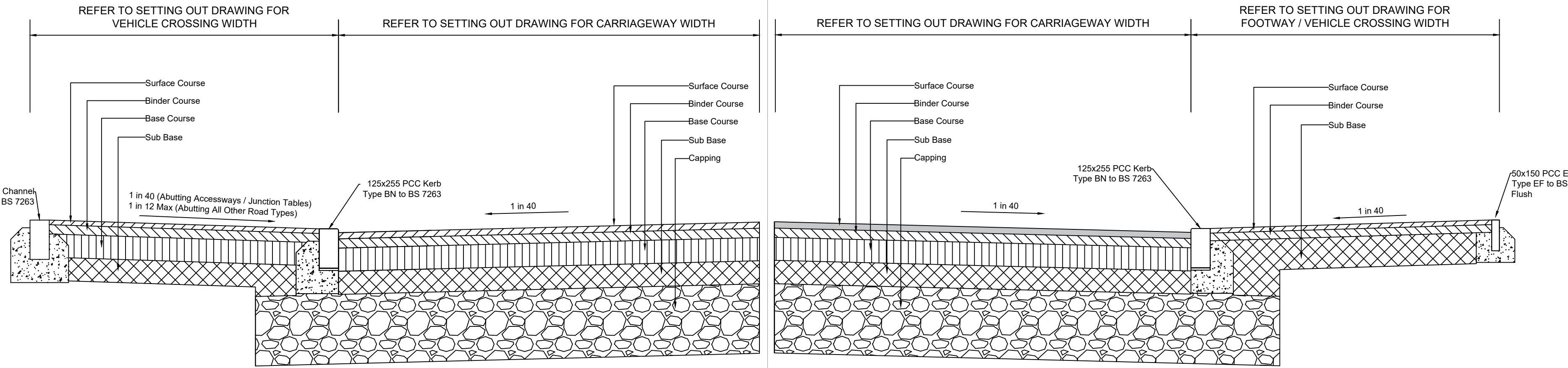


TYPICAL SECTION INDUSTRIAL ESTATE ROAD / LOCAL DISTRIBUTOR ROAD / HOUSING SPINE ROAD / BUS ROUTE / COLLECTOR ROAD



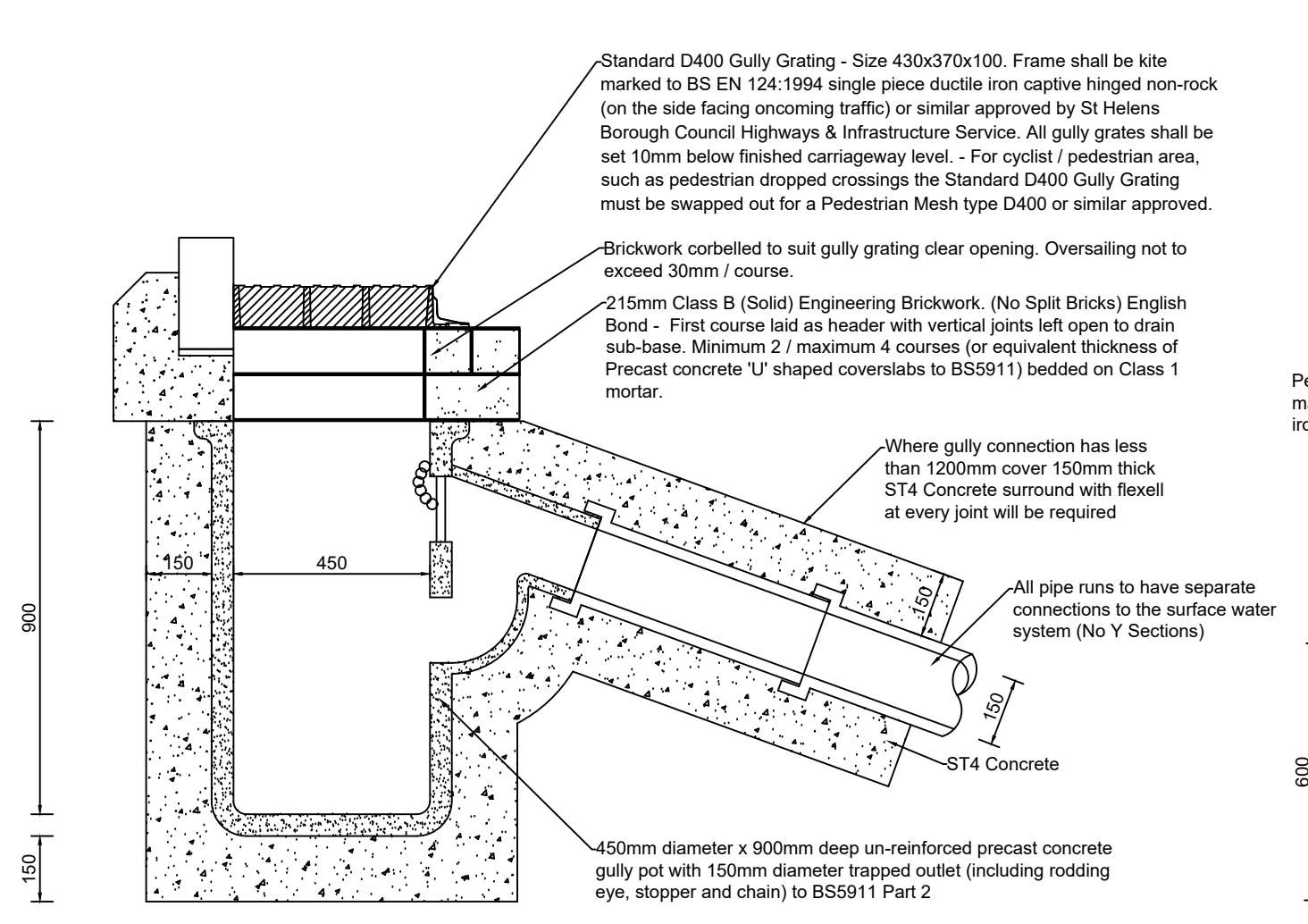
HEAVY DUTY CROSSING SERVING 4 OR MORE PROPERTIES AND AT ACCESS POINTS TO CAR PARKS

