JOHN D SPOONER & ASSOCIATES
Civil Engineering Consultants
9 HIGH STREET
THURLBY
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LINCS PE10 0ED
Tel: 01778 423647

CLIENT: TUDOR HOMES

PROJECT: RESIDENTIAL DEVELOPMENT
MILL MARSH ROAD
MOULTON SEA END

TITLE: SITE ACCESS ROAD & SEWERS
LONGITUDINAL SECTION

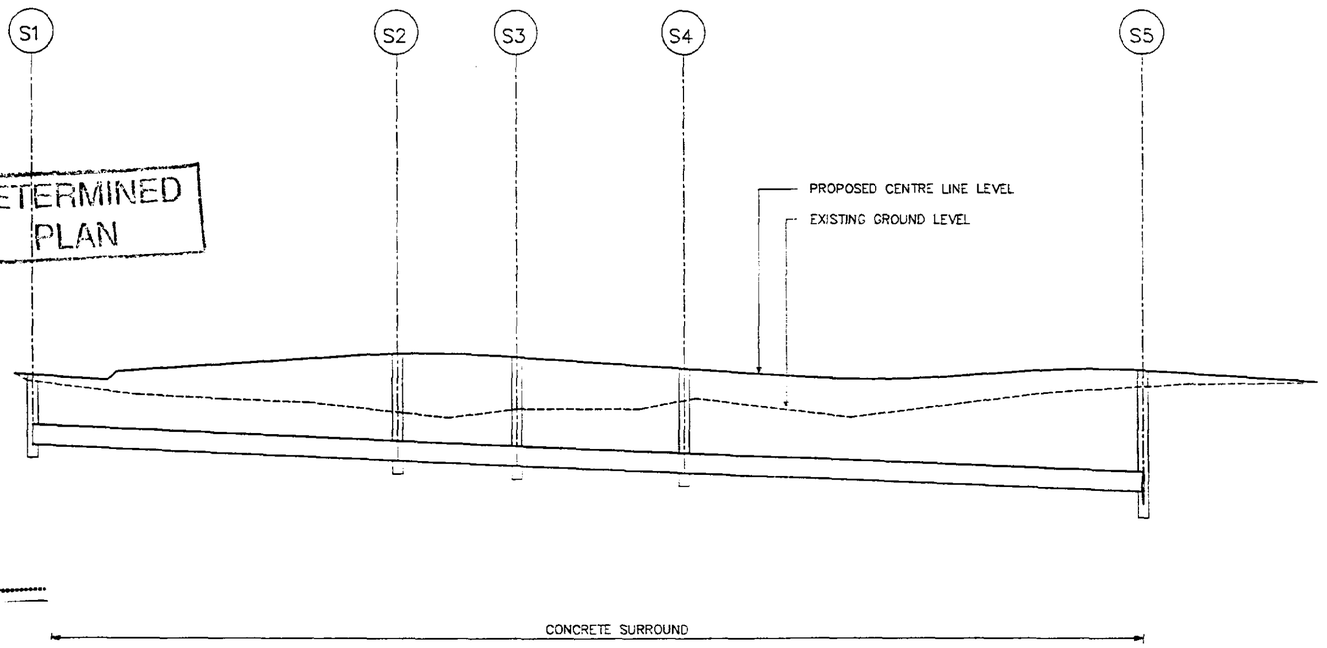
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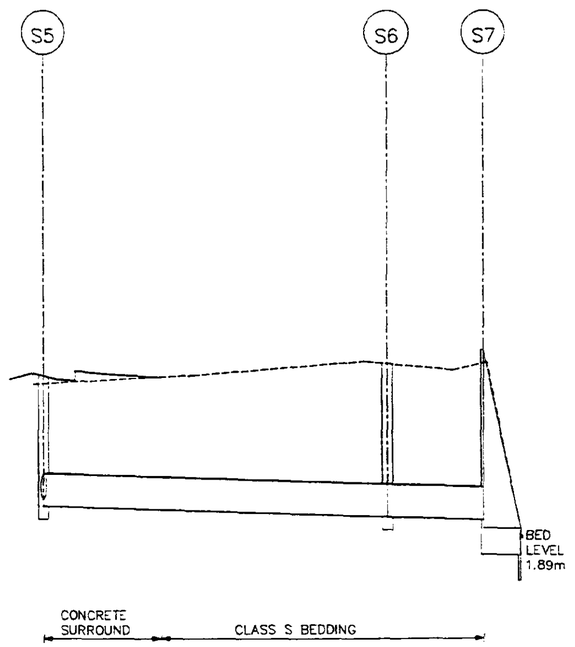
DRAWING NUMBER: J388-13B

Ref 01741/03
Rec'd 30/7/03

L.C.C.
HIGHWAYS DEVELOPMENT GROUP
APPROVED DRAWING
15/7/03
Name D. Whitehead SIGNED:

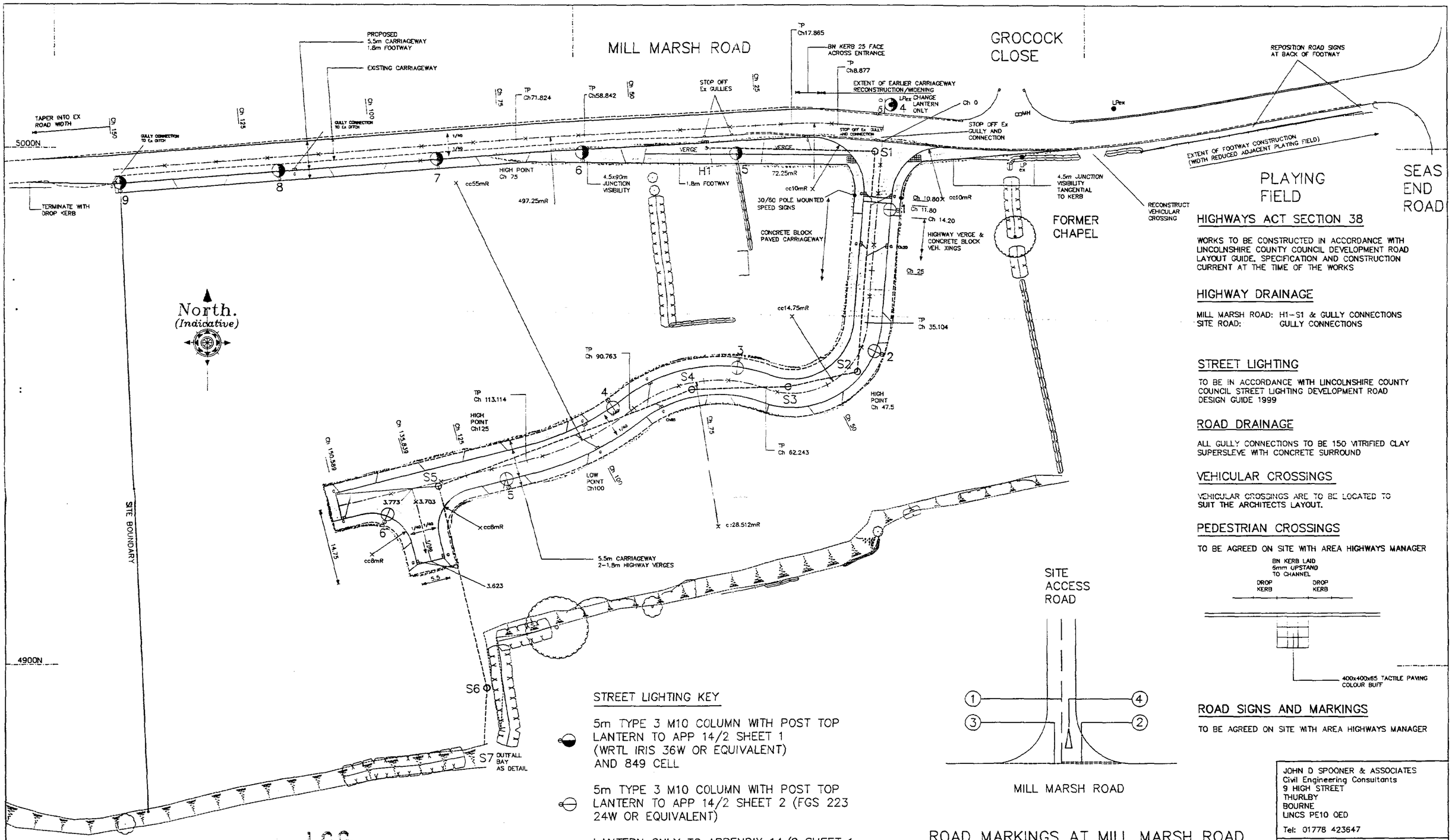
DETERMINED PLAN





▽ 0m A.O.D

| | | |



HIGHWAYS ACT SECTION 38

WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH LINCOLNSHIRE COUNTY COUNCIL DEVELOPMENT ROAD LAYOUT GUIDE, SPECIFICATION AND CONSTRUCTION CURRENT AT THE TIME OF THE WORKS

HIGHWAY DRAINAGE

MILL MARSH ROAD: H1 – S1 & GULLY CONNECTIONS
SITE ROAD: GULLY CONNECTIONS

STREET LIGHTING

TO BE IN ACCORDANCE WITH LINCOLNSHIRE COUNTY COUNCIL STREET LIGHTING DEVELOPMENT ROAD DESIGN GUIDE 1999

ROAD DRAINAGE

ALL GULLY CONNECTIONS TO BE 150 VITRIFIED CLAY SUPERSLEVE WITH CONCRETE SURROUND

VEHICULAR CROSSINGS

VEHICULAR CROSSINGS ARE TO BE LOCATED TO SUIT THE ARCHITECTS LAYOUT.

