

Typical Cross Sections

FOOTWAY CONSTRUCTION

WEARING COURSE - 25mm of 6mm size Dense Wearing Course to Clause 9.4. compacted to a void content within the range 2%-10%.

The Wearing Course must be bonded to the Basecourse.

BASECOURSE - 50mm of 20mm size Dense Basecourse to Clause 9.1, compacted to a void content within the range 2%-10%.

SUB-BASE - 100mm Type 1 Sub-Base to Clause 1.2.

VEHICULAR CROSSING CONSTRUCTION

As Footway Construction, with Sub Base increased to 380mm Type 1

Note - Kerb Upstand on vehicular crossings 12mm See Kerb Detail 2

FLEXIBLE CONSTRUCTION (CONSTRUCTION CHART 1):

WEARING COURSE - 40mm of close graded bitumen macadam, 10mm nominal size to Clause 7.3. compacted to a void content within the range 2%-10%.

The Wearing Course must be bonded to the Basecourse.

BASECOURSE - 110mm of 20mm size Dense Basecourse to Clause 9.1, compacted to clause 7.2 to a void content within the range 2%-8%.

SUB-BASE - Type 1 Sub-Base to conform with Clause 8.1. Depth of Sub-Base depends upon CBR results - see Chart 1.

Thickness 400mm assuming 2% CBR.
For thickness if CBR's are greater than 2% see Construction Chart 1 of L.C.C.Specification 1999.
For CBR's less than 2% see specialists details.

Approved geotextile if used

C.B.R. Tests to be taken to establish depth of Sub-Base as Construction Chart 1.
Min. depth of Sub-Base to be 310mm

BLOCK PAVER CONSTRUCTION (CONSTRUCTION CHART 6):

BLOCK PAVING - 80mm Precast Concrete Paving Blocks to comply with Clause 10.2. Blocks laid to herringbone pattern with stretcher course adjacent to kerb. Colour to be agreed with the Highway Authority.

LAYING COURSE - 30mm Bedding Sand in accordance with Clause 10.4

BASECOURSE - 120mm of 20mm size Dense Basecourse to Clause 9.1, compacted to clause 7.2 to a void content within the range 2%-8%.

SUB-BASE - Type 1 Sub-Base to conform with Clause 8.1. Depth of Sub-Base depends upon CBR results - see Chart 6.

Thickness 400mm assuming 2% CBR.
For thickness if CBR's are greater than 2% see Construction Chart 6 of L.C.C.Specification 1999.
For CBR's less than 2% see specialists details.

Approved geotextile if used

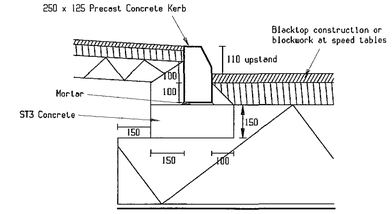
C.B.R. Tests to be taken to establish depth of Sub-Base as Construction Chart 6.
Min. depth of Sub-Base to be 310mm

VEHICLE CROSSING

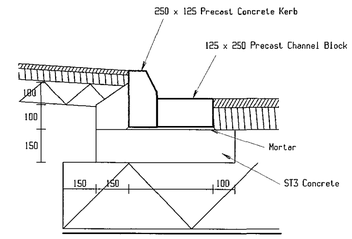
380mm type 1 aggregate (unless CBR value less than 2% when extra 150mm thickness required)

NOTE:
C.B.R.test results from a U.K.A.S. accredited laboratory & construction depths must be approved by the Highway Authority prior to commencement of any works on site.

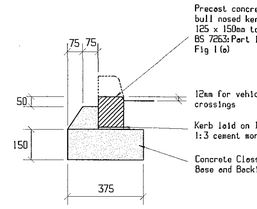
Carriageway Construction Details



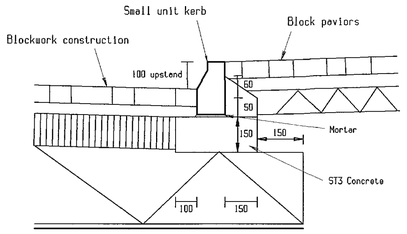
Kerb Detail 1



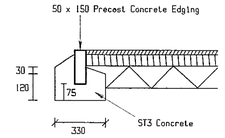
Channel Block Detail
(required where gradient < 1 in 150)



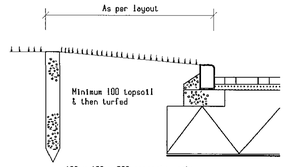
Kerb Detail 2
At vehicular crossings



Kerb Detail 3



Edging Detail



Service Margin Detail

CONSTRUCTION CHART 1 NORMAL FLEXIBLE CONSTRUCTION (For roads up to 0.25 m.s.s.)

