S.H.D.C. PLANNING DEPT
RECEIVED
- 9 SEP 1994

Xpelair DX100WH wall mounted extract fan with VK10 wall vent kit and XRH humidity sensor switch.

MK Electrical surface mounted Sentry consumer unit and enclosure.

Two way push
also serving lo

100 mm diameter at 1 in 80

100 mm diameter at 1 in 80

100 mm dia. at 1 in 60

100 mm diameter at 1 in 80

Rodding eye.

rwp

Access gully

rwp

Dimplex XL24 storage heater.

COMMON ROOM

Bath

SHAVER

Dimplex XL12 storage heater.

KITCHEN

ID 4

HW

ac

ID 3

ID 5

LAUNDRY.

STUDIO

Dimplex XL12 storage heater.

ID 2

ID 6

FLAT

Kitchen layout see Drawing No 4978–29.

ID 1

LOBBY.

rwp

Electricity meter.

Switched fused spur for focal point fire.

Dimplex XL18 storage heater.

Dimplex XL12 storage heater.

For detailed Kitchen layout see Drawing No. 4978–29.

Access gully

100 mm diameter at 1 in 80

rwp

Xpelair DX400 extract fan with VK10 wall vent kit.

Soil vent and waste pipe to terminate in roof void with air admittance valve.

Position of beams supporting first floor separating walls to flats above.

HW

Dimplex XL12 storage heater.

Dimplex XLT6 storage heater.

Flat meter.

Flat meter.

Entrance Hall

ID 7

Bath

ID 12

ac

ID 11

st

ID 13

REFRIG

ID 8

ID 9

ID 14

Kitchen

Lour

BINS
Bins

ID 15

STORE

rwp

Laundry

WM

TD

ID 16

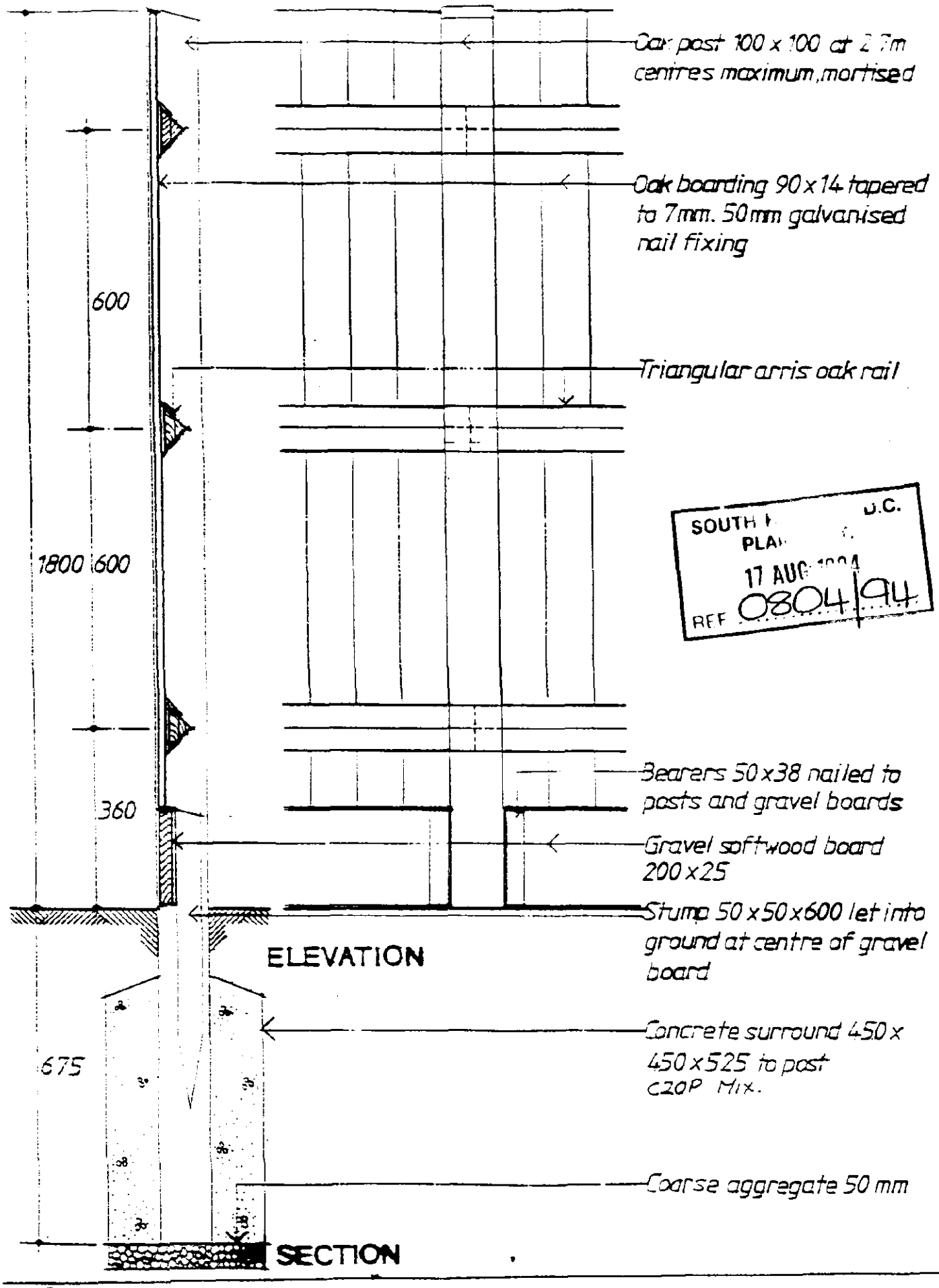
C Landlords meter.