PEDESTRIAN CROSSINGS

TO BE AGREED ON SITE WITH AREA HIGHWAYS MANAGER

ROAD SIGNS AND MARKINGS

TO BE AGREED ON SITE WITH AREA HIGHWAYS MANAGER

STREET LIGHTING KEY

5m TYPE 3 M10 COLUMN WITH POST TOP LANTERN TO APP 14/2 SHEET 1 (WRTL IRIS 36W OR EQUIVALENT) AND 849 CELL

5m TYPE 3 M10 COLUMN WITH POST TOP LANTERN TO APP 14/2 SHEET 2 (FGS 223 24W OR EQUIVALENT)

LANTERN ONLY TO APPENDIX 14/2 SHEET 1 MOUNTED ON EXISTING COLUMN

NB THE CONTRACTOR IS MADE AWARE OF THE APPENDICES OF SHW AND CORRESPONDENCE RELATING TO THIS PROJECT.

ROAD MARKINGS AT MILL MARSH ROAD

1. DIAG 1004 4000 MARK, 2000 GAP, 100 WIDE
2. DIAG 1003 600 MARK, 300 GAP, 200 WIDE
3. DIAG 1009 600 MARK, 300 GAP, 100 WIDE
4. DIAG 1023 1250x3750

L.C.C.
HIGHWAYS DEVELOPMENT GROUP
APPROVED DRAWING
DATE: 15/7/03
NAME: D Whitehead SIGNED:

Ref H13/0174/03
Rec'd 30/7/03.

DETERMINED
PLANS

REV C 04.2004
RADII REVISEDAT JUNCTION MILL MARSH ROAD AND HAMMERHEAD:
STREET LIGHTING ADDED:
PRAM CROSSING ADDED:
ROAD MARKINGS ADDED:
SPEED SIGNS INDICATED:
REV B 02.2004
SW & HIGHWAY DRAINAGE ADDED
STREET LIGHTING NOTE REVISED

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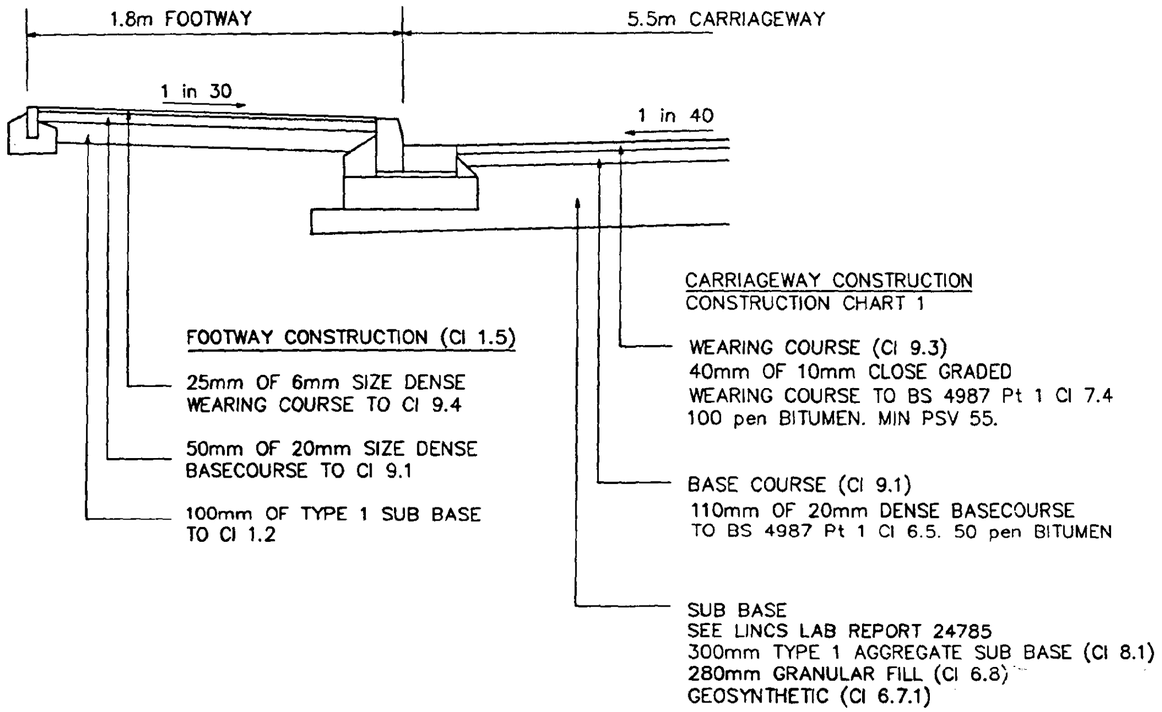
CLIENT: TUDOR HOMES