SUB-GRADE	SUB-BASE (mm)		SURFACING (mm)		TOTAL THICKNESS REQUIRED (mm)	
Bearing Capacity (CBR)	When sub-grade is classified as frost susceptible	When sub-grade is classified as non frost susceptible	Basecourse Note 4	Wearing Course	When sub-grade is classified as frost susceptible	When sub-grade is classified as non frost susceptible
Below 1.5% & soft spots	Note 2	Note 2	110	40	Note 2	Note 2
1.5%	630 Note 3	630 Note 3	110	40	780 Note 3	780 Note 3
2%	400	400	110	40	550	550
3%	310	310	110	40	460	460
4%	300	260	110	40	450	410
5%	300	225	110	40	450	375
6-15%	300	200	110	40	450	350
Above 15%	300	150	110	40	450	300

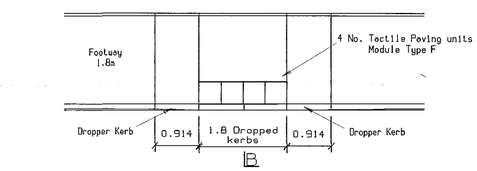
Note 1 See Clause 1.1.7
Note 2 See Clause 1.1.6
Note 3 Assumes no improvement is possible using either a sub-soil drainage technique or a geosynthetic. 630mm is 330mm Granular Fill to Clause 6.8 and 300mm Type 1 Sub-Base.
Note 4 May be laid in one layer.

CONSTRUCTION CHART 6 BLOCK PAVER CONSTRUCTION (For roads up to 2.0 m.s.s.)

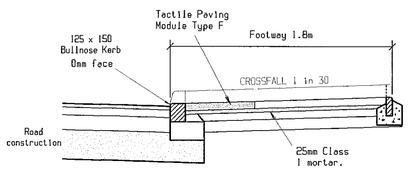
SUB-GRADE	SUB-BASE (mm)		SURFACING (mm)			TOTAL THICKNESS REQUIRED (mm)	
Bearing Capacity (CBR)	When sub-grade is classified as frost susceptible	When sub-grade is classified as non frost susceptible	Basecourse	Wearing Course	Block Paver	When sub-grade is classified as frost susceptible	When sub-grade is classified as non frost susceptible
Below 1.5% & soft spots	Note 2	Note 2	120	30	80	Note 2	Note 2
1.5%	630 Note 3	630 Note 3	120	30	80	860 Note 3	860 Note 3
2%	400	400	120	30	80	630	630
3%	310	310	120	30	80	540	540
4%	260	260	120	30	80	490	490
5%	225	225	120	30	80	455	455
6-15%	220	200	120	30	80	450	430
Above 15%	220	150	120	30	80	450	380

Note 1 See Clause 1.1.7
Note 2 See Clause 1.1.6
Note 3 Assumes no improvement is possible using either a sub-soil drainage technique or a geosynthetic. 630mm is 330mm Granular Fill to Clause 6.8 and 300mm Type 1 Sub-Base.

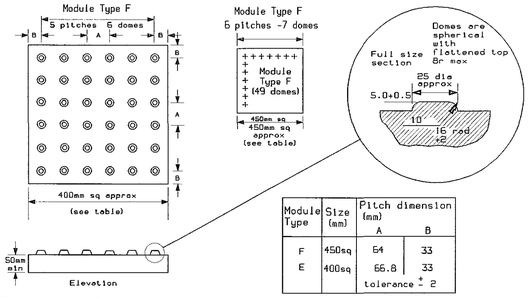
* Ref:BS7533: 1992 Guide for structural design of pavements constructed with clay or concrete block pavers.



FOOTPATH CONSTRUCTION :- As footway detail except that tactile paving set into 50mm lean concrete under 25mm Class 1 mortar.



