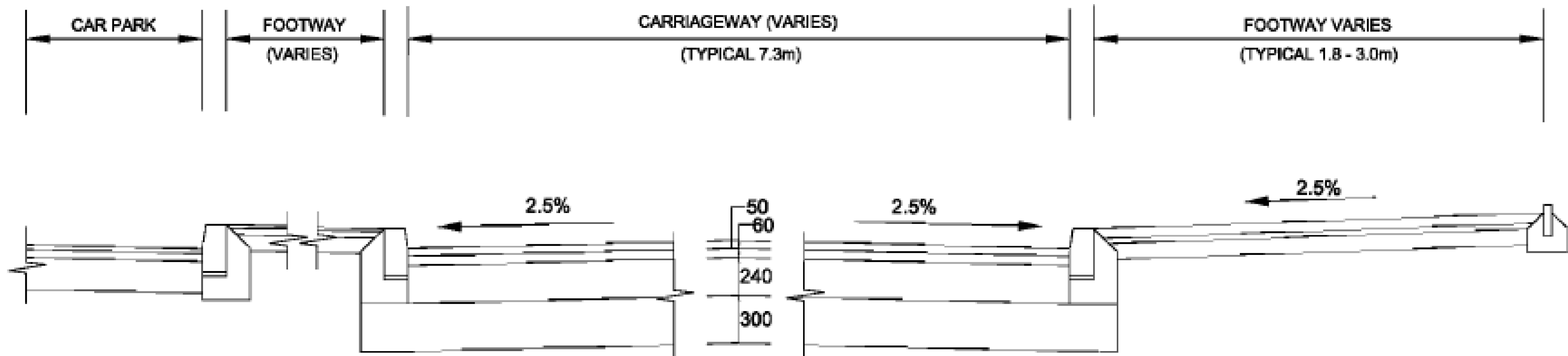
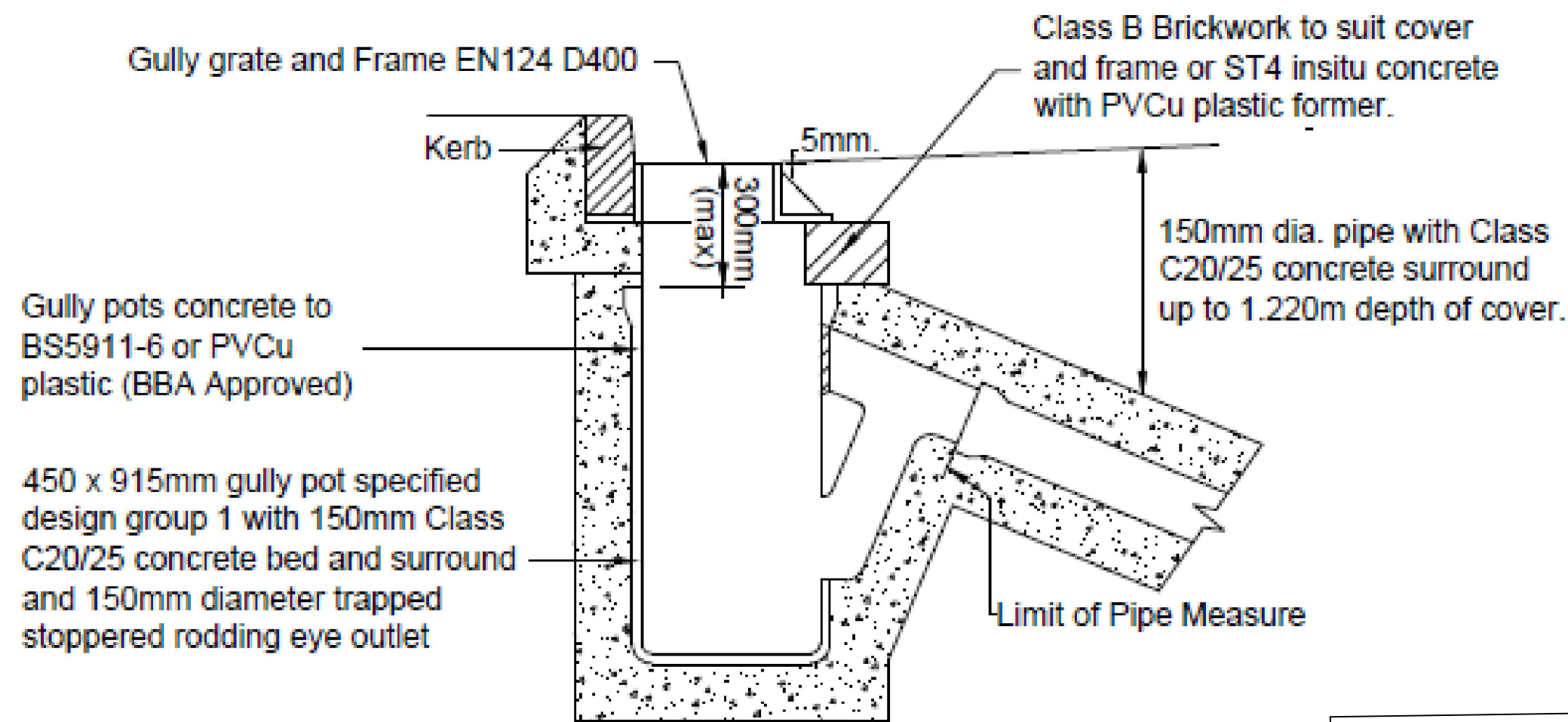


