


FOOTWAY DETAILS

FOOTWAY DETAILS

## FOOT WAY CONSTRUCTION NOTES

**Surface Course:**
25mm of 6mm size Dense 70/100 Surface Course (AC 6 dense surf) to Clause 9.4 compacted to a void content within the range 2%-10%.
The Surface Course must be bonded to the Binder Course.

**Binder Course:**
100mm of 20mm size Dense, 70/100 Binder Course (AC 20 dense bin rec) to Clause 9.1 compacted to a void content within the range 2%-10%. Laid in a single layer.

**Sub - Base:**
100mm of Type 1 sub-base to Clause 1.2.
Thickness increased to 150mm for vehicle accesses

## CARRIAGEWAY CONSTRUCTION NOTES

**Surface Course:**
40mm of 10mm size close graded surface course (AC10 close surf 70/100) to Clause 7.3. It must be compacted in accordance with Clause 7.2 to avoid content within the range 2% - 10%. The Surface Course must be bonded to the Binder Course.

**Binder Course:**
130mm of 20mm size Dense binder course (AC 20 Dense bin 40/60 rec) to Clause 9.1 and shall be laid in a single layer or combination of layes not less than 50mm thickness nor greater than 110mm in thickness. Compaction must be in accordance with Clause 7.2 to avoid content within the range 2%-8% and all layers must be bonded together with Tack coat to Clause 9.2.

**Sub - Base:**
300mm Thick Sub-base shall conform with Clause 8.1 and shall be compacted thickness of DoT Type 1 Granular material highways specification Clause 803. It shall be spread evenly on the formation in layers of a depth not more than 150mm compacted thickness.

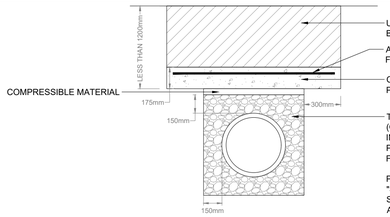
**Capping Layer:**
A Capping layer will be required due to ground CBR 1.5%.
410mm Thickness of Type 6F5 Granular matarial to be laid on a layer of Geotextile Geogrids to be approved on site by Highway Inspector. Granular fill material for both parts to be well compacted type 1 to clause 803 SHW.

**Notes:**
Clauses specified refer to Lincolnshire County Council's DEVELOPMENT ROAD SUSTAINABLE DRAINAGE SPECIFICATION AND CONSTRUCTION
May 2018 Edition

**Dense Binder Course: Clause 9.1**
This material shall be AC 20 dense bin rec (20 mm size Dense Binder Course recipe mix) to BS EN 13108-1. The binder shall conform to BS EN 12591 grade 40/60 for carriageway construction. For vehicle crossings and footways the binder shall be either 40/60, 70/100 or 100/150 grade.

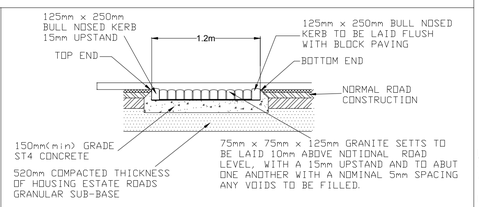
**Tack Coat: Clause 9.2**
When required a C40B4 or C60B3 tack coat of cationic bitumen emulsion to BS EN 13808 shall be applied to accord with the target rates given in BS 594987 Clause 5.5.2 to the binder course surface. The surface should be thoroughly cleaned prior to the application of the tack coat and the emulsion allowed to 'break' prior to the application of a further layer of binder course or the surface course. In most instances Table 2 in Clauses 5.5.2 of BS 594987 will apply due to the likely condition of the binder course.