TYPICAL SECTION ACCESSWAYS / JUNCTION TABLES

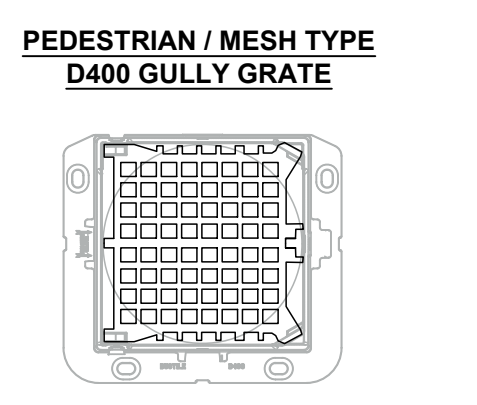
	Industrial Estate Road / Housing Spine Road / Bus Route	Junction Table on Industrial Estate Road / Local Distributor Road / Housing Spine Road / Bus Route	Collector Road	Junction Table on Collector Road	Accessway	Localised Carriageway Widening to existing adopted carriageway (less than 1 metre wide)	Classified Roads / Local Distributor Roads
Surface Course	40mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 30/14F surf 40/60 des with 20mm pre-coated Harden Red chippings min. PSV65	40mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 30/14F surf 40/60 des with 20mm pre-coated Harden Red chippings min. PSV65	40mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 30/14F surf 40/60 des with 20mm pre-coated Criggon Green chippings min. PSV65	40mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 30/14F surf 40/60 des with 20mm pre-coated Harden Red chippings min. PSV65	40mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 30/14F surf 40/60 des with 20mm pre-coated Harden Red chippings min. PSV65	40mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 30/14F surf 40/60 des with 20mm pre-coated Criggon Green chippings min. PSV65	50mm thick Hot Rolled Asphalt Surface Course EN13108-4 HRA 35/14F surf 40/60 des with 20mm pre-coated Criggon Green chippings min. PSV65
Binder Course	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1	60mm thick Asphalt Concrete Binder Course to AC20 HDM bin 40/60 EN13108-1
Base Course	150mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1	150mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1	150mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1	150mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1	150mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1	150mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1	250mm thick Asphalt Concrete Base Course to AC32 HDM base 40/60 EN13108-1
Sub Base	200mm thickness of Granular Sub Base Type 1 (DoT Clause 803)	200mm thickness of Granular Sub Base Type 1 (DoT Clause 803)	150mm thickness of Granular Sub Base Type 1 (DoT Clause 803)	150mm thickness of Granular Sub Base Type 1 (DoT Clause 803)	150mm thickness of Granular Sub Base Type 1 (DoT Clause 803)	350mm thick wet lean concrete ST4 with 20mm aggregate in lieu of Base Course / Sub Base	200mm thickness of Granular Sub Base Type 1 (DoT Clause 803)
Capping	Thickness of 6F2 material to be determined by CBR Tests to be undertaken every 30 metres along road centreline (if centreline is less than 30 metres in length then a minimum of two CBR results will be required) For required 6F2 thickness please see Table 3 - Capping Requirements						
Kerb Type	See Table 2 for Kerb Type	Bull Nosed Kerb Type BN 125x255	See Table 2 for Kerb Type	Bull Nosed Kerb Type BN 125x255	See Table 2 for Kerb Type	See Table 2 for Kerb Type	See Table 2 for Kerb Type
Kerb face (KF)	Standard = 125mm Vehicle Crossings = 25mm PDC = 0 - 6mm	Standard = 25mm Vehicle Crossings = 25mm PDC = 0 - 6mm	Standard = 125mm Vehicle Crossings = 25mm PDC = 0 - 6mm	Standard = 25mm Vehicle Crossings = 25mm PDC = 0 - 6mm	Standard = 25mm Vehicle Crossings = 25mm PDC = 0 - 6mm	Standard = 125mm Vehicle Crossings = 25mm PDC = 0 - 6mm	Standard = 125mm Vehicle Crossings = 25mm PDC = 0 - 6mm

