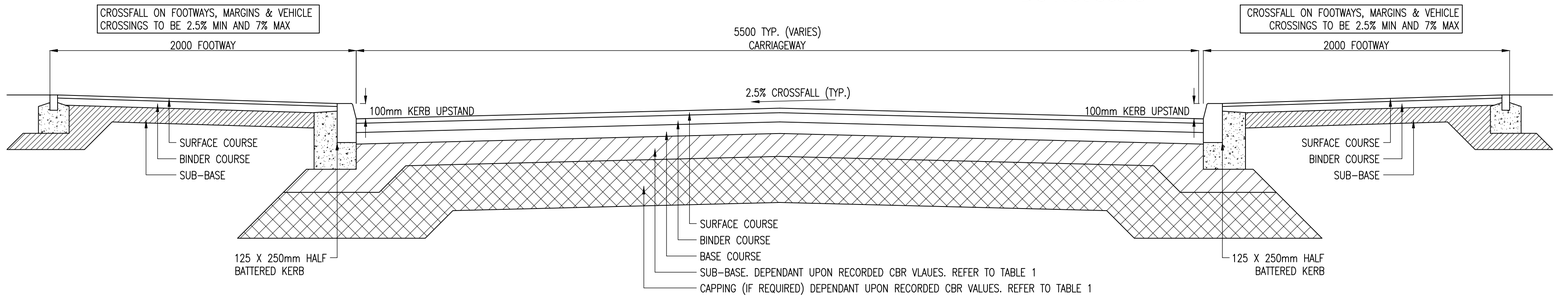
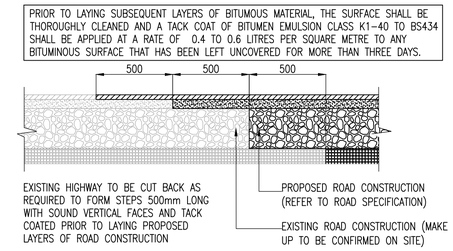
Do Not Scale



BITUMINOUS HIGHWAY CONSTRUCTION DETAIL

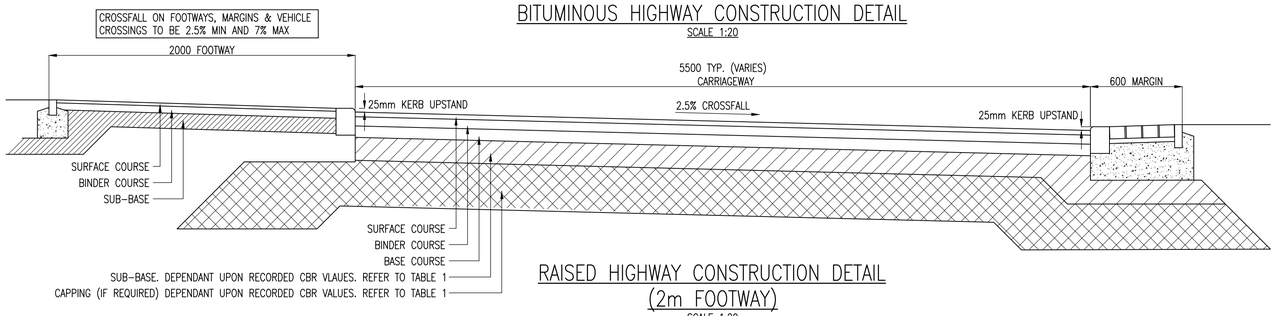
SCALE 1:20



TYPICAL ROAD CONSTRUCTION TYING IN DETAIL

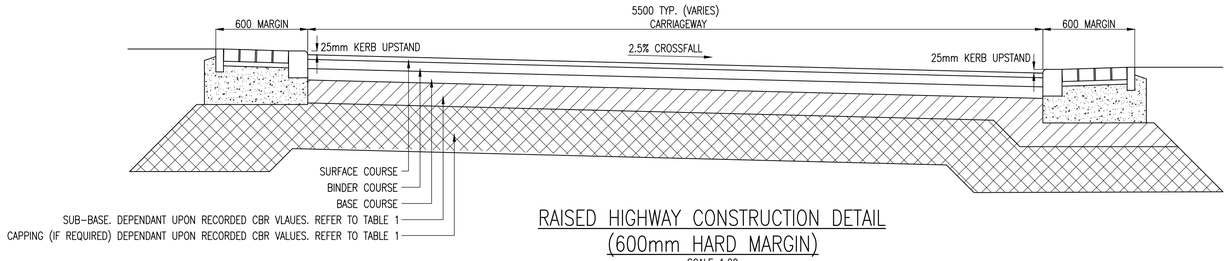
SCALE 1:20

(FOOTPATH TYING IN DETAIL SIMILAR, REFER TO PEDESTRIAN CROSSING DETAIL FOR APPROPRIATE BUILD UP)



