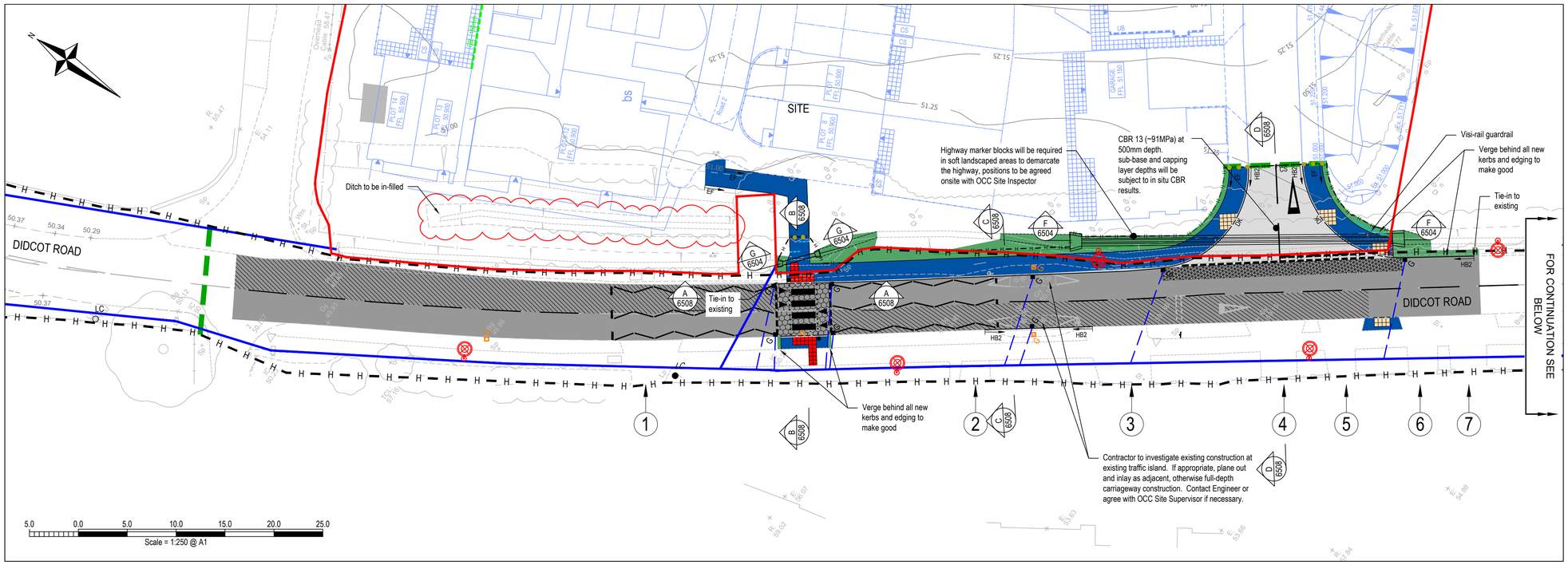
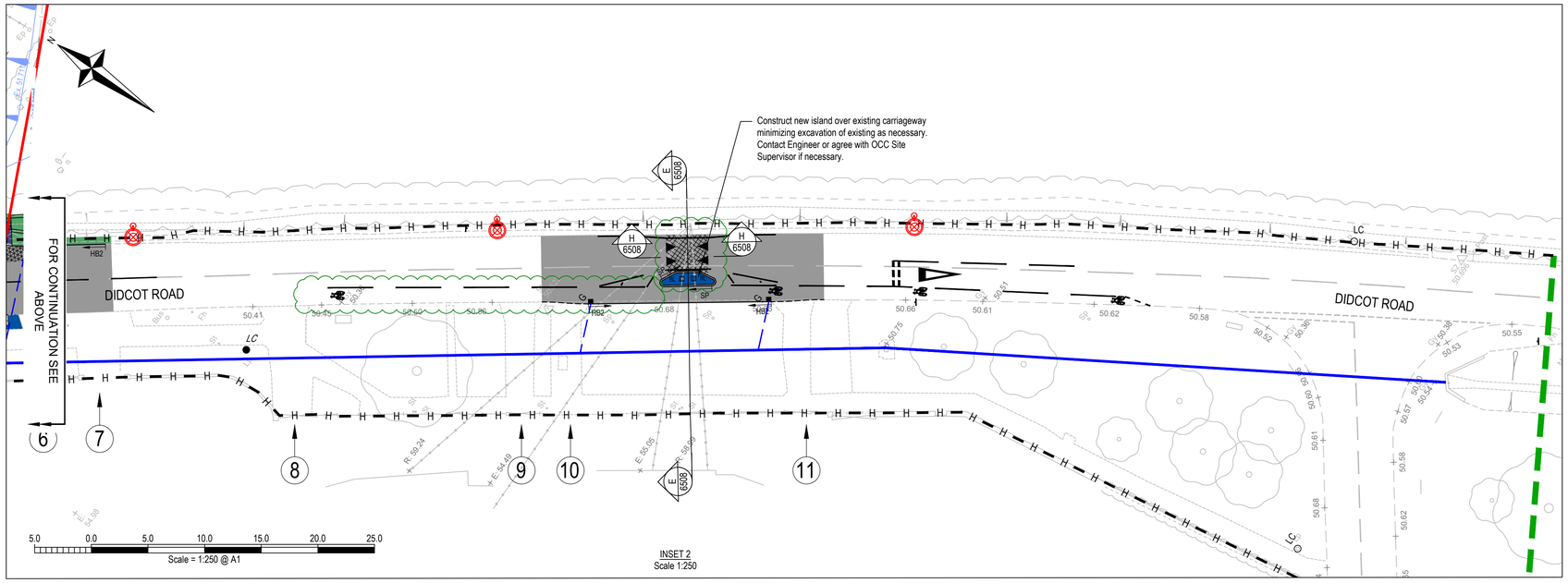