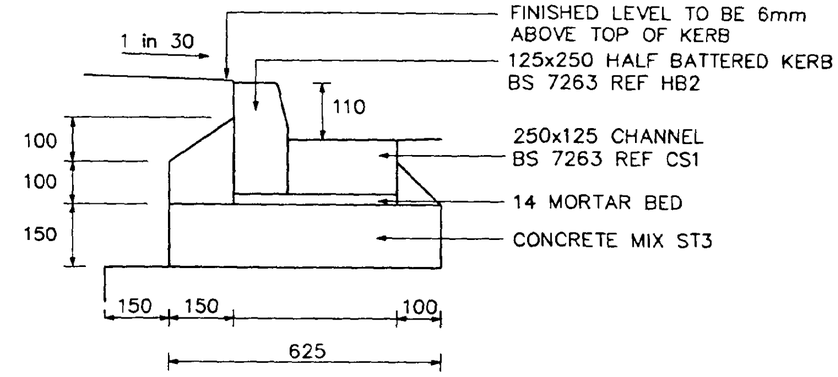
PROJECT: RESIDENTIAL DEVELOPMENT
MILL MARSH ROAD
MOULTON SEA END

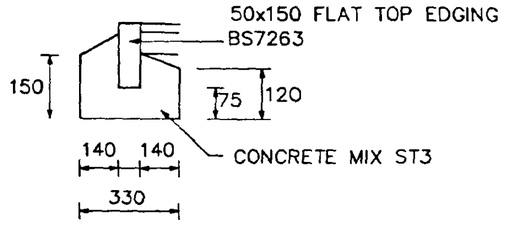
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SCALE	DATE	DRAWN	CHECKED
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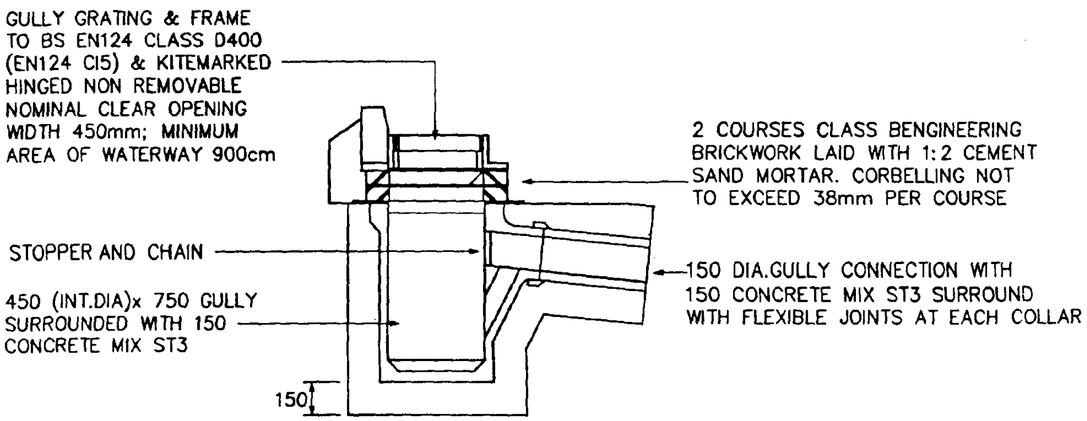
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CARRIAGEWAY, FOOTWAY AND VEHICULAR CROSSING – TYPICAL SECTION



ROAD GULLY DETAIL

USE

SITE ACCESS ROAD
CHAINAGE 0 – 10.80m

DETERMINED PLAN

SHDC
Planning & Development
18 [illegible] 2003
Ref 0174/03

REV A 02.2003 SUB BASE DESCRIBED AS LINCS LAB REPORT 24785

HIGHWAYS ACT – SECTION 38

WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH LINCOLNSHIRE COUNTY COUNCIL DEVELOPMENT ROAD LAYOUT GUIDE; SPECIFICATION AND CONSTRUCTION 1999.

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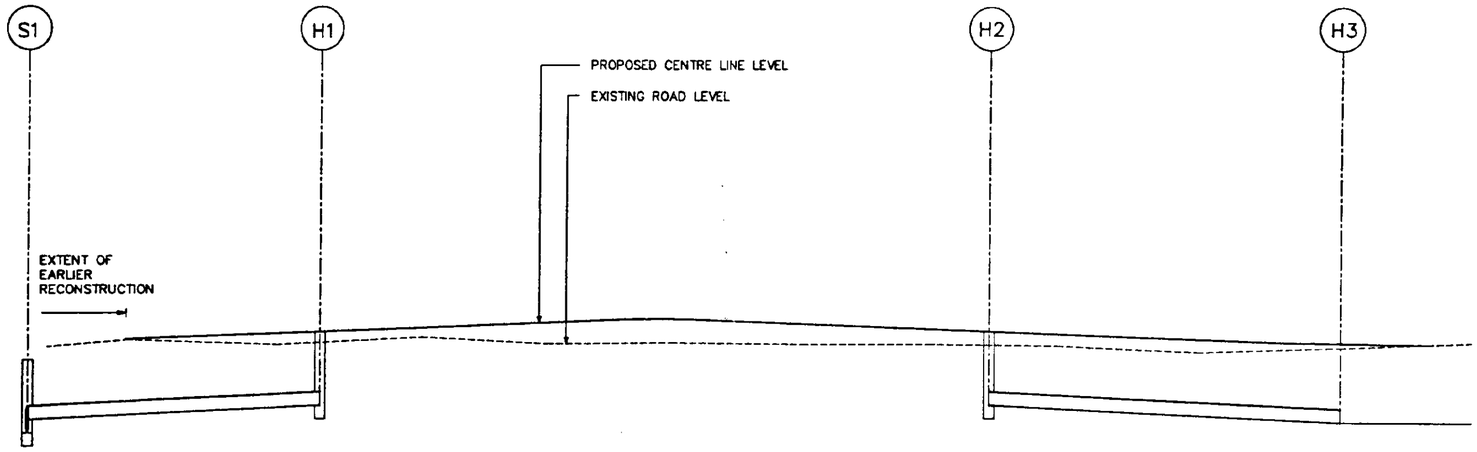
CLIENT
TUDOR HOMES