**Specialist Road Design Based on 1.5% CBR**
Stone thickness reduced by geogrid. For typical design thicknesses see Chart 1 for design thicknesses for alternative CBR values

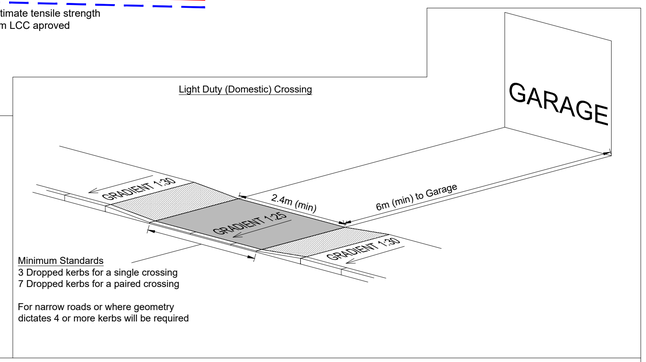



# PROTECTION OF PIPES LAID AT SHALLOW DEPTHS

WHERE SEWERS HAVE DEPTH TO SOFFIT LESS THAN 1.2m UNDER CARRIAGEWAY, AND 0.9m UNDER OPEN SPACE




GRANITE SETT RUMBLE STRIP




Minimum Standards
3 Dropped kerbs for a single crossing
7 Dropped kerbs for a paired crossing

For narrow roads or where geometry dictates 4 or more kerbs will be required

| CONSTRUCTION CHART 1 (NORMAL FLEXIBLE CONSTRUCTION) | | | | | | |
|---|---|---|---|---|---|---|
| SUB-GRADE | SUB-BASE (mm) | | SURFACING (mm) | | TOTAL THICKNESS REQUIRED (mm) | |
| DESIGN CBR | WITHOUT GEOTEXTILE | WITH GEOTEXTILE | BINDER COURSE | SURFACE COURSE | WITHOUT GEOTEXTILE | WITH GEOTEXTILE |
| < 1.5% & SOFT SPOTS | NOT SUITABLE | 710 Notes 2 & 3 | 130 | 40 | NOT SUITABLE | 860 Notes 2,3 & 6 |
| 1.5% | NOT SUITABLE | 440 | 130 | 40 | NOT SUITABLE | 590 Note 6 |
| 2% | 400 | 340 | 130 | 40 | 550 Note 6 | 490 Note 6 |
| 3% | 310 | 300 | 130 | 40 | 460 Note 6 | 450 Note 6 |
| 4% Note 6 | 300 | 300 Note 7 | 130 | 40 | 450 Note 6 | 450 Notes 6 & 7 |
| 5% Note 6 | 300 | 300 Note 7 | 130 | 40 | 450 Note 6 | 450 Notes 6 & 7 |
| 6-15% Note 6 | 300 | 300 Note 7 | 130 | 40 | 450 Note 6 | 450 Notes 6 & 7 |
| >15% Note 6 | 300 | 300 Note 7 | 130 | 40 | 450 Note 6 | 450 Notes 6 & 7 |

*Note 1*: See Clauses 1.1.6, 1.1.7 and 1.1.8

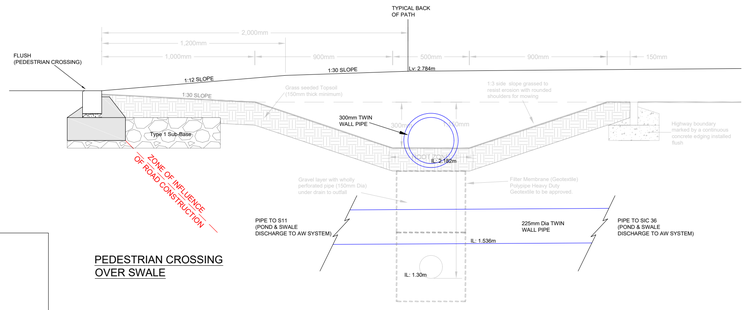
*Note 2*: See Clause 1.1.6 - Assumes no improvement is possible using either sub-soil drainage or soil strengthening technique. 710mm is 410mm of 6F5 Capping Layer Granular Fill to clause 6.8 and 300mm of Type 1 sub-base. The thickness of 710mm can be reduced to 620mm if all Type 1 sub-base is used.

*Note 3*: For soft spots and sub-grades with a CBR of less than 1½% the geofabric shall be laid with an approved geogrid or shall be an approved geocomposite. Approved specialist design can be used with the agreement of the Authority.