Note: PDC = Pedestrian Dropped Crossing

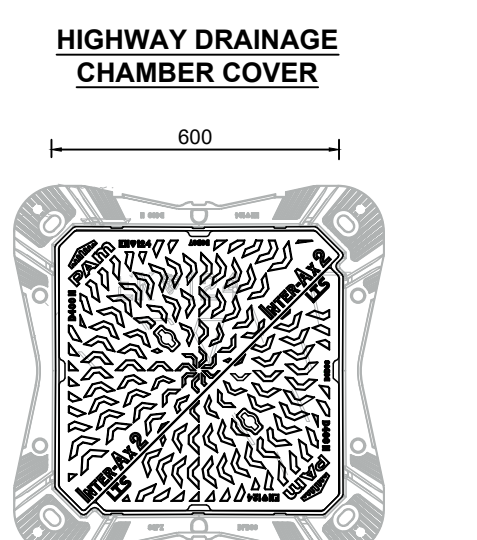
	Standard Footway / Hard Paved Service Margin on Industrial Estate Road / Local Distributor Road / Housing Spine Road / Bus Route / Collector Road	Standard Footway / Hard Paved Service Margin on Accessway	Vehicle crossing serving 1 to 3 properties	Footway / Hard Paved Service Margin (including Vehicle Crossing serving 1 to 3 properties)	Heavy Duty Vehicle Crossing serving 4 or more properties / access points to car parks (when adjoining all Carriageway widths)	Pedestrian Dropped Crossing (Non Tactile)	Pedestrian Dropped Crossing (Tactile - Uncontrolled crossing)	Highway Verge
Location of use	Adjoining Carriageway 5 metres or greater in width	Adjoining Carriageway less than 5 metres in width	Adjoining Carriageway less than 5 metres in width	All Carriageway widths	All Carriageway widths	All Carriageway widths	All Carriageway widths	All Carriageway widths
Surface Course	30mm thick Asphalt Concrete AC8 dense surf 100/150 EN13108-1 (No Limestone Aggregate)	30mm thick Asphalt Concrete AC8 dense surf 100/150 EN13108-1 (No Limestone Aggregate)	30mm thick Asphalt Concrete AC8 dense surf 100/150 EN13108-1 (No Limestone Aggregate)	30mm thick Asphalt Concrete AC8 dense surf 100/150 EN13108-1 (No Limestone Aggregate)	30mm thick Asphalt Concrete AC8 dense surf 100/150 EN13108-1 (No Limestone Aggregate)	30mm thick Asphalt Concrete AC8 dense surf 100/150 EN13108-1 (No Limestone Aggregate)	400 x 400 x 70mm buff coloured blaster paving slabs. Configuration as per MerseySide Code of Practice on Access and Mobility	Seed Mixture - 35% Smooth Staked Meadow Grass, 30% Slender Creeping Red Fescue, 25% Perennial Ryegrass, 10% Browntop Bent
Binder Course	50mm thick Asphalt Concrete AC20 dense bin 100/150 EN13108-1	50mm thick Asphalt Concrete AC20 dense bin 100/150 EN13108-1	50mm thick Asphalt Concrete AC20 dense bin 100/150 EN13108-1	50mm thick Asphalt Concrete AC20 dense bin 40/60 EN13108-1	60mm thick Asphalt Concrete AC20 dense bin 40/60 EN13108-1	50mm thick Asphalt Concrete AC20 dense bin 100/150 EN13108-1	100mm thick compacted Concrete Class ST4	150mm thick Topsoil, laid on beram 1000 or similar approved
Base Course	Not Applicable	Not Applicable	Not Applicable	Not Applicable	150mm thick Asphalt Concrete AC32 dense base 40/60 EN13108-1	Not Applicable	Not Applicable	Not Applicable
Sub Base	150mm thickness of Granular Sub Base Type 2 (DoT Clause 804)	150mm thickness of Granular Sub Base Type 2 (DoT Clause 804)	200mm thickness of Granular Sub Base Type 2 (DoT Clause 804)	200mm thickness of Granular Sub Base Type 2 (DoT Clause 804)	150mm thickness of Granular Sub Base Type 1 (DoT Clause 804)	150mm thickness of Granular Sub Base Type 2 (DoT Clause 804)	100mm thickness of Granular Sub Base Type 2 (DoT Clause 804)	Not Applicable
Kerb Type	Half Battered Kerb Type HB2	Bull Nosed Kerb Type BN 125x150	Bull Nosed Kerb Type BN 125x150	Bull Nosed Kerb Type BN 125x255	Bull Nosed Kerb Type BN 125x255	Bull Nosed Kerb Type BN 125x150 (at Junction Tables use Bull Nosed Kerb Type 125x255)	Bull Nosed Kerb Type BN 125x150 (at Junction Tables use Bull Nosed Kerb Type 125x255)	Not Applicable
Kerb Face (KF)	125mm	25mm	25mm	25mm	25mm	0 - 6mm	0 - 6mm	Not Applicable
Rear Edging Type	Footway / Verge Edging Type EF	Footway / Verge Edging Type EF	Footway / Verge Edging Type EF	Footway / Verge Edging Type EF	Heavy Duty Edging Type CS1	Footway / Verge Edging Type EF	Footway / Verge Edging Type EF	Footway / Verge Edging Type EF
Rear Edging Upstand	Flush	Flush	Flush	Flush	Flush	Flush	Flush	Flush