Access gully for w
from sink and wa

Ground Floor Plan

PART ANNOTATED. COPY. DEG.NO 4978-25. 7/SEPT. 94.

100 mm diameter at 1 in 80



SOUTH ... U.C.
PLA...
17 AUG ...
REF 0804/94

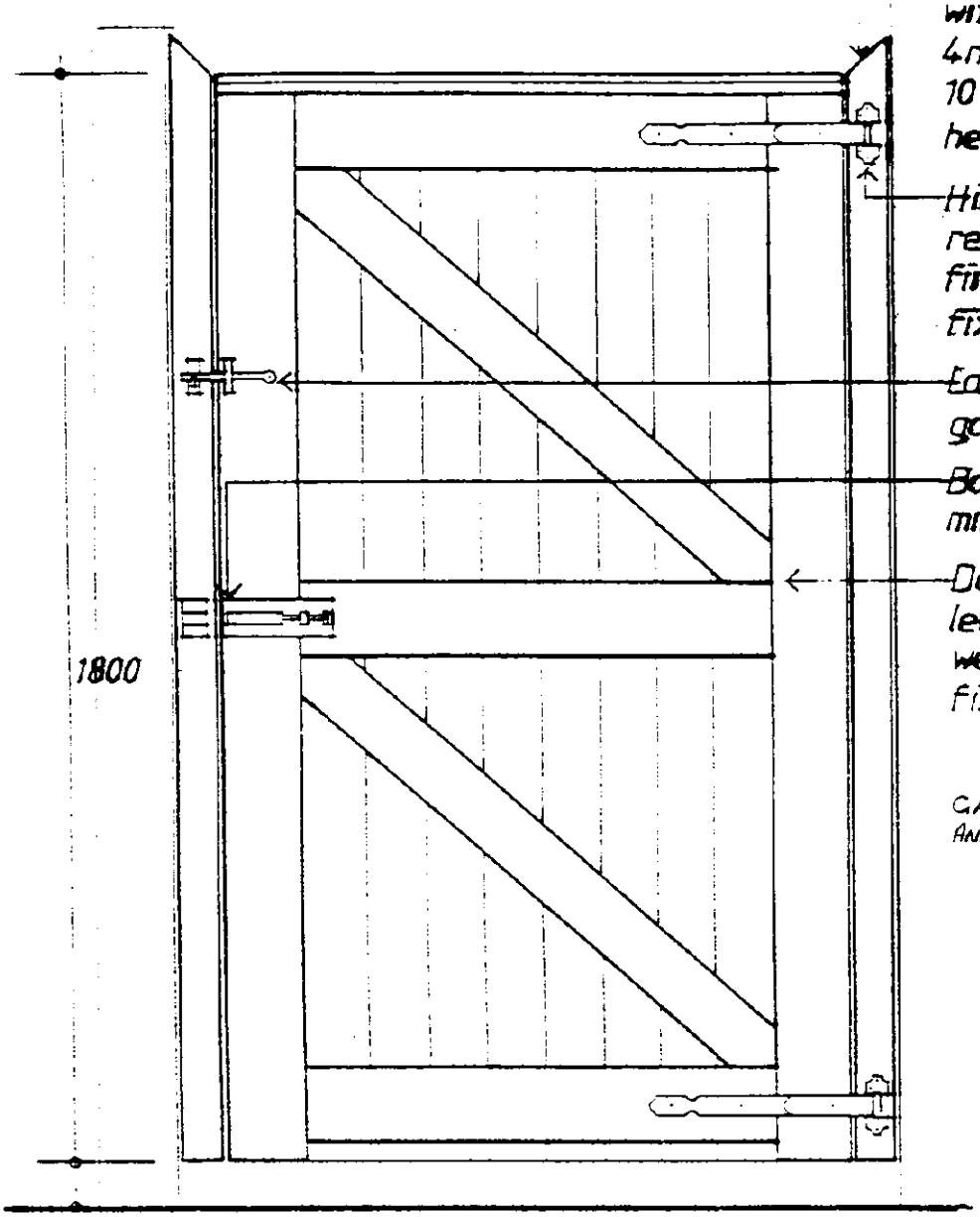
Meldrum Lee & Gillatt
Architects Quantity Surveyors
Management & Cost Consultants

Close boarded timber fence

Date

Drawn by

No. 4978-50



Gate post wrot softwood 44x69 with weathered top end with 4no bolts (expanding) 100 x 10 mm with washers. Bolt heads to be recessed

Hinges 1 pair 300mm light reversible with galvanised finish Sherardized screw fixing 35mm

Latch heavy duty suffolk galvanised finish

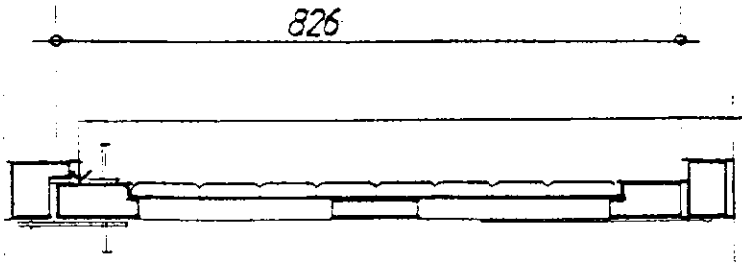
Bolt heavy duty barrel 203 mm galvanised finish

Door softwood framed, ledged & braced with twice weathered hardwood capping fixed with galvanised nails

GATE FRAME FIXED TO FENCE POSTS AND/OR WALL DEPENDING ON POSITION.

SOUTH ... D.C.
PLA... r.
17 AUG 1994
REF 0804/94

ELEVATION



Gate stop softwood 25 x 25 35mm sherardized screw fixing at 450 centres

Meldrum Lee & Gillatt
Architects Quantity Surveyors
Management & Cost Consultants