PROJECT
RESIDENTIAL DEVELOPMENT
MILL MARSH ROAD
MOULTON SEA END

TITLE
TYPICAL ROAD DETAILS SHEET 1

SCALE	DATE	DRAWN	CHECKED
N T S	01.2003	C A D	J D S

DRAWING NUMBER
J388–21A


S1
H1
H2
H3
PROPOSED CENTRE LINE LEVEL
EXISTING ROAD LEVEL
EXTENT OF EARLIER RECONSTRUCTION

▽ 0m A.O.D

| | | |

MILL MARSH ROAD

GROCOCK CLOSE

PLAYING FIELD

SEAS END ROAD

FORMER CHAPEL

HIGH POINT Ch 75

STOP OFF Ex GULLIES

5000N

4900N

1100E

900E

1000E

SITE BOUNDARY

FORM DITCH TO RECEIVE DISCHARGE LENGTH 15m

H1 H2 H3 OUTFALL BAY

S1 S2 S3 S4 S5 S6 S7

DISCHARGE FROM SEWAGE TREATMENT PLANT

FOUL DRAIN TO SEWAGE TREATMENT PLANT

6m SEWER EASEMENT

OUTFALL BAY AS DETAIL

CLEAN OUT DITCH UP & DOWNSTREAM FOR MIN 15m

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

North. (Indicative)

SHDC Planning & Development 18 F 0174/03

MILL MARSH ROAD – HIGHWAY DRAINAGE

H1 – S1	150mm	1 in 200	33.20m	CONCRETE SURROUND
H2 – H3	150mm	1 in 200	40.0m	CONCRETE SURROUND

H1 AND H2 600x600 BRICK CHAMBER

H3 OUTFALL BAY BY JKH DRAINAGE UNIT TYPE X

MANHOLE SCHEDULE

SURFACE WATER SEWER

MANHOLE No	TYPE	INVERT PLAN	ROAD CHAINAGE	COVER LEVEL
S1	D900x750		2.0	3.75
S2	B1200		44.1	3.95
S3	B1200		58.0	3.90
S4	B1200		77.6	3.80
S5	B1350		130.8	3.75
S6	B1350		–	3.90
S7	OUTFALL BAY		–	–

S1 – S2	300mm	1 in 240	42.6m	CONCRETE SURROUND
S2 – S3	300mm	1 in 240	13.8m	CONCRETE SURROUND
S3 – S4	300mm	1 in 240	19.2m	CONCRETE SURROUND
S4 – S5	300mm	1 in 240	52.5m	CONCRETE SURROUND
S5 – S6	375mm	1 in 320	40.3m	PART CONCRETE SURROUND/ PART CLASS S BEDDING
S6 – S7	375mm	1 in 320	11.0m	CLASS S BEDDING

DETERMINED

HIGHWAY DRAIN

1. GULLY CONNECTIONS 150mm WITH CONCRETE SURROUND

HIGHWAYS ACT SECTION 38 WORKS

GULLY CONNECTIONS AND DRAINAGE IN MILL MARSH ROAD

TO BE CONSTRUCTED IN ACCORDANCE WITH LINCOLNSHIRE COUNTY COUNCIL DEVELOPMENT ROAD LAYOUT GUIDE, SPECIFICATION AND CONSTRUCTION CURRENT AT THE TIME OF THE WORKS.

SECTION 104 WORKS

SURFACE WATER SEWER (S1 – S7)

TO BE CONSTRUCTED IN ACCORDANCE WITH WATER AUTHORITIES ASSOCIATION – SEWERS FOR ADOPTION FIFTH EDITION AND ADDITIONS/DELETIONS BY ANGLIAN WATER NOVEMBER 2001

CONNECTION TO EXISTING SEWERS

BEFORE WORKS COMMENCE EXISTING LEVELS MUST BE CHECKED.

PIPE MATERIALS

100 & 150 DIAMETER
CLAY BS EN295
VITRIFIED CLAY SUPERSLEVE
225 DIAMETER
CLAY BS EN295
VITRIFIED CLAY HEPSLEVE
Ex 225 DIAMETER
CONCRETE BS5911 PART 100
CLASS M

CONCRETE

ALL CONCRETE USED IN DRAINAGE WORKS (PRECAST AND INSITU) SHALL BE CLASS 3 SULPHATE RESISTING IN ACCORDANCE WITH BUILDING RESEARCH ESTABLISHMENT DIGEST 363.

MANHOLE COVER LEVELS

COVER LEVELS ARE FOR GUIDANCE ONLY & SHOULD BE ADJUSTED TO SUIT FINISHED LEVELS

PRIVATE DRIVES

SURFACE WATER OFF DRIVES AND OTHER PRIVATE AREAS SHALL NOT DISCHARGE ONTO ADOPTED HIGHWAY AREAS.