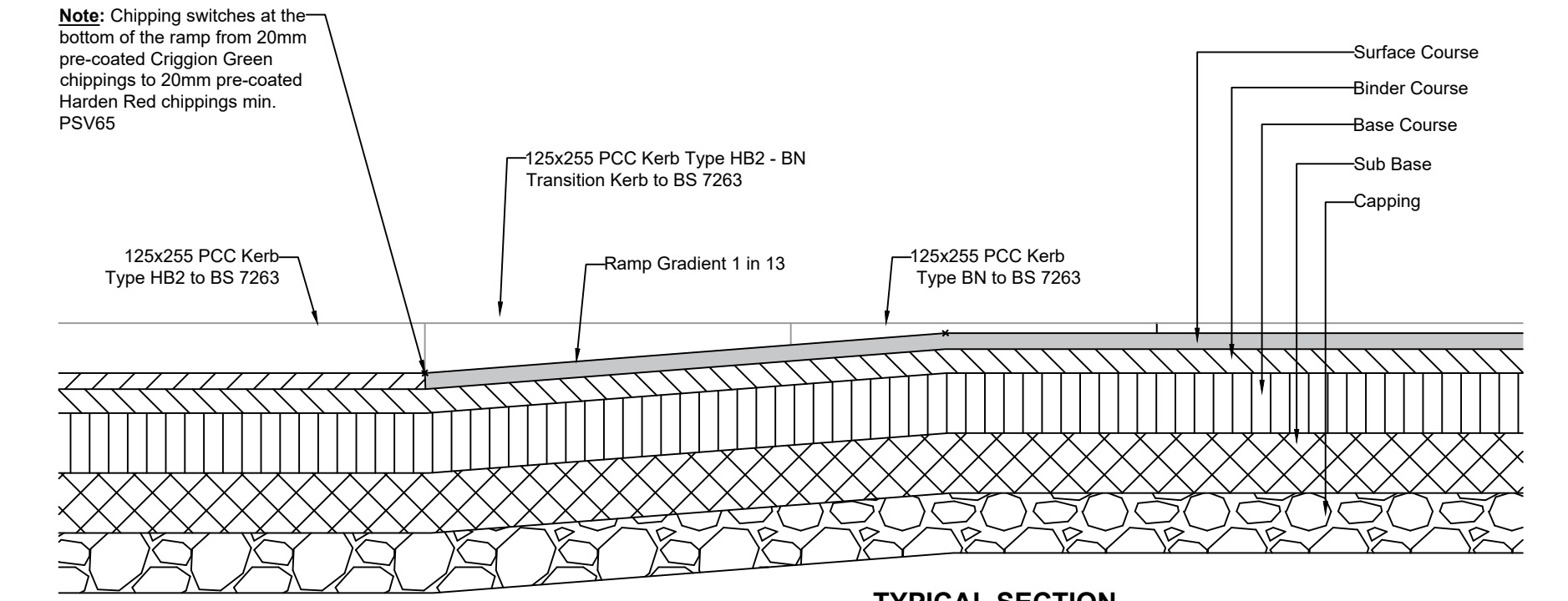
PRECAST CONCRETE GULLY CROSS SECTION



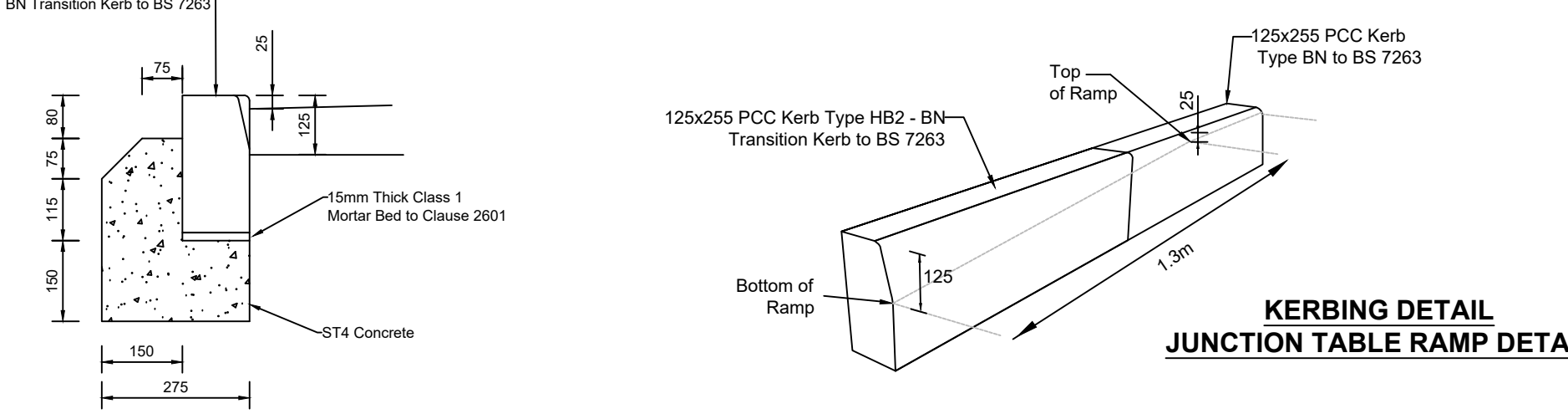
PEDESTRIAN / MESH TYPE D400 GULLY GRATE



HIGHWAY DRAINAGE CHAMBER COVER

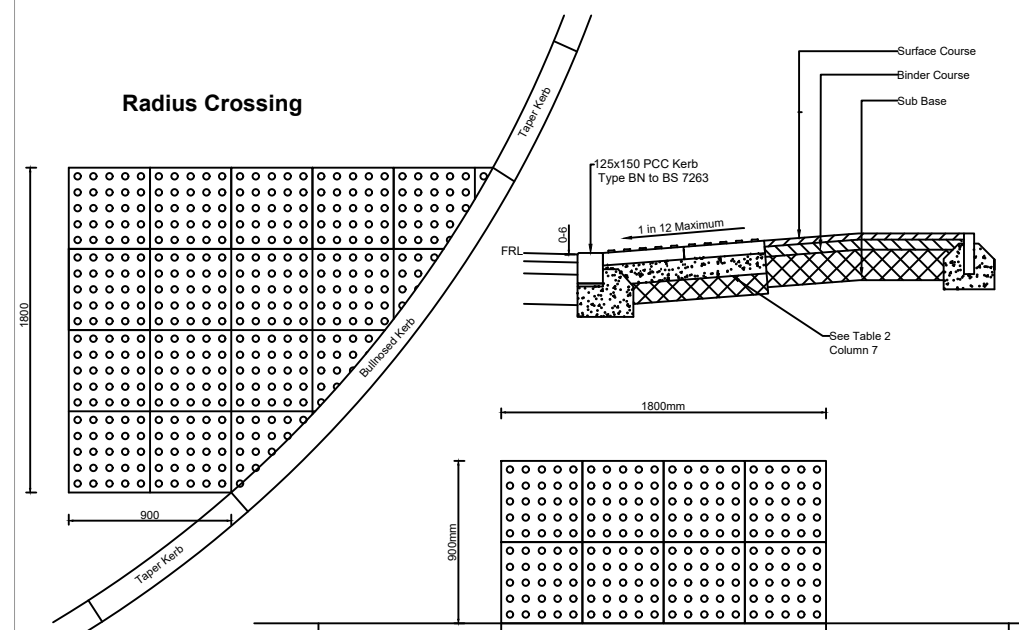


TYPICAL SECTION JUNCTION TABLE RAMP DETAIL



KERBING DETAIL JUNCTION TABLE RAMP DETAIL

UNCONTROLLED TACTILE CROSSING STANDARD DETAIL



Radius Crossing

Straight Crossing

Table 3 - Capping Requirements

CBR Result (Note - Lowest achieved CBR heading to be used to determine capping requirements)	6F2 Capping Thickness Required