Timber matchboard single gate
ARTHURS AVENUE HOLBEACH

Date

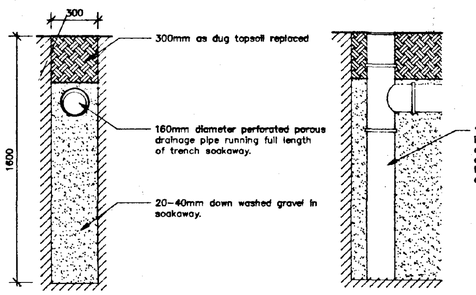
Drawn by

No. 4978-50

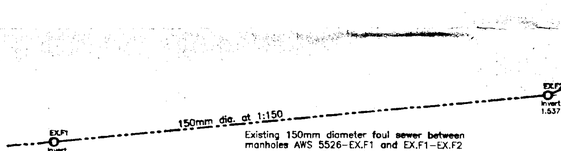
Scale 1:10

Checked by

ADMEL P/4/813

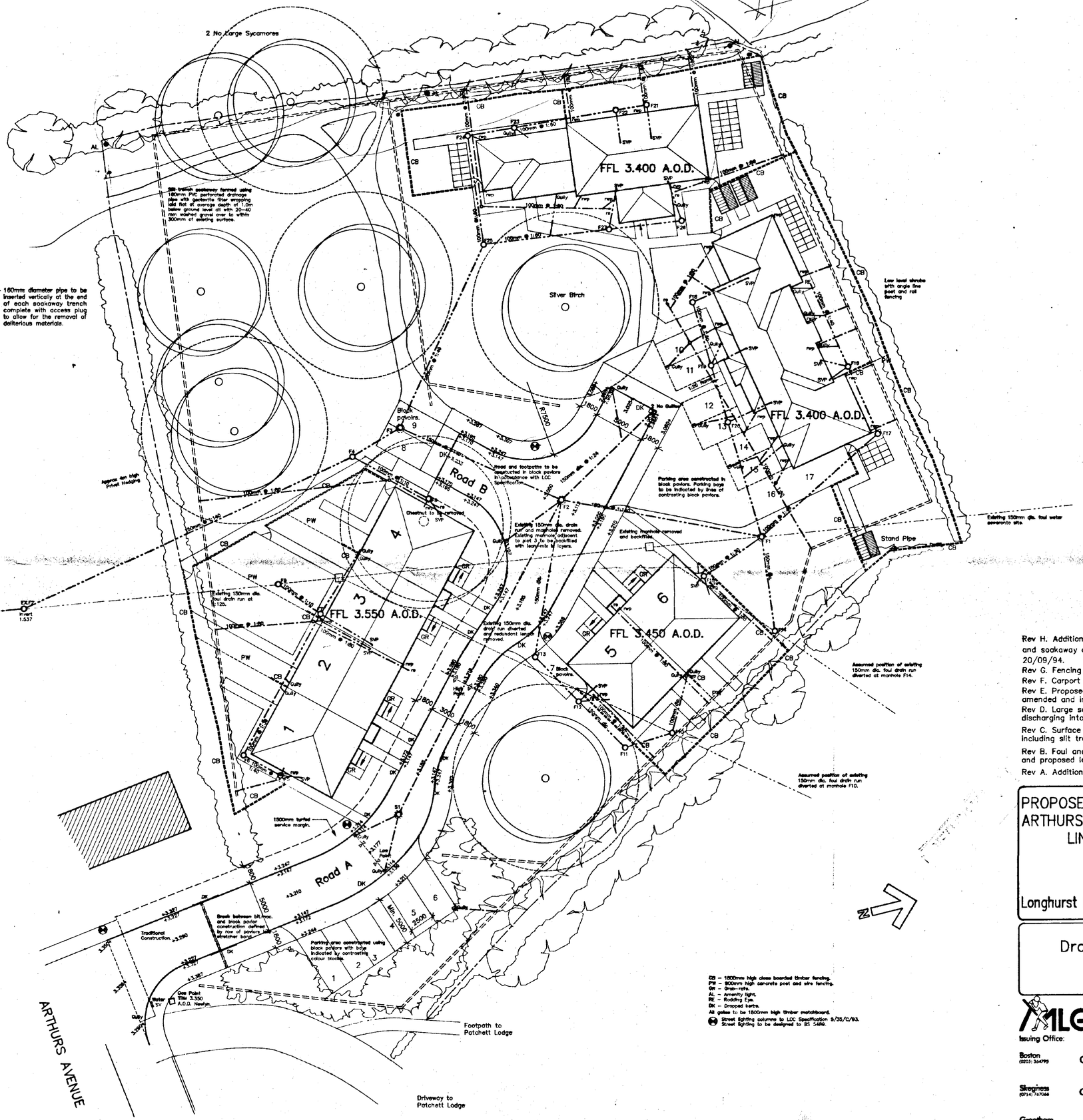


Slit Trench Soakaway
Scale 1:20



EX.F1 to AWS 5526–
150mm dia. at 1:70.

Existing 150mm diameter foul sewer between manholes AWS 5526–EX.F1 and EX.F1–EX.F2 removed. New 150mm diameter drain laid to same falls as existing to facilitate the use of the existing manholes. Existing manhole covers and frames to be replaced with BS Grade B lockable covers.



Rev H. Additional lengths of soakaway added and soakaway detail amended to BRE 365. 20/09/94.
Rev G. Fencing partially removed. 08/09/94.
Rev F. Carport to hostel removed. 08/02/94.
Rev E. Proposed adoptable foul sewer position amended and inverts added. 03/02/94.
Rev D. Large soakaway omitted, 2 No gullies discharging into foul water sewer. 13/01/94.
Rev C. Surface water drainage layout shown including slit trench soakaway. 9/11/93.
Rev B. Foul and surface water layouts ammended and proposed levels amended. 26/10/93.
Rev A. Additional rwp added to move–on flats

PROPOSED DEVELOPMENT AT
ARTHURS AVENUE ,HOLBEACH
LINCOLNSHIRE

Longhurst Housing Association Ltd

Drainage Layout

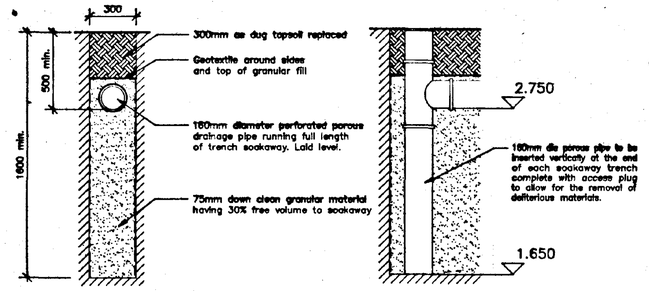
Meldrum Lee & Gillatt
Architects, Quantity Surveyors
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Skegness (0754) 767066