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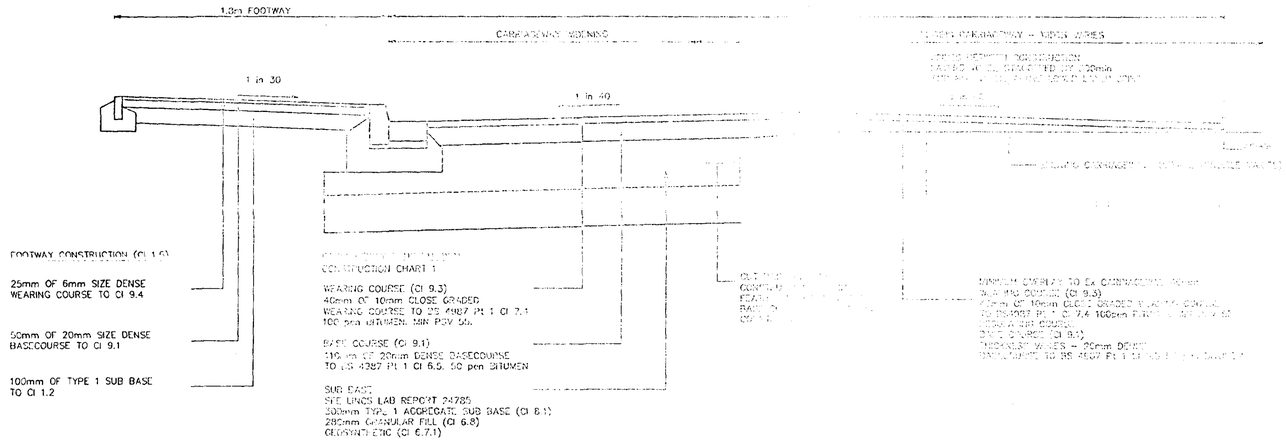
CLIENT: TUDOR HOMES

PROJECT: RESIDENTIAL DEVELOPMENT
MILL MARSH ROAD
MOULTON SEA END

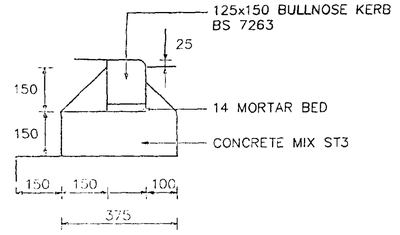
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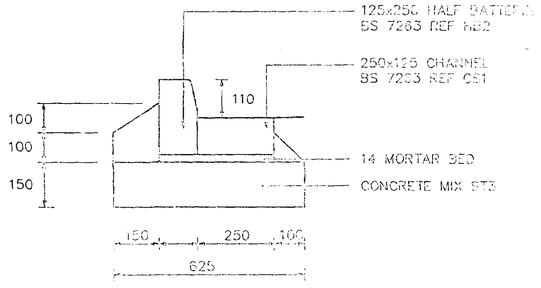
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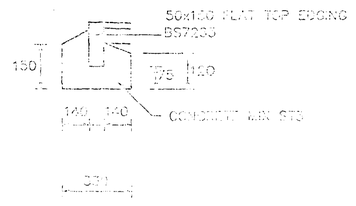
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TYPICAL SECTION THROUGH MILL MARSH ROAD

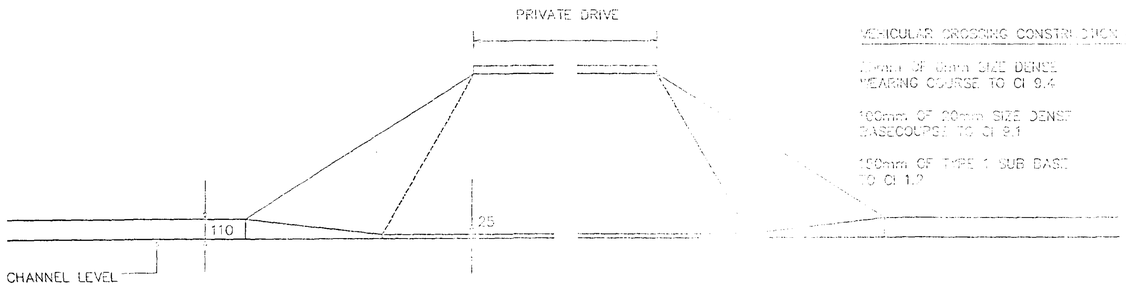






USE AT VEHICULAR CROSSINGS

KERB DETAILS



VEHICULAR CROSSING

CONSTRUCTION REQUIREMENTS BASED ON LINCS LAB REPORT

CARRIAGEWAY WIDENING

LCC CONSTRUCTION CHART 1
CBR
FROST SUSCEPTIBLE SUB GRADE
OVERALL THICKNESS

OVERLAY TO EXISTING CARRIAGEWAY

MINIMUM THICKNESS 40mm
40mm WEARING COURSE – LCC CONSTRUCTION CHART 1
REGULATING BASE COURSE –LCC CONSTRUCTION CHART 1

EXISTING PAVEMENT TO BE INSPECTED PRIOR TO WORKS WITH HIGHWAY AUTHORITY OFFICER TO IDENTIFY THE AREAS & TYPE OF REPAIR REQUIRED.

