Retractable Bollards

3m wide Emergency Access & Pedestrian Link

Backgate

Curlew Drive

2132.336E
4628.782N

2144.924E
4587.517N

150mmØ Perforated Pipe set in gravel. See detail Drg. No E1333/11

150mmØ Perforated Pipe set in gravel. See detail Drg. No E1333/11

DRAINAGE NOTES

All works to comply with Building Regulations. 1991 (Amended 1992)
Road gully connections to be 150mm dia. clayware pipes.
Private drain connections to adoptable sewers to be clayware pipes.
Remaining private drains to be 110mm dia. U.P.V.C. or clayware unless otherwise stated.
All pipe chambers and fittings to be installed, bedded and backfilled in accordance with the manufacturers instructions.
Private drains and sewers which pass adjacent to building foundations to be constructed in accordance with Part H1. of the Building Regulations.
All private drains to incorporate preformed inspection and shallow access chambers where possible.
Traditional chambers (private) to be constructed using precast concrete sections with 150mm concrete surround.

| Depth to I.L. | Min. chamber size (internal). |
|---|---|
| 1.0m or less | 450 x 450mm (normally a preformed chamber 0.5m depth or less) |
| 1.5m or less | 1200 x 750mm or 1050mm dia. |
| Over 1.5m | 1200 x 750mm or 1200mm dia. |

Rainwater downpipes to be connected directly to surface water drain via 68/110mm adaptors, removable to allow for rodding.
Position of yard gullies shown in garage drives are nominal only and may be adjusted on site.
All existing land drains encountered during construction to be connected to surface water system.
All drains the vicinity of proposed trees to be constructed in accordance with the requirements of N.H.B.C. Practice Note 3.
All back inlet gullies to be roddable.

DRAINAGE LEGEND

Existing foul water sewer
Existing surface water sewer
Proposed foul water sewer
Proposed surface water sewer
Proposed backdrop
Proposed foul water drain
Proposed surface water drain
Proposed inspection chamber (traditional)
Proposed preformed inspection chamber (depth 1m. or less)
Proposed preformed inspection chamber (depth 600mm or less)
Proposed shallow access chamber
Proposed rodding eye — RE
Proposed chamber invert level — 7.60
Proposed road gully — G
Proposed Trapped gully in drives
Suspended slab, where appropriate — SS
Proposed slab level — SL 9.780
Proposed soakaway
Target levels to car parks — × 7.880

rwp... ○ svp... ● svp via... "durgo" valve ● s/c... ● sink... ○ big... ■ vent pipe... ○ vent required at head of system

NOTE
Where durgo valves are used they should not adversely affect the amount of ventilation necessary for the below ground system which is normally provided by the open stacks of the sanitary pipework.

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | Plots 1-8,10 & 11 amended | AJMB/BL | 11.5.01 | AJMB |

Written dimensions to be taken. Do not scale off the drawing.
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WORMALD, BURROWS PARTNERSHIP
Civil Engineering Consultants
12a & 14a Hitchin Street, Tel 01767 317244
Biggleswade, Beds SG18 8AX, U.K. Fax 315434


Project
Proposed Development at:-
Backgate - Combit

Drawing Description
Private House Drainage - Phase 1

Planning Ref 08/8102 24 JUL 2002

Client
Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

Drawing Number E1333/7/A

Drawn By WD Date 20.3.01

Scale 1:500

Checked By AJMB Date 22.3.01

Architect


REGISTERED COMPANY ISO 9001:1994 CERT NO.99

CONTROL

| | | | | |
|---|---|---|---|---|
| 2 | 1856.202 | 5000.000 | 2.856 | NAIL |
| 5 | 1958.967 | 4984.267 | 2.786 | NAIL |
| | 1733.242 | 4975.529 | | NAIL |
| | | | | NAIL |
| 52 | 2143.475 | 4786.203 | 3.073 | NAIL |
| 53 | 2210.091 | 4813.790 | 3.001 | NAIL |
| 54 | 2205.396 | 4764.979 | 3.108 | NAIL |
| 55 | 2205.144 | 4609.764 | 2.964 | NAIL |
| 56 | 2128.401 | 4578.523 | 2.387 | NAIL |
| 57 | 2087.733 | 4605.141 | 2.432 | NAIL |
| 58 | 2053.583 | 4657.422 | 2.583 | PEG |
| 59 | 2160.079 | 4748.086 | 3.043 | PEG |
| 60 | 1903.364 | 4696.930 | 2.156 | PEG |
| 65 | 1889.365 | 4601.091 | 2.231 | PEG |

Job : e1333

Road number : 4

Coordinates along road centre line at 10 metre intervals

| Metrage | Easting | Northing | Curve/Straight |
|---|---|---|---|
| 0.0000 | 1976.5040E | 4620.9921N | Start |
| 10.0000 | 1972.0745 | 4629.9576 | Straight |
| 18.7473 | 1968.2000E | 4637.8000N | End |

Job : e1333

Road number : 5

Coordinates along road centre line at 10 metre intervals

| Metrage | Easting | Northing | Curve/Straight |
|---|---|---|---|
| 0.0000 | 1964.1081E | 4614.7848N | Start |
| 10.0000 | 1968.4955 | 4605.7986 | Straight |
| 20.0000 | 1972.8828 | 4596.8124 | Straight |
| 23.6851 | 1974.5000E | 4593.5000N | End |

Channel line
Co-ord
2060.099E
4670.151N

Channel line
Co-ord
2063.650E
4663.391N

Road 3

Road 1

1:200

Job : e1333

Road number : 1

Coordinates along road centre line at 10 metre intervals

| Metrage | Easting | Northing | Curve/Straight |
|---|---|---|---|
| 0.0000 | 2089.5690E | 4607.9080N | Start |
| 0.0082 | 2089.5641E | 4607.9146N | Tangent Point |
| 10.0000 | 2084.4866 | 4616.4889 | Curve Radius 49.942 |
| 15.5588 | 2082.3704E | 4621.7419N | Tangent Point |
| 20.0000 | 2080.9923 | 4625.8585 | Straight |
| 30.0000 | 2077.8179 | 4635.3413 | Straight |
| 40.0000 | 2074.6434 | 4644.8241 | Straight |
| 50.0000 | 2071.4690 | 4654.3068 | Straight |
| 60.0000 | 2068.2945 | 4663.7896 | Straight |
| 70.0000 | 2065.1201 | 4673.2724 | Straight |
| 80.0000 | 2061.9456 | 4682.7551 | Straight |
| 90.0000 | 2058.7712 | 4692.2379 | Straight |
| 98.0210 | 2056.2250E | 4699.8440N | End |

