

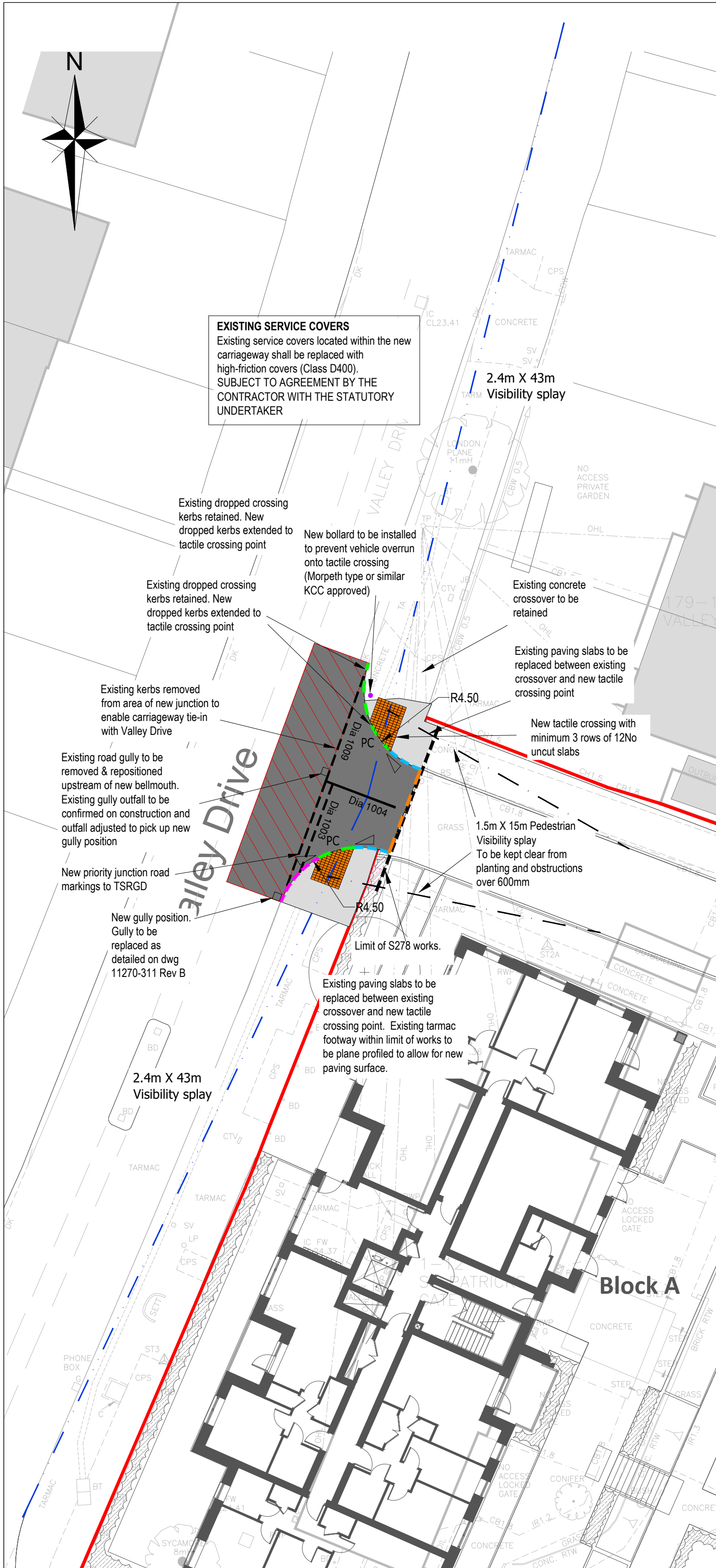
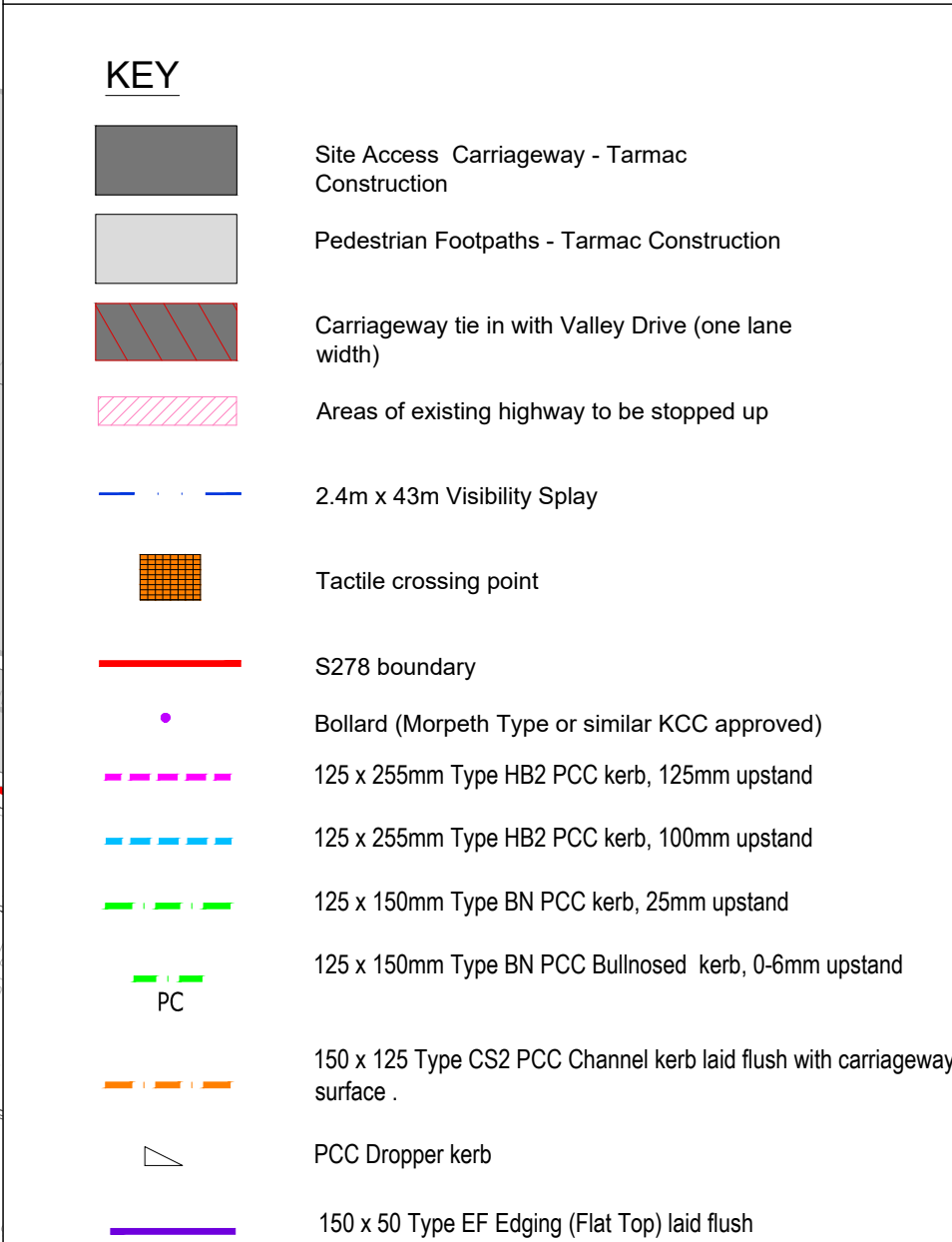