AREAS OF VISIBLE SURFACE DISTRESS, INCLUDING POOR QUALITY TRENCHES TO RECEIVE FULL DEPTH RECONSTRUCTION INCLUDING SUB BASE IF VISUAL INSPECTION OF EXPOSED SUB BASE INDICATES THIS TO BE APPROPRIATE.

DETERMINED PLAN

HIGHWAYS ACT – SECTION 38

WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH LINCOLNSHIRE COUNTY COUNCIL DEVELOPMENT ROAD LAYOUT GUIDE; SPECIFICATION AND CONSTRUCTION 1999.

SHDC Planning & Development
18 FEB
Ref 0174/03

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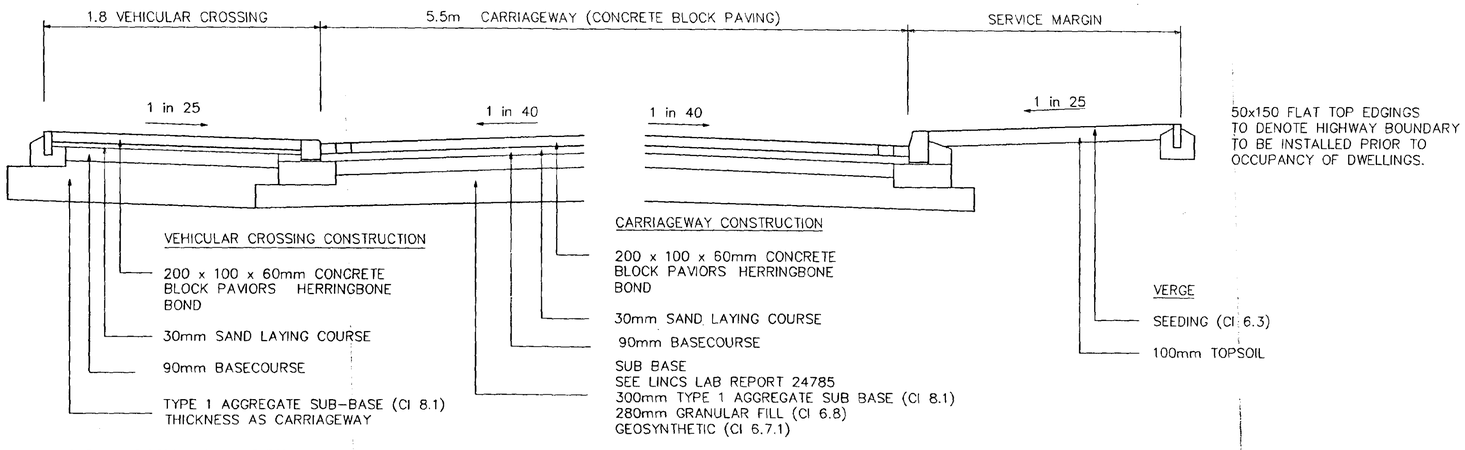
PROJECT
RESIDENTIAL DEVELOPMENT
MILL MARSH ROAD
MOULTON SEA END