Grantham (0476) 590139

Date: April 93
Drawn by: PAL
Scale: 1 : 200
Checked by:
Drawing No: 4978–46
Revision: H

Do not scale. The Contractor is to check all dimensions on site and report any discrepancy to the Architect

AM ADMEL 813181/B



334 lin.m. Soakaway (7% in excess of Lincs Lab design)

Slit Trench Soakaway
Scale 1:20

Hoggin Footpath

Hoggin footpath to consist of :–
100mm compacted, clean furnace clinker with top surface blinded with fine hoggin, watered and rolled to a thickness of 12mm on 100mm graded hoggin with maximum particle size of 50mm, watered and rolled on compacted ground.

* The finished surface to have a cross–fall of 1:30.

Rev L. Private hoggin footpath added 06.12.94 – TMR
Rev K. Sewer and drain layouts amended, following 17.10.94 site meeting. 19/10/94 – TMR
Rev J. Sewer, drain and soakaway layouts amended, following 10.10.94 site meeting. 11/10/94 – TMR
Rev H. Additional lengths of soakaway added and soakaway detail amended to BRE 365. 20/09/94.
Rev G. Fencing partially removed. 08/09/94.
Rev F. Carport to hostel removed. 08/02/94.
Rev E. Proposed adoptable foul sewer position amended and inverts added. 03/02/94.
Rev D. Large soakaway omitted, 2 No gullies discharging into foul water sewer. 13/01/94.
Rev C. Surface water drainage layout shown including slit trench soakaway. 9/11/93.
Rev B. Foul and surface water layouts amended and proposed levels amended. 26/10/93.
Rev A. Additional rwp added to move–on flats