Job : e1333

Road number : 2

Coordinates along road centre line at 10 metre intervals

| Metrage | Easting | Northing | Curve/Straight |
|---|---|---|---|
| 0.0000 | 2072.9312E | 4649.9387N | Start |
| 10.0000 | 2082.3928 | 4653.1759 | Straight |
| 20.0000 | 2091.8543 | 4656.4131 | Straight |
| 23.4537 | 2095.1280E | 4657.5311N | Tangent Point |
| 30.0000 | 2101.1597 | 4660.0490 | Curve Radius 50.000 |
| 33.7285 | 2104.4348E | 4661.8292N | Tangent Point |
| 40.0000 | 2109.8895 | 4665.0275 | Straight |
| 50.0000 | 2118.4314 | 4670.1272 | Straight |
| 55.6833 | 2123.3201E | 4673.0255N | Tangent Point |
| 60.0000 | 2127.1237 | 4675.0640 | Curve Radius 50.000 |
| 66.5217 | 2133.1671E | 4677.5030N | Tangent Point |
| 70.0000 | 2136.4705 | 4678.5919 | Straight |
| 80.0000 | 2145.9680 | 4681.7222 | Straight |
| 90.0000 | 2155.4654 | 4684.8525 | Straight |
| 96.9593 | 2162.0750E | 4687.0310N | End |

| STATION | EASTINGS | NORTHINGS | RADIUS | TANGENT LENGTH | ARC LENGTH | INT. ANGLE |
|---|---|---|---|---|---|---|
| I.P. 1.0 | 2089.569 | 4607.908 | | | | |
| I.P. 1.1 | 2084.875 | 4614.260 | 49.942 | 7.890 | 15.651 | 17-57-19 |
| C.P. 1.1 | 2129.729 | 4637.596 | | | | |
| I.P. 1.2 | 2056.225 | 4699.844 | | | | |
| I.P. 2.0 | 2072.931 | 4649.939 | | | | |
| I.P. 2.1 | 2100.000 | 4659.200 | 50.000 | 5.156 | 10.275 | 11-46-27 |
| C.P. 2.1 | 2078.936 | 4704.839 | | | | |
| I.P. 2.2 | 2128.000 | 4675.800 | 50.000 | 5.441 | 10.838 | 12-25-11 |
| C.P. 2.2 | 2148.819 | 4630.016 | | | | |
| I.P. 2.3 | 2162.075 | 4687.031 | | | | |
| I.P. 3.0 | 2066.582 | 4668.905 | | | | |
| I.P. 3.1 | 2032.849 | 4657.363 | 50.000 | 6.882 | 13.678 | 15-40-27 |
| C.P. 3.1 | 2055.547 | 4612.284 | | | | |
| I.P. 3.2 | 1989.500 | 4627.500 | 100.000 | 6.960 | 13.898 | 07-57-47 |
| C.P. 3.2 | 1938.501 | 4713.795 | | | | |
| I.P. 3.3 | 1950.691 | 4608.066 | 200.000 | 4.518 | 9.034 | 02-35-17 |
| C.P. 3.3 | 1865.179 | 4788.920 | | | | |
| I.P. 3.4 | 1922.777 | 4595.631 | | | | |

Channel line
Co-ord
20.78.441E
4654.832N

Channel line
Co-ord
2080.240E
4645.458N

1:200

Job : e1333

Road number : 3

Coordinates along road centre line at 10 metre intervals

| Metrage | Easting | Northing | Curve/Straight |
|---|---|---|---|
| 0.0000 | 2065.5821E | 4668.9050N | Start |
| 10.0000 | 2057.1205 | 4665.6677 | Straight |
| 20.0000 | 2047.6591 | 4662.4304 | Straight |
| 28.7710 | 2039.3605E | 4659.5909N | Tangent Point |
| 30.0000 | 2038.2026 | 4659.1788 | Curve Radius 50.000 |
| 40.0000 | 2029.2317 | 4654.7982 | Curve |
| 42.4492 | 2027.1816E | 4653.4587N | Tangent Point |
| 50.0000 | 2020.9634 | 4649.1751 | Straight |
| 60.0000 | 2012.7284 | 4643.5920 | Straight |
| 70.0000 | 2004.4934 | 4637.8089 | Straight |
| 80.0000 | 1996.2583 | 4632.1558 | Straight |
| 81.2465 | 1995.2318E | 4631.4686N | Tangent Point |
| 90.0000 | 1987.8153 | 4626.0043 | Curve Radius 100.000 |
| 95.1446 | 1983.2766E | 4624.3835N | Tangent Point |
| 100.0000 | 1978.9350 | 4622.2895 | Straight |
| 110.0000 | 1969.9934 | 4617.7319 | Straight |
| 120.0000 | 1961.0519 | 4613.2543 | Straight |
| 127.0595 | 1954.7306E | 4610.0889N | Tangent Point |
| 130.0000 | 1952.1008 | 4608.7960 | Curve Radius 200.000 |
| 136.1035 | 1946.5641E | 4606.2276N | Tangent Point |
| 140.0000 | 1943.0050 | 4604.6421 | Straight |
| 150.0000 | 1933.8703 | 4600.5728 | Straight |
| 160.0000 | 1924.7357 | 4596.5036 | Straight |
| 162.1443 | 1922.7770E | 4595.6310N | End |

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | Spot levels added to turning head | 21.3.01 | AJMB | AJMB |
| B | Road 3 and turning head detail added. | 22.4.02 | WD | AJMB |
| C | Levels/co-ords added to road 2 at junction with road 1 | 30.4.02 | AJMB | AJMB |
| D | Roads 4 & 5 added | 23.5.02 | WD | WD |

Written dimensions to be taken. Do not scale off the drawing.

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WORMALD, BURROWS PARTNERSHIP

