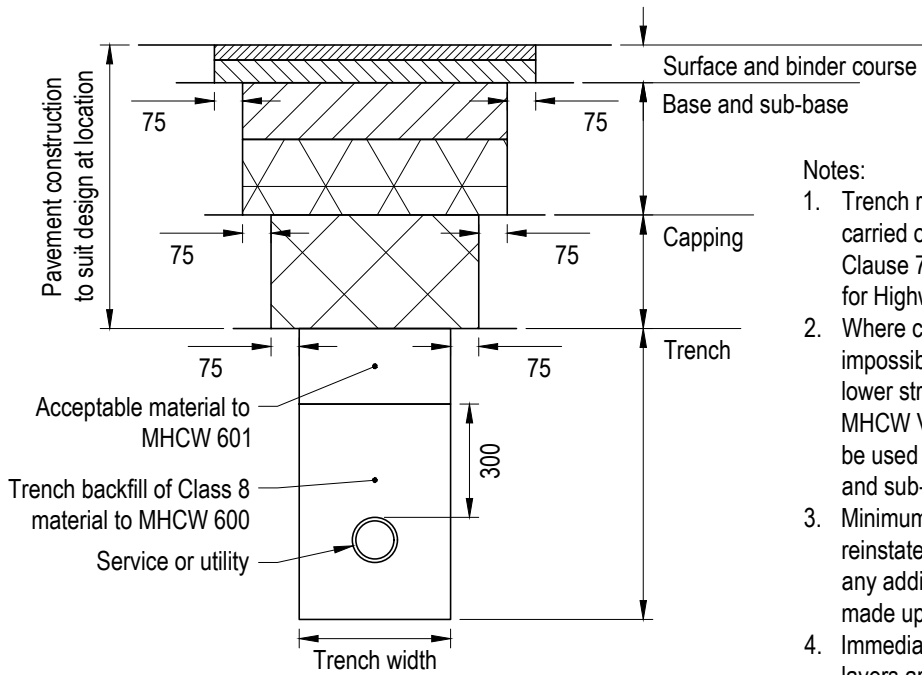


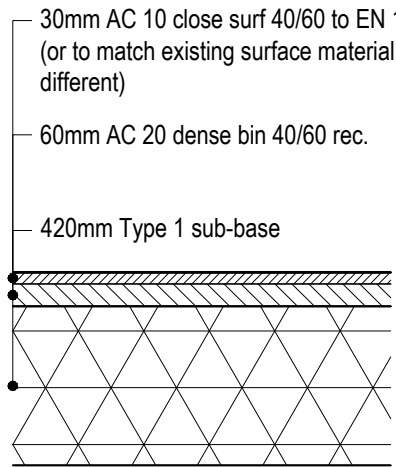


TRENCH REINSTATEMENT BITUMINOUS PAVEMENT

Design code: MHCW Vol 1 Clause 706
(Scale 1:20)

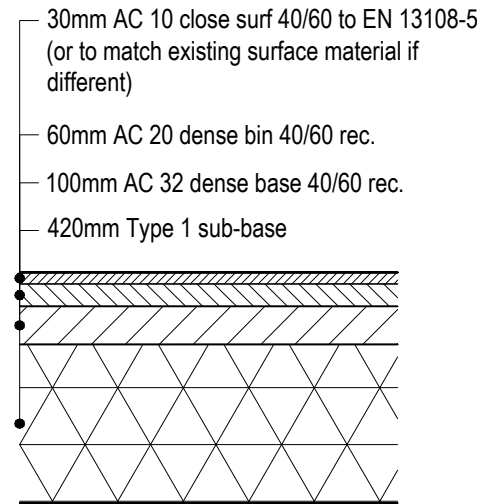
Notes:

- Trench reinstatements shall be carried out in accordance with Clause 706 of the Specification for Highway Works
- Where compaction is made impossible due to trench width, lower strength concrete to MHCW Vol Clause 1030 may be used in place of capping and sub-base.
- Minimum depth of reinstatement to be 450mm, any additional depth to be made up in Type 1 sub-base.
- Immediately before bituminous layers are reinstated, the edges of existing material shall be cleaned of all loose material and be coated with an appropriate hot bituminous binder or equivalent treatment.