TITLE
MILL MARSH ROAD
TYPICAL ROAD DETAILS

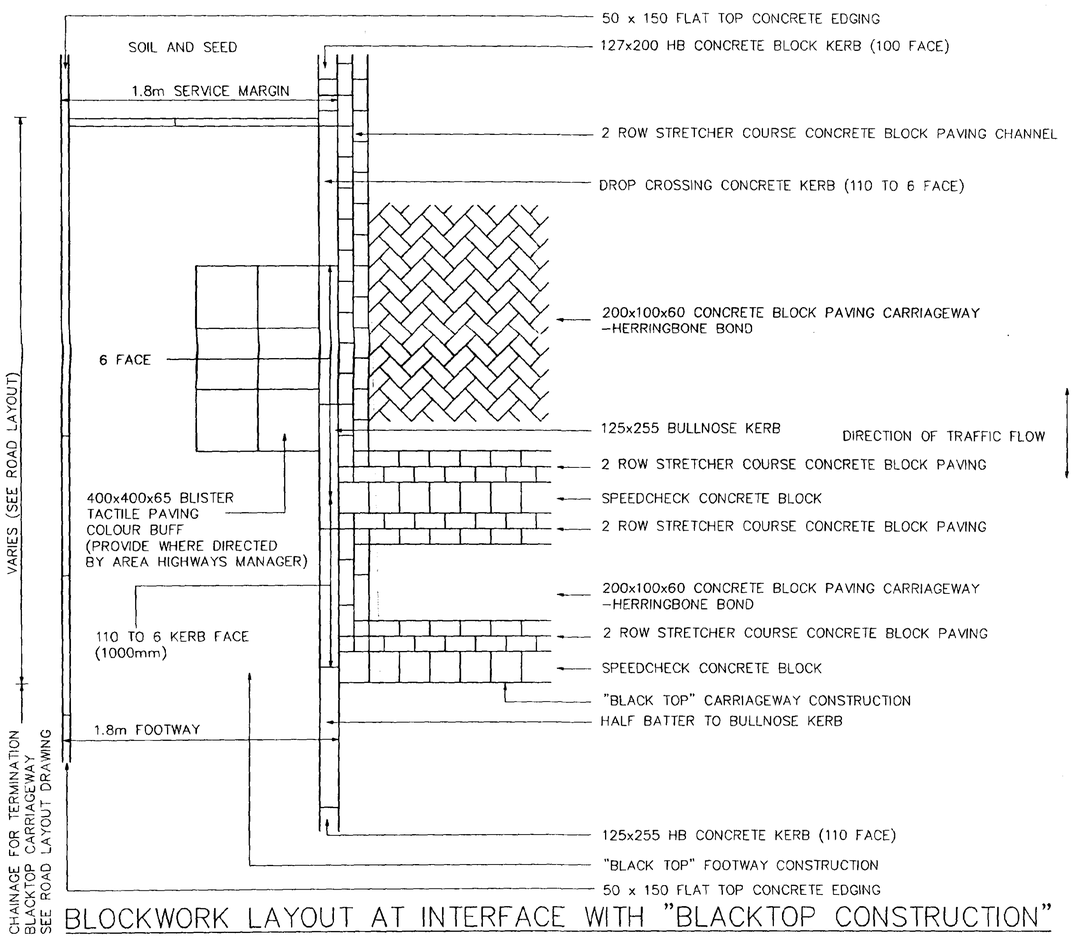
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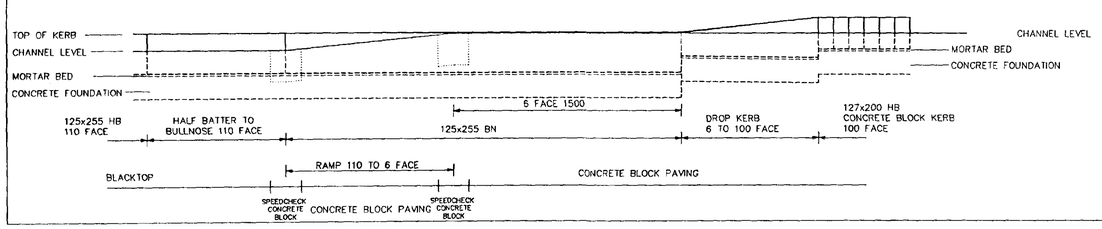
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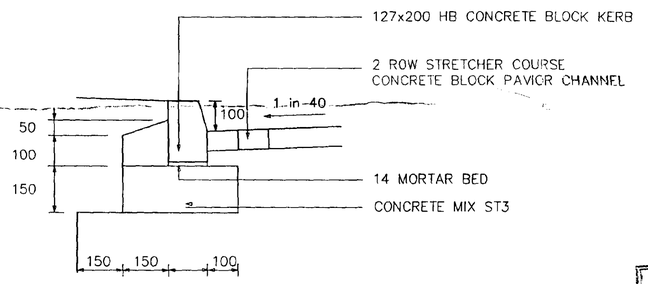
CARRIAGEWAY, SERVICE MARGIN AND VEHICULAR CROSSING – TYPICAL SECTION



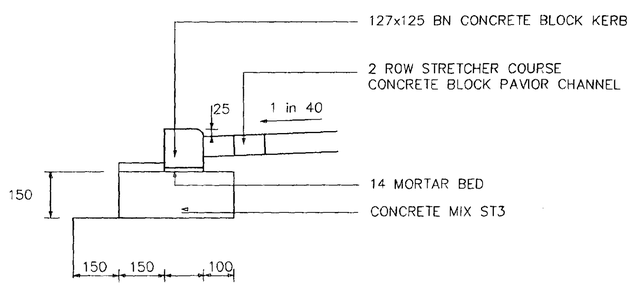
BLOCKWORK LAYOUT AT INTERFACE WITH "BLACKTOP CONSTRUCTION"



ELEVATION OF KERB FACE



CONCRETE BLOCK KERB KERB AND CHANNEL DETAIL



CONCRETE BLOCK KERB BULLNOSE KERB AT VEHICULAR CROSSING

SMALL UNIT CONCRETE BLOCK KERBING

COMPATIBLE UNITS ARE TO BE USED FOR INTERNAL AND EXTERNAL ANGLES, RADII, TRANSITIONS AT CROSSOVERS AND AT CONNECTION TO BS7263 KERBS ETC

Ref 01774/03
Rec'd 30/7/03

DETERMINED PLAN

H.G. HIGHWAYS DEVELOPMENT GROUP 5/7/03 D Linstead SIGNED:

REV A 02.2003 SUB BASE DESCRIBED AS LINCS LAB REPORT 24785

HIGHWAYS ACT – SECTION 38

WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH LINCOLNSHIRE COUNTY COUNCIL DEVELOPMENT ROAD LAYOUT GUIDE, SPECIFICATION AND CONSTRUCTION 1999.

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CLIENT
TUDOR HOMES

PROJECT
RESIDENTIAL DEVELOPMENT
MILL MARSH ROAD
MOULTON SEA END

TITLE
TYPICAL ROAD DETAILS SHEET 2
CONCRETE BLOCK PAVING

SCALE	DATE	DRAWN	CHECKED
N T S	01.2003	C A D	J D S

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J388–22 A