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


DETERMINED PLAN

Project

Proposed Development at:-
Backgate - Cowbit

Drawing Description

Horizontal Alignment

24 JUL 2002

0858/02

Client

Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire
PE11 2BS

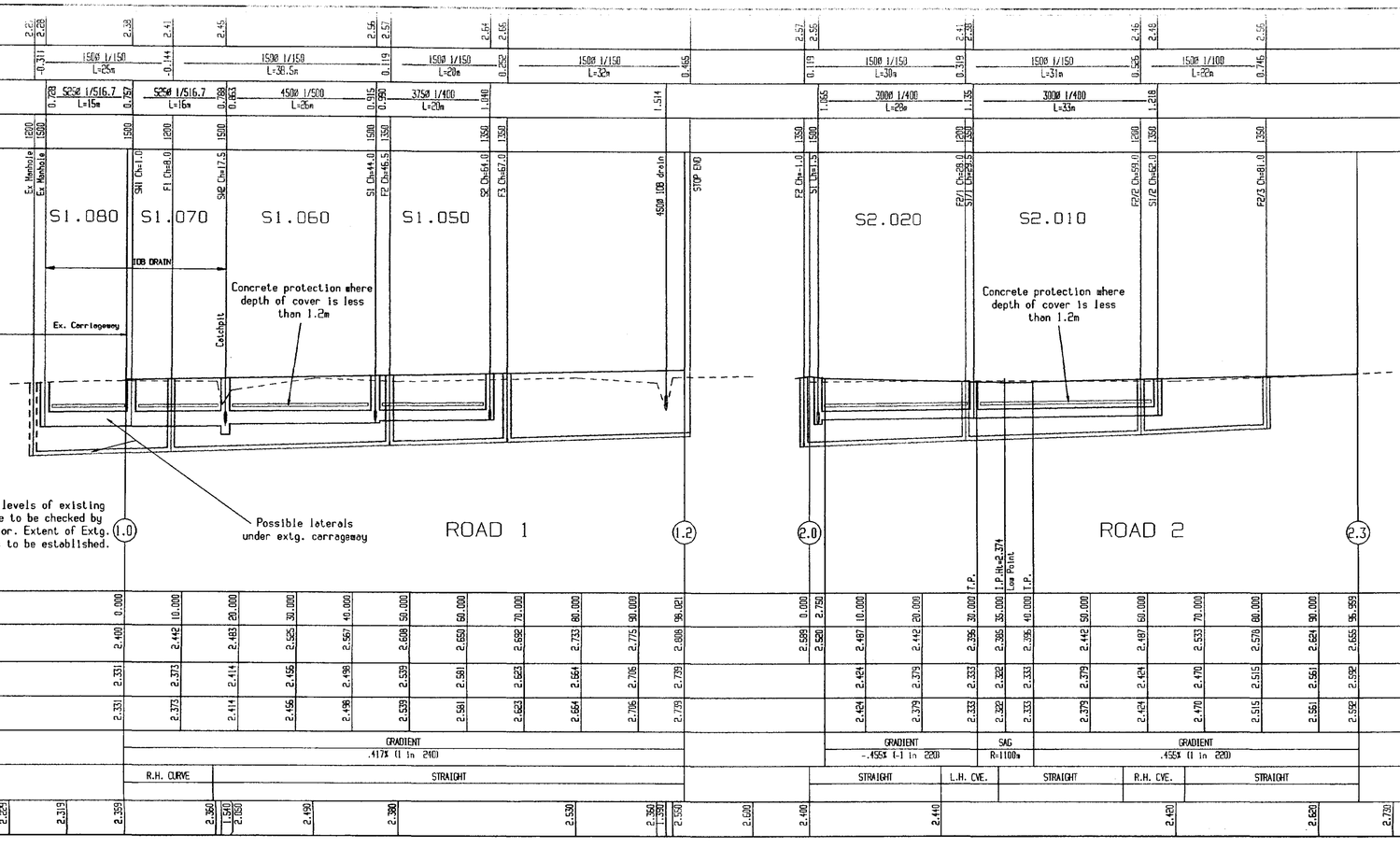
Drawing Number

E1333/1/D

Drawn By WD
Date 14.3.01

Scale 1:500

Architect




1. All foul water sewers shall be Extra Strength Clayware to BS 65.
2. All 150-300mm surface water sewers shall be Extra Strength Clayware to BS 65. All surface water sewers of 375mm or greater shall be Concrete Class M to BS 5911.
3. All pipe bedding shall be Class S, 6FN 2.0, unless otherwise stated.

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | Gradient between SW2 - ExSW amended. | 9.4.01 | AJMB | AJMB |

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Biggleswade, Beds SG18 8AX, U.K. Fax 315434


Project

Proposed Development at:-
Backgate- Cowbit

Planning Department
24 JUL 2002
Ref 0858/02

Drawing Description

Longitudinal Sections
Phase 1

DETERMINED PLAN

Client

Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire
PE11 2BS

Drawing Number

E1333/3/A

Drawn By WD Date 15.3.01

Scale 1:100 Vert 1:500 Horz

Checked By AJMB Date 20.3.01

Architect

EAQA REGISTERED CONTRACT ISO 9001:1994 CERT NO.99 UKAS QUALITY ASSURANCE 002

Recommend. That no building located nearer then 2 metres from edge of gravel to 450ø Perforated Pipe or 4 metres from centre of pipeline whichever is the greater

450ømm Perforated Pipe set in gravel. See detail

450ømm Perforated Pipe set in gravel. See detail Drg. No E1333/11

450ømm Perforated Pipes set in gravel. See detail Drg. No E1333/11

450ømm Perforated Pipe set in gravel. See detail

450ømm Perforated Pipe set in gravel. See detail

450ømm Perforated Pipe set in gravel. See detail

Exact line & level to be agreed on Site with I D B

Ex. I D B Drain

CL 2.30
IL 1.027

P.O.S

0.1201Ha
0.2968Ac

0.2016Ha
0.4982Ac

0.1257Ha
0.3107Ac

0.1293Ha
0.3170Ac

0.5801Ha
1.4333Ac

0.1422Ha
0.3514Ac

0.1512Ha
0.6219Ac

0.2908Ha
0.7185Ac

0.3590Ha
0.9118Ac

0.2592Ha
0.6405Ac

0.8495Ha
2.1227Ac

0.2309Ha
0.5705Ac

Retractable Bollards

3m wide Emergency Access & Pedestrian Link

Roy Roberts F.Inst.C.E.S.
Land Surveyor

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | Drainage areas revised | 20.5.02 | WD | WD |

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


Project

Proposed Development at:-
Backgate- Cowbit

Drawing Description

Drainage Areas Plan

24 JUL 2002
0858102

Client

Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire
PE11 2BS

Drawing Number

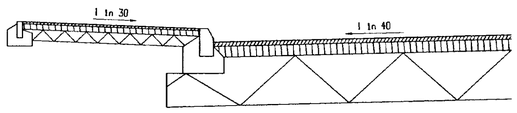
E1333/4

Drawn By
MPW
Date 14.3.01

Scale
1:500

Checked By
WD
Date 14.3.01

Architect

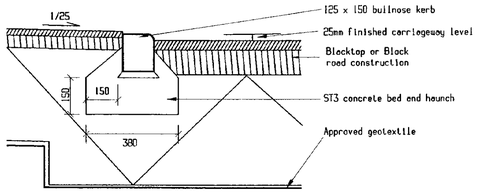



BLACKTOP CARRIAGEWAY

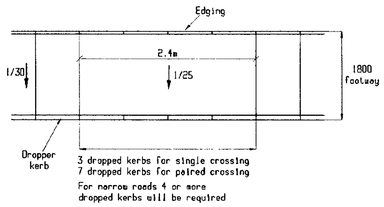
FOOTWAY CONSTRUCTION

WEARING COURSE - 25mm of 6mm nominal DBM Clause 9.4
BASE COURSE - 50mm of 20mm nominal DBM Clause 9.1
SUB BASE - 100mm of Type 1 material Clause 1.2