RAISED HIGHWAY CONSTRUCTION DETAIL (2m FOOTWAY)

SCALE 1:20



RAISED HIGHWAY CONSTRUCTION DETAIL (600mm HARD MARGIN)

SCALE 1:20

BITUMINOUS ROAD SPECIFICATION

SURFACE COURSE	30mm OF AC.6 DENSE SURF 100/150
BINDER COURSE	55mm OF AC.20 DENSE BIN 100/150
BASE	85mm OF AC.32 DENSE BASE/BIN 100/150
SUB-BASE	REFER TO TABLE 1. TYPE 1 STONE TO CLAUSE 803.
CAPPING	REFER TO TABLE 1. WELL GRADED NATURAL SANDS, GRAVELS, CRUSHED ROCK/CONCRETE IN ACCORDANCE WITH KIRKLEES COUNCIL DESIGN GUIDE SPECIFICATION.

BITUMINOUS FOOTWAY SPECIFICATION

SURFACE COURSE	25mm OF AC.6 DENSE SURF 100/150
BINDER COURSE	40mm OF AC.20 DENSE BIN 100/150
SUB-BASE	100mm TYPE 1 STONE TO CLAUSE 803

BITUMINOUS VEHICULAR CROSSING SPECIFICATION

SURFACE COURSE	25mm OF AC.6 DENSE SURF 100/150
BINDER COURSE	60mm OF AC.20 DENSE BIN 100/150
SUB-BASE	150mm TYPE 1 STONE TO CLAUSE 803

BLOCK PAVED ROAD SPECIFICATION

SURFACE COURSE	80mm DEEP, BRINDLE COLOURED PCC BLOCK PAVIOURS (MARSHALLS KEYBLOK' OR SIMILAR APPROVED) LAID IN 45° HERRINGBONE PATTERN
LAYING COURSE	30mm COMPACTED SHARP SILICA SAND
BASE	85mm OF AC.32 DENSE BASE/BIN 100/150
SUB-BASE	REFER TO TABLE 1. TYPE 1 STONE TO CLAUSE 803.
CAPPING	REFER TO TABLE 1. WELL GRADED NATURAL SANDS, GRAVELS, CRUSHED ROCK/CONCRETE IN ACCORDANCE WITH WEST YORKSHIRE DESIGN GUIDE SPECIFICATION.

BLOCK PAVED SERVICE MARGIN SPECIFICATION

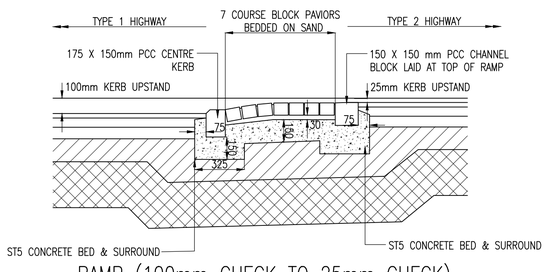
SURFACE COURSE	80mm DEEP, CHARCOAL COLOURED PCC BLOCK PAVIOURS (MARSHALLS 'KEYBLOK' OR SIMILAR APPROVED) WITH STRETCHER BOND
LAYING COURSE	30mm COMPACTED 3:1 SAND/CEMENT BED
SUB-BASE	200mm ST5 CONCRETE.

TABLE 1:

CAPPING LAYER & SUB-BASE OPTIONS

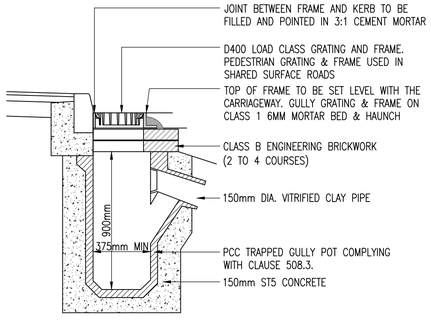
CBR (%)	CAPPING (mm)		SUB-BASE		SUB-BASE
<2	600	+	150		–
2	450	+	150		350
3	350	+	150	OR	300
4	300	+	150	OR	275
5–15	250	+	150	OR	225
>15	–	+	–	OR	150

WHERE A CBR VALUE BETWEEN THOSE IN THE ABOVE TABLE ARE OBTAINED THE LOWER VALUE IN THE ABOVE TABLE SHALL BE USED FOR THE PURPOSE OF CONSTRUCTION.