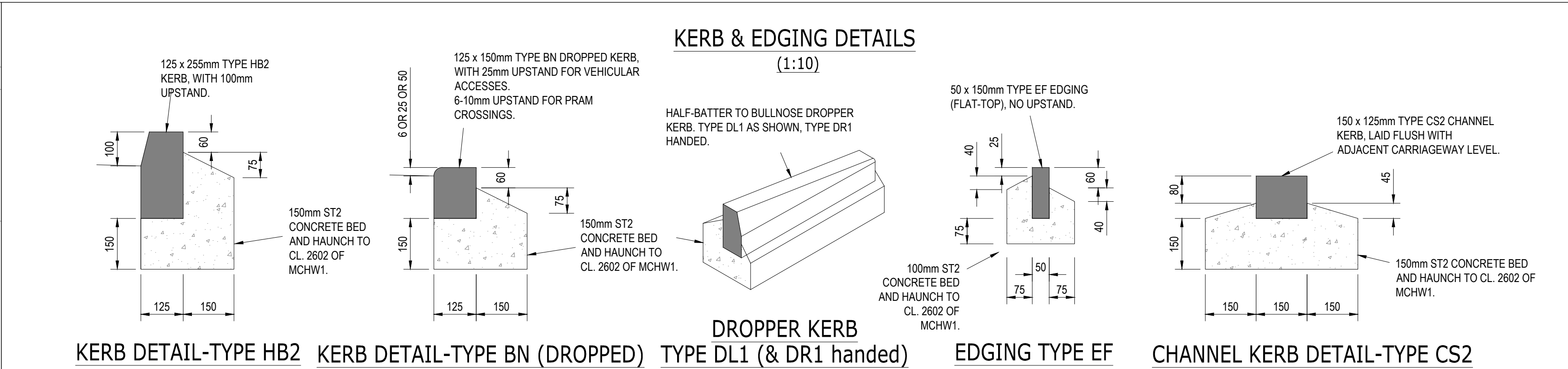