## Typical Cross Section




## SECTION




## PLAN

# Vehicle Crossing (D.B.M.)

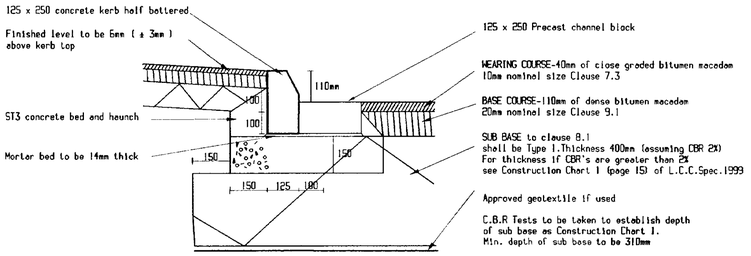
VEHICLE CROSSING CONSTRUCTION

WEARING COURSE - 25mm of 6mm nominal DBM Clause 9.4
BASE COURSE - 100mm of 20mm nominal DBM Clause 9.1
SUB BASE - 150mm of Type 1 material Clause 1.2

Where CBR less than 2% on approved Geosynthetic layer to Clause 6.7 will be required

EMERGENCY ACCESS/PEDESTRIAN LINK CONSTRUCTION

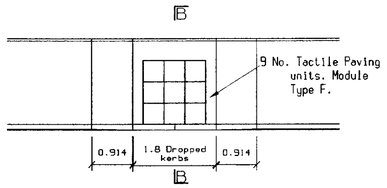
TO BE AS VEHICLE CROSSING SPECIFICATION WITH FOOTPATH EDGINGS BOTH SIDES. 15MM UPSTAND ON LOW SIDE. CROSSFALL TO BE 1 IN 40.



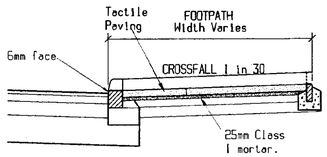

## Carriageway and Kerb Detail- up to 5.5m (construction chart 1) (Blacktop Construction)

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

Channel blocks will be provided where the carriageway longitudinal gradient is less than 1 in 150 & the channel blocks will need to be laid to 'false falls' where the longitudinal gradient is less than 1 in 250.



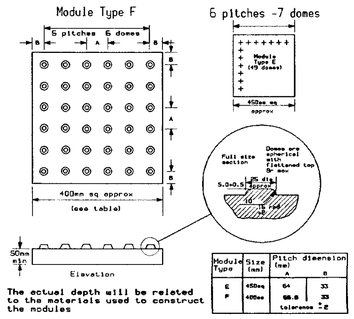

FOOTPATH CONSTRUCTION :- As footway detail except that tactile paving set into 50mm lean concrete under 25mm Class 1 mortar.




Section B-B

## PRAM CROSSING DETAILS

Tactile Surface Pattern for use at Pram Crossings



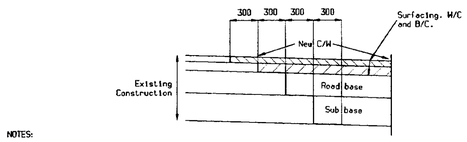

| Module Type | Size (mm) | Pitch dimension (mm) A | B |
|---|---|---|---|
| E | 450mm | 64 | 33 |
| F | 400mm | 66.8 | 33 |
| | | tolerance ±2 | |

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

NOTES 1) Colour Buff or contrasting colour to be agreed with Lincs CC

NOTES:

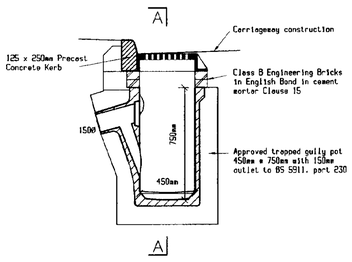
1) Tactile surface shall be in accordance with DETR Guidance on the use of Tactile Paving Surfaces dated Nov.1998
2) Paving shall be cut as necessary to kerb radius if required.



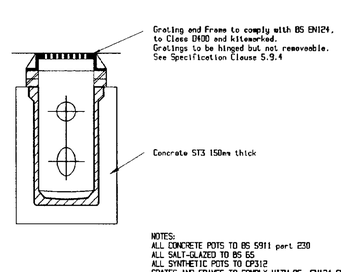

NOTES:

1) The horizontal faces to be sprayed with bitumen emulsion, class K1-40 at + 0.1 l/sq.m.
2) The vertical faces to the base course and road base to be coated with hot bitumen.
3) The vertical face to the wearing course to be coated with asphaltic cement.
4) All joints to be saw cut.

## TIE IN DETAIL with existing Curlew Drive




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

ALL WORKS TO BE CONSTRUCTED TO LATEST L.C.C SPEC.DATED 1999 TO WHICH THE CLAUSE NUMBERS ON THIS DRAWING REFER.

ALL HIGHWAY SIGNING/MARKINGS TO BE AGREED ON SITE BY DIVISIONAL HIGHWAYS MANAGER.

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | TIE IN DETAIL AND PEDESTRIAN LINK CONSTRUCTION ADDED. | 22.3.01 | AJMB | AJMB |

Written dimensions to be taken. Do not scale off the drawing.
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Civil Engineering Consultants
12a & 14a Hitchin Street, Tel 01767 317244
Biggleswade, Beds SG18 8AX, U.K. Fax 315434


Project
Proposed Development at Backgate, Cowbit


DEVELOPMENT CONTROL PLAN
Development
24 JUL 2002
0858/02


Drawing Description
Standard Road Details

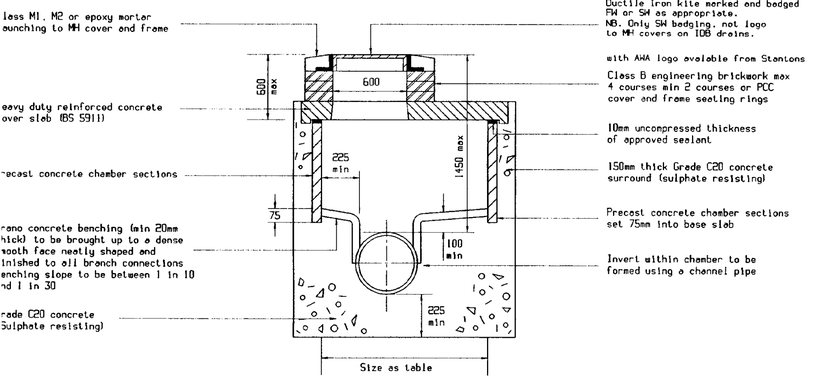
Client
Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

