

FOR LOCATION OF CROSSFALL/CAMBER AND SPECIFIC CHANGE IN CROSS-SECTION, PLEASE REFER TO ENGINEERING LAYOUT

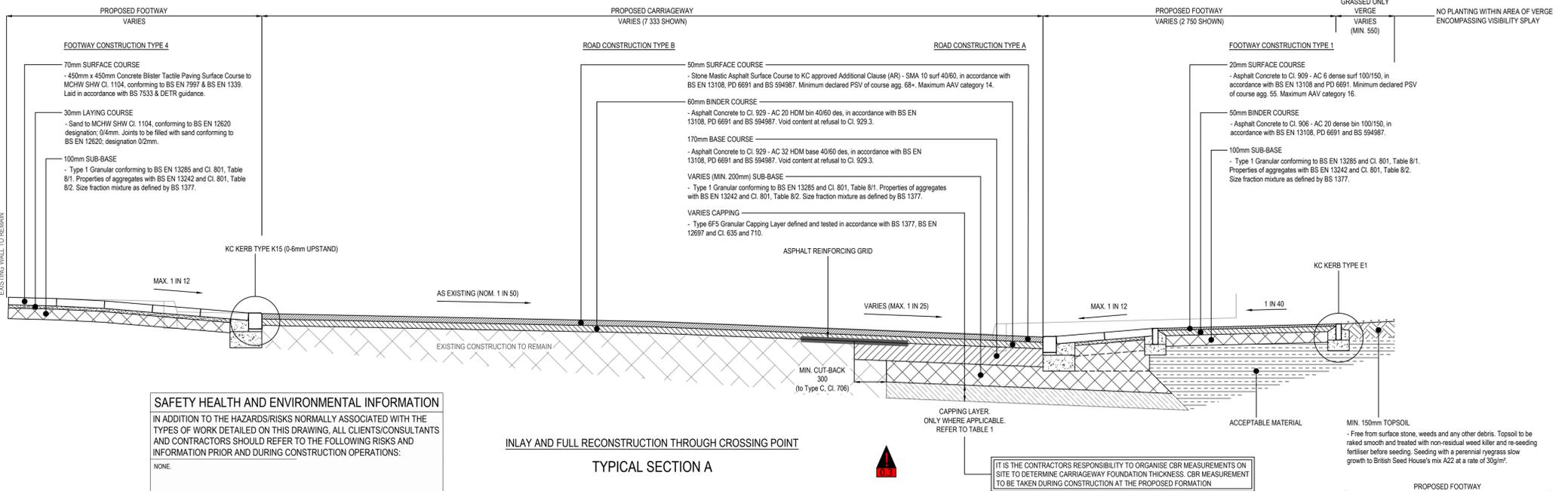
TABLE 1
 CBR TESTS ARE REQUIRED TO DETERMINE CAPPING REQUIREMENTS AND PAVEMENT THICKNESS IN ACCORDANCE WITH THE FOLLOWING:

SUB-BASE ON CAPPING		
SUBGRADE CBR %	SUB-BASE THICKNESS (mm)	CAPPING THICKNESS (mm)
15 OR MORE	200	150
5 - 15	200	260
2.5 - 5	250	430

- NOTES**
- A CAPPING LAYER MUST BE PROVIDED WHERE THE CBR VALUE OF THE FORMATION IS LESS THAN 15%.
 - WHERE A CAPPING LAYER IS REQUIRED, IT SHALL ACHIEVE A CBR VALUE OF NOT LESS THAN 15% WHEN TESTED.
 - FOR CBR VALUES OF 2.5% OR LESS, THE CONSTRUCTION SHALL BE STABILISED ON A TENSAR TRAX TX1607X-G180 GEOGRID (OR EQUAL APPROVED).
 - ALL MATERIALS WITHIN 450mm FROM FINISHED LEVEL SHALL BE NON-FRAGILE SUSCEPTIBLE.
 - THE FOUNDATION DESIGN SHOULD NOT VARY FREQUENTLY ALONG THE ROAD, AN APPROPRIATE VALUE FOR EACH SIGNIFICANT CHANGE IN SUB-GRADE PROPERTIES SHOULD BE SELECTED.
 - ANY CAPPING LAYER SHALL BE TYPE GF5 GRANULAR, DEFINED AND TESTED IN ACCORDANCE WITH BS 1377, BS EN 12697 AND CL 635 AND 710. CAPPING MUST EXCLUDE RECYCLED AGGREGATES AND MATERIALS THAT CONTAIN TAR AND TAR-BITUMEN BINDERS, UNBURNT COULIERY SPOIL AND ARGILLACEOUS ROCK.