TABLE B & C - CAPPING LAYER & SUB-BASE THICKNESS

Table B	Sub-Base Only Option			
Plasticity Index Above Zero?	If 'Yes' use a construction CBR of <2%. If 'No' test for Construction CBR			
Construction CBR (%)	<2	2 to 3	>3 to 5	5+
Non Woven Geotextile layer required	Yes	Yes	No	No
Road Type Definition				
MIW/Z & SAW/MC	500mm	370mm	290mm	250mm

Table C	Sub-Base + Capping option		
Plasticity Index Above Zero?	If 'Yes' use a construction CBR of <2%. If 'No' test for Construction CBR		
Construction CBR (%)	<2	2 to 3	3+
Non Woven Geotextile layer required	Yes	Yes	No
Sub-base Thickness	250mm of sub-base laid over a Capping layer Thickness as below		
Road Type Definition			
MIW/Z & SAW/MC	300mm	150mm	150mm



REPLACEMENT FOOTWAY CONSTRUCTION SPECIFICATION

SURFACE COURSE
25mm of AC6 DENSE SURFACE 100/150 TO CLAUSE 909

BINDER COURSE
55mm OF AC 20 DENSE BIN 100/150 REC, TO COMPLY WITH BS EN 13108-1 ASPHALT CONCRETE

BASE COURSE
70mm OF AC 20 DENSE BASE 100/150 REC, TO COMPLY WITH BS EN 13108-1 ASPHALT CONCRETE

SUB-BASE
150mm MIN. OF TYPE 1 GRANULAR MATERIAL TO CLAUSE 803 MCHW1. LAID ABOVE A NON WOVEN GEOTEXTILE MEMBRANE

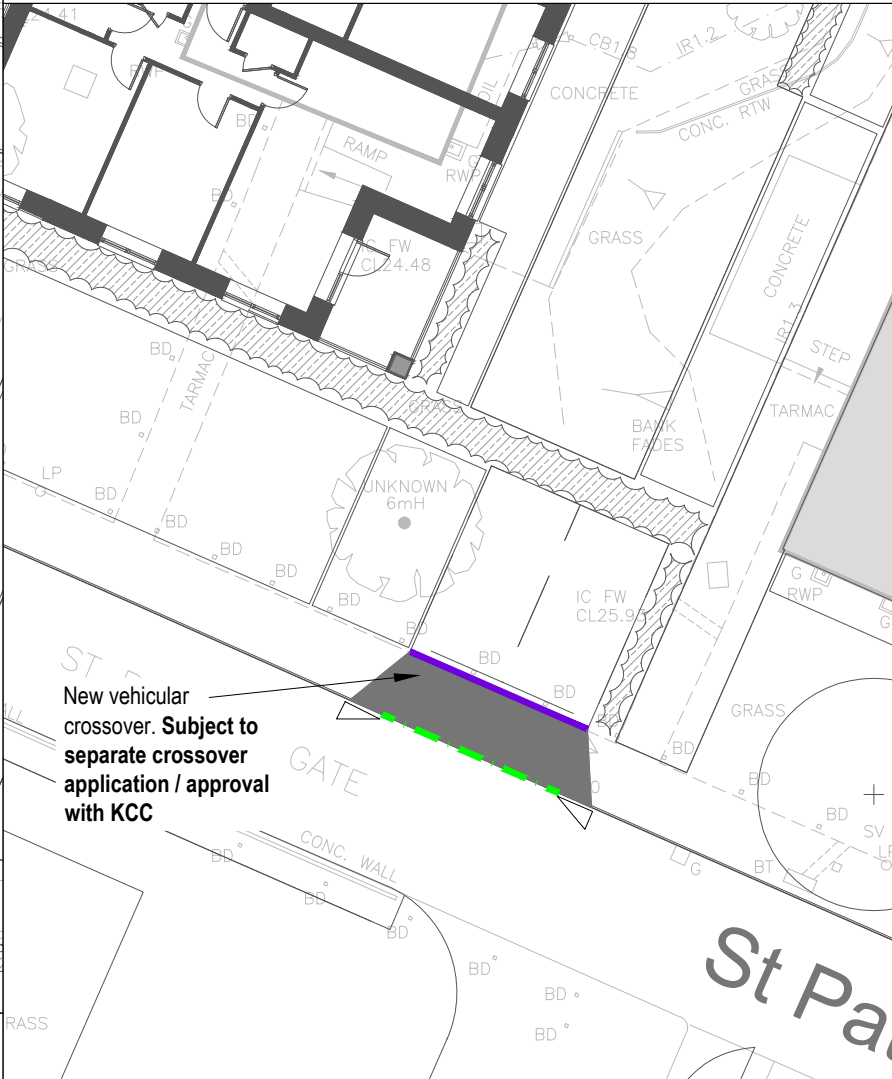
MINOR ACCESS WAY (FLEXIBLE CONSTRUCTION SPECIFICATION) (1:20)