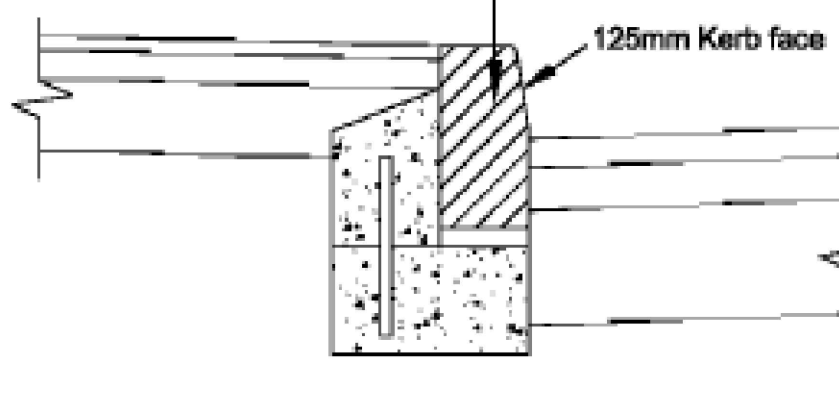


TYPICAL CARRIAGEWAY AND FOOTWAY CROSS SECTION



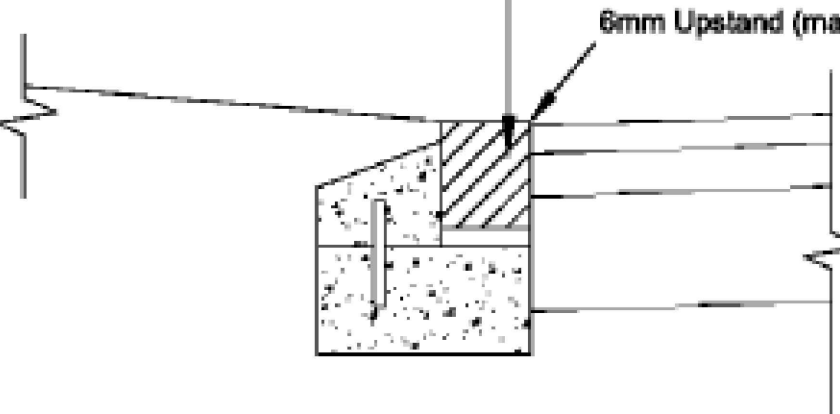
**HIGHWAY GULLY TYPE P1
(CONNECTION DIRECT TO SEWER)**

150 x 305mm OR 125 x 255mm precast concrete half battered kerb on 25mm cement mortar and 275 x 150mm ST1 concrete bed with 16mm dia. x 250mm long mild steel dowel bars at 500mm centres on 150mm class ST1 concrete bed and backing