2% or below	Minimum 600mm plus ground stabilisation to be agreed with St Helens Council Engineering Division prior to commencement
2% to 2.5%	450mm
Greater than 2.5% to 3%	400mm
Greater than 3% to 4%	350mm
Greater than 4% to 5%	300mm
Greater than 5% to 7.5%	250mm
Greater than 7.5% to 10%	225mm
Greater than 10%	None

Designation	Redesign / Specification Change	JE	22/6/22
C	CBR / GENERAL NOTES	JE	30/1/17
B	Trench Reinstatement Detail	JE	15/8/17
A	Pre-coated added to HRA chippings	JD	17/4/14
Rev	Amendments	By	Date

Place Services
Highways & Infrastructure Service
PO Box 512
St Helens
WA10 9JX



Contact Centre: 01744 676789
www.sthelens.gov.uk
Section38@sthelens.gov.uk

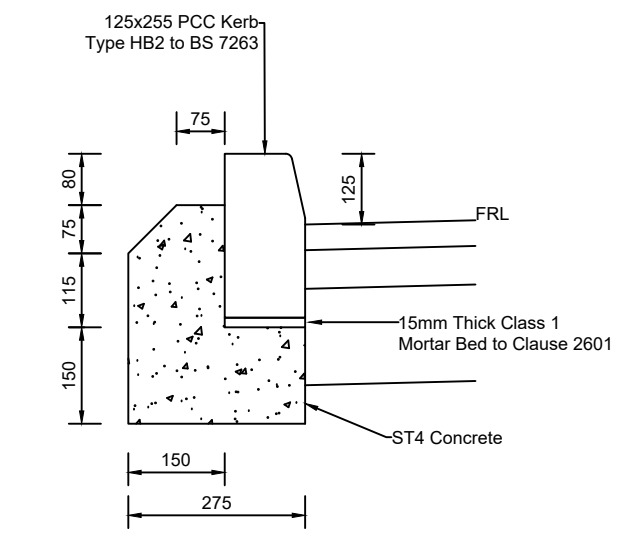
Project **Section 38 / Section 278 Developments**

Title **Road Construction Details**

Scale	Drawn by:	Designed by:	Checked by:	Approved by:
NTS	JE	JE	JD	JD
	Date Dec13	Date Dec 13	Date Dec 13	Date Dec 13

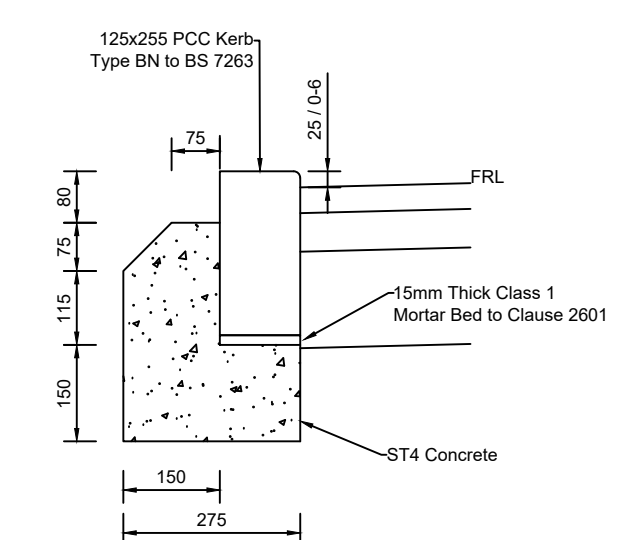
Drawing Number: 1_RD_S38-278_GEN_CONSTRUCTION DETAIL