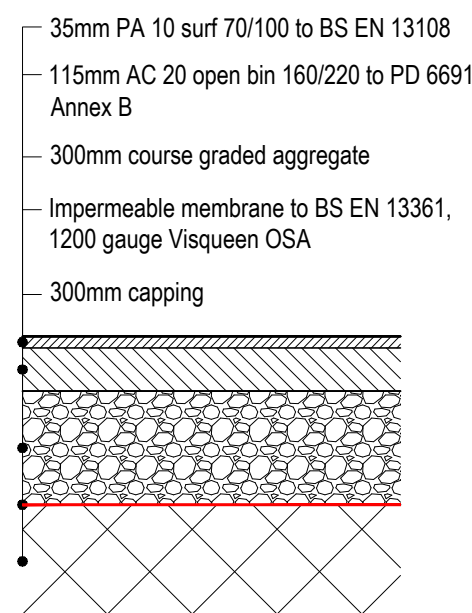
CAR PARK REINSTATEMENT

Design code: To match existing
Subgrade: CBR 2.5% (see Foundations: Asphalt)



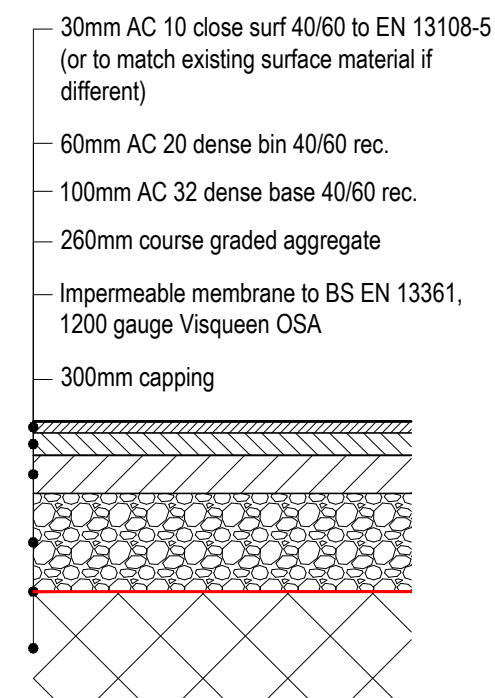
ASPHALT CAR PARK

With traditional sub-base
Design code: MPA Asphalt Applications
Traffic: Heavier usage / Category 4
Subgrade: CBR 2.5% (see Foundations: Asphalt)



POROUS ASPHALT

Design code: CIRIA C753 Chapter 20
Traffic: Category 4
Subgrade: CBR 2.5% (see Foundations: Pervious)

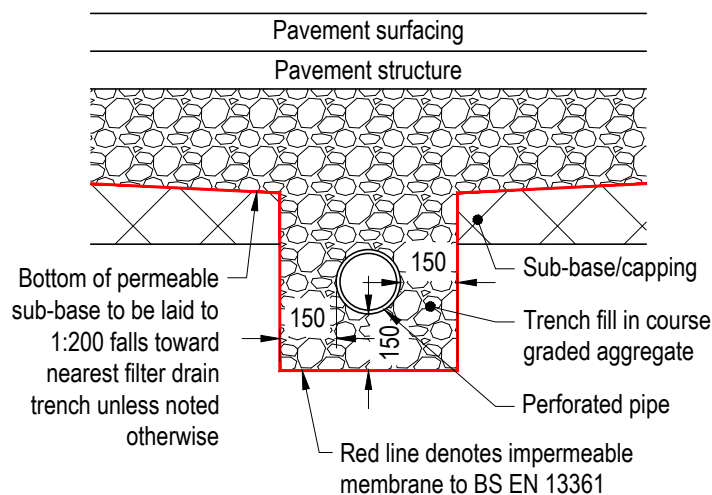


ASPHALT CAR PARK

With permeable sub-base
Design code: MPA Asphalt Applications
Traffic: Heavier usage
Subgrade: CBR 2.5% (see Foundations: Pervious)