Drawing Number E1333/5/A

Drawn By WJD
Date 15.3.01

Scale NTS

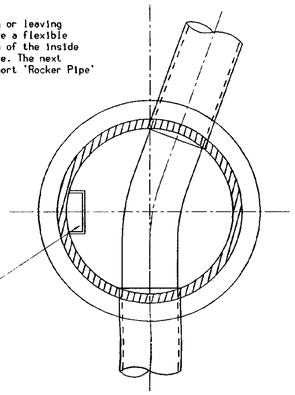
# MANHOLE TYPE X



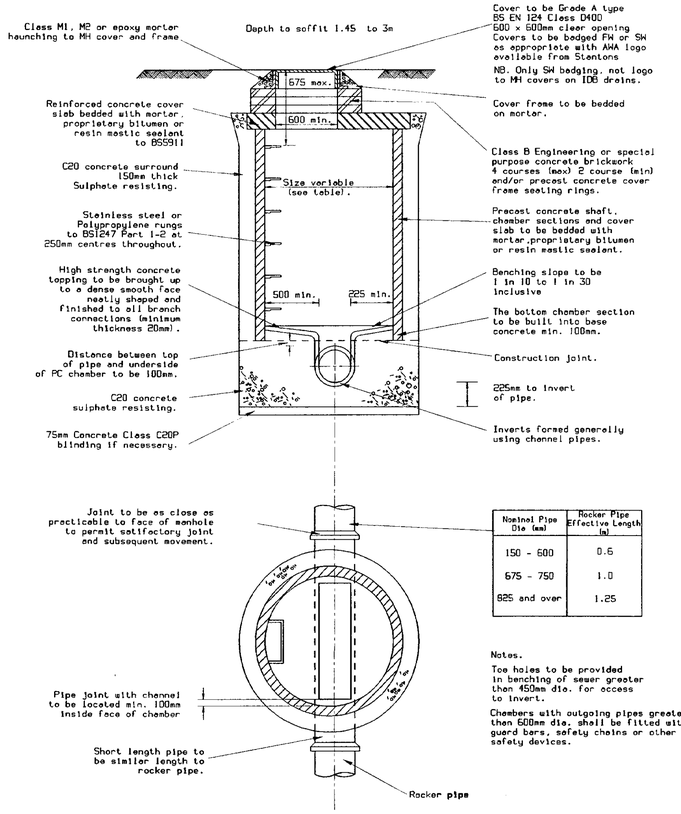

All pipes entering or leaving manholes shall have a flexible joint within 600mm of the inside face of the manhole. The next pipe shall be a short 'Rocker Pipe' 600mm long

Shaft Diameters

| Dia of largest pipe in MH (mm) | Int. dia of MH (mm) |
|---|---|
| up to 450 | 1350 |




# TYPE B MANHOLE




| Nominal Pipe Dia (mm) | Rocker Pipe Effective Length (m) |
|---|---|
| 150 - 600 | 0.6 |
| 675 - 750 | 1.0 |
| 825 and over | 1.25 |

Notes.

Toe holes to be provided in benching of sewer greater than 450mm dia. for access to invert.

Chambers with outgoing pipes greater than 600mm dia. shall be fitted with guard bars, safety chains or other safety devices.

CLAUSE 4.6.6 PIPES AND JOINTS ADJACENT TO STRUCTURES

1. A flexible joint shall be provided as close as is feasible to the outside face of any structure into which a pipe is built, compatible with the satisfactory completion and subsequent movement of the joint.
2. The length of the next pipe ( rocker pipe ) away from the structure shall be shown as in the Table below.

| Nominal pipe dia. ( mm ) | Rocker Pipe Effective Length ( m ) |
|---|---|
| 150 - 600 | 0.6 |
| 675 - 750 | 1.0 |
| 825 and over | 1.25 |

SPECIFICATION CLAUSES TAKEN FROM 'SEWERS FOR ADOPTION' 4TH EDITION.

CLAUSE 4.2.32 MANHOLE COVERS AND FRAMES

1. Manhole covers and frames shall comply with the relevant provisions of BS EN 124 and they shall be of a non-rocking design which does not rely on the use of cushion inserts.
2. Class D 400, 600mm Sq.covers shall be used in carriageways of roads ( including pedestrian streets ), hard shoulders and parking areas used by all types of road vehicles. Class B 125 shall be used in footways, pedestrian areas and comparable locations.
3. All manhole covers shall be the non-ventilating type and shall have closed keyways.

NOTE: -

TRENCH BACKFILL

1. Where the soffit of the Pipe is less than 0.5m below formation - Backfill to formation with Class E concrete.
2. Where the soffit of the Pipe is between 0.5m & 1.0m below formation - Backfill to formation with Type 1 Sub-base (allow for granular bedding material 150mm above crown of Pipe).
3. Where the soffit of the Pipe is greater than 1.0m below formation - backfill with suitable fill.

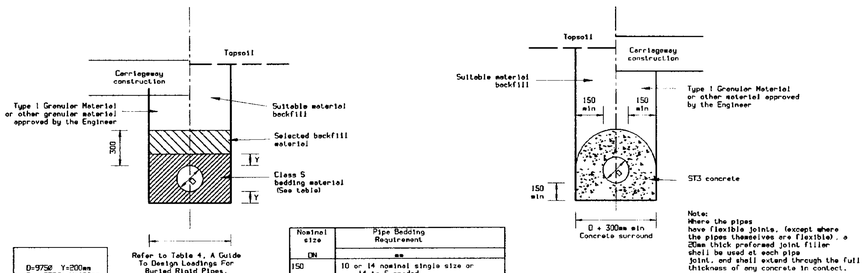
| MANHOLE SCHEDULE FOR MINIMUM DIAMETER | | | | | |
|---|---|---|---|---|---|
| Diameter of largest pipe | Diameter of chamber | Diameter of largest pipe | Diameter of chamber | Diameter of largest pipe | Diameter of chamber |
| 150 | 1200 | 450 | 1350 | 750 | 1800 |
| 225 | 1200 | 525 | 1500 | 825 | 1680 |
| 300 | 1200 | 600 | 1500 | 900 - 975 | 1800 |
| 375 | 1350 | 675 | 1500 | > 975 | 2400 |

GENERAL NOTE: -
The details on this drawing are to comply with the Water Authorities Association Design Guide - Sewers For Adoption. Dated 1995, 4th Edition.