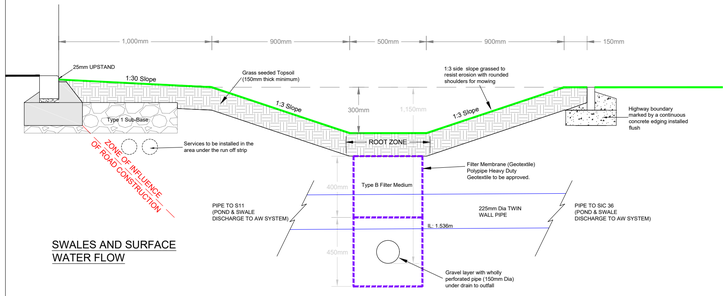
*Note 4*: May be laid in one layer.

*Note 5*: Initial Binder Course layer thickness **70mm** if the **alternative kerbing installation method** (two stage construction - kerbing to be laid at a later stage) is used. **Total Binder Course thickness becomes 130mm** in these circumstances. **See Clause 1.1.17.**

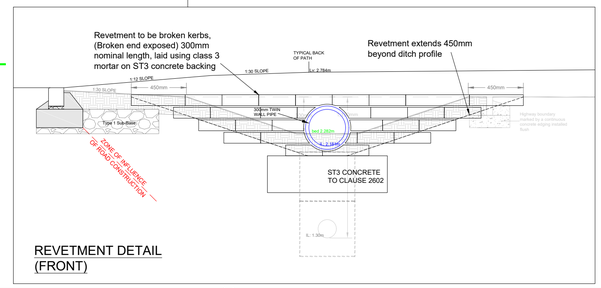
*Note 6*: Total thickness to be **increased by 20mm** above these values if the **alternative kerbing installation method** is used. **See Clause 1.1.17.**



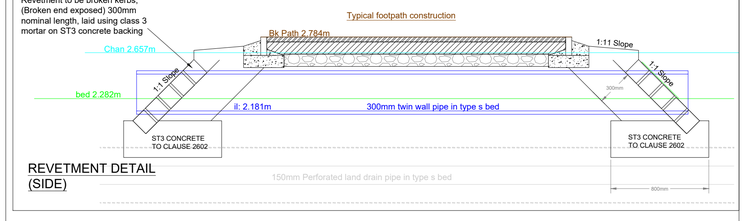

PEDESTRIAN CROSSING OVER SWALE




SWALES AND SURFACE WATER FLOW



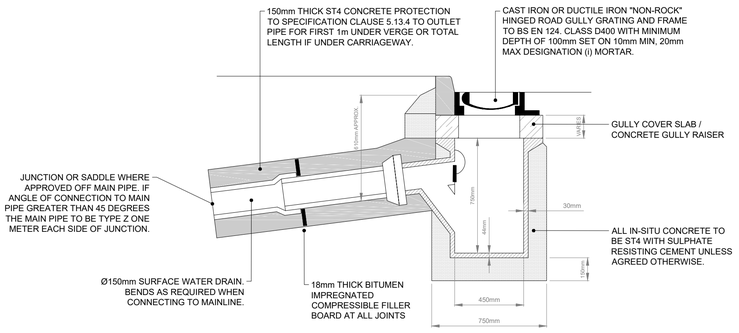

REVETMENT DETAIL (FRONT)

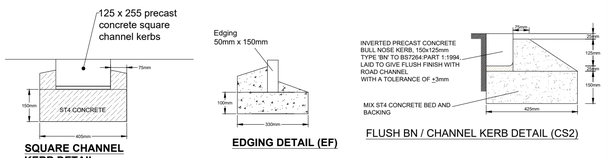



REVETMENT DETAIL (SIDE)

## TYPE G5 TRAPPED ROAD GULLY DETAIL

LINCOLNSHIRE COUNTY COUNCIL - DEVELOPMENT ROAD SPECIFICATION (MAY 2018) - PAGE 64

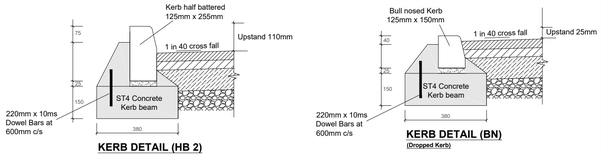



SQUARE CHANNEL KERB DETAIL

EDGING DETAIL (EF)