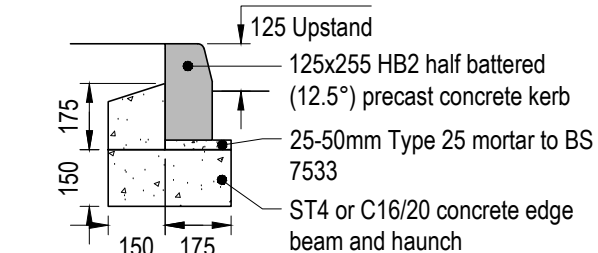
Foundations: Asphalt		
The below foundations should be provided for pavements trafficked by vehicles, as either sub-base on capping or sub-base only, based on the measured subgrade CBR. Table adapted from CD 225		
CBR	Sub-base + capping (mm)	Sub-base only (mm)
<2.5%	Contact engineer	Contact engineer
≥2.5%	250 + 430	420
≥3%	230 + 380	370
≥4%	220 + 340	330
≥5%	210 + 300	300
≥6%	190 + 240	260
≥8%	160 + 220	240
≥10%	150 + 200	230
≥12%	150 + 180	220
≥15%	150 + 150	200

Foundations: Pervious	
The below foundations should be provided below the permeable sub-base (CGA) for pervious pavements, based on the measured subgrade CBR. Based on C753 Ch 20	
CBR	Additional foundation treatment
<2.5%	Contact engineer
≥2.5%	300mm capping
3%	225mm capping
4%	150mm capping
5%+	No additional foundation



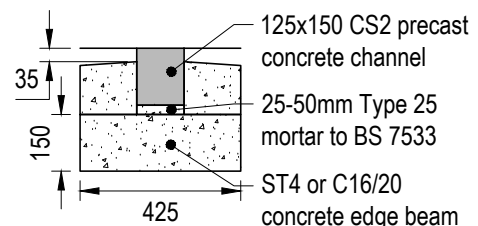
PERVIOUS PAVING FILTER DRAIN

See drainage layout for pipe locations and levels
(Scale 1:20)



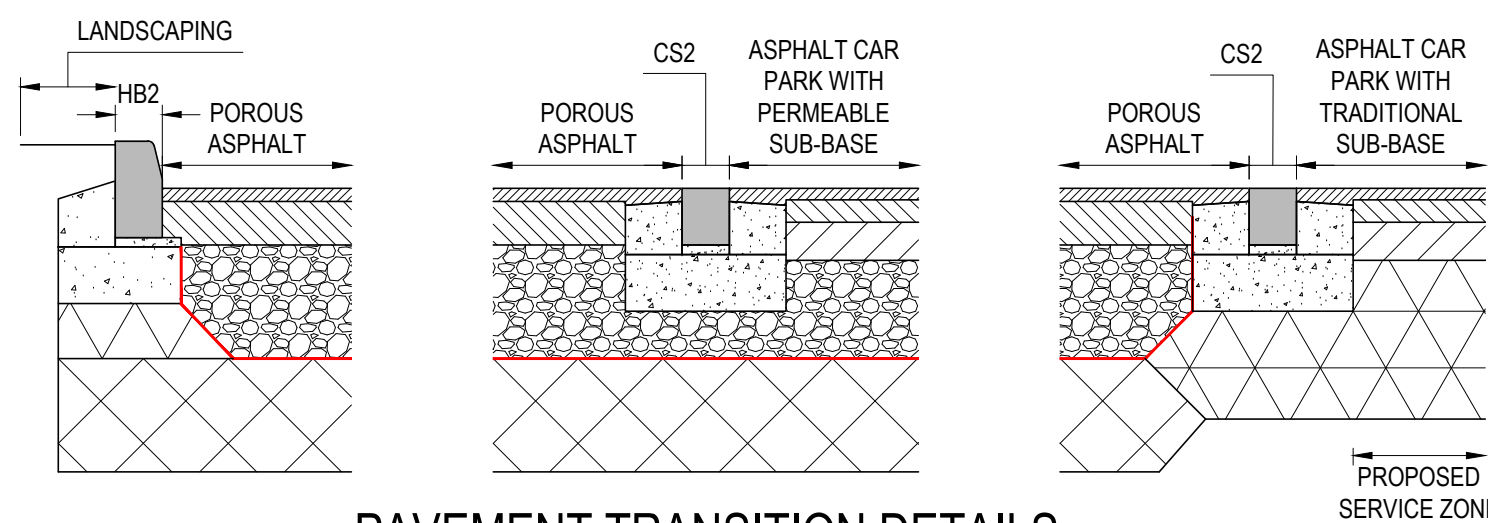
HB2 KERB

Design code: BS 7533-101:2021
Traffic: Categories 4-6
(Scale 1:20)