INSET 1
Scale 1:250




INSET 2
Scale 1:250


SITE LOCATION
Scale 1:10000

NOTES

1. See General Notes drawing 6501.

KEY

- Existing highway boundary (interpreted from OCC records)
- New highway boundary
- Site boundary (interpreted from Land Registry Illustrative Plan IP5488.OP45322)
- Exent of S.278/38 Works
- Existing sewer system (interpreted from drainage investigation report)
- BB Belisha beacon See OCC standard detail HSD/12/310k (Electrical requirement set at BS 873 LED illuminated)
- Brass stud to demarcate highway boundary on footway
- DK Dropped precast concrete kerb 125x150mm Type CS2 kerb laid on ST2 concrete bed and haunch. Upstand to be 0-6mm at pedestrian crossing 10-25mm at vehicular crossover.
- CS Precast concrete kerb Type CS kerb laid on ST2 concrete bed and haunch. To be laid flush
- EF Precast concrete kerb Type EF laid with ST2 concrete bed and haunch.
- HB2 Precast concrete kerb Type HB2 or equivalent matching existing laid with ST2 concrete bed and haunch.
- SP Precast concrete kerb Type SP or equivalent matching existing laid with ST2 concrete bed and haunch. Note - Upstand to be maintained around traffic island ramp as indicated on Section H-H on drawing 6508.
- BN Precast concrete kerb Type BN 25mm upstand or equivalent matching existing laid with ST2 concrete bed and haunch.
- G Precast concrete gully. Connection to be confirmed.
- G Existing gully to be retained
- Culvert (detail design see drainage drawing number 6504).
- High visibility guardrail for pedestrian safety with staggered arrangement of infill bars Optirail or equivalent approved 2 x 2m.
- Guardrail for pedestrian safety without staggered arrangement of infill bars 1x 2m.
- Indicates amendments from previous drawing revision

- LC Existing lighting column to be retained
- LC Existing lighting column to be removed
- New lighting column

Indicative street lighting. Subject to OCC design TBC

# OXFORDSHIRE COUNTY COUNCIL

## Foundation CBR Table

CD 225 Design for new Pavement foundations (formerly IAN 73/06) must guide the design of pavement foundations. The CBR table below is based on class 2 restricted foundation design. Class 2 foundation can only be used where the design traffic does not exceed 80msa.