SURFACE COURSE
40mm AC 10 CLOSE SURFACE 40/60

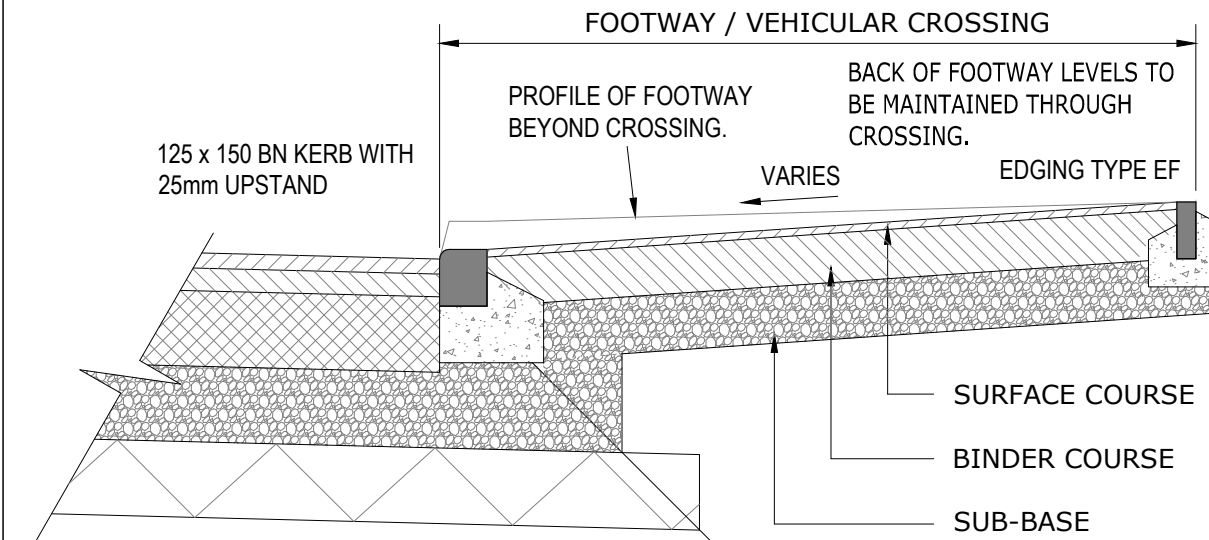
BINDER COURSE
70mm OF AC 20 HDM BIN 40/60 REC TO BS EN 13108-1 ASPHALT CONCRETE

BASE (*)
90mm OF AC 32 HDM BASE 40/60 REC TO BS EN 13108-1 ASPHALT CONCRETE.