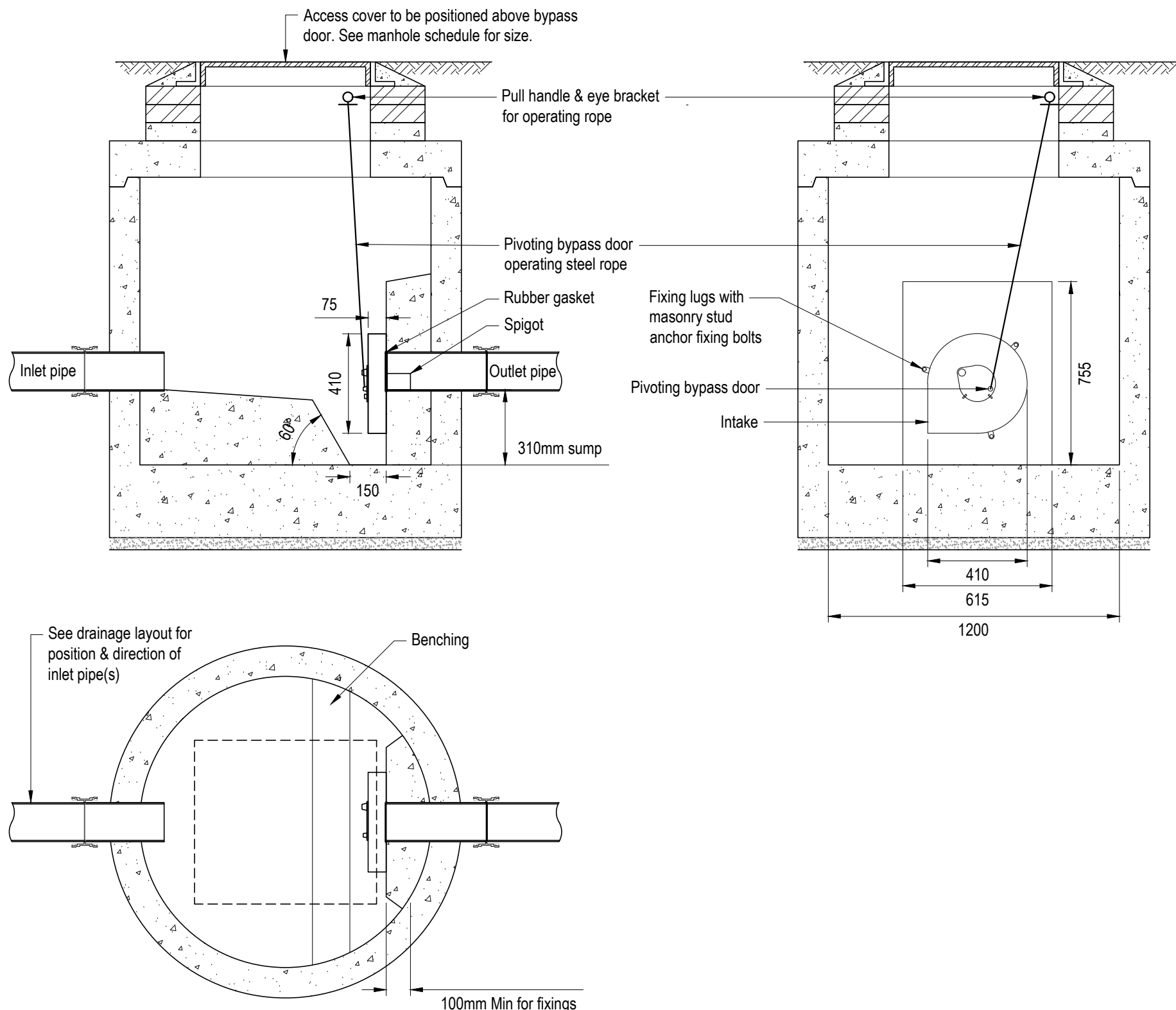