Directory: St Helens Council\Shared Documents\HA Agreements\Section 38 Agreements\Standard Details



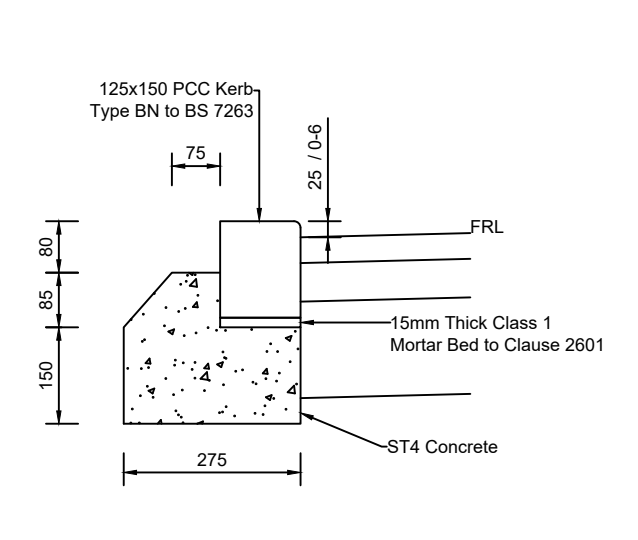
Half Battered Kerb - Type HB2

For use with Industrial Estate Roads, Local Distributor Roads, Housing Spine Roads, Bus Routes and Residential Collector Roads



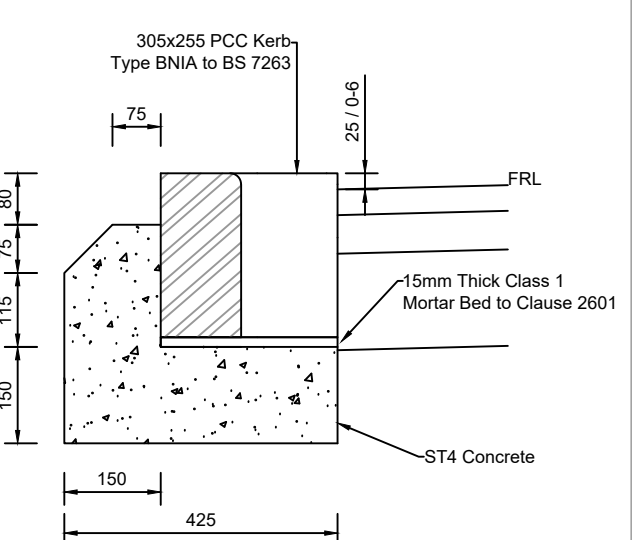
Bull Nosed Kerb - Type BN 125x255

For use with Junction Tables, Accessways, Vehicle Crossings serving 4 or more properties and at access points to Car Parks



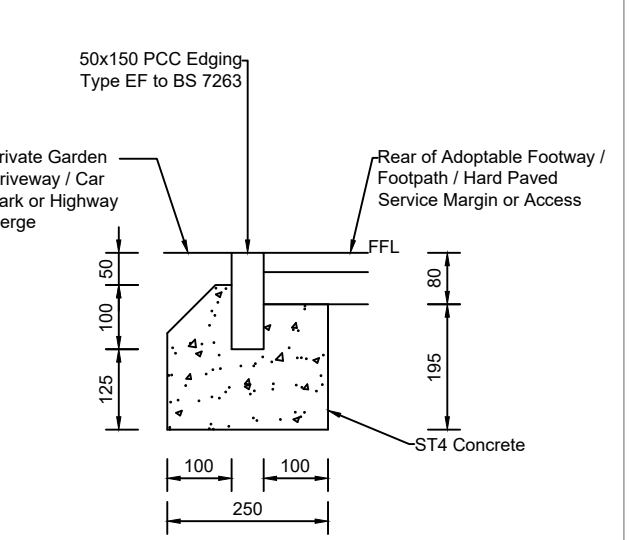
Bull Nosed Kerb - Type BN 125x150

For use with Pedestrian Dropped Crossings and Vehicle Crossings serving 1 to 3 properties