Road pavement foundations are to be designed as part of the technical submission made to OCC, the foundation is to be based on the design (lowest) CBR results from the ground investigation (GI) report. The foundation design is to be used for construction if insitu CBR results are of the same value or greater than the design CBR. If the insitu CBR results are less than the design CBR then the road pavement foundation will need to be redesigned.

CBR testing is required at 30m centres, the lowest CBR result is to be used to determine the needed foundation. Foundation requirements are to be approved by OCC's engineer before the foundation is constructed, this will require the insitu CBR results to be provided.

| CBR (%) | Subbase on Capping (mm) | | Subbase Only (mm) |
|---|---|---|---|
| | Subbase | Capping | |
| ≤2.5 | Ground Stabilisation | | Ground Stabilisation |
| 2.5 – 5.0 | 250 | 420 | 420 |
| 5.0 – 7.5 | 200 | 250 | 265 |
| 7.5 – 10.0 | 165 | 220 | 240 |
| 10.0 – 12.5 | 150 | 200 | 220 |
| 12.5 – 15.0 | 150 | 170 | 210 |
| 15.0z | 150 | 150 | 200 |

(figures used in table above have been extracted from figures 3.18 and 3.20 of CD225).

- All subbase is to be Type 1 in compliance with MCHW1 803.
- All capping is to be 6F2 or 6F5 in compliance with MCHW1 613.
- Grading certificates for all granular fill are to be provided for every 500 tonnes.
- Foundations on cohesive soils are to use subbase on capping foundation type.

**Ground Stabilisation**
CBR results of 2.5% or less will require ground stabilisation. The method of ground stabilisation and design is to be approved by OCC's scheme engineer prior to implementation.
Implementation without OCC's engineer approval could result in the road becoming unadoptable or remediation works at the contractors or developers expense if the ground stabilisation method or design is not accepted by OCC's engineer.

There are various ground stabilisation methods available, these include:
- Lime/cement soil stabilisation – is to be used where there are cohesive soils.
- Increased capping – if a suitable load bearing soil is within 1m of formation, the relatively soft material above is to be excavated and filled with capping in compliance with above.
- Geo-grid – is to only be used as a last resort if either of the options above are not possible.

| Rev. | Description | Date | Chkd |
|---|---|---|---|
| A7 | Road hump added. Cycle bypass extended. | 20/10/2021 T. Hart | MF |
| A6 | Extent of HFS revised. Overbreak construction removed. | 14/10/2021 T. Hart | MF |
| A5 | Highway boundary updated. CBR Table updated. Footpath rearranged. | 29/09/2021 T. Hart | MF |
| A4 | Priority traffic calming arrangement location updated. | 01/07/2021 T. Hart | MF |

FULL DEPTH CARRIAGEWAY CONSTRUCTION

50mm 10mm Ultipave 40/60 PSV 65 AVV 14 or equivalent approved
60mm AC20 HDM 40/60 pen to BS EN 13108-1:2016 and BS594987
130mm AC32 HDM 40/60 pen to BS EN 13108-1:2016 and BS594987 TBC
150mm Type 1 sub-base. Clause 803.
180mm Capping layer.

Terram 1000 or similar approved Geotextile to be provided between sub-base and road formation where ground conditions dictate

CARRIAGEWAY PLANE OUT AND INLAY

Plane out 50mm bituminous surfacing and inlay

50mm 10mm Ultipave 40/60 PSV 65 AVV 14 or equivalent approved

HIGH FRICTION CARRIAGEWAY PLANE OUT AND INLAY

Plane out 50mm bituminous surfacing and inlay

50mm 10mm Ultigrip specified in SHW CL924 PSV 68 AVV 16 or equivalent approved

CARRIAGEWAY TO CARRIAGEWAY TIE-IN CONSTRUCTION

50mm 10mm Ultipave 40/60 PSV 65 AVV 14 or equivalent approved
60mm AC20 HDM 40/60 pen to BS EN 13108-1:2016 and BS594987
130mm AC32 HDM 40/60 pen to BS EN 13108-1:2016 and BS594987 TBC
Refer to standard detail on 8190644/6509

