICIENT TO ALLOW ADEQUATE COMPACTION OF THE EMBEDMENT MATERIAL. ALL PIPE WORK TO BE DESIGNED TO BS EN 1295-1
  - GEN3 CONCRETE SHALL BE USED IN NON AGGRESSIVE GROUND ELSEWHERE THE CEMENT TYPE & MIX DESIGN SHOULD BE SELECTED TO SUIT SULPHATE CONTENT & PH OF THE GROUND & GROUND WATER
  - GROUND COVER TO ALL PLANT TO BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

NOTE: PERMITS FOR CONNECTION INTO EXISTING UNITED UTILITIES SYSTEM AND WORKING WITHIN THE HIGHWAY TO BE SOUGHT AND CONFIRMED PRIOR TO CONSTRUCTION

REV	DATE	AUTHOR	NOTES
DRAWING STATUS			<b>PLANNING</b>
		CLIENT SUNSHINE PROPERTIES LTD	
28 Castle Street, Carlisle, Cumbria CA3 8TF TEL 01228 527428 EMAIL mail@aldaines.co.uk WEB www.aldaines.co.uk		TITLE LAND ADJ TO SCHOOL HOUSE, ST BEES PROPOSED CULVERT REPLACEMENT	
DRAWN	PA	DATE JULY 22	SCALE 1:100 @A1
DRAWING NO. 22-C-16630-07			-