TESTING FOR THE PRESENCE OF TAR BOUND MATERIALS IN THE EXISTING PAVEMENT CONSTRUCTION TO BE CARRIED OUT. IF ANY LOCATED, CONTRACTOR TO PROVIDE DETAILS OF HOW SUCH MATERIAL WILL BE DEALT WITH TO KC.

ALL BITUMINOUS SURFACES SHALL BE TREATED WITH A HOT APPLIED BOND COAT PRIOR TO OVERLAY. CARPET PATCH TESTING REQUIRED ON-SITE TO SATISFY SPREAD RATE REQUIREMENTS FROM BEYOND 40m (IN ACCORDANCE WITH BS 594987). SEE ALSO HIGHWAYS NOTE 4.



SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, ALL CLIENTS/CONSULTANTS AND CONTRACTORS SHOULD REFER TO THE FOLLOWING RISKS AND INFORMATION PRIOR AND DURING CONSTRUCTION OPERATIONS:

NOTE:

HAZARD WARNING INDICATIVE LOCATION MARKER SYMBOL

THE CONTRACTOR MUST REFER TO THE SUPPLIED UNDERGROUND MAPPING SURVEYS/CONSTRAINTS PLANS/STATUTORY UNDERTAKERS' APPARATUS RECORDS AND GEOTECHNICAL INFORMATION PRIOR TO ANY CONSTRUCTION WORKS.

FOR INFORMATION RELATING TO DEMOLITION, USE, CLEANING AND MAINTENANCE; SEE THE HEALTH AND SAFETY FILE.

RISKS LISTED HERE ARE NOT EXHAUSTIVE. REFER TO DESIGNERS RISK ASSESSMENT FOR FULL DETAILS.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.

- General Notes:**
- DO NOT USE THIS DRAWING IN ISOLATION. This drawing has been prepared as part of a set, and must therefore be read in conjunction with all other drawings. Any discrepancies or design queries must be reported to the engineer prior to completion of tender and commencement of works. Following completion of tender it is assumed that the developer and Contractor are in full agreement with the design drawings (with the exception of pre tender queries only).
 - Third party information used to prepare the engineering design (including architectural layout, ground investigation, existing utilities records, and specialist design items). The engineering design must therefore be read in conjunction with all third party information prior to commencing work. Queensberry Design Ltd is not responsible for any third party information or details.
 - House type working drawings are to be used in conjunction with the plot setting out drawing.
 - Drawing status will remain preliminary until full technical approval is received from local authority and sewerage undertaker. Works commenced prior to technical approval are done at risk and may be subject to change.
 - The Contractor is expected to prepare appropriate construction method statements for all aspects of appointed work. This should include any temporary protection works.
 - Land drainage is not permitted to discharge into the public sewer network. Any need for land drainage should be assessed by the ground worker and landscaper during construction and placement of gardens on an individual plot basis. If land drainage designs are required, they should be appointed prior to plot completion.
 - The Contractor is expected to check each drainage inverts prior to commencing work, this may involve completion of trial holes if invert levels have been interpolated.
 - The Contractor must monitor the 'as built' progress of each construction stage (roads/sewer/pit works/etc), to enable the next stages of construction to be checked before installation. For this reason the design of, floor levels, external works, retaining walls, and plot drainage are to be read as guidance only.