SUB-BASE
500mm TYPE 1 GRANULAR SUB-BASE MATERIAL TO CLAUSE 803 MCHW1. (CBR OF <2% ADOPTED FOR DESIGN BASED UPON RECOMMENDATIONS WITHIN RPS PHASE 1 PRELIMINARY RISK ASSESSMENT & PHASE 2 GEO-ENVIRONMENTAL & GEOTECHNICAL SITE INVESTIGATION REPORT) REFER TO TABLE B



FOOTWAY - TYPICAL UNCONTROLLED PEDESTRIAN TACTILE CROSSING DETAIL (NTS)



TYPICAL CROSS SECTION THROUGH FOOTWAY VEHICULAR CROSSING * (1:20)

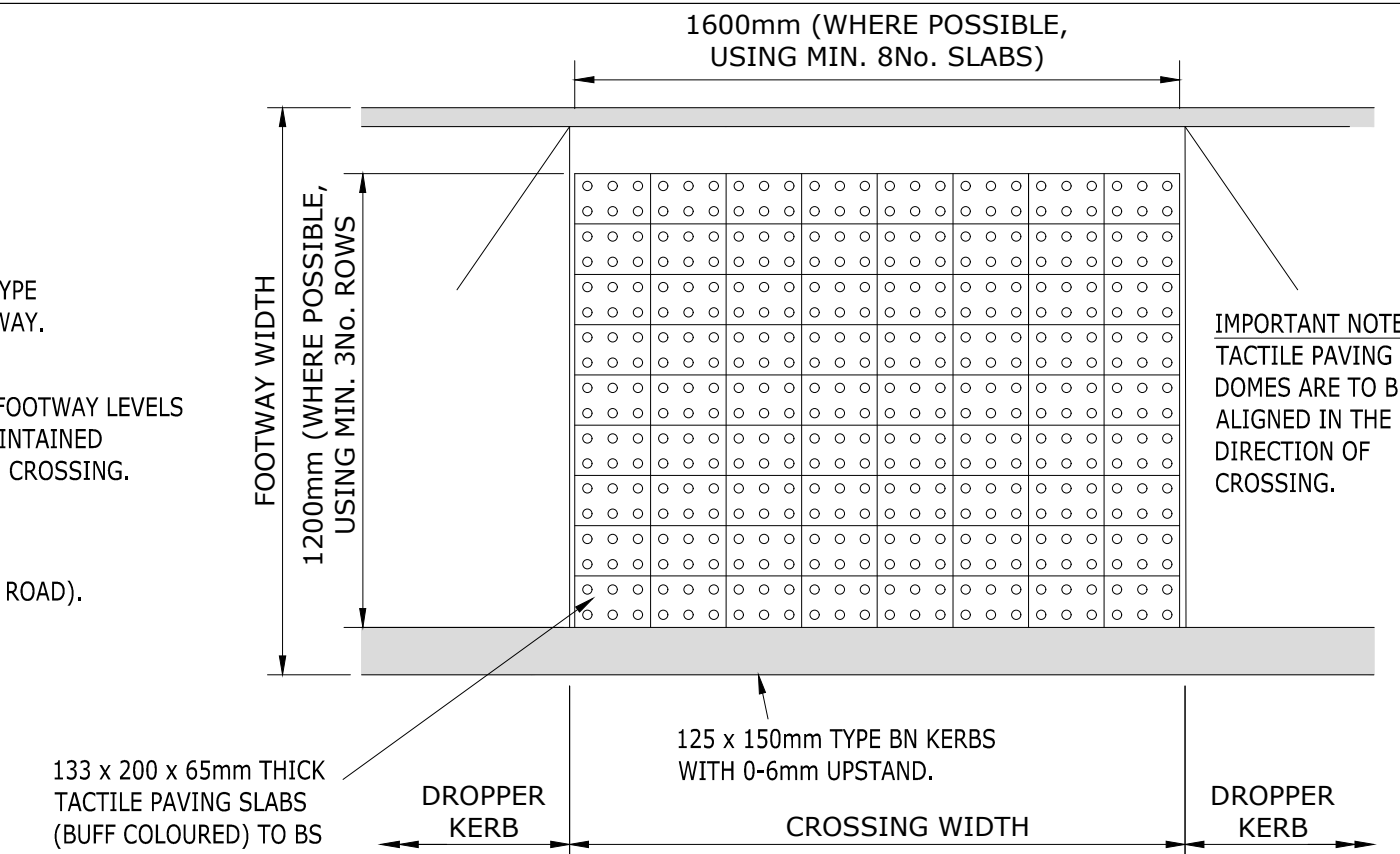
CROSSOVER CONSTRUCTION SPECIFICATION

SURFACE COURSE
25mm of AC6 DENSE SURFACE 100/150 TO CLAUSE 909

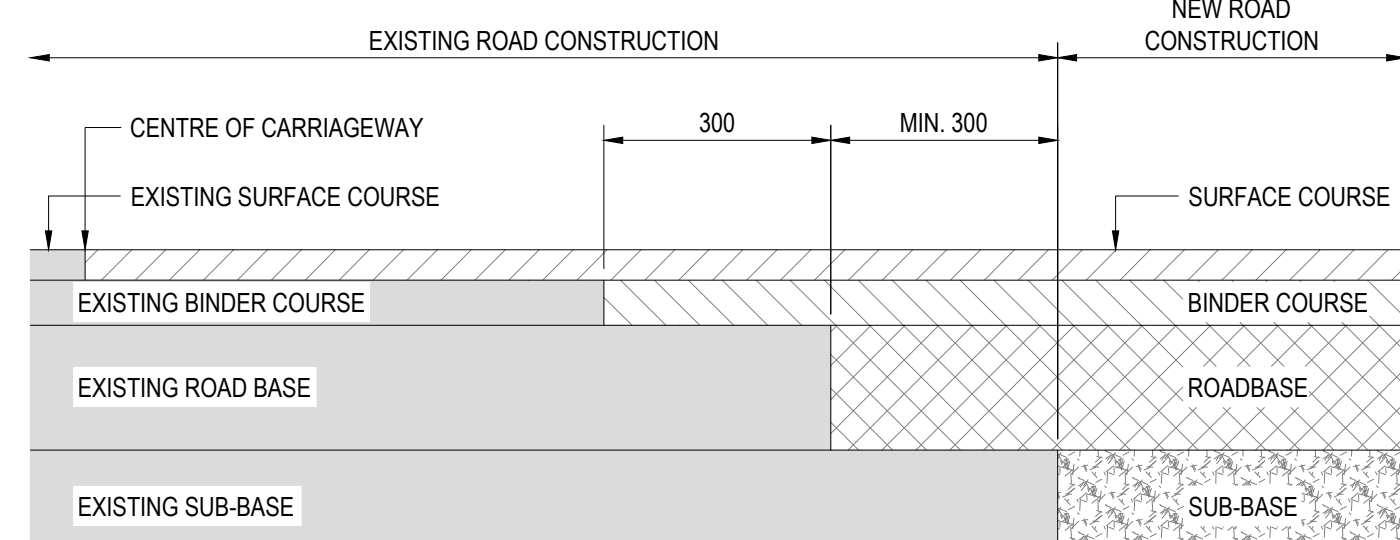
BINDER COURSE
55mm OF AC 20 DENSE BIN 100/150 REC, TO COMPLY WITH BS EN 13108-1 ASPHALT CONCRETE

BASE COURSE
70mm OF AC 20 DENSE BASE 100/150 REC, TO COMPLY WITH BS EN 13108-1 ASPHALT CONCRETE

SUB-BASE
150mm MIN. OF TYPE 1 GRANULAR MATERIAL TO CLAUSE 803 MCHW1. LAID ABOVE A NON WOVEN GEOTEXTILE MEMBRANE



PLAN SHOWING TACTILE PAVING REQUIREMENTS TO FOOTWAY AT UNCONTROLLED CROSSING (1:20)



TYPICAL TIE-IN DETAIL 1:10

EXISTING ROAD CONSTRUCTION ABOVE SUB-BASE TO BE CUT OUT IN 300mm STEPS AS SHOWN AND REPLACED WITH NEW FLEXIBLE MATERIAL WITH STAGGERED LAPS BEYOND TIE-IN.

REFER TO NOTE 15 REGARDING BOND COATS BETWEEN BITUMINOUS MATERIALS.

