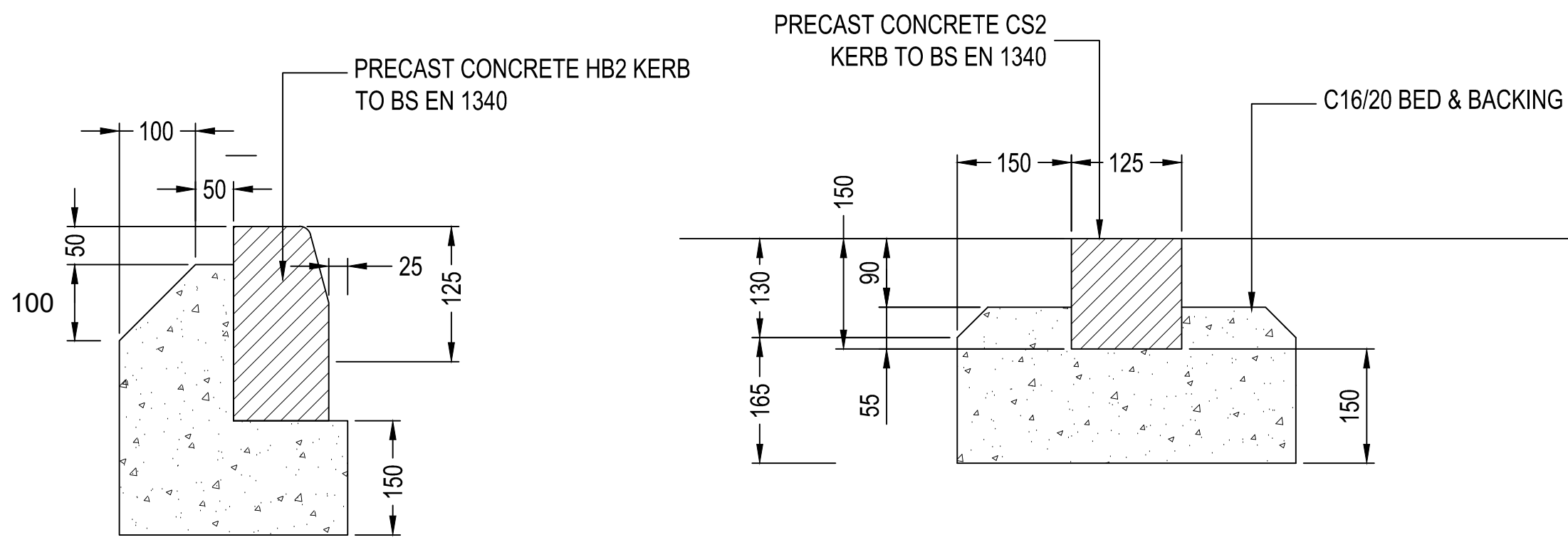
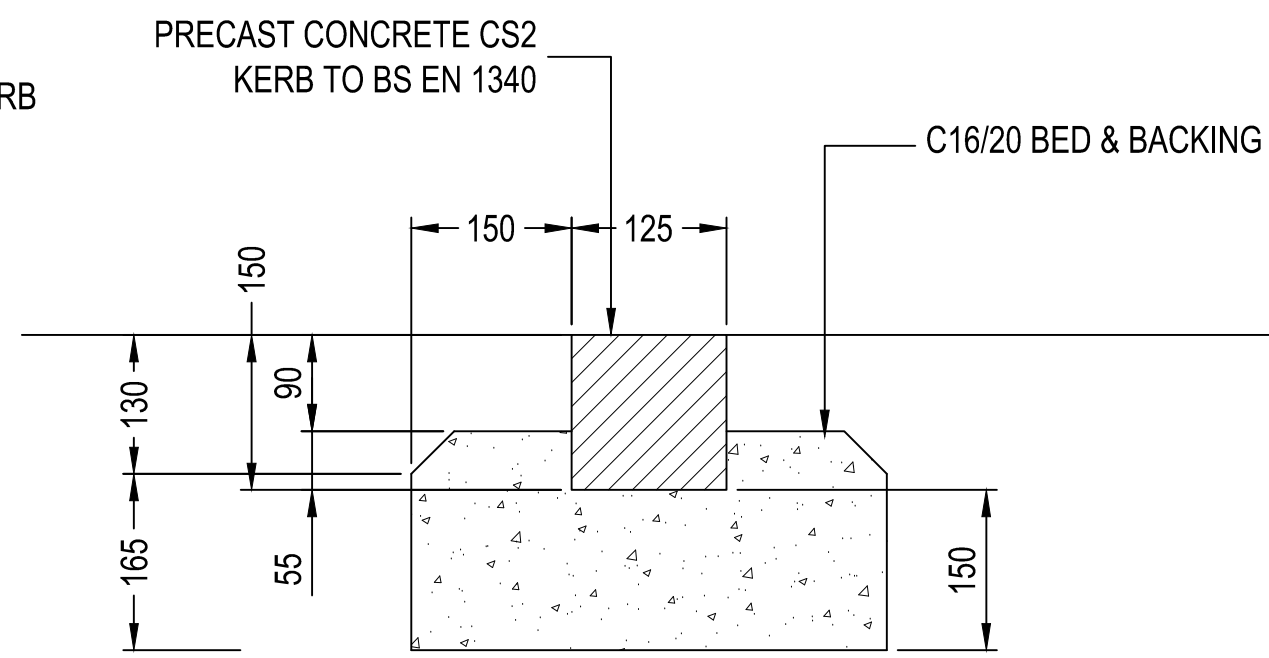
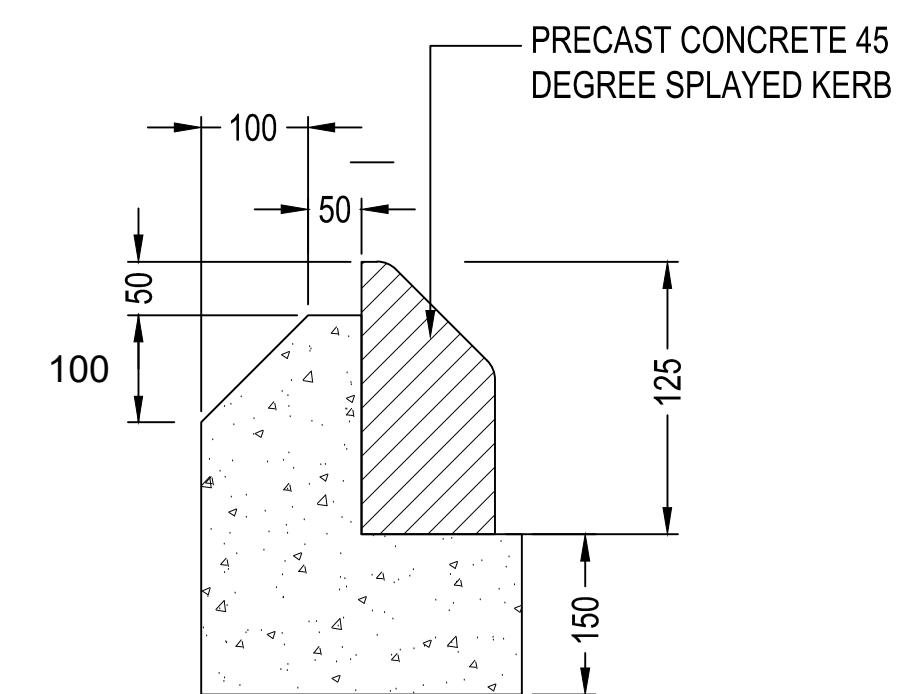