All work to comply with 'Sewers for Adoption - 4th Edition' and to the document 'additions / deletions to sewers for adoption 4th edition' produced by Anglian Water Services Ltd.

NOTES: -

1. The centre of any manhole is not necessarily co-incidental with the centre line of the main pipe.
2. Positioning of the manhole covers and step irons to be directed on site.
3. Construction joints in the concrete surround must not coincide with the joints in the precast concrete chamber rings.
4. The benching is to be formed to direct flow from side connections into the main flow.
5. Sulphate resisting cement is required in all concrete products used for Section 104 works on the site.
6. All lateral crossings to twin sewers shall be to the bedding and backfill standards described on the drawings, and protected as necessary. The high level sewer shall not be undermined by the low level lateral and connection. All end caps to laterals shall be painted 'FW' or 'SW' as appropriate.

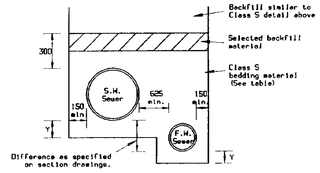



| Nominal size | Pipe Bedding Requirement |
|---|---|
| DN | ** |
| 150 | 10. or 14 nominal single size or 14 to 5 graded |
| 225 to 525 | 10. 14 or 20 nominal single size or 14 to 5 graded or 20 to 5 graded |
| 600 and above | 10. 14, 20 or 40 nominal single size crushed rock or 14 to 5 graded or 20 to 5 graded or 40 to 5 graded |

Class S Bedding
( Fm. - 2.2 )

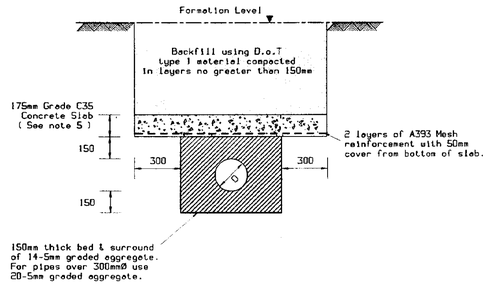



Concrete Bed and Surround
Gully Connections Only




Dual Trench Detail

# PIPE BEDDING DETAILS




CONCRETE PROTECTION DETAIL

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | step irons added to type x manhole | 9.04.01 | MPN | AJMB |

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.