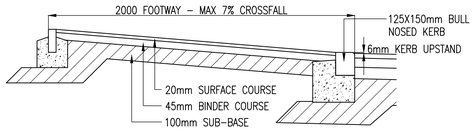
RAMP (100mm CHECK TO 25mm CHECK) CONSTRUCTION DETAIL

SCALE 1:20



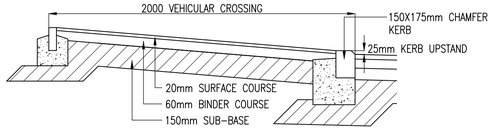
ROAD GULLY DETAIL

SCALE 1:20



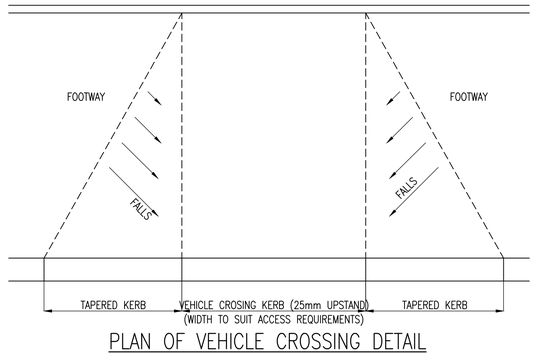
PROPOSED PEDESTRIAN CROSSING DETAIL

SCALE 1:20



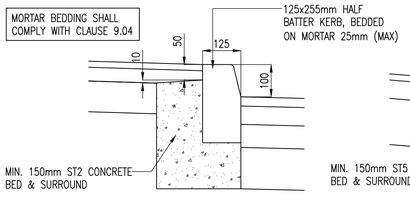
PROPOSED VEHICULAR CROSSING DETAIL

SCALE 1:20



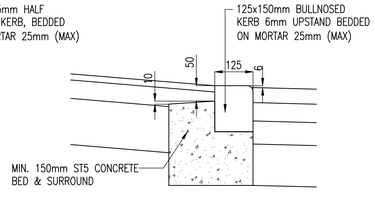
PLAN OF VEHICLE CROSSING DETAIL

SCALE 1:20



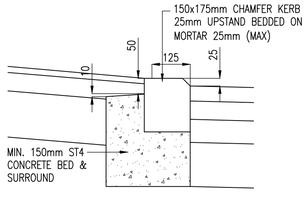
125x250mm HALF BATTERED KERB

SCALE 1:10



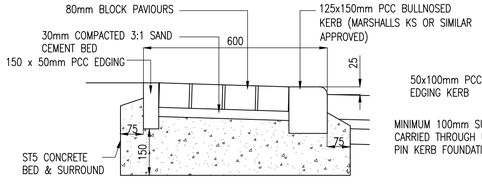
125x150mm BULL NOSED KERB (PEDESTRIAN CROSSING)

SCALE 1:10



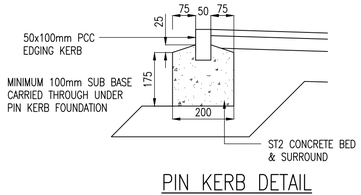
150x175mm CHAMFER CENTRE KERB (VEHICLE CROSSING)

SCALE 1:10



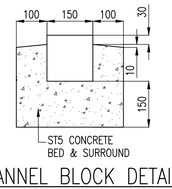
BLOCK PAVED MARGIN DETAIL

SCALE 1:10



PIN KERB DETAIL

SCALE 1:10



CHANNEL BLOCK DETAIL

SCALE 1:10

DESIGNERS HAZARD IDENTIFICATION

IT IS ASSUMED THAT ALL WORKS WILL BE UNDERTAKEN BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT. IN ADDITION TO THE HAZARDS TYPICALLY ASSOCIATED WITH THE TYPES OF CONSTRUCTION DETAILED ON THIS DRAWING, ANY KNOWN ABNORMAL HAZARDS SPECIFIC TO THIS DRAWING HAVE BEEN IDENTIFIED.