TYPICAL PRECAST HB2 KERB



TYPICAL PRECAST FLUSH CONCRETE KERB



TYPICAL PRECAST 45 DEGREE SPLAYED KERB

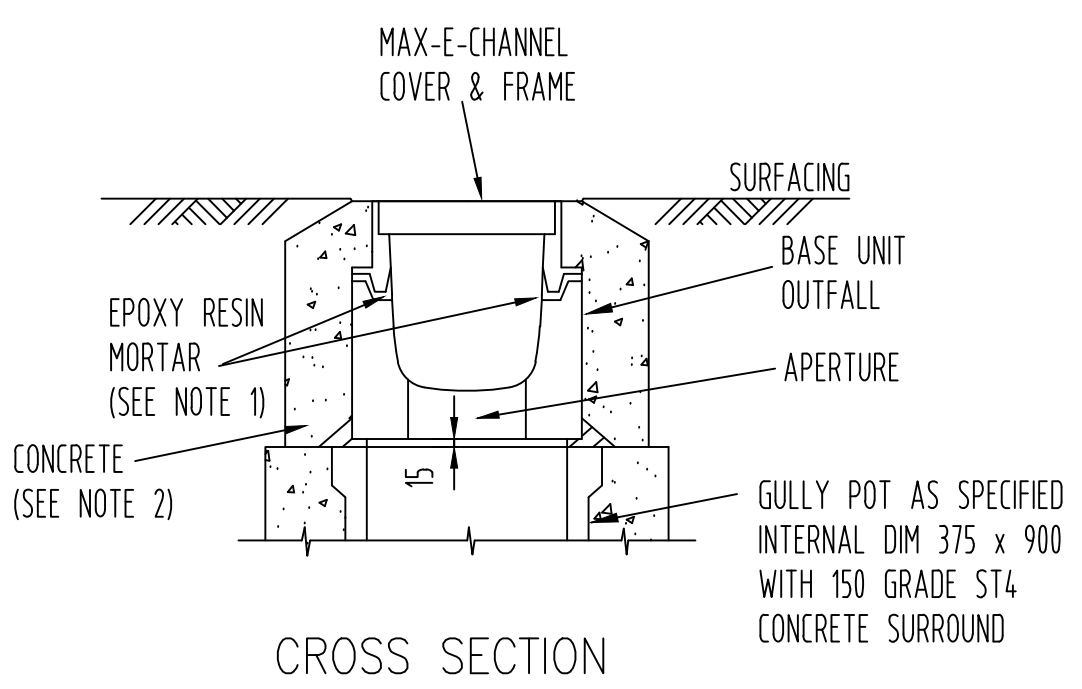
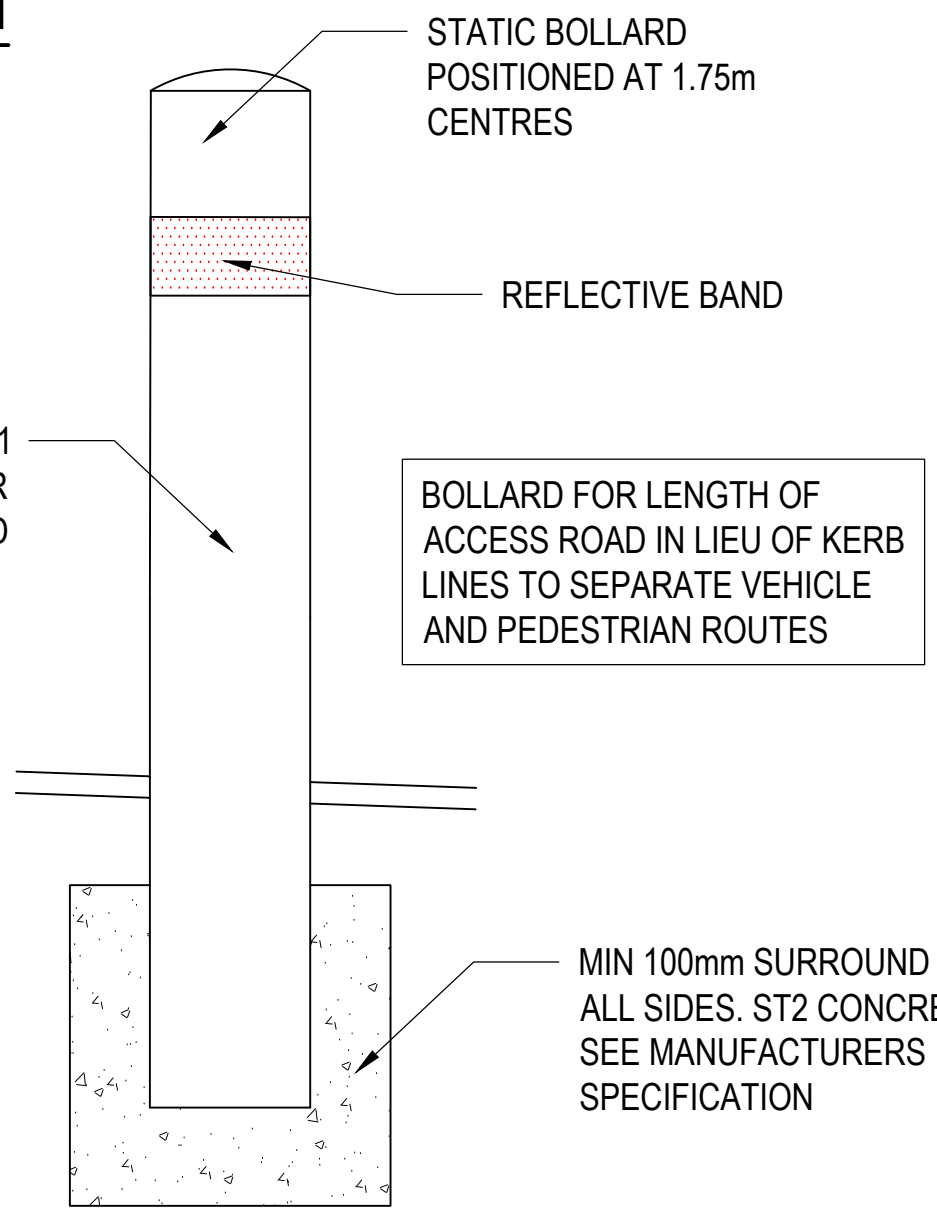
TYPICAL ROAD KERB CONSTRUCTION DETAILS