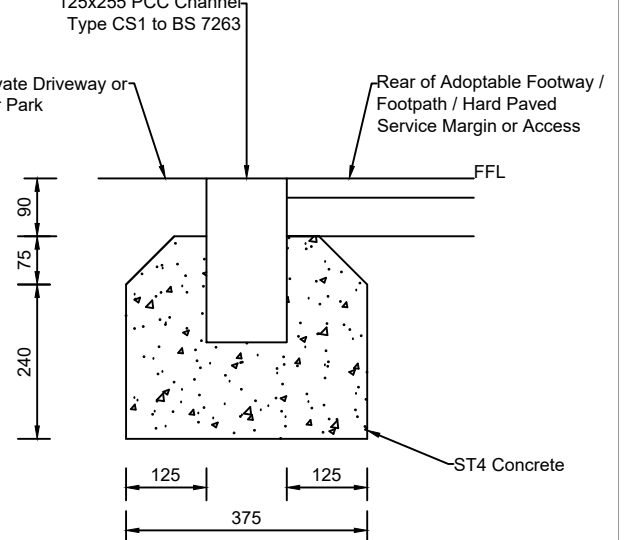
Bullnosed Internal angle kerb - Type BNIA

For use with Industrial Estate Roads, Local Distributor Roads, Housing Spine Roads, Bus Routes and Residential Collector Roads



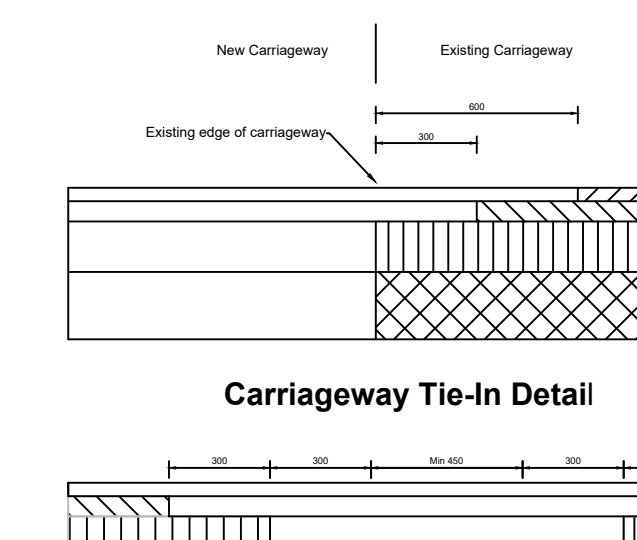
Footway / Verge Edging - Type EF

For use at rear of Footways / Footpaths / Hard Paved Service Margins when abutting Private Gardens or Landscaped Areas Driveways serving 1 to 3 properties or when abutting Access Pathways



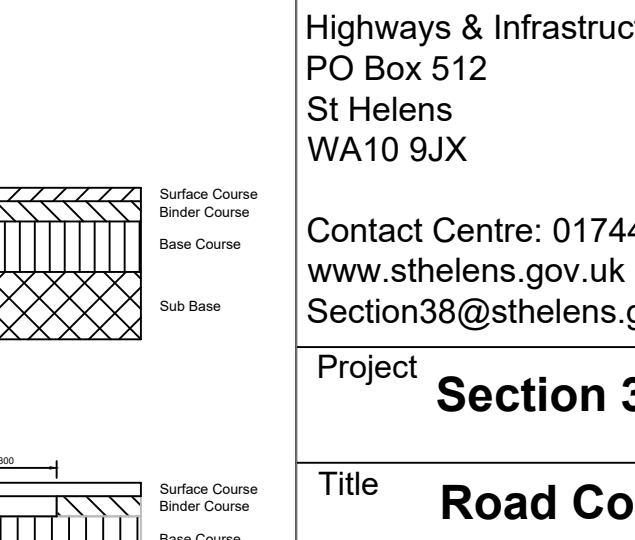
Heavy Duty Edging - Type CS1

For use at rear of Footways / Footpaths / Hard Paved Service Margins at Heavy Duty Vehicle Crossings serving 4 or more properties and at access points to Car Parks



Carriageway Tie-In Detail

For use at rear of Footways / Footpaths / Hard Paved Service Margins at Heavy Duty Vehicle Crossings serving 4 or more properties and at access points to Car Parks



Trench Reinstatement Detail

For use at rear of Footways / Footpaths / Hard Paved Service Margins at Heavy Duty Vehicle Crossings serving 4 or more properties and at access points to Car Parks