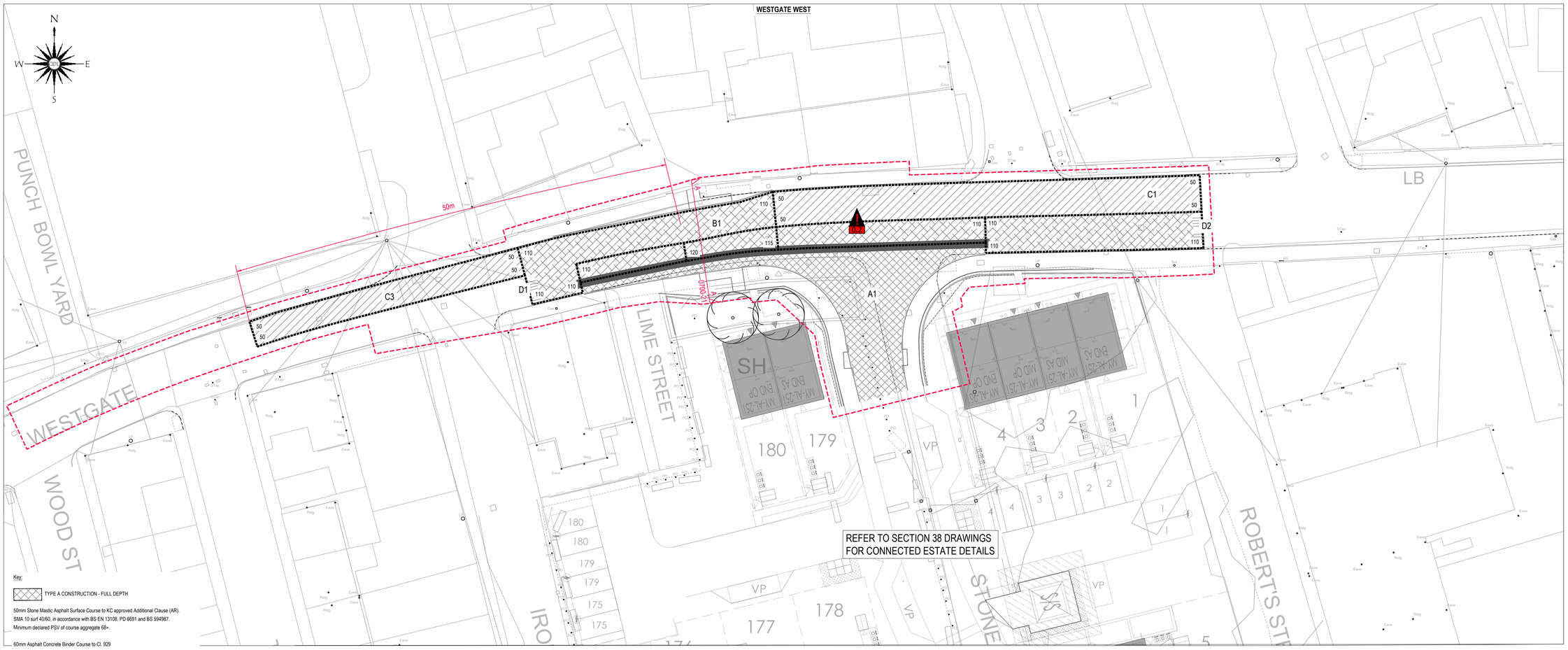
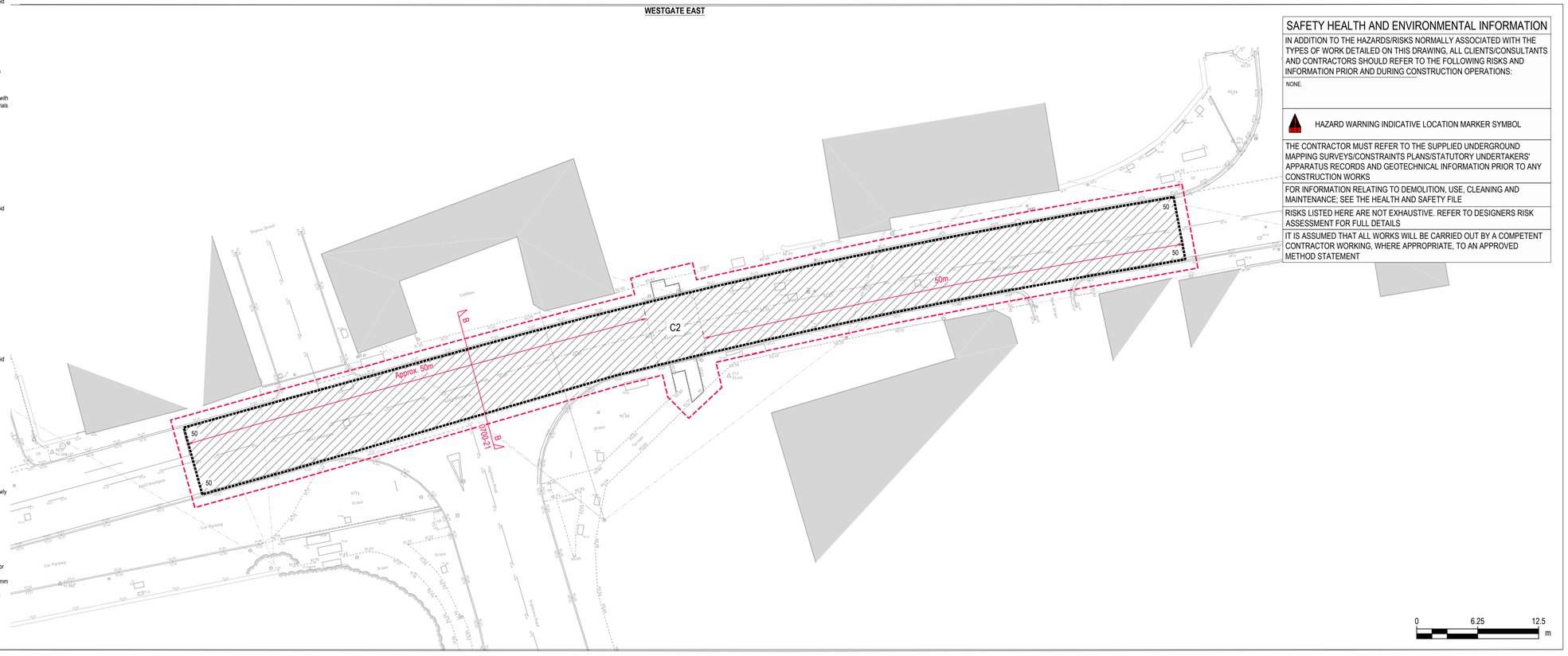