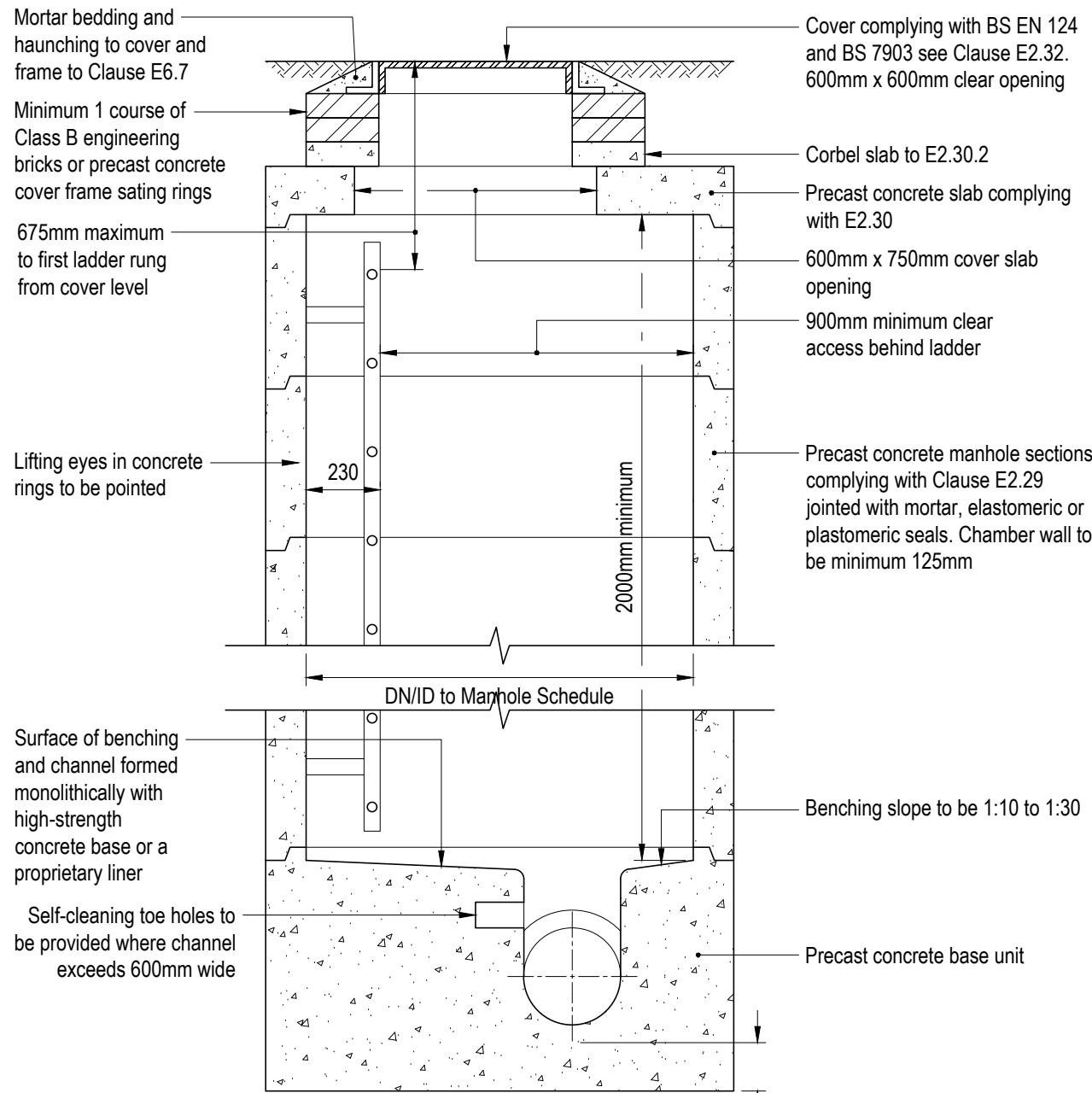
CS2 KERB