- DO NOT SCALE FROM THIS DRAWING -
All dimensions in mm U.N.O

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
 - DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
 - ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
 - ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
 - NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
 - ALL MATERIALS AND WORKMANSHIP SHALL COMPLY FULLY WITH THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, VOLUME ONE, (MCHW1) SPECIFICATION FOR HIGHWAY WORKS AND KENT COUNTY COUNCIL.
 - THE CONTRACTOR SHALL UNDERTAKE SUCH MATERIALS TESTING AS INDICATED IN THE SPECIFICATIONS AND SHALL INCLUDE THE COST OF TESTING IN THE TENDER.
 - WHERE NECESSARY, ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED TIP OFF-SITE.
- KERB NOTES:**
- ALL KERBS TO BE IN ACCORDANCE WITH BS7263, PART 1: 2001.
 - ALL IN-SITU CONCRETE TO FOUNDATION AND HAUNCH TO BE CLASS ST1 TO CL. 2602 OF SHW.
 - KERB FOUNDATION TO BE LAID ON ROLLED SUB-BASE OF MINIMUM THICKNESS 150mm.
 - THE KERB BED AND BACKING SHALL NORMALLY BE LAID IN ONE OPERATION.
 - WHERE THE BED IS LAID IN ADVANCE OF THE KERBS A 200x20mm DIA. MILD STEEL DOWEL BARS WILL BE REQUIRED IN BACKING AT 600mm CENTRES AND KERBS WILL BE BEDDED ON 10mm THICK MORTAR TO DESIGNATION (I) OF CL. 2604 OF SHW.
 - KERBS SHALL BE LAID WITH DRY JOINTS AND CLOSELY BUTTED LEAVING A 2-3mm GAP AT EACH JOINT FOR EXPANSION.
 - TRANSITION KERBS SHALL BE USED AT ALL CHANGES IN KERB FACE.
 - FOR KERB AND CHANNEL RADI OF 12m OR LESS, THE APPROPRIATE RADIUS SHALL BE USED.
 - FOR RADI OF BETWEEN 12m AND 18m STRAIGHT KERBS 600mm LONG SHALL BE USED.
 - CUTTING KERBS AND CHANNELS SHALL BE OF AN APPROVED MECHANICAL MEANS.
 - THE LENGTH OF ANY KERB OR CHANNEL SHALL NOT BE LESS THAN 300mm.
- CONSTRUCTION NOTES:**
- ALL SOFT SPOTS AND VOIDS SHALL BE REMOVED BEFORE CONSTRUCTION AND REPLACED WITH SUITABLE FILL MATERIAL.
 - ROAD FORMATION TO BE IN ACCORDANCE WITH CLAUSE 616 AND COMPACTED IN ACCORDANCE WITH TABLE THE REQUIREMENTS OF 614 OF THE SPECIFICATION FOR HIGHWAY WORKS - SERIES 600 EARTHWORKS.
 - THE CONTRACTOR MUST VERIFY CBR VALUES ALONG EACH ACCESS ROAD AT FORMATION LEVEL AT APPROX 30m INTERVALS. THE RESULTS OF WHICH MUST BE SENT TO THE ENGINEER & HIGHWAYS INSPECTOR FOR CONFIRMATION OF THE CARRIAGEWAY CONSTRUCTION SHOWN ON THIS DRAWING. PRIOR TO COMMENCING THE WORKS. REFER TO TABLES B & C.
 - A RESIDUAL TRANSLUCENT TOTAL HERBICIDE WITH SOME CONTACT EFFECT, BUT NON-POISONOUS TO HUMAN BEINGS, ANIMALS AND INSECTS SHALL BE SPRAY APPLIED TO ALL FORMATIONS. THE PROPOSED HERBICIDE TO BE USED BY THE CONTRACTOR MUST FIRST OBTAIN ITS APPROVAL BY THE HIGHWAY AUTHORITY.
 - ALL CONCRETE AND CEMENT MORTAR MUST BE SULPHATE RESISTING TO BS4201.
 - ALL CARRIAGEWAY MATERIALS SHALL BE SUPPLIED AND LAID IN ACCORDANCE WITH BS EN 13108.
 - ALL MATERIALS IN CARRIAGEWAY & FOOTWAY/CYCLEDWAYS TO BE LAID BY MACHINE.
 - DESIGN TYPE SURFACE COURSES MAY ONLY BE USED IN SPECIAL CASES WITH PRIOR WRITTEN APPROVAL OF KENT COUNTY COUNCIL HIGHWAYS.
 - MINIMUM DEPTH OF 40mm CONSTRUCTION IS REQUIRED FOR NON-FROST SUSCEPTIBLE MATERIAL.
 - THE MINIMUM POLISHED STONE VALUE (PSV) AND AGGREGATE ABRASION VALUE (AV) FOR SURFACE COURSES, WITH AND WITHOUT PRE-COATED CHIPPINGS, FOR ESTATE ROADS SHALL BE IN ACCORDANCE WITH CLAUSE 942, MCHW1 AND JAN 15/11, AND ALSO TO THE REQUIREMENTS OF DMRB, VOLUME 7, SECTION 5, PART 1, HD3006.
 - THE AVERAGE TEXTURE DEPTH FOR BITUMINOUS SURFACING SHALL BE EQUAL TO OR MORE THAN 1mm AND NOT MORE THAN 1.2mm.
 - FOR ALL BITUMINOUS MATERIALS, TRANSPORTATION, LAYING, COMPACTION AND TYPE TESTING PROTOCOLS SHALL CONFORM TO BS 5948/97: 2010.
 - WHERE AGREED IN WRITING WITH THE HIGHWAY AUTHORITY, RECLAIMED ASPHALT MAY BE USED IN ACCORDANCE WITH BS EN 13108 AND CLAUSES 902 & 948 OF MCHW1. FOR ADDITIONAL GUIDANCE REFER TO PD 6891: 2007.
 - WHERE THE SURFACE FINISH VARIES WITHIN THE WORKS, E.G. ASPHALT, CONCRETE, BLOCK PAVERS ETC THE SPECIFICATION OF MATERIALS USED SHALL REMAIN CONSISTANT THROUGHOUT UNLESS AGREED OTHERWISE BY THE HIGHWAY AUTHORITY.
 - BOND COATS SHALL BE APPLIED BETWEEN BOUND LAYERS OF BITUMINOUS MATERIALS BY METERED MECHANICAL SPRAYING EQUIPMENT. SPRAY TANKER OR SPRAYING DEVICE INTEGRAL WITH THE PAVING MACHINE. BOND COATS SHALL HAVE BBA CERTIFICATION AND COMPLY WITH CLAUSE 920 OF MCHW1.
 - ALL ROAD MARKINGS ARE TO BE MMA TYPE.