Key:

TYPE A CONSTRUCTION - FULL DEPTH

50mm Stone Mastic Asphalt Surface Course to KC approved Additional Clause (AR).
SMA 10 surf 40/60, in accordance with BS EN 13108, PD 6691 and BS 594987.
Minimum declared PSV of course aggregate 68+.

60mm Asphalt Concrete Binder Course to Cl. 929
AC 20 HDM bin 40/60 des, in accordance with BS EN 13108, PD 6691 and BS 594987. Void content at refusal to Cl. 929.3.

170mm Asphalt Concrete Base Course to Cl. 929
AC 32 HDM base 40/60 des, in accordance with BS EN 13108, PD 6691 and BS 594987. Void content at refusal to Cl. 929.3.

Varies - Min. 200mm Type 1 Granular Sub-Base conforming to BS EN 13285 and Cl. 801, Table 8/1. Properties of aggregates with BS EN 13242 and Cl. 801, Table 8/2. Size fraction mixture as defined by BS 1377.

Varies - Min. 150mm Type 6F5 Granular Capping Layer defined and tested in accordance with BS 1377, BS EN 12697 and Cl. 635 and 710. Must exclude recycled aggregates and materials that contain tar and tar-bitumen binders, unburnt colliery spoil and argillaceous rock.
Only where applicable - subject to KC approval and CBR test results.

TYPE B CONSTRUCTION - OVERLAY OF EXISTING

50mm Stone Mastic Asphalt Surface Course to KC approved Additional Clause (AR).
SMA 10 surf 40/60, in accordance with BS EN 13108, PD 6691 and BS 594987.
Minimum declared PSV of course aggregate 68+.

60mm Asphalt Concrete Binder Course to Cl. 929
AC 20 HDM bin 40/60 des, in accordance with BS EN 13108, PD 6691 and BS 594987. Void content at refusal to Cl. 929.3.

TYPE C CONSTRUCTION - OVERLAY OF EXISTING

50mm Stone Mastic Asphalt Surface Course to KC approved Additional Clause (AR).
SMA 10 surf 40/60, in accordance with BS EN 13108, PD 6691 and BS 594987.
Minimum declared PSV of course aggregate 68+.

TYPE D CONSTRUCTION - TIE-IN

50mm Stone Mastic Asphalt Surface Course to KC approved Additional Clause (AR).
SMA 10 surf 40/60, in accordance with BS EN 13108, PD 6691 and BS 594987.
Minimum declared PSV of course aggregate 68+.

60mm Asphalt Concrete Binder Course to Cl. 929
AC 20 HDM bin 40/60 des, in accordance with BS EN 13108, PD 6691 and BS 594987. Void content at refusal to Cl. 929.3.

0-85mm Asphalt Concrete Regulating Base Course to Cl. 929
AC 32 HDM base 40/60 des, in accordance with BS EN 13108, PD 6691 and BS 594987. Void content at refusal to Cl. 929.3.