CARRIAGEWAY ROAD HUMP OVERLAY

Overlay existing carriageway surfacing to maximum height above existing of 75mm with

60mm 10mm Ultipave 40/60 PSV 65 AVV 14 or equivalent approved

Refer to section H-H on 8190644/6508

FULL DEPTH FOOTWAY CONSTRUCTION

20mm AC 6 dense surf 100/150 pen to BS EN 13108-1:2016 and BS594987
60mm AC 20 dense bin 100/150 pen to BS EN 13108-1:2016 and BS594987
150mm CBM3 Compacted Lean mix concrete. Clause 811.
150mm Type 1 sub-base Clause 803.

NB. Omit Type 1 sub-base where pedestrian refuges are being constructed on existing carriageway surface. Lay additional material as regulating to make up levels.

RAISED ZEBRA CROSSING (MAXIMUM HEIGHT TO BE 75mm)

35mm 10mm Ultipave 40/60 PSV 65 AVV 14 or equivalent approved
60mm AC20 dense bin 40/60 rec to BS EN 13108-1:2016 and BS594487.See also Table A.

PEDESTRIAN CROSSINGS CONTROLLED PAVING

Blister tactile paving blocks (200x133x60mm) color red. See notes.

60mm Blister tactile paving blocks.
30mm Class (iii) mortar Clause 2404.
150mm Lean mix concrete.
150mm Type 1 sub-base.

PEDESTRIAN CROSSINGS UNCONTROLLED PAVING

Blister tactile paving blocks(200x133x60mm) color buff.See notes

60mm Blister tactile paving blocks.
30mm Class (iii) mortar Clause 2404.
150mm Lean mix concrete.
150mm Type 1 sub-base.

RE-PROFILE / REINSTATE VERGE

150mm Topsoil and grass seed or turf to match existing.

Laid at a gradient no steeper than 1:40. Existing pavement shall be punctured through to a free draining layer i.e subbase level, using holes at least 25mm diameter at 500mm centre to centre spacing. Lay Class 5A or 5B topsoil and grass seed (minimun depth 250mm).

CARRIAGEWAY BOND COAT NOTES

Polymer modified bond coat. Colas: 50, Colbond 65, Colbond Multi. Nynas: Enduramuls 100. Total: Emulsis NBC50, Emulsis NBC65. Bituchem: Polybond 50. Ayton Asphalt: KE92P. Jobling Purser: Sprayco Armabond6.

The required application rate in terms of residual bitumen onto asphalt is 0.15 - 0.35 kg/m$^2$.

The receiving surface should be sound and of suitable regularity to ensure satisfactory surface drainage and layer thickness of the Ultilayer surfacing.

Existing surfaces should be cleaned and all loose material, mud, dirt and other debris must be removed. Ironwork should be raised prior to surfacing and precautions taken to ensure it is kept clean. Bituminous joint paint should be applied to the edge of ironwork which is to be subject to trafficking. The existing or any milled surface shall be inspected and any unanticipated weak or deteriorated areas removed prior to overlay.

Longitudinal joints shall be made in one of the following ways;
Cold - Shall be cut to a full depth vertical face and painted prior to matching or shall be formed into a chamfer during the laying process and subsequently painted prior to matching. Chamfers shall be at an angle of 70-80 degrees rather than a vertical right angle.
Hot - Joints may be hot matched so long as the temperature of the earlier laid mat is at least 120°C. Transverse joints shall be cut or sawn to a vertical face at least 300mm from the day joint and painted. As required joints shall be painted with either hot bitumen or an approved cold emulsion joint paint prior to matching. Care should be taken to ensure coverage of the vertical face with a uniform coating.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Client : Vanderbilt Homes

Project : Didcot Road Long Wittenham

Title : S.278 Highway Works Construction Plan

| | | | |
|---|---|---|---|
| Project Engineer : | T. Hart | Scale : | As Shown @ A1 |
| Project Director : | M. Ford | Date : | February 2021 |
| Status : | APPROVAL | | |

Drawing No. 8190644-6506 Rev A7