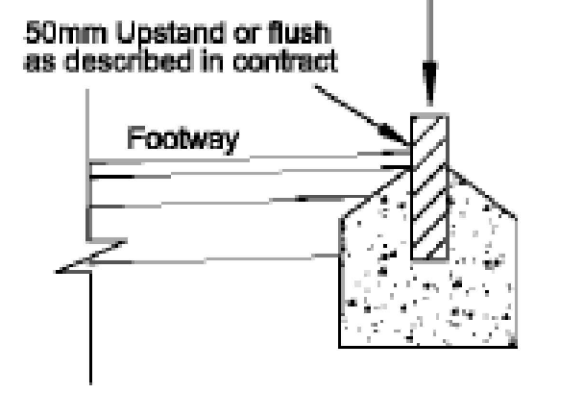
HALF BATTERED KERB

125 x 150mm precast concrete bullnosed kerb in dropped crossing on 25mm cement mortar and 275 x 150mm ST1 concrete bed with 16mm dia. x 250mm long mild steel dowel bars at 500mm centres on 150mm class ST1 concrete bed and backing



BULLNOSED KERB (IN DROPPED CROSSING)

50 x 200mm precast concrete edging on 100mm ST1 concrete bed and backing (both sides)



EDGING

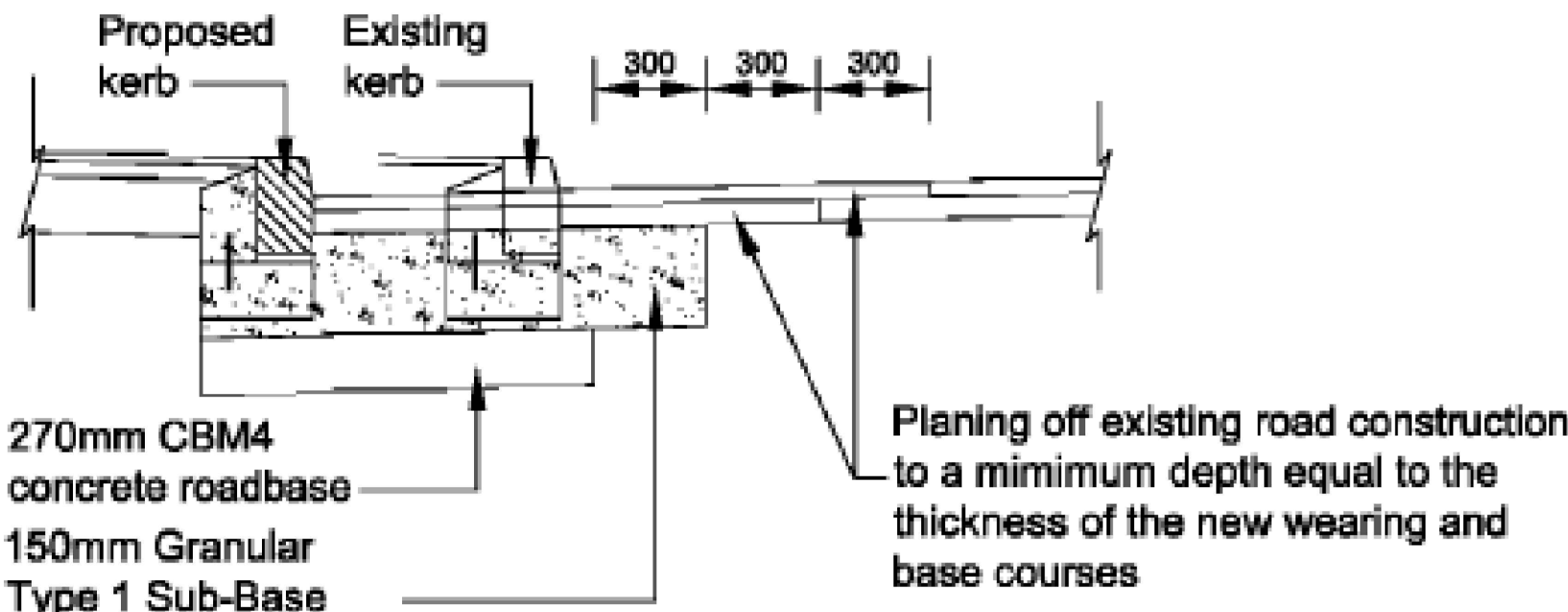
CARRIAGEWAY CONSTRUCTION

50mm	HRA 35/14 F surf PMB WTR 2 to Clause 943 (Min 68PSV)
60mm	AC20 Dense Binder Course 100 /150 to BS EN 13108 Part 1
240mm	AC32 Dense Base 100/150 to BS EN 13108 Part 1
300mm	Granular Type 1 Sub-Base

NOTE
Carriageway construction is in accordance with Design Manual for Roads and Bridges, Volume 7, Section 2.