Maximum 1200mm reinstatement with minimum 300mm cut-backs to surfacing material.
Cut-back details to SHW Cl. 706.

ASPHALT REINFORCING GRID

To be applied across any longitudinal joints at all locations along where the existing carriageway is widened. The asphalt reinforcing grid shall be a standard open grid self-adhesive glass fibre type and have a minimum tensile strength of 100 kN/m in both the longitudinal and transverse directions. The grid should be at the lowest possible level of newly installed asphalt and be overlaid by a bituminous layer that is at least 110mm thick. The asphalt reinforcing grid shall be laid in widths of at least 1.0m with joints installed strictly in accordance with the manufacturers recommendations. The asphalt reinforcing grid shall extend at least 500mm in all directions beyond any crack or construction joint.

AREA AND APPROXIMATE MINIMUM DEPTH (mm) OF COLD MILLING

Carriageway shall be cold milled to the minimum depth shown. Depth shall be used as an indication of the quantities required to construct to proposed carriageway levels. All areas for overlay with a visible failure to existing surfacing shall be repaired or replaced to provide suitable structural support, cold milled to a minimum depth of 50mm with a tolerance of +-6mm in accordance with SHW Cl. 709. Planed horizontal faces are to be sprayed with bitumen emulsion K1-40 BS 434 at a rate of spread 05.+0.1L/m². Vertical planed faces to be coated with 50 to 70 pen grade hot emulsion.

Proposed kerb line.

Extent of 278 works.

Only PDF/ DWF Issues of this drawing are controlled. All other formats (eg. DWG AutoCAD FILES) are UN-controlled and are used at your own risk.

General Notes:

1. 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 developer and Contractor are in full agreement with the design drawings (with the exception of pre tender queries only).
2. Third party information is 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 are not responsible for any third party information or details.
3. House type working drawings are to be used in conjunction with the plot setting out drawing.
4. 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 so at risk and may be subject to change.
5. The Contractor is expected to prepare appropriate construction method statements for all aspects of appointed work. This should include any temporary protection works.
6. 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.
7. The Contractor is expected to cross check all drainage inverts prior to commencing work, this may involve completion of trial holes if invert levels have been interpolated.
8. The Contractor must monitor the "as build" progress of each construction stage (roads/sewers/plot 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

1. All highway 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.
2. 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.
3. Highway authority to be notified by the Contractor prior to the commencement of works.
4. All statutory consents, opening notices etc. as required under the Highways Act are to be obtained by the Contractor.
5. Extents of works shown is for guidance only, subject to the existing carriageway condition and shall be read against all drawings.
6. Carriageway foundation thickness will be finally determined from CBR measurements taken on site during construction at proposed formation unless stated otherwise.
7. Any soft spots shall be dug out and the void backfilled in layers up to formation level with selected granular material.
8. All fill below proposed carriageway construction shall be granular material unless stated otherwise.
9. Road pavements shall be constructed from the permitted design within the appropriate Clauses of MCHW SHW series 700, 800 and 900.
10. The Contractor shall provide temporary ramps in suitable material to make safe and sure of run-ons, run-offs and any longitudinal joint or projecting ironwork during construction.
11. All milling shall be undertaken in accordance with the requirements of MCHW SHW Cl. 709.
12. 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, blinding material sources all to be in accordance with MCHW SHW Cl. 920 and to the approval of KC (including adequate contingency plans in the event any breakdown).
13. Surface preparation and masking shall be in accordance with Clause 920.6 and, as appropriate, with BBA/HAPAS roads and bridge certificate.
14. Refer to drawing sheet number QD1776-0700-21 and 'Kirklees Highways Standard Details 2022 to 2024' for construction details.
15. All construction aggregate including those as part of concrete and asphalt concrete to be quarry sourced with no use of waste or recycled materials. Bituminous material sizes for road construction to be in accordance with BS EN 13043 and 13242.

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.

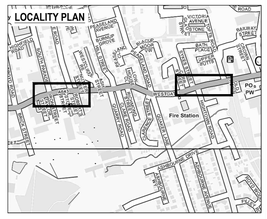
As Constructed Information

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

1. Position/co-ordinates of all adoptable manholes.
2. Invert and cover levels of all adoptable manholes.
3. New gully positions and connections.
4. 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.

LOCALITY PLAN



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:

NONE.

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

Rev.	Date	Revision Details	Drawn	Checked
E	30.01.2025	MODIFIED TO REFLECT DESIGN DEVELOPMENT.	MK	ND
D	19.07.2024	MODIFIED FOLLOWING KC COMMENTS.	MK	ND
C	13.06.2024	MODIFIED FOLLOWING KC COMMENTS.	MK	ND
B	17.05.2024	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
Road Pavements

Drawn	Checked	Date
MK	ND	SEPTEMBER 2023

Drawing Number
QD1776-0700-11

Drawing Status	Scale	Rev.
PRELIMINARY	1:250 (@ A1)	E