CDM NOTES:

- THE ATTENTION OF THE CLIENT AND THE PRINCIPAL CONTRACTOR IS DRAWN TO THE FOLLOWING POTENTIAL RISKS IN CONJUNCTION WITH THE PROPOSED ON-SITE AND OFF-SITE WORKS AS DESIGNED FOR THIS PROJECT.
- WORKS IN THE VICINITY OF LIVE SERVICES INCLUDING GAS, WATER, ELECTRICITY, BT AND CABLE SERVICES WILL BE NECESSARY AND THE ADVICE OF ALL STATUTORY SERVICE COMPANIES MUST BE SOUGHT BEFORE ANY WORKS COMMENCE.
- WORKS WITHIN AND ABUTTING THE EXISTING HIGHWAY WILL ENTAIL TRAFFIC HAZARDS AND ALL APPROPRIATE SAFETY MEASURES INCLUDING BARRIERS, SIGNS AND LIGHTING MUST BE UNDERTAKEN TO THE APPROVAL OF THE LOCAL AUTHORITY, THE HIGHWAY AUTHORITY AND THE POLICE DEPARTMENT.
- HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURERS ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATIVES.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES WITHIN THE VICINITY OF THE WORKS HAND DUG AND ENSURE THESE ARE PROTECTED THROUGHOUT THE DURATION OF THE WORKS. ALL UTILITY PLANT SHOULD BE CLEARLY MARKED ON THE GROUND PRIOR TO COMMENCEMENT OF THE WORKS.
- THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURE.
- CONTRACTOR TO AGREE MAINS LOWERING AS REQUIRED WITH ALL STATUTORY SERVICE COMPANIES TO ENSURE ALL SERVICES ARE BELOW THE PROPOSED TYPE 1 LEVEL OF THE PROPOSED ROAD CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE HIGHWAY AUTHORITY.

SCALE 1:200

0	2m	4m	6m	8m	10m	16m	20m
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E	Updated following KCC highway comments (email dated 28.08.2024)	TGL	ICD	10.09.24
D	Updated following KCC highway comments (email dated 25.07.2024)	TGL	ICD	19.08.24
C	Updated following KCC highway comments (email dated 12.07.2024)	TGL	ICD	16.07.24
B	Pedestrian bollard repositioned following auditors response. St Patrick's Gate vehicular crossover inset added	TGL	ICD	20.05.24
A	Service cover note and pedestrian vis splays added. Tactile paver depth increased. Pedestrian bollard added. Completed following Stage 1/2 RSA comments.	TGL	ICD	17.05.24
Rev		By	Chk'd	Date

PRELIMINARY

Client: **OAKWOOD BUILDING CONTRACTORS**

Project: **ST COLUMBA'S CLOSE GRAVESEND, KENT**

Title: **SECTION 278 AGREEMENT PLAN**

Job No.	Dwg No.	Rev
11270	310	E
Drawn by	Date	
TGL	April 24	
Checked by	Scale	
ICD	1:250 on A1	

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