DETERM... PLAN

PROPOSED DEVELOPMENT AT ARTHURS AVENUE ,HOLBEACH LINCOLNSHIRE

Longhurst Housing Association Ltd

Drainage Layout

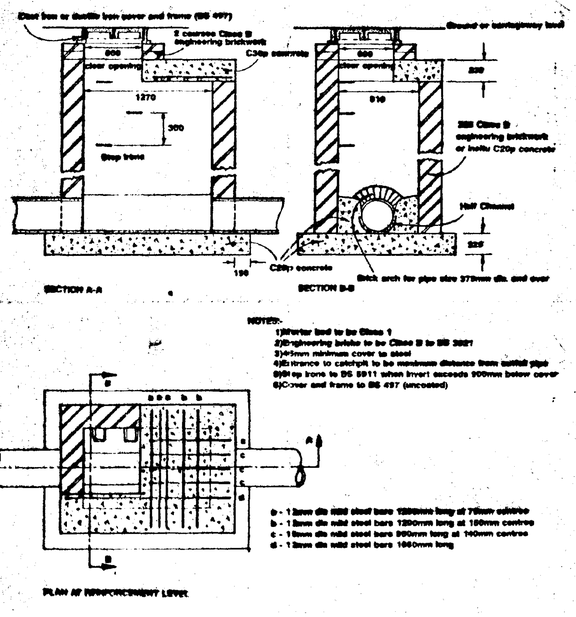
S.H.D.C. PLANNING DEPT.
RECEIVED
12 DEC 1994
Attention of: DPO KRM, DOPO BS, JC ACP
Action by ..... Discuss with ..... Copy to .....
File Nos.
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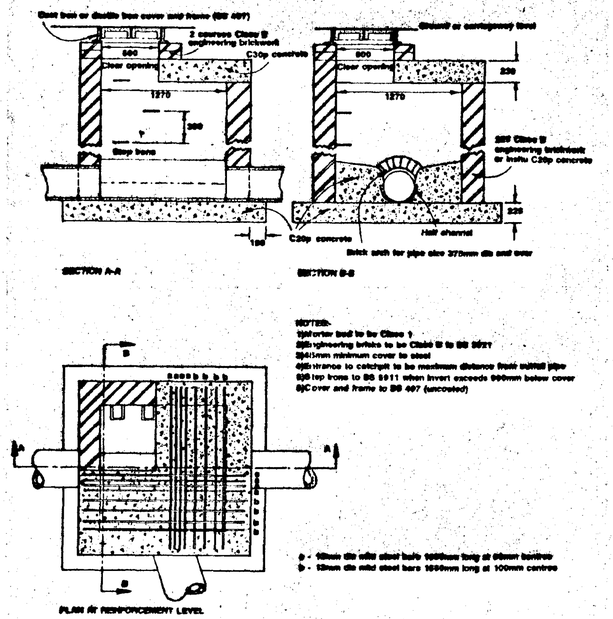
Date April 93 | Drawn by DAL
Scale 1 : 200 | Checked by TMR
Drawing No. 4978–46 | Revision L

Do not scale. The Contractor is to check all dimensions on site and report any discrepancy to the Architect