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


Project

Proposed Development at:-
Backgate - Cowbit

Drawing Description

Standard Drainage Details

DETAIL NOT TO SCALE PLAN

Client

Swallow Homes Ltd
West Bitter Avenue
Spalding
Lincolnshire PE11 2BS

SHDC
Development
24 JUL 2002

Drawing Number

E1333/6/A

Drawn By
WD
Date 15.3.01

Scale
Various

Architect
ROBERT DOUGHTY CONSULTANCY
0858102

Checked By
AJMB
Date 19.3.01

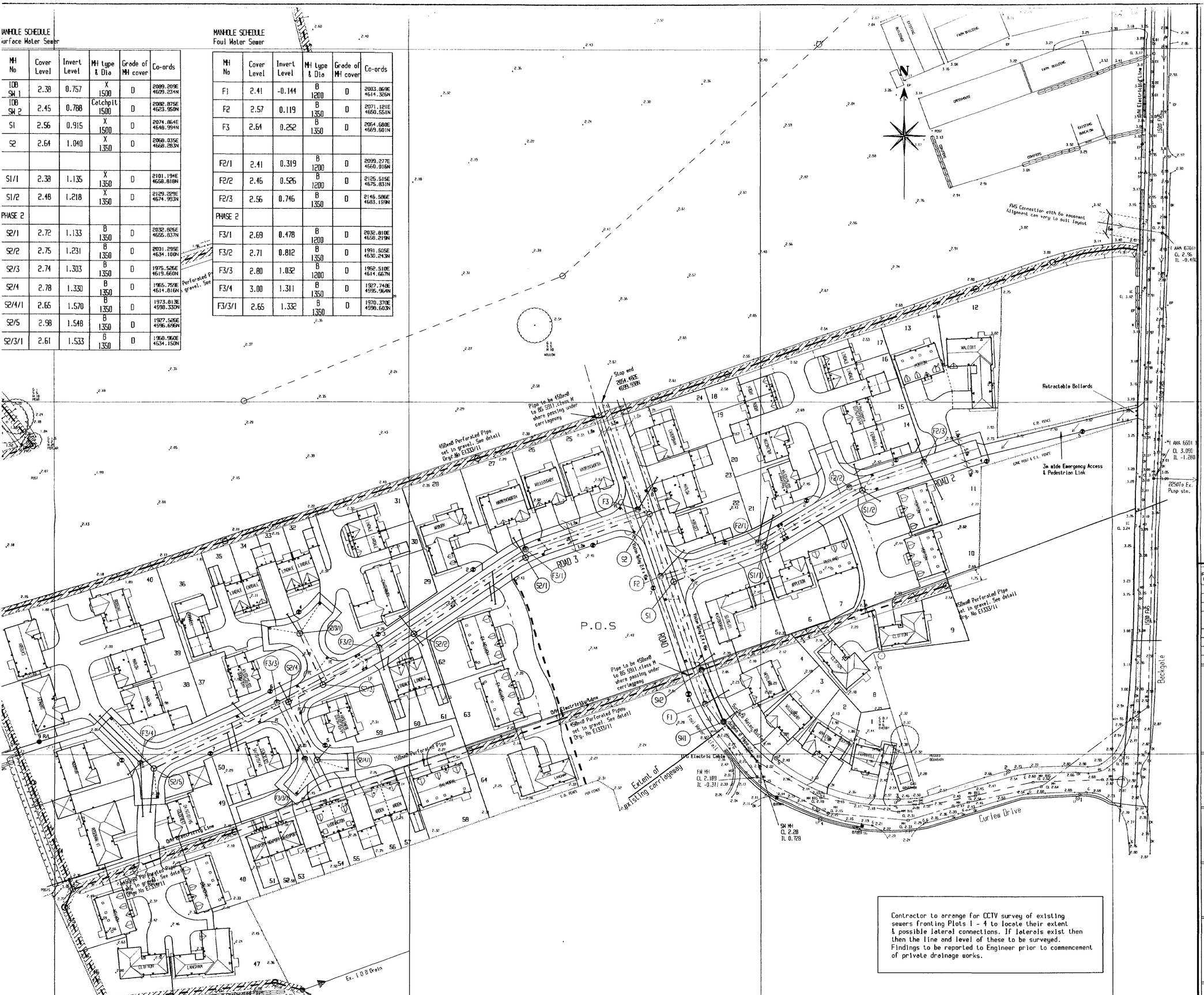
EAQA

## MANHOLE SCHEDULE
Surface Water Sewer

| MH No | Cover Level | Invert Level | MH type & Dia | Grade of MH cover | Co-ords |
|---|---|---|---|---|---|
| IDB SW 1 | 2.38 | 0.757 | X 1500 | D | 2089.209E 4609.234N |
| IDB SW 2 | 2.45 | 0.788 | Catchpit 1500 | D | 2082.875E 4623.950N |
| S1 | 2.56 | 0.915 | X 1500 | D | 2074.864E 4648.994N |
| S2 | 2.64 | 1.040 | X 1350 | D | 2058.035E 4668.283N |
| | | | | | |
| S1/1 | 2.38 | 1.135 | X 1350 | D | 2101.194E 4658.818N |
| S1/2 | 2.48 | 1.218 | X 1350 | D | 2129.329E 4674.993N |
| PHASE 2 | | | | | |
| S2/1 | 2.72 | 1.133 | B 1350 | D | 2032.826E 4655.857N |
| S2/2 | 2.75 | 1.231 | B 1350 | D | 2001.295E 4634.100N |
| S2/3 | 2.74 | 1.303 | B 1350 | D | 1975.526E 4619.660N |
| S2/4 | 2.78 | 1.330 | B 1350 | D | 1955.759E 4614.816N |
| S2/4/1 | 2.65 | 1.570 | B 1350 | D | 1973.813E 4598.330N |
| S2/5 | 2.98 | 1.548 | B 1350 | D | 1927.526E 4596.696N |
| S2/3/1 | 2.61 | 1.533 | B 1350 | D | 1958.960E 4634.150N |

## MANHOLE SCHEDULE
Foul Water Sewer

| MH No | Cover Level | Invert Level | MH type & Dia | Grade of MH cover | Co-ords |
|---|---|---|---|---|---|
| F1 | 2.41 | -0.144 | B 1200 | D | 2083.869E 4614.326N |
| F2 | 2.57 | 0.119 | B 1350 | D | 2071.121E 4650.551N |
| F3 | 2.64 | 0.252 | B 1350 | D | 2054.680E 4669.801N |
| | | | | | |
| F2/1 | 2.41 | 0.319 | B 1200 | D | 2099.277E 4660.016N |
| F2/2 | 2.46 | 0.526 | B 1200 | D | 2125.515E 4675.831N |
| F2/3 | 2.56 | 0.746 | B 1350 | D | 2146.586E 4683.159N |
| PHASE 2 | | | | | |
| F3/1 | 2.69 | 0.478 | B 1200 | D | 2032.810E 4658.219N |
| F3/2 | 2.71 | 0.812 | B 1350 | D | 1991.505E 4630.243N |
| F3/3 | 2.80 | 1.032 | B 1200 | D | 1952.510E 4614.667N |
| F3/4 | 3.00 | 1.311 | B 1350 | D | 1927.748E 4595.964N |
| F3/3/1 | 2.65 | 1.332 | B 1350 | D | 1970.370E 4598.603N |




KEY

- Proposed SWS (Section 104)
- Proposed FWS (Section 104)
- Proposed IDB drain
- Proposed Pram Crossing ( all require tactile paving)
- Proposed Gully
- Proposed Street Lighting
  5m column type 3M10 to APP 19/3 with post top mounted lantern to APP 14/2 (Residium FGS 224)
- 6m column type 3M10 with post top mounted lantern to APP 14/2 Sheet 2 (WRTL Pathfinder 42M or equivalent)

Existing Services

- Water
- BT
- Electricity

Routes of existing plant are taken from record drawings and exact location is to be verified on site in conjunction with statutory undertakings before works commence.

ALL WORKS TO BE CONSTRUCTED TO LATEST L.C.C SPEC.DATED 1999 TO WHICH THE CLAUSE NUMBERS ON THIS DRAWING REFER.

ALL HIGHWAY SIGNING/MARKINGS TO BE AGREED ON SITE BY DIVISIONAL HIGHWAYS MANAGER.

| Rev. No. | REVISION | Date | Drawn By | Checked By |
|---|---|---|---|---|
| A | Emergency access/pedestrian link added | 22.3.01 | AJMB | AJMB |
| B | Street lighting scheme confirmed.plots 1-11 revised | 24.4.01 | AJMB | AJMB |
| C | Gullies added to road 3. Manhole schedule updated | 23/4/02 | MPW | AJMB |
| D | Gully locations revised at junction of road 2 with road 1.Stop-end from FS co-ord revised | 30.4.02 | AJMB | AJMB |
| E | Phase 2 added, manholes S2/4,S2/4/1,S2/5,F3/3/1 added | 17.5.02 | WD | WD |
| F | Plots 45,46,47 rear boundary fence confirmed | 5.6.02 | WD | WD |
| G | Phase 2 lighting and specification added | 4.7.02 | AJMB | AJMB |
| | | | | |

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 relevent 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
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Tel 01767 317244
Fax 315434


Project
Proposed Development at:-
Backgate - Cowbit

Drawing Description
Adoptable Roads & Sewers
Phases 1 & 2

Planning & Development
24 JUL 2002
Ref 0858/02

Client
Swallow Homes Ltd
West Elloe Avenue
Spalding
Lincolnshire PE11 2BS

Drawing Number
E1333/2/G

Drawn By WD Date Feb.'01

Scale 1:500

Architect

Checked By

PROVISION FOR FUTURE DEVELOPMENT

COTONEASTER COUSSACUS DECORUS AT DENSITY OF 3/METRE

EXISTING FENCE REPLACED BY 1.8m CLOSE BOARDED FENCE WITH 0.3m TRELLIS

1.8m CLOSE BOARDED FENCE TO NORTH SIDE OF EMERGENCY LINK AND 1.8m CHAIN LINK FENCE TO SOUTHERD SIDE

RETRACTABLE BOLLARDS

3M WIDE EMERGENCY ACCESS AND PEDESTRIAN LINK

GREEN P.O.S

BERBERIS JULIANAE AT 1/m

LONICERA NITIDA BAGGESENS GOLD AT DENSITY 6/m

BERBERIS STENOPHYLLA AT DENSITY 3/m

CHAENOMELES SARGNICA AT DENSITY OF 1/METRE

LAVANDULA AUGUSTIFOLIA AT DENSITY 1/m

COTONEASTER CONSPICUUS DECORUS AT DENSITY OF 3/

ELEAGNUS COMMUTATA AT DENSITY OF 3/METRE

1.5m x 2.4m WASHLINE SPANS

VIBURNUM TINUS AT DENSITY OF 1/m

PRUNUS LUSITANICA AT DENSITY OF 1/m

LAVANDULA AUGUSTIFOLIA AT DENSITY 1/m

COTONEASTER CONSPICUUS DECORUS AT DENSITY OF 3/METRE

LONICERA NITIDA BAGGESENS GOLD AT DENSITY 6/m

LONICERA NITIDA BAGGESENS GOLD AT DENSITY 6/m

COTONEASTER CONSPICUUS DECORUS AT DENSITY OF 3/

VIBURNUM TINUS AT DENSITY OF 1/m

EXISTING GAS GOVERNOR

BACKGATE

CURLEW DRIVE

EMSTHORPE I.C.