- Highways**
- All highways works to be carried out in accordance with the Design Manual for Roads and Bridges (DMRB); the Manual of Contract Documents for Highway Works; Specification for Highway Works (MCHW SHW) and the current local authority highway design guide.
 - All excavations below proposed and existing highways to be back-filled with granular type 1 sub-base and well compacted in layers not exceeding 150mm, unless otherwise agreed.
 - Highway authority to be notified by the Contractor prior to the commencement of works.
 - All bituminous surfaces shall be treated with a hot applied bond coat prior to overlay. A spray tanker shall be utilised for application throughout. Surface preparation, equipment, product data sheets, test certificates, binding material sources all to be in accordance with MCHW SHW Cl. 503 and to the approval of KC (including adequate contingency plans in the event any breakdown).
 - Refer to drawing sheet numbers QD1775-03-11 for the engineering layout.
 - Refer to drawing sheet numbers QD1775-0700-11 for extent of road pavements.
 - Refer to drawing sheet numbers QD1775-1100-11 for extent of kerbs, footways, cycleways and paved areas.
 - This drawing shall be read in conjunction with 'Kinkies Highways Standard Details 2022 to 2024'.

Existing Services

Any existing services which may be affected by the proposed works should be located by means of a hand dig in close liaison with the statutory service authorities. The Contractor shall inform the developer of any services that may affect the proposed design.

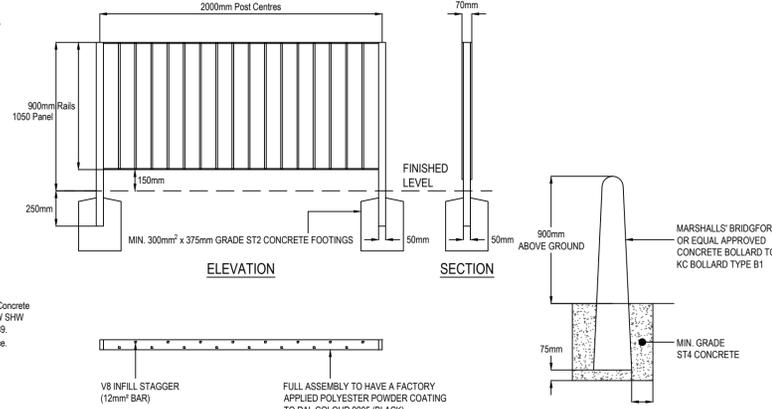
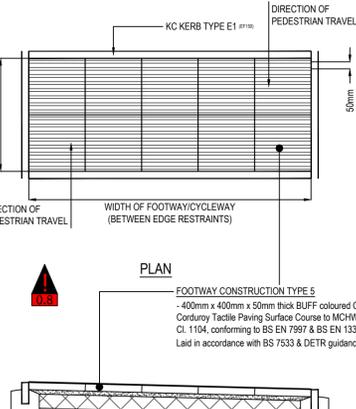
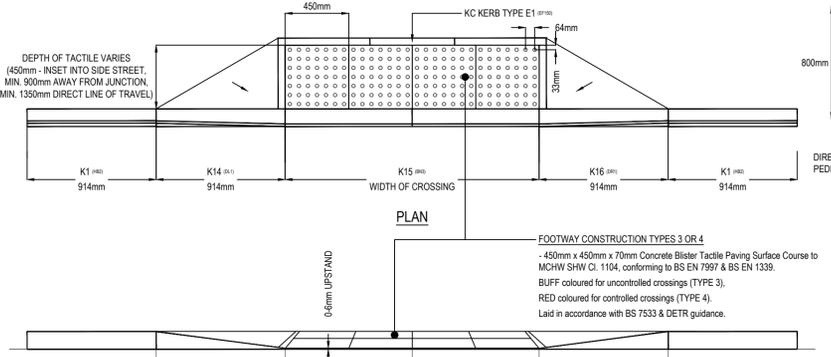
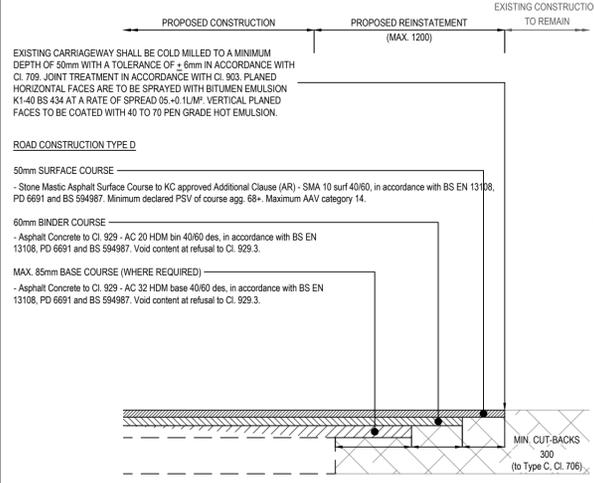
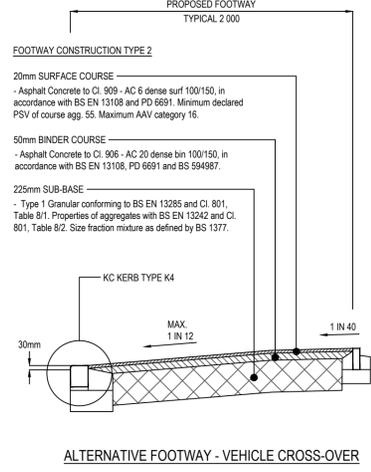
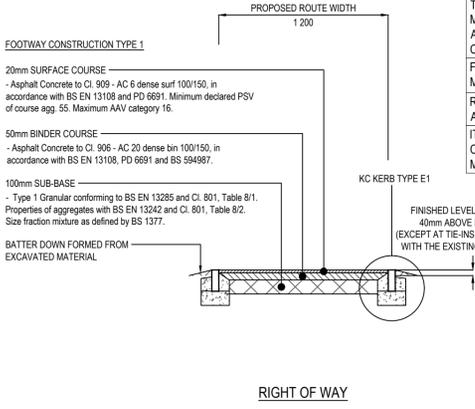
Contractor to notify statutory service authorities prior to commencement of work.