Section B-B



Module Type	Size (mm)	Pitch dimension (mm) A	B
F	450sq	64	33
E	400sq	66.8	33
		tolerance ± 2	

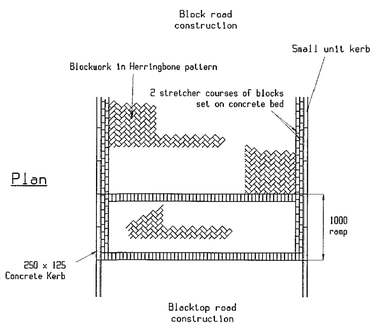
The actual depth will be related to the materials used to construct the modules

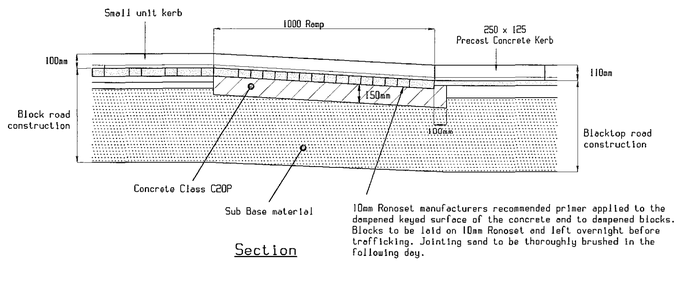
Typical Tactile Surface Pattern for use at Pram Crossings

NOTES:

1) Tactile surface shall be in accordance with DETR Guidence on the use of Tactile Paving Surfaces dated Nov.1998
2) Paving shall be cut as necessary to kerb radius if required.
3) Colour Buff or contrasting colour to be agreed with Lincs CC

PRAM CROSSING DETAILS

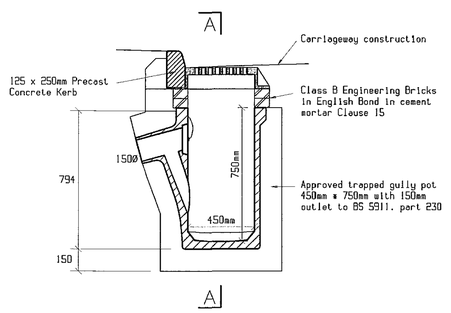




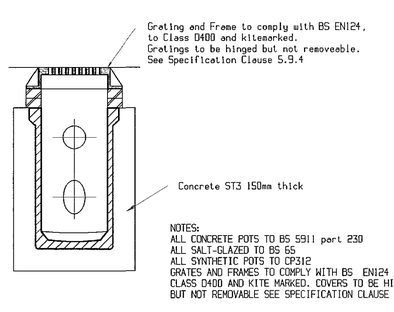
Section

10mm Ronaset manufacturers recommended primer applied to the dampened keyed surface of the concrete and to dampened blocks. Blocks to be laid on 10mm Ronaset and left overnight before trafficking. Jointing sand to be thoroughly brushed in the following day.

Detail for Blockwork Speed Ramp



Trapped Channel Gully.



NOTES:
ALL CONCRETE POTS TO BS 5911 part 230
ALL SALT-GLAZED TO BS 65
ALL SYNTHETIC POTS TO CP312
GRATES AND FRAMES TO COMPLY WITH BS EN124 CLAUSE 5
CLASS D400 AND KITE MARKED. COVERS TO BE HINGED BUT NOT REMOVABLE SEE SPECIFICATION CLAUSE 5.9.4

Section A-A.

TYPICAL CHANNEL GULLY DETAILS

NOTE FOR ALL WORKS:

The Specification shall be in all respects the County Council's 'Development Road Specification and Construction 1999', published by Lincolnshire County Council.

Rev. No.	REVISION	Date	Drawn By	Checked By
A	Blockwork Road to have block paviors on footway with small unit kerbs (100mm upstand). Construction details revised to suit for c/w and speed resp and kerb detail 3 added.	25.9.02	HGC	WD

Written dimensions to be taken. Do not scale off the drawing.
Any discrepancies, written or scaled, should be brought to the attention of the engineer immediately.
This drawing to be read in conjunction with the relevant Bills of Quantities and Local Authority Specification.
CDM NOTE: The design has been undertaken as far as possible to avoid risks to health and safety or to reduce and control the effects of any unavoidable risks.
All relevant information identifying the unavoidable risks has been passed to the planning supervisor for inclusion in the Health & Safety plan.
The Health & Safety plan will be issued by the planning supervisor with these drawings.

WORMALD, BURROWS PARTNERSHIP
Civil Engineering Consultants
12a & 14a Hitchin Street, Tel 01767 317244
Biggleswade, Beds SG18 8AX, U.K. Fax 315434

Planning & Development
29 SEP 2004
Ref: 1295/04

Project
Proposed Development at:-
Wygate Park - Phase 9
Spalding, Lincolnshire

Drawing Description
Typical Road Construction Details

Client
Allison Homes Eastern Ltd
Banbury Close
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

Drawing Number
E1481/4A

Drawn By HGC Date 9.7.02

Scale N.T.S.

Checked By WD Date 30.7.02

Architect
DETERMINED
PLOT

EAQA REGISTERED COMPANY ISO 9001:1994 CERT NO.99 022