AM ADMEL 813161

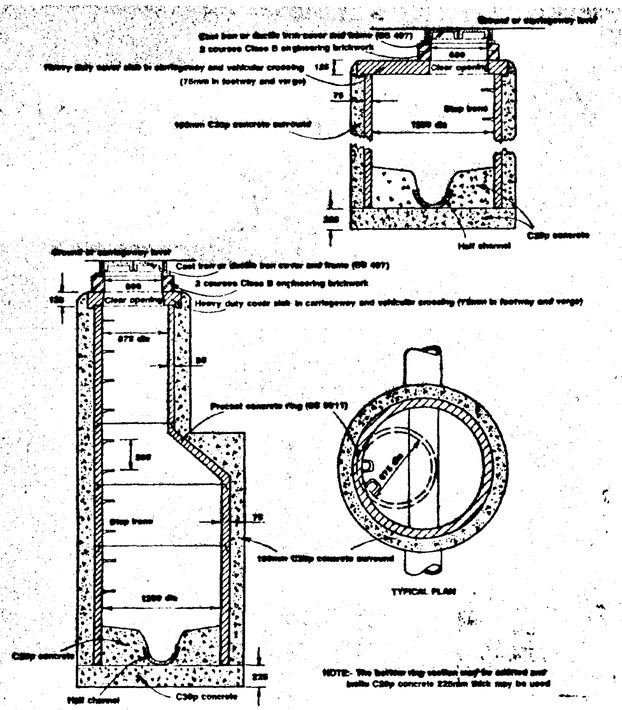


manhole up to 2·0m deep on line of drain



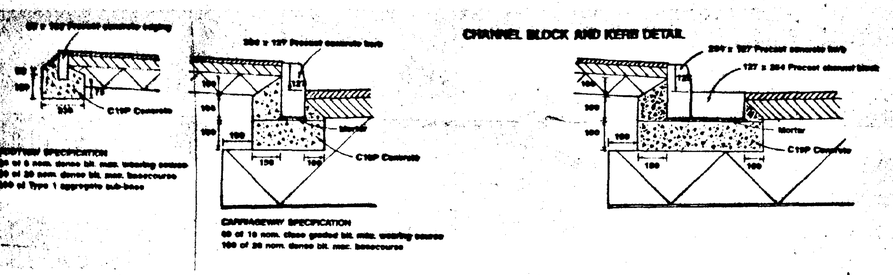
manhole up to 2·0m deep drain intersection

manhole up to 3m deep precast concrete

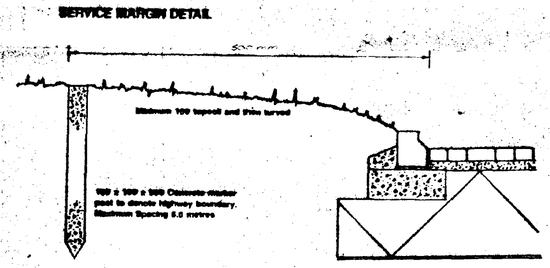


manhole over 3·0m deep precast concrete

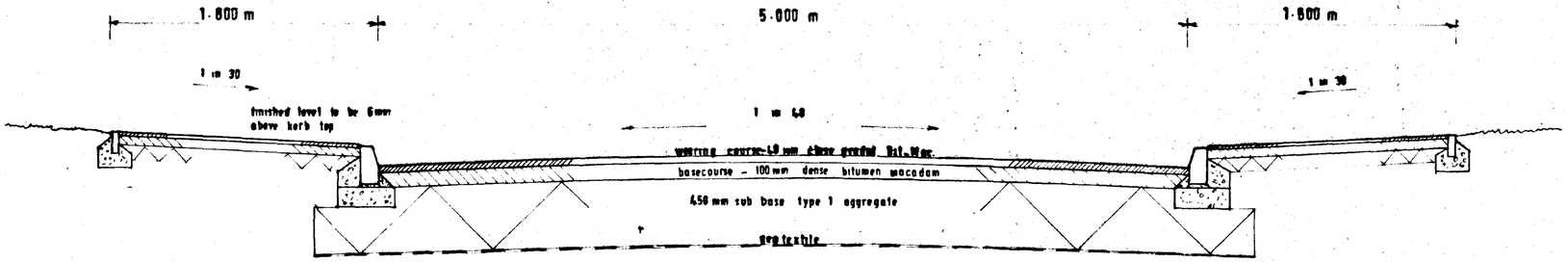
CHANNEL BLOCK AND KERB DETAIL