As Constructed Information

Refer to General Note 8 above. It is the Contractor's responsibility to provide the following as constructed drawings to the developer upon the completion of the works covered by the contract:

- Position/co-ordinates of all adoptable manholes.
- Invert and cover levels of all adoptable manholes.
- New gully positions and connections.
- Position and depth of service ducts for water, gas, electric, BT, cable and street lighting, stating size and number of ducts.

CONTRACTOR TO NOTE THAT MATERIALS TESTING IS REQUIRED THROUGHOUT. CONTRACTOR TO LIAISE WITH KC HIGHWAYS TESTING LABORATORY REGARDING THE REQUIRED TESTING STANDARDS, TYPICALLY INCLUDING FOR FILL, ASPHALT, HOT APPLIED BOND COAT, STRUCTURAL CONCRETE AND ROAD MARKINGS.



Rev	Date	Revision Details	Drawn	Checked
G	09.01.2025	MODIFIED FOLLOWING RSA2 RECOMMENDATIONS.	MK	ND
F	22.08.2024	MODIFIED FOLLOWING KC COMMENTS.	AM	MK
E	19.07.2024	MODIFIED FOLLOWING KC COMMENTS.	MK	ND
D	13.06.2024	MODIFIED FOLLOWING KC COMMENTS.	MK	ND
C	17.05.2024	MODIFIED FOLLOWING KC COMMENTS.	MK	ND
B	11.03.2024	MODIFIED FOLLOWING KC COMMENTS.	MK	ND
A	10.10.2023	FOR KC DESIGN REVIEW.	MK	ND
-	29.09.2023	INITIAL ISSUE. DRAFT, FOR CLIENT COMMENT AND TENDER.	MK	ND

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Client: STRATA HOMES

Project: Westgate Cleckheaton

Title: Section 278 Construction Details

Drawn	Checked	Date
MK	ND	SEPTEMBER 2023

Drawing Number: QD1776-0700-21

Drawn Status	Scale	Rev
PRELIMINARY	Not to Scale	G