◆ Micromark Sentinel bollard in a black finish to private drives.

**HOUSE TYPE SCHEDULE – PHASE 3**

| | | |
|---|---|---|
| 5 BED HOUSES | | |
| CANTERBURY | | 29 |
| | TOTAL | 1 |
| 4 BED HOUSES | | |
| CROMWELL | | 36 |
| HASLEWOOD | | 37 |
| MARLOW | | 38, 39 |
| ROSSINI | | 40 |
| GOLDCREST | | 49, 50 |
| | TOTAL | 7 |
| 3 BED HOUSES | | |
| LINDALE | | 31, 35, 60 |
| CARDALE | | 30, 34, 61 |
| ARDEN | | 32, 33, 56, 57 |
| LUDDINGTON | | 54, 55 |
| HASLEMERE | | 59 |
| | TOTAL | 13 |
| 2 BED HOUSES | | |
| NEWPORT | | 52 |
| DAVENPORT | | 51, 53 |
| | TOTAL | 3 |
| 3 BED CHALET | | |
| MORTON | | 45 |
| BALMORAL | | 48, 58 |
| | TOTAL | 3 |
| 3 BED BUNGALOW | | |
| CATESBY | | 41 |
| DARNLEY | | 42 |
| ROSEBANK | | 44 |
| LANGHAM | | 47 |
| | TOTAL | 4 |
| 2 BED BUNGALOW | | |
| BRANDON | | 43 |
| CLIFTON | | 46 |
| | TOTAL | 2 |
| | GRAND TOTAL | 33 |

**HOUSE TYPE SCHEDULE – PHASE 2**

| | | |
|---|---|---|
| 5 BED HOUSES | | |
| WOBURN | | 28 |
| | TOTAL | 1 |
| 4 BED HOUSES | | |
| HARRINGWORTH | | 25, 27 |
| WILLOUGHBY | | 26 |
| | TOTAL | 3 |
| 3 BED CHALET | | |
| BALMORAL | | 62, 63 |
| | TOTAL | 2 |
| 3 BED BUNGALOW | | |
| LANGHAM | | 64 |
| | TOTAL | 1 |
| | GRAND TOTAL | 7 |

**HOUSE TYPE SCHEDULE – PHASE 1**

| | | |
|---|---|---|
| 5 BED HOUSES | | |
| EASTBOURNE | | 5 |
| | TOTAL | 1 |
| 4 BED HOUSES | | |
| APPLETON | | 6, 2 |
| CAVERSHAM | | 24 |
| FERNHILL | | 1, 14 |
| WESTLAND | | 4 |
| WILLOUGHBY | | 3 |
| MARLOW | | 23 |
| MORCOTT | | 22 |
| | TOTAL | 9 |
| 3 BED HOUSES | | |
| ARDEN | | 18, 19 |
| ARLINGTON | | 20 |
| HASLEMERE | | 15,21 |
| LINDALE | | 16 |
| CARDALE | | 17 |
| | TOTAL | 7 |
| 3 BED CHALET | | |
| MORTON | | 10, 11, 13 |
| RUTLAND | | 7 |
| | TOTAL | 4 |
| 3 BED BUNGALOW | | |
| WORCESTER | | 12 |
| | TOTAL | 1 |
| 2 BED BUNGALOW | | |
| CLIFTON | | 8, 9 |
| | TOTAL | 2 |

**LEGEND**

- 1.2m High Post & Wire Fence
- 1.2m High Post & Rail Fence
- 1.8m High Timber Boarded Fence
- 1.8m High Timber Panelled Fence
- Denotes Existing Trees & Hedges
- Denotes Indicative Trees & Hedges
- Denotes Existing Trees & Hedges To Be Removed

The conservatory is for planning purposes only, and will not be constructed and included in the sale unless requested as an extra by the purchaser. The design is therefore indicative and may be subject to alteration to suit individual requirements.

SEE SEPERATE DRAWING FOR LANDSCAPING DETAILS

**GENERAL NOTES**

1·80m TO 2·00m STANDARD STOCK TREES.

- Ac ACER COMPESTRE
- Apa ACER PALINUTUM
- Ap ACER PLANTANOIDES
- Bp BETULA PENDULA
- Cb CARPINUS BETULUS
- Mf MALUS FLORIBUNDA
- Pp PRUNUS PADUS 'PLENA'
- Rp ROBINA PSEUDOACACIA 'FRISIA'
- Sa SORBUS AUCUPARIA 'ASPLENIFOLIA'

PLANTING TECHNIQUE FOR STANDARD STOCK TREES :- TREE PITS TO BE 500 DIA X 500 DEEP, BOTTOM OF PIT TO BE BROKEN UP TO DEPTH OF 150. PIT TO BE BACKFILLED WITH 20 LITRES OF A MIXTURE OF EXCAVATED SOIL AND ORGANIC MANURE. TREES TO BE FASTENED BY 1NO TREE STAKE AND 2NO PROPRIETARY TIES.

| | | | |
|---|---|---|---|
| 8/5/02 | PHASE 3 ADDED | E | KB |
| 8/4/02 | SCHEDULES REVISED | D | KB |
| 12/11/01 | HOUSE FENCE AMENDED | C | MC |
| 5/4/01 | AMENDMENTS FOR 9m RDS LIMIT | B | MC |
| 13/2/01 | AMENDMENTS FOR PLANNING | A | MC |
| Date: | Description: | | |

R E V I S I O N S


ALLISON Homes

Allison House
Banbury Close
West Elloe Avenue
Spalding
Lincolnshire
PE11 2BS
Tel: 01775 724701 Fax: 01775 762153
Email: headoffice@allisonhomes.org
Allison Homes Eastern Limited is a Yorkshire Company


DETERMINED PLAN

Project: BACKGATE, COWBIT.

Drawing Title: SITE LAYOUT

24 JUL 2002

Fig: 0858/02

| | |
|---|---|
| Date: 14:12:00 | Scales: 1:500 |
| Reference No: | Drawn: |
| Drawing No: SL/01 | Revision: A B C D E F |


Do not scale directly from this drawing. All discrepancies to be brought to the attention of the above office.