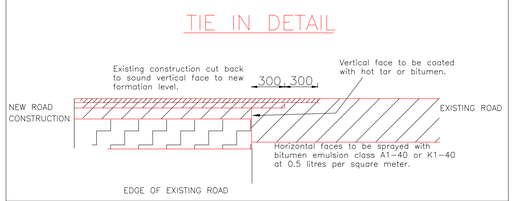
FLUSH BN / CHANNEL KERB DETAIL (CS2)

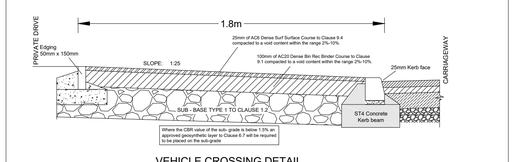



KERB DETAIL (HB 2)

KERB DETAIL (BN)
(Dropped Kerb)

## TIE IN DETAIL



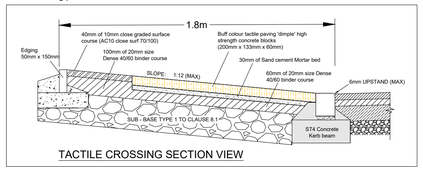




VEHICLE CROSSING DETAIL

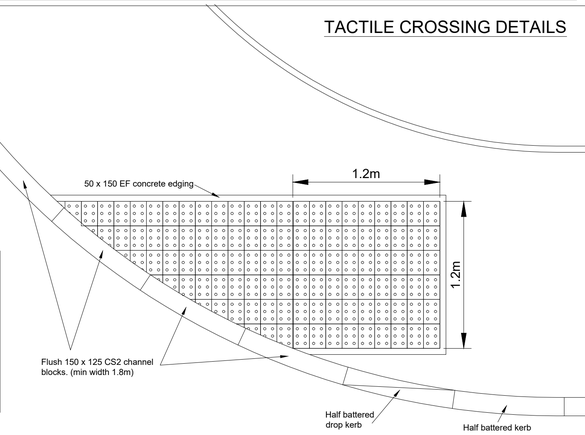
## TACTILE CROSSING DETAILS

NOTES

1) Tactile paving shall be 'dimple' high strength concrete blocks, 200mm x 133mm x 60mm paving blocks, with concrete edgings around the outside of the blocks. the surface colour shall be buff
2) Central channel blocks minimum 1.8m to be flush with carriageway surface.
3) Maximum gradient of 1:12 (8%)
4) Tactile paving shall be installed in the line of travel. Flush kerbs to comprise 125mm x 150 x 150 precast concrete channel blocks.
5) The back edge of the tactile paving shall be at right angles to the direction of crossing and align with tactile at the oposite crossing point.




TACTILE CROSSING SECTION VIEW




## PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

| REV | DATE | DESCRIPTION/REASON FOR ISSUE | APPR |
|---|---|---|---|
| F | 12/02/21 | REVETMENT DETAIL ADDED | MRF |
| E | 25/01/21 | PED CROSSING SWALE ADDED | MRF |
| D | 8/01/21 | PRODUCT NAMES REMOVED FROM DRAWING | MRF |
| C | 29/10/20 | RUMBLE STRIP ADDED, GULLY MODS | MRF |
| B | 30/09/20 | UPDATED AS PER LCC COMMENTS | AO |
| A | 12/08/20 | UPDATED AS PER LCC HW COMMENTS (23/07/2020) | AO |


MTC ENGINEERING
MTC Engineering (Cambridge) Ltd.
Ground Floor, 24 High Street
Whittlesford, Cambridgeshire, CB22 4LT
Tel (01223) 837270, fax (01223) 835648
E-mail office@mtcengineering.co.uk


TITLE
Proposed Residential Development
Chapel Walk, Moulton Chapel
Lincolnshire
Construction Details

| ORIG | DATE |
|---|---|
| J.T.C | May 2020 |
| CHKD | SCALE Not to Scale @ A1 |
| APPR | DRAWING NO 2351-99 REV F |

©This drawing and the works depicted are the copyright of MTC Engineering (Cambridge) Ltd and may not be reproduced or amended except by written permission. No liability will be accepted for amendments made by other persons.