Design code: BS 7533-101:2021
Traffic: Categories 4-6
(Scale 1:20)



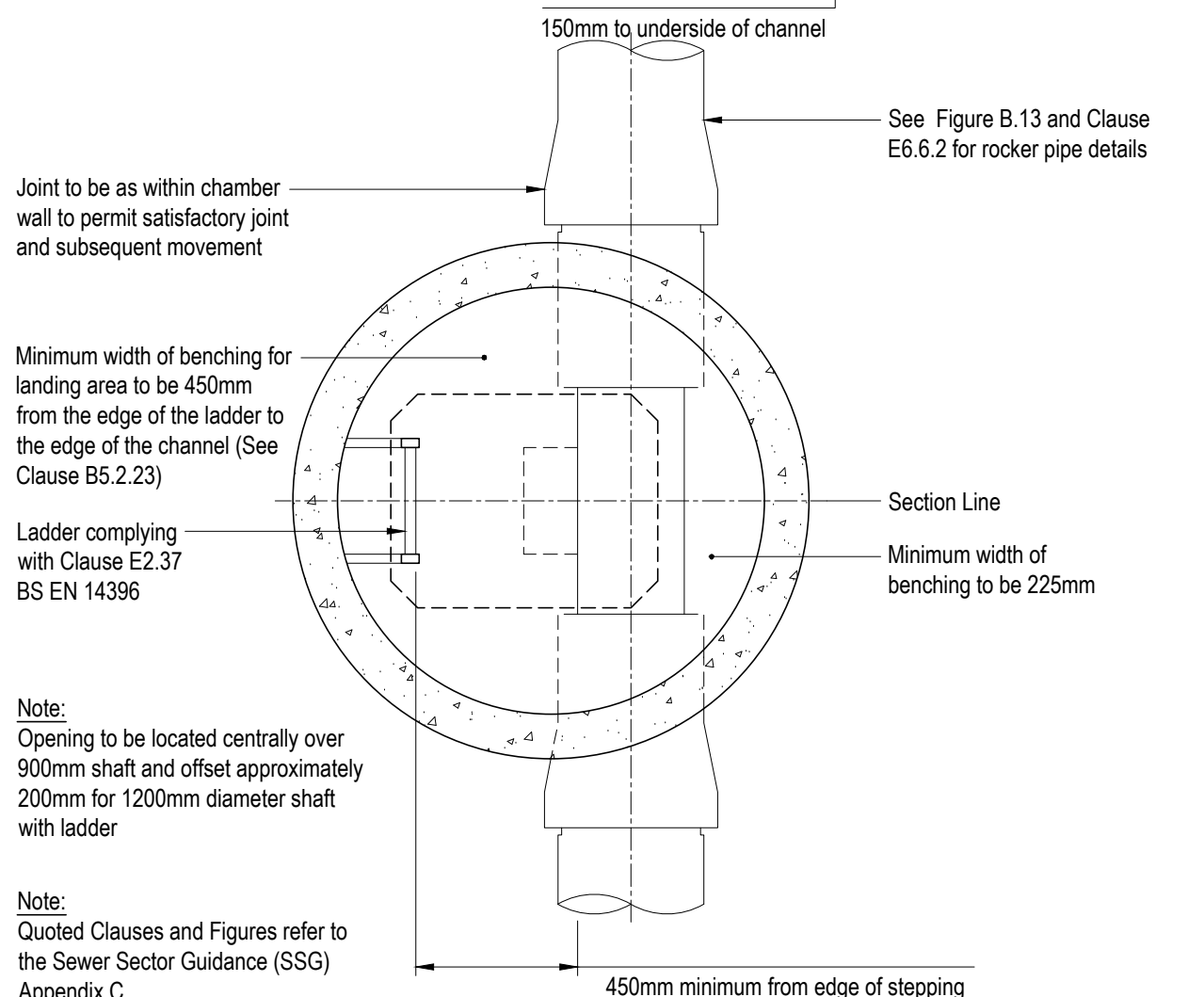
PAVEMENT TRANSITION DETAILS

(Scale 1:20)



VORTEX FLOW CONTROL

To be installed in accordance with manufacturer's instructions
(Scale 1:20)



SSG APPENDIX C FIGURE B 6 TYPICAL MANHOLE DETAIL - TYPE A2

Depth from cover level to soffit of pipe 3m to 6m with ladder
rigid material construction without concrete surround
(Scale 1:20)

CLASS S - 360° GRANULAR SURROUND PIPE BEDDING DETAIL

(SCALE 1:20)

CLASS Z - CONCRETE BED AND SURROUND PIPE BEDDING DETAIL

Cover < 900mm in vehicular loading and open field.
Cover < 600mm elsewhere except under buildings.
(Scale 1:20)

GENERAL NOTES:

PAVING NOTES

- This drawing is to be read in conjunction with all relevant architects and engineers drawings and specifications.
- Do not scale this drawing. Any ambiguities, omissions or errors on drawings shall be brought to the engineers attention immediately. All dimensions must be checked / verified on site.
- All works and materials to be in accordance with current British Standards (BS) and Building Regulations.
- This drawing makes references to the below sections of Standards for Highways, which are freely available at standardsforhighways.co.uk
 - Design Manual for Roads and Bridges (DMRB)
 - Manual of Contract Documents for Highway Works (MHCW)
 - Specification for Highway Works (SHW)
 - Interim Advice Notes (IANs)
- The construction depths given are the minimum required (compacted).
- Subgrade California Bearing Ratio (CBR)
- Pavement constructions details state their assumed CBR value.
- CBR tests should be carried out at formation and pavement foundations adjusted in accordance with the relevant Pavement Foundation tables.
- CBR test procedure is detailed within DMRB CD 225 and BS 1377-4.
- Measured CBR value to be at formation level and to be a 'soaked' condition.
- Any variations in ground conditions should be notified to the engineer prior to construction.

Pavement Foundations

- In areas where levels are to be raised, acceptable fill material is to be used to the underside of the proposed construction make up.
- The construction depths given assume formation is non-frost susceptible.
- Where formation is frost susceptible contractor to provide capping material to give a minimum 450mm overall construction thickness.
- Construction detail are for private areas only and not for adoptable highways.
- All sub-bases and capping layers to be graded and compacted to the SHW.
- No regulating or fill material has been included in construction build up. contractor to include for regulating/fill material in their rates.
- In areas where levels are to be lowered, existing construction is to be removed (full depth).

Pavement Materials

- Capping material to be to SHW Clause 613 Sub-formation and Capping.
- Sub-base material to be to SHW Clauses 803 (Type 1), 804 (Type 2), 806 (Category B) or 807 (Type 4). Type 1 is most commonly used.
- CGA (Coarse Graded Aggregate) to be either Coarse Aggregate 4-40mm or 4-20mm to BS 7533-13:2009, or Type 3 to SHW Clause 805, and must have at least 30% voids.
- AC (Asphalt Concrete) to be to SHW Clause 900.
- Laying course for impermeable paving to be naturally occurring sand or mortar in accordance with BS 7533 requirements.

Information to be Confirmed

- Extent of highway boundary to be confirmed prior to commencement of works.
- The landscape architect's drawing has been used as a base for this plan. Please refer to the latest landscaping layout.
- Refer to landscape architects specification for surface finishes.
- Kerbing requirements/detail to be confirmed by landscape architect.
- Refer to landscape architects specification for jointing material. Consideration required of compatibility of jointing and bedding material and whether sub-surface drainage is required.

P04	ADDED KERB AND PAVEMENT TRANSITION DETAILS.	07/12/22	AMB	GW
P03	REVISED TO DESIGN TEAM COMMENTS AND ADDED VORTEX FLOW CONTROL DETAIL.	10/11/22	AMB	CJS
P02	ADDED DRAINAGE DETAILS FOR PLANNING SUBMISSION.	04/11/22	AMB	CJS
P01	FIRST ISSUE SHOWING REINSTATEMENT WORKS.	24/10/22	AMB	-
Rev.	Description:	Date:	By:	Chkd:



Units 24-25 Riverside Place, K Village, Lound Road
01539 724 823
kendal@curtins.com
www.curtins.com

Civil & Structures • Transport Planning • Environmental • Infrastructure • Geotechnical • Conservation & Heritage • Principal Designer
Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

Status:
SUITABLE FOR INFORMATION **S2**

Client:

MORGAN SINDALL

Project:

GORTON COMMUNITY HUB

Orig Title:

LIBRARY SITE,
CIVIL ENGINEERING
CONSTRUCTION DETAILS
SHEET 1

Drawn By: AMB

Designed By: AMB

Checked By: PT

Date: 21/10/2022

Scales @ A1: 1:20 OR AS NOTED

Project No - Originator - Function - Spatial - Form - Discipline - Number

GCH - CUR - XX - XX - DR - C - 90111

Revision: P04