ABNORMAL HAZARD REFERENCE

NOTES AND ROAD SPECIFICATION

1. ALL ADOPTABLE HIGHWAY WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS OF KIRKLEES COUNCIL.
2. FOR GUIDANCE, ALL CLAUSE NUMBERS BELOW RELATE TO THE DEPT OF TRANSPORT'S SPECIFICATION FOR HIGHWAY WORKS 1991.
3. PREPARATION AND SURFACE TREATMENT OF FORMATION SHALL BE IN ACCORDANCE WITH CL. 616
4. GENERAL REQUIREMENTS FOR ROAD PAVEMENTS SHALL BE IN ACCORDANCE WITH CLAUSES 701 TO 707 INCLUSIVE.
5. ALL BITUMEN MACADAM SHALL BE IN ACCORDANCE WITH BS EN 13108
6. ALL BITUMINOUS BOUND MATERIALS SHALL BE TRANSPORTED, LAID AND COMPACTED IN ACCORDANCE WITH CL. 903
7. GRANULAR TYPE 1 SUB BASE SHALL BE IN ACCORDANCE WITH CL. 803
8. LAYING AND COMPACTION OF SUB BASE SHALL BE IN ACCORDANCE WITH CL. 802
9. BASE SHALL BE DENSE MACADAM IN ACCORDANCE WITH CL. 903
10. BINDER COURSE SHALL BE DENSE BITUMEN MACADAM IN ACCORDANCE WITH CL.906
11. LIMESTONE AGGREGATE IS NOT PERMITTED.
12. NO CUTS PERMITTED (E.G. FOR SERVICES) ONCE BINDER COURSE IS LAID.
13. POSITION SIZE AND DEPTH OF ALL EXISTING SEWERS AND SERVICES SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT ON SITE AND ANY DISCREPANCIES REPORTED TO THE ENGINEER.
14. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT, AND TEMPORARY AND PERMANENT DIVERSION WORKS, AS NECESSARY TO ALL EXISTING SERVICES.
15. THE CONTRACTOR SHALL ALLOW FOR ALL TRAFFIC MANAGEMENT IN CONNECTION WITH ROAD AND SEWER WORKS.
16. THE CONTRACTOR SHALL ALLOW FOR KEEPING TRENCHES AND EXCAVATIONS AS DRY AS PRACTICABLE BY PUMPING FROM TEMPORARY SUMPS AND DEWATERING AS APPROPRIATE. THE POINT AND METHOD OF DISCHARGE TO BE AGREED WITH THE DRAINAGE AUTHORITY AND ENVIRONMENT AGENCY.
17. INSITU AND PRECAST CONCRETE UNITS SHALL HAVE SULPHATE RESISTING PORTLAND CEMENT TO BS 4027, UNLESS AGREED OTHERWISE WITH THE ADOPTING AUTHORITY.
18. PRECAST CONCRETE PRODUCTS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS 5911:2002, BS EN 1916:2002, AND BS EN 1917:2002 AND BE KITEMARKED. CONCRETE PIPES TO BE CLASS 120 UNLESS NOTED OTHERWISE.
19. VITRIFIED CLAY PIPES AND FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN295 AND BS 65 RESPECTIVELY AND BE KITEMARKED. ALL PIPES SHALL BE CLASS 120 TO BS EN295.
20. GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN124 AND BE OF A NON-ROCKING DESIGN WITH LEFT HANDED CAPTIVE HINGE ACCESS AND BE KITEMARKED. LOAD CLASS D400 FOR ROADS REGULARLY CARRYING FAST MOVING HEAVY VEHICLES. CLASS C250 TO BE USED IN LESSER TRAFFICKED AREAS eg. CAR PARKING AREAS TYPE D400:450 GRATE AND FRAME. MINIMUM AREA OF WATERWAY TO BE 1010cm². TYPE C250:450 GRATE AND FRAME. MINIMUM AREA OF WATERWAY TO BE 900cm².
21. BACKFILLING AND REINSTATEMENT TO TRENCHES IN PUBLIC HIGHWAYS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF THE ADOPTING AUTHORITY, OR, IN THE ABSENCE OF SUCH, IN ACCORDANCE WITH THE REQUIREMENTS OF "THE STREET WORKS REGULATIONS 1992" AND RELEVANT PROVISIONS OF H.A.U.C. "SPECIFICATION FOR THE REINSTATEMENT OF OPENINGS IN HIGHWAYS" JUNE 1992, BOTH UNDER SECTION 71 OF THE NEW ROADS AND STREET WORKS ACT 1991.
22. UNSEALED AND LOOSE MATERIAL, SUCH AS GRAVEL, IS NOT TO BE USED ADJACENT TO THE ADOPTABLE HIGHWAY.
23. SHOULD THERE BE ANY CONFLICT BETWEEN THE INFORMATION ABOVE AND LCC RECOMMENDATIONS AND SPECIFICATIONS, THE ADOPTING AUTHORITY'S REQUIREMENTS TAKE PRECEDENCE.
24. THE CONTRACTOR MUST LIAISE CLOSELY WITH LCC WITH RESPECT TO ANY TESTING, APPROVALS, INSPECTIONS, PERMISSIONS OR LICENCES REQUIRED AS WORK PROGRESSES.

Date	Revision	By	Chkd	Ref
16.02.17	PRELIMINARY ISSUE	KB	VB	P1

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A1 v.1.0

Project
ST MARY'S AVE, NETHERTHONG JONES HOMES

Title
HIGHWAY CONSTRUCTION DETAILS

Scale AS @ A1	Drawn KB	Checked VB	
Date FEB 17	Status PRELIMINARY		
Drg. No. 16293/125			Rev. P1