FOOTWAY CONSTRUCTION (PEDESTRIAN ONLY)

20mm	AC6 Dense Surface Course 100/150 to BS EN 13108 Part 1
60mm	AC20 Dense Binder Course 100/150 to BS EN 13108 Part 1
150mm	Granular Type 1 Sub-Base
	OR
	450 x 450 x 70mm thick standard Trafica precast concrete flags
35mm	Sharp Sand
150mm	Granular Type 1 Sub-Base
	OR
100mm	Wet lean Concrete CBM4 as described in the contract



LONGITUDINAL JOINT DETAIL

© This drawing and the building works depicted are the copyright of Banners Gate Ltd and may not be reproduced or amended except by written permission. No liability will be accepted for amendments made by other persons.

GENERAL NOTES

- This drawing is to be read in conjunction with relevant architectural and engineering drawings.
 - Any discrepancies between the details shown and actual on site conditions to be reported immediately to the engineer prior to commencement of works.
 - This drawing is not intended to show details of ground conditions or ground contaminants. Each area of ground relied upon to support any structure depicted (including drainage) must be investigated by the Contractor any areas of formation for said structures which do not accord with the anticipated conditions as described in the site investigation report are to be immediately notified to the Engineer, where applicable. Any suspect full ground or ground contaminants on or within the ground should be further investigated by a suitable expert. Any earthworks shown indicate typical slopes for guidance only and should be investigated further by a suitable geotechnical expert.
 - Where existing trees are shown to be retained they should be subject to a full Arboricultural inspection for safety. All trees are to be planted so as to ensure they are a minimum of 5 metres from buildings and 3 metres from drainage and services, where applicable. A foundation is to be provided to accommodate the proposed tree planting, where applicable.
- ADOPTABLE ROADS AND SEWERS**
- Roads, footways and parking bays which form part of the highway to be adopted under Section 38 of the Highways Act 1980 shall comply with the requirements of the Adopting Authority.
 - Sewers to be adopted under Section 104 of the Water Industries Act 1991 shall comply with the Sewerage Sector Guidance (SSG) "Design & Construction Guidance" with any amendments specified by the Adopting Water Authority.
 - All pipes to be used in adoptable sewerage shall be either clayware to BS EN 295 or concrete to BS EN 1916 and BS 5911: Part 1 with Class S bedding unless otherwise stated. With approval of the Adopting Authority solid wall concentric external rib reinforced uPVC pipes complying with the relevant provisions of BS EN 13476 may be used.
 - Where cover to a pipe is more than 1200mm under adoptable carriageway the trench shall be filled to formation of the carriageway with well compacted DTP Type 1 material.
 - Where cover to a pipe is less than 1200mm under adoptable carriageway it shall be provided with concrete protection in accordance with the specification of the adopting authority and back filled to formation of the carriageway with well compacted DTP Type 1 material. Where concrete bed and surround is specified flexibility of joints is to be maintained by using compressible bitumen impregnated foreboard at each pipe joint.
 - All existing drainage invert levels, diameters and locations are to be checked by the Contractor prior to the commencement of any proposed drainage work. Any difference between actual and drawn details is to be reported to the Engineer immediately.
 - Positions of existing services/statutory undertakers apparatus adjacent to or crossing proposed sewers is to be checked by the Contractor prior to starting work.

Rev.	Description	Date	By
A	Updated to suit revised layout and planning comments	24/01/2025	SH
-	First issue	03/01/2022	SH

Drawing Status **PLANNING**

Please note while these drawings may be used for tender purposes, drawings are subject to the Greater Manchester County Council approval as part of ongoing consultations and design checks. Amendments may therefore be requested.

Client **MORRIS**

Project **East Lancs Paper Mill
Bury**

Title **Section 278
Highway Construction Details**

BANNERS GATE

CIVIL, STRUCTURAL & ARCHITECTURAL DESIGN SERVICES

10-11 Birmingham Street, Halesowen, West Midlands B63 9JN
Tel: 0121 687 1500 Fax: 0121 687 1501
E-mail: mail@bannersgate.com

Scale	NTS @ A1	Drawn	SH
Date	January 2023	Checked	DA
File	22166/drawings/civils/current	Drawing	22166 / 450