REFER TO LANDSCAPE ARCHITECTS DRAWINGS FOR SPECIFIC KERB TYPES

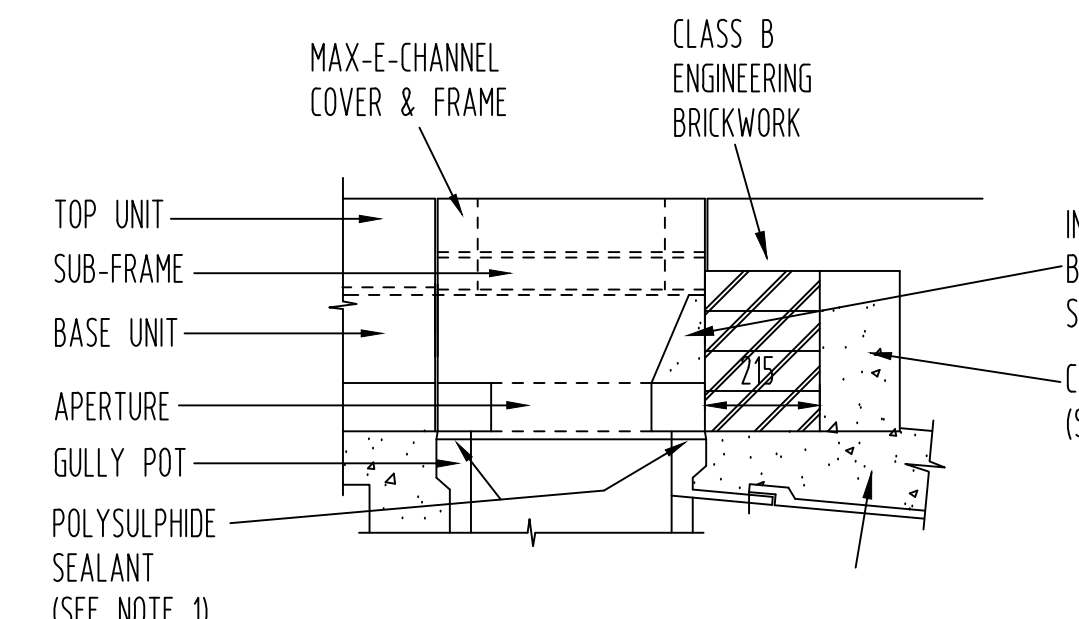
RHINO RS001 BOLLARD OR SIMILAR APPROVED

BOLLARD TO BE TYPE 101 670 FIXED BOLLARD BY ATG ACCESS

STATIC BOLLARD & FOUNDATION



CROSS SECTION



LONGITUDINAL SECTION

OUTFALL USING GULLEY POT

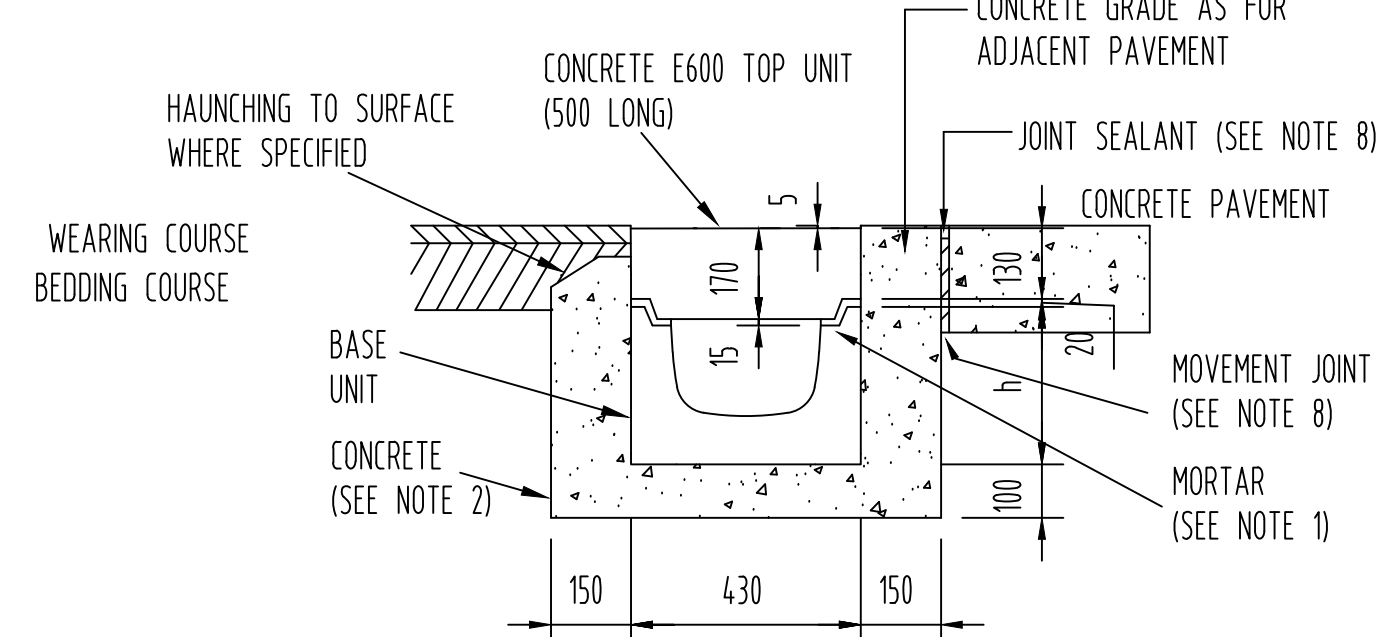
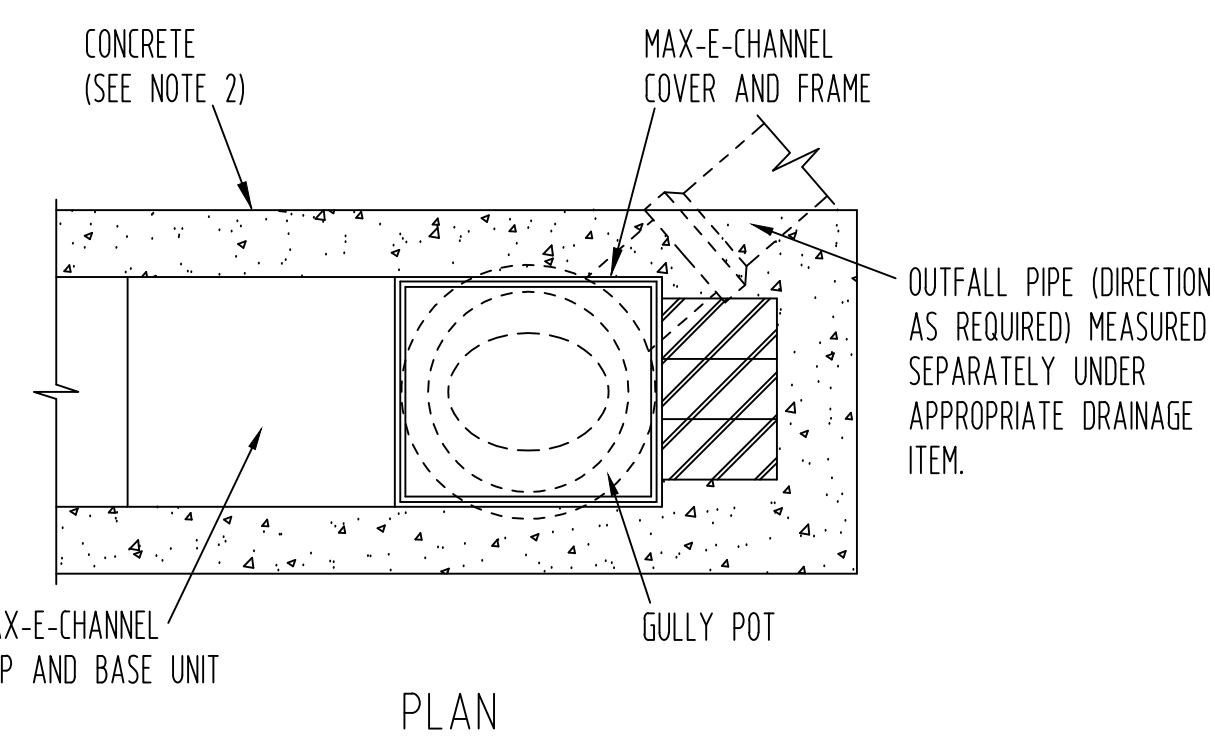


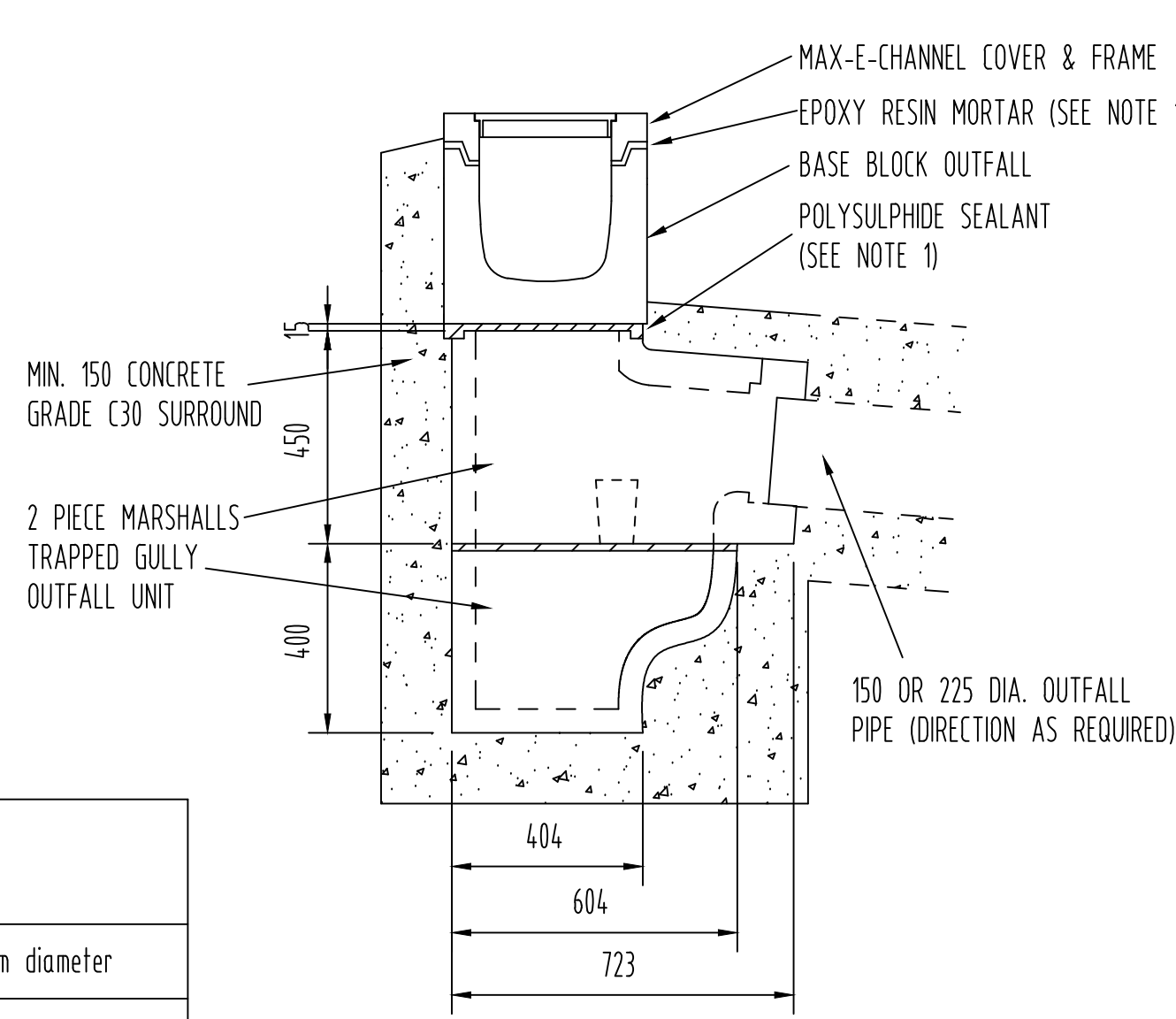
Fig.2: CROSS SECTION BASE UNIT & CONCRETE E600 TOP UNIT (WITH FLEXIBLE OR CONCRETE PAVEMENT LOADING E600)

Outfall Pipe Invert Depth From Carriageway Level (mm)		
Beany Base	150mm diameter	225mm diameter
205	701	738
295	791	828
365	861	898

All Figures Assume 125mm Kerb Upstand



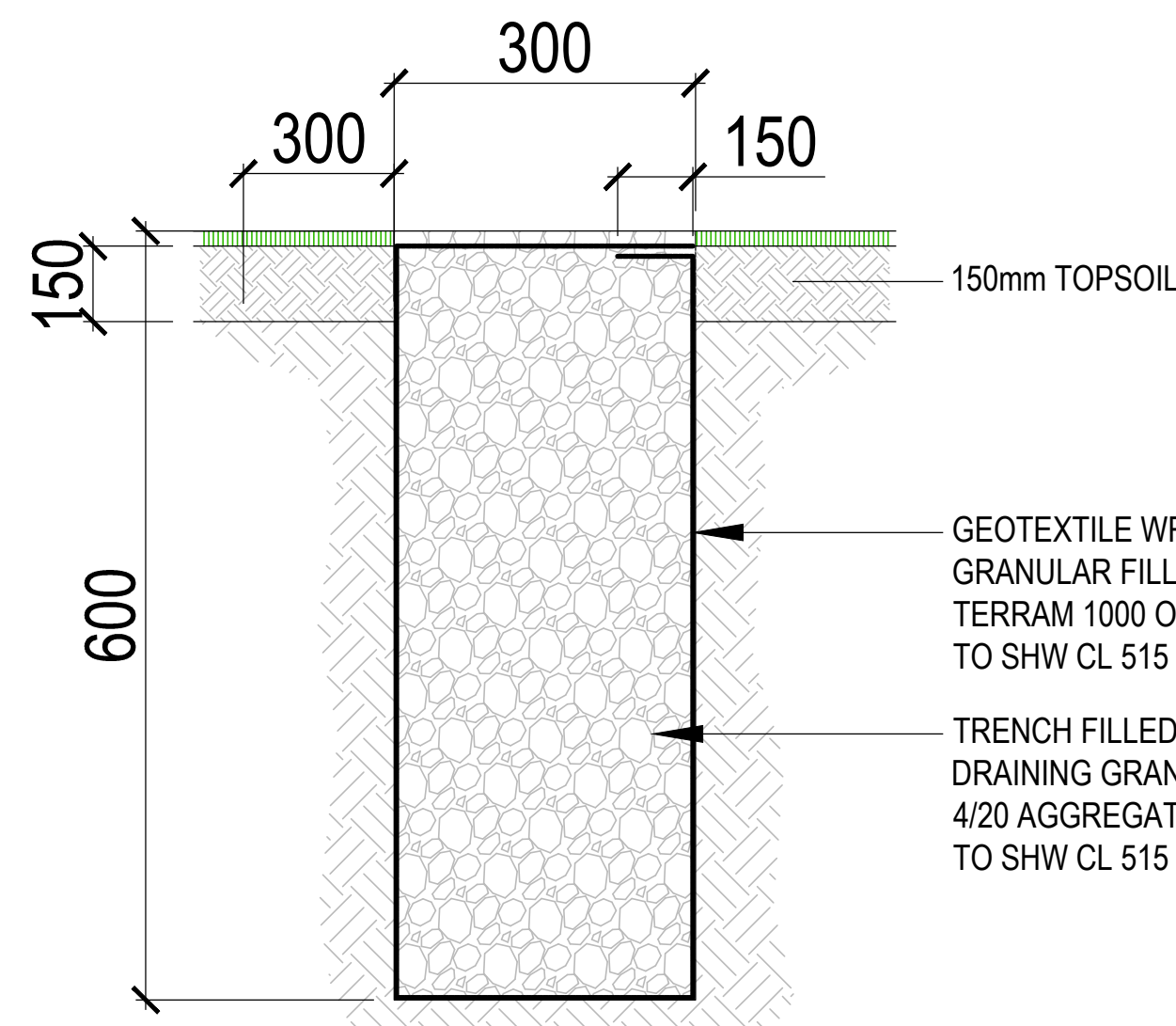
PLAN



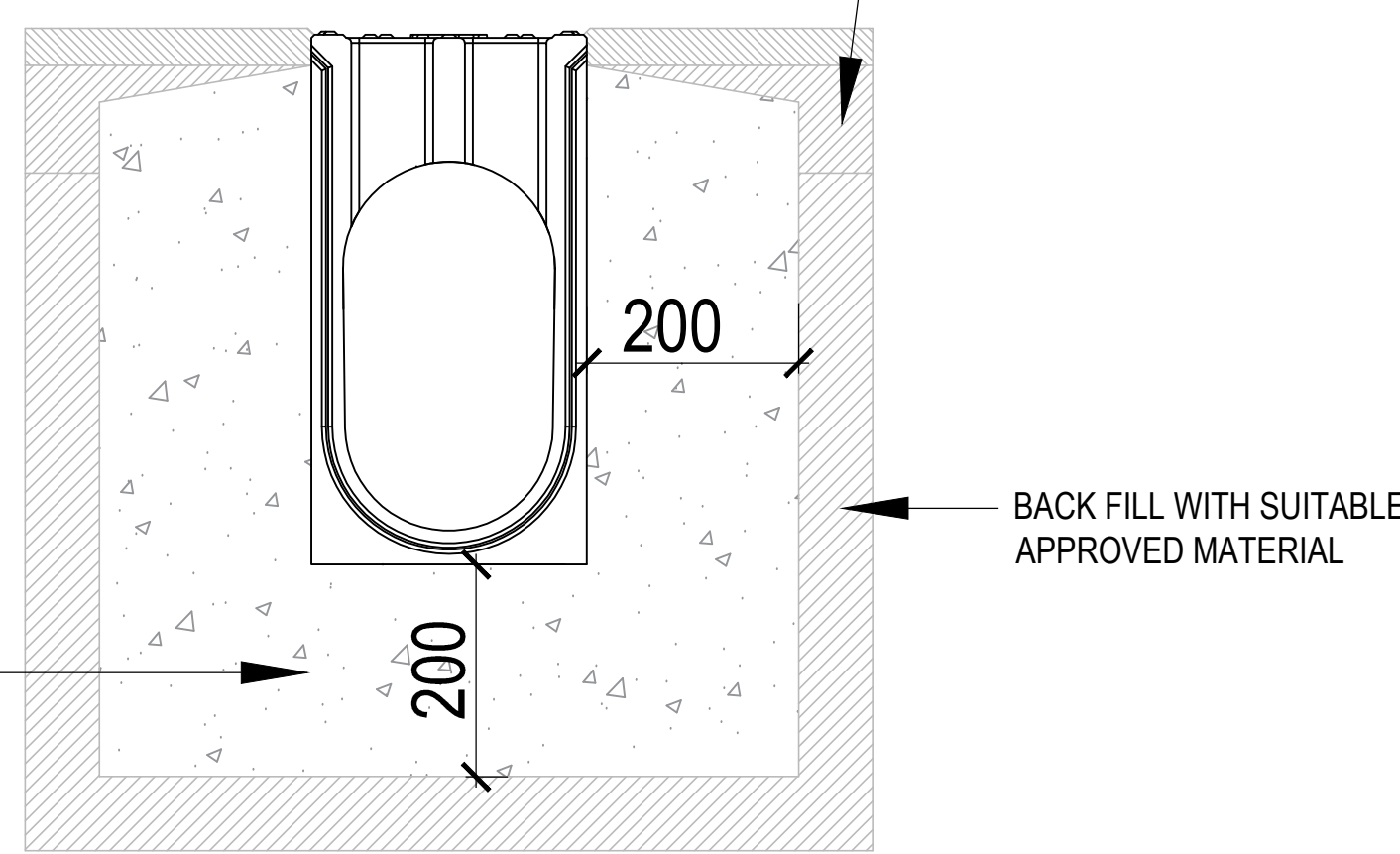
CROSS SECTION OUTFALL TYPE 3 (OF 3) (OF 3 - 150 WITH 150 DIA OUTLET) (OF 3 - 225 WITH 225 DIA OUTLET)

Notes For Max-E-Channel

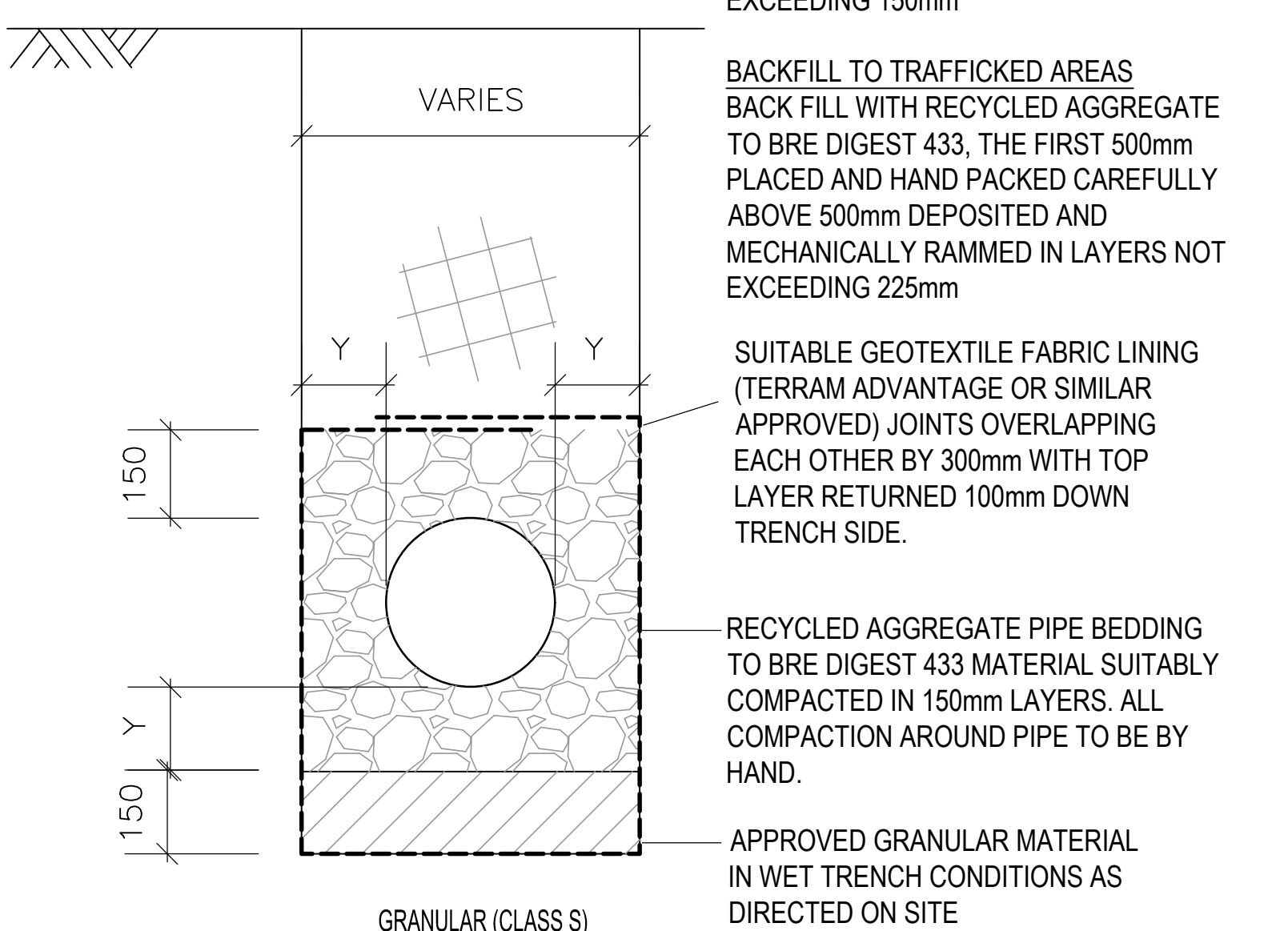
- Mortars shall be:
i) A Mortar class 12 cement mortar to BS EN 998-2 for bedding of the Concrete Top Units for applications up to Load Classification D400 to BS EN 1433
ii) Marshalls' M-Bond epoxy mortar for bedding of Cast Iron Top Units and reinforced concrete Top Units for Load Classification E600 and F900
iii) Marshalls' M-Flex for bedding Base Block Outfalls onto the Beany Trapped Gully Unit
iv) Marshalls' M-Flex for bedding the sections of the Marshalls' Trapped Gully Unit sections
- Concrete bed, haunch and surround shall be:
i) A C25/30 concrete to BS 8500-18.2 and BS EN 206-1 for applications up to Load Classification F900 to BS EN 1433
ii) Reinforcement details for Base 630 E600 and F900 applications only are as indicated
iii) A mix ST4 concrete to BS 8500-18.2 and BS EN 206-1 for Beany Trapped Gully, Silt Traps, Catch Pits and outfall details
iv) The specification for carrier pipe concrete surround is by others.
- Marshalls' vertical joint sealant, M-Seal, shall be applied to all Base Blocks.
- For Base 630 applications, all Outfalls, Silt Traps and junctions should be formed by a brick Catch Pit structure.
i) The outfall pipe diameter, gradient, depth to invert, depth of trap shall be by others
ii) The internal dimensions of the catch pit shall be 540 wide x 1000 long for Base 630 applications
iii) Corbelled brickwork with a maximum of 22mm steps shall be used to support the Access Cover and Frames
- Movement joint details that fully isolate the Max-E-Channel whilst maintaining restraint shall be provided adjacent to all concrete slabs, even when the slab is covered by other materials.
- When used in conjunction with the Beany Block system, Max-E-Channel base units are the same as Beany Block Bases.
- All dimensions are in millimetres.



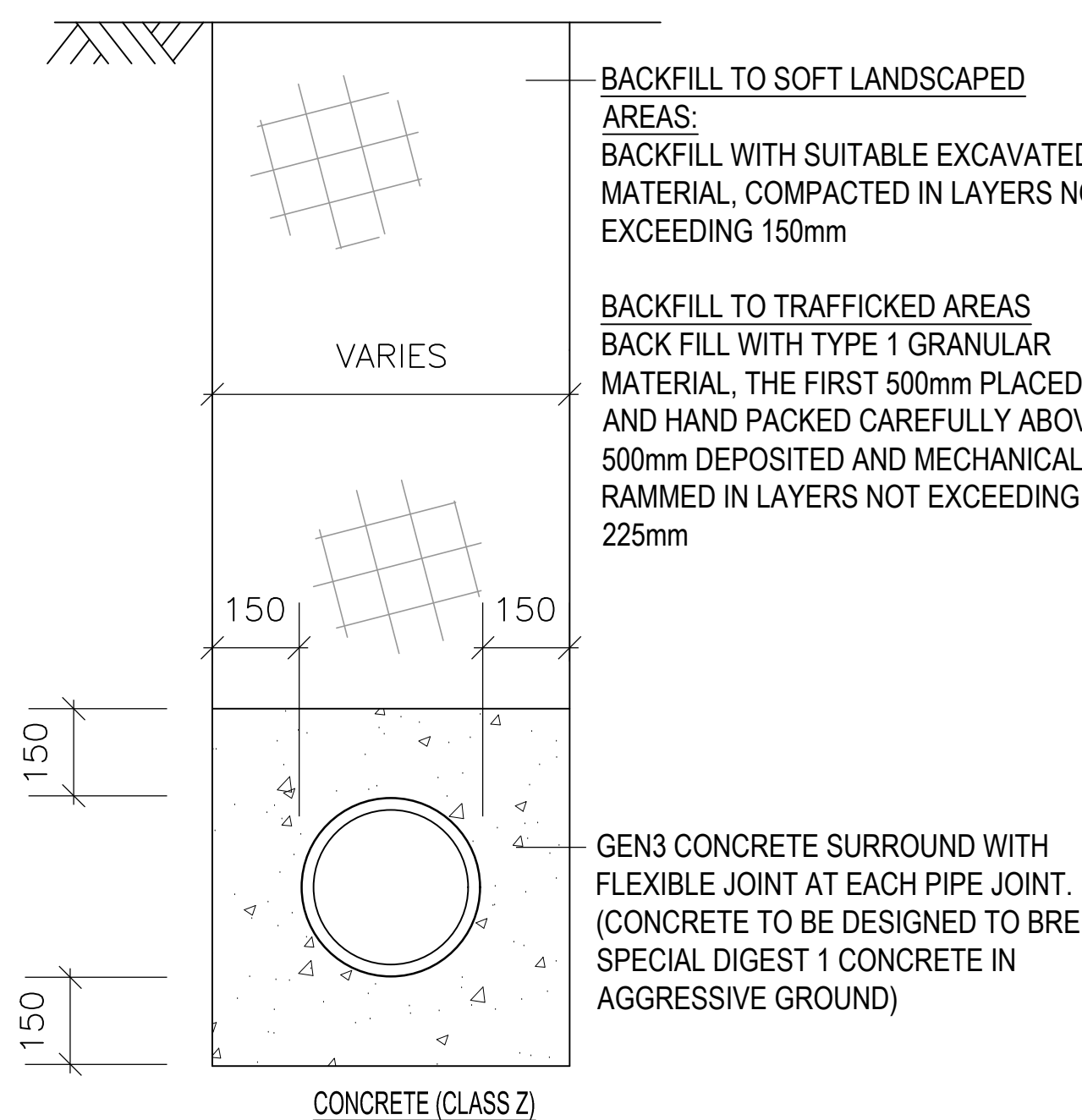
TYPICAL LAND DRAIN DETAIL



ACO ROAD DRAIN PD200 F 30.1

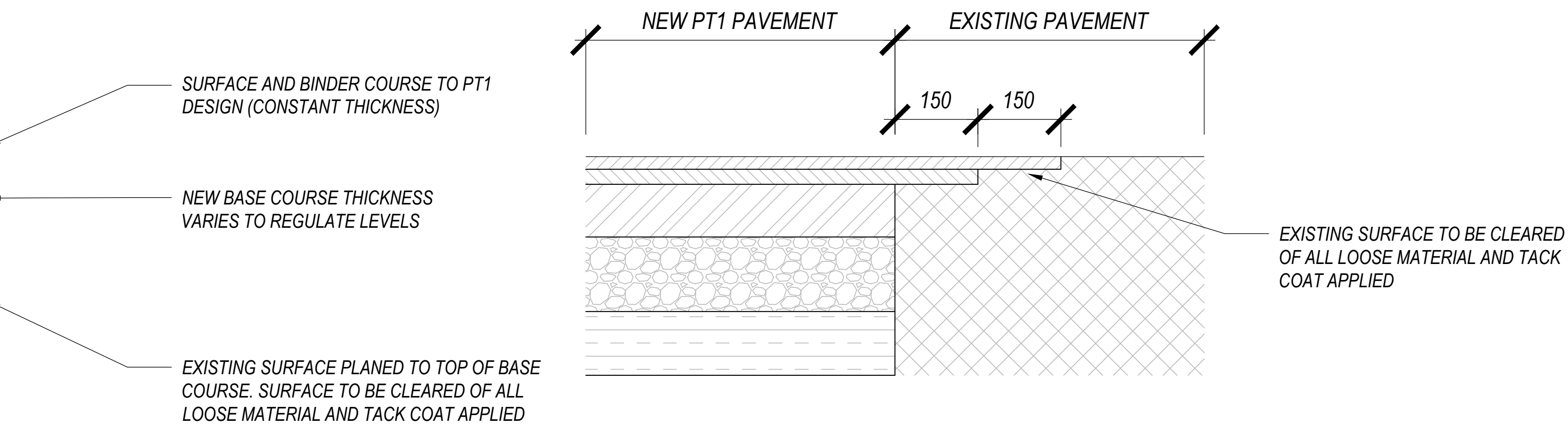


>1200mm DEPTH TO SOFFIT IN ROADS AND PAVEMENTS DIMENSION 'Y' TO BE 100mm MIN. UNLESS OTHERWISE SPECIFIED OR DIRECTED BY THE ENGINEER FOR ADAPTABLE SEWER, GRANULAR SURROUND MIN. THICKNESS OF 300 ABOVE CROWN OF PIPES.

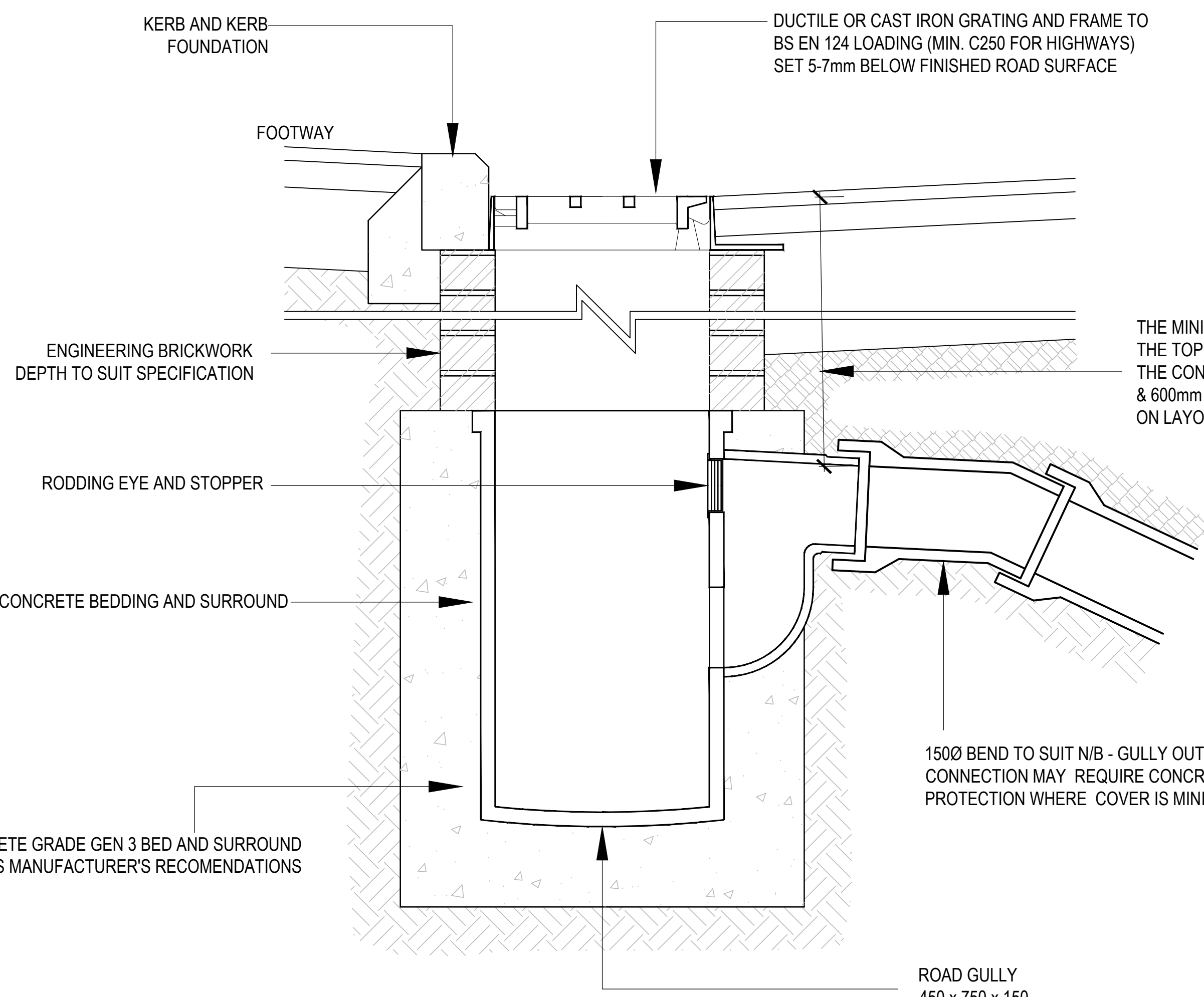


<1200mm DEPTH TO SOFFIT IN ROADS AND PAVEMENTS SUBJECT TO VEHICLE LOADING ALL JOINTS IN CLASS Z BEDDING SHOULD BE SURROUNDED BY COMPRESSIBLE FILLER BOARD (THICKNESS 18mm) TO ENSURE THE PIPE REMAINS FLEXIBLE.

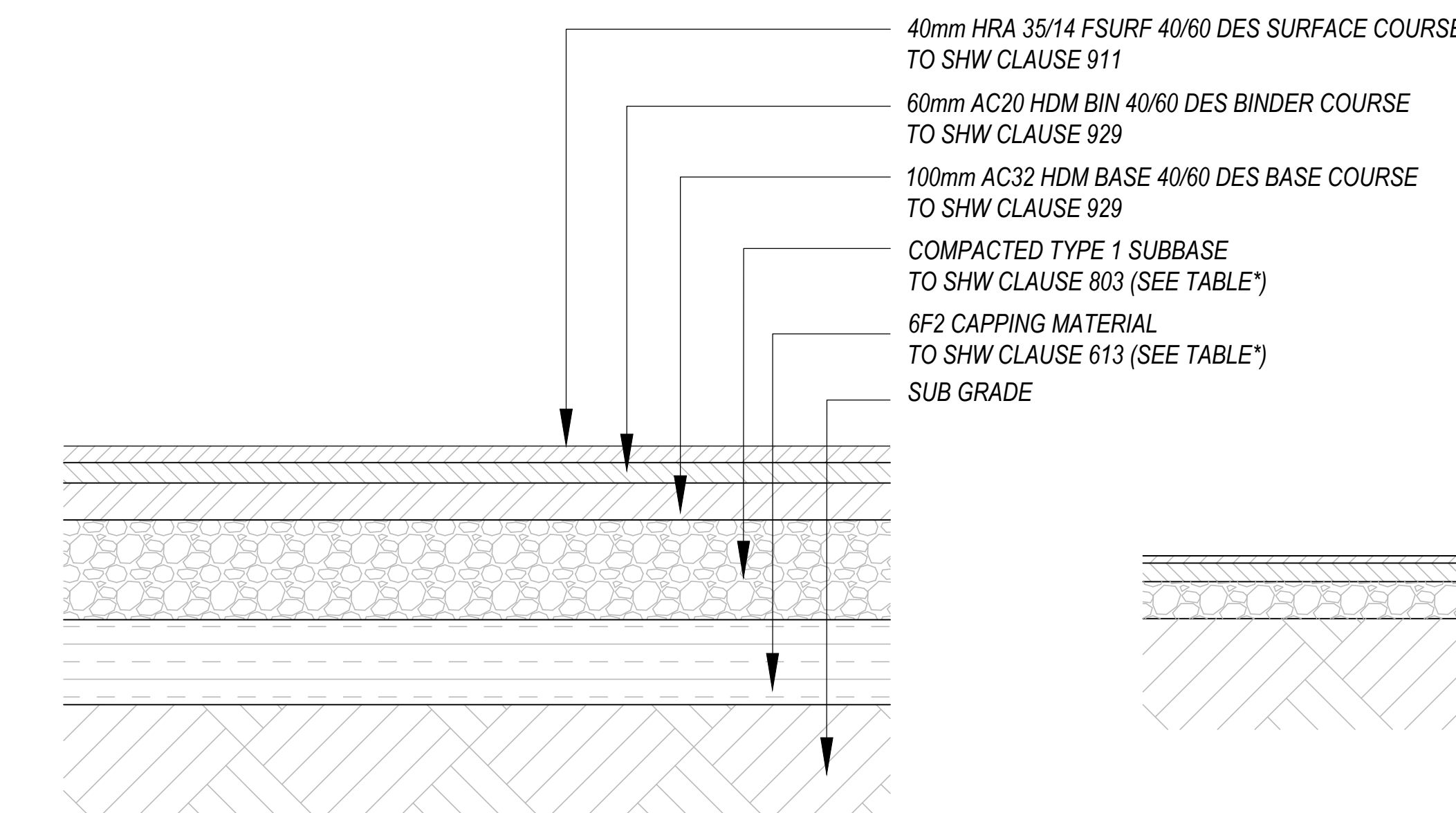
TYPICAL PIPE BEDDING DETAILS



TIE-IN TO EXISTING FLEXIBLE PAVEMENT CONSTRUCTION

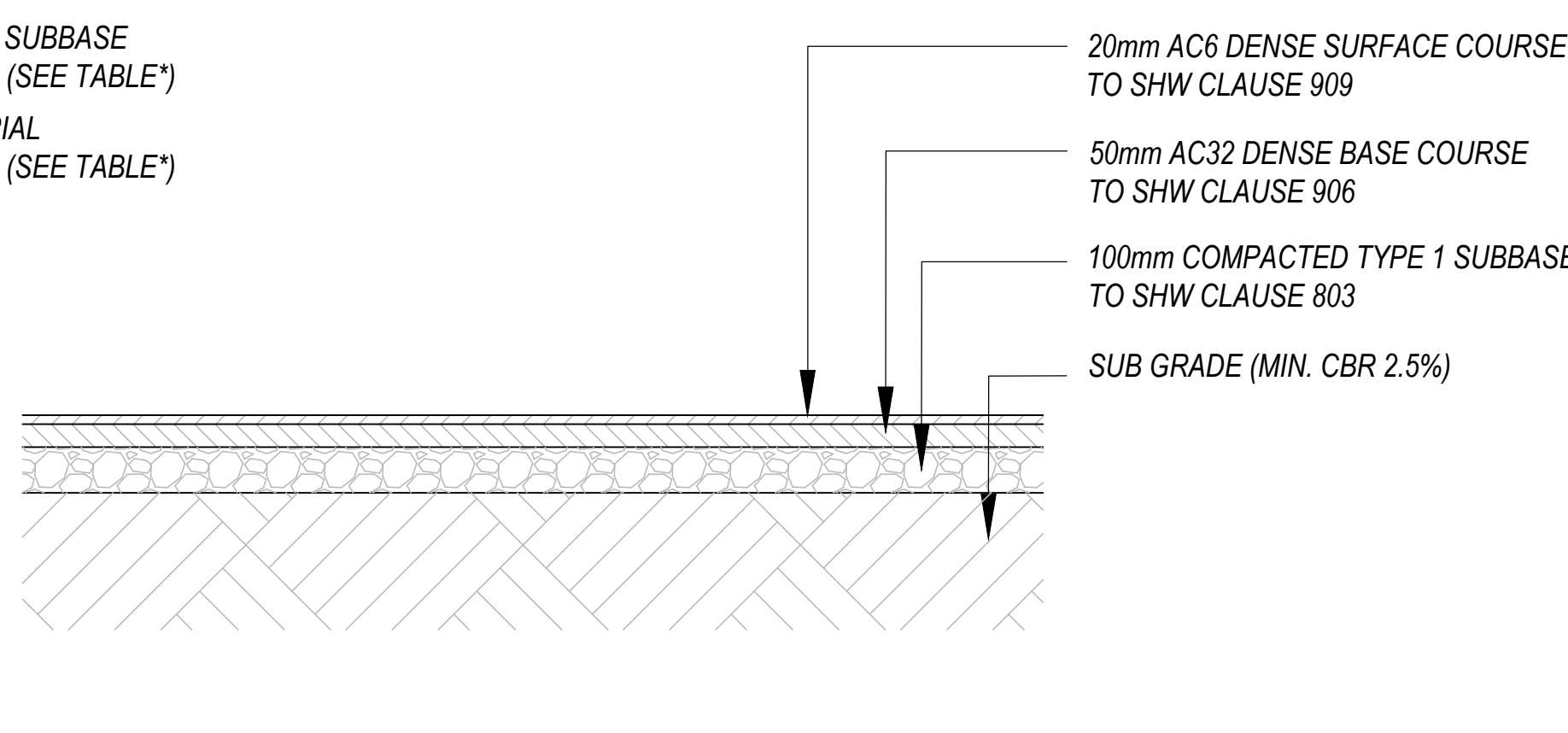


ROAD GULLY



PT1 - CARRIAGEWAY PAVEMENT CONSTRUCTION

REFER TO TABLE* FOR FOUNDATION LAYER OPTIONS



PT2 - FOOTPATH AND CYCLEWAY PAVEMENT CONSTRUCTION

NEW PAVEMENT ON EXISTING: PLANE AND OVERLAY

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DO NOT SCALE THIS DRAWING.

Suitability Code (as defined in ISO 19650-2:2018)

Work in Progress (WIP)

S0 - Initial Status

Shared (Non- Contractual)

- S1 - Suitable for co-ordination
- S2 - Suitable for information
- S3 - Suitable for review & comment
- S4 - Suitable for stage approval
- S5 - Withdrawn
- S6 - Suitable for PIM authorisation
- S7 - Suitable for AIM authorisation

Published (Contractual)

- A1, A2, A3, Etc - Authorised and accepted
- B1, B2, B3, Etc. - Partial sign-off (with comments)

Published (AIM Acceptance)

- CR - As constructed record document

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING

CONSTRUCTION

- EXISTING BURIED UTILITIES
- EXISTING LIVE HIGHWAY AND CAR PARK

MAINTENANCE/CLEANING/OPERATION

- NO UNUSUAL RISKS

DECOMMISSIONING/DEMOLITION

- NO UNUSUAL RISKS

Notes

CBR (%)	SUBBASE ON CAPPING		SUBBASE ONLY	CAPPING ONLY
	SUBBASE (mm)	CAPPING (mm)	SUBBASE (mm)	CAPPING (mm)
2.5	350	250	450	550
3	320	240	420	520
4	270	230	370	450
5	240	210	330	390
8	200	190	270	310
10	180	180	250	270
12	170	170	230	250
≥ 15	150	150	200	200

*PT1 FOUNDATION DESIGN OPTIONS

FOR CAPPING ONLY, BASE COURSE THICKNESS TO BE INCREASED BY 30mm TO 130mm

P03 SBH/TH 03.07.20 STAGE 4a TENDER

P02 SBH/NJH 27.04.20 STAGE 4a DRAFT

P01 SBH/NJH 09.04.20 STAGE 4a DRAFT

Rev | Appr/Drm | Date | Description



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OVG Manchester

15th HIGHWAYS
NORTHERN CAR PARK ACCESS
CONSTRUCTION DETAILS

purpose of issue
STAGE 4a

scale	AS SHOWN	drawn	SBH	job no.	Suitability
date	Apr-20	checked	NJH	0042841	S4
project code	originator	volume	level	type	rate
reference	BRA-BHE-XX-XX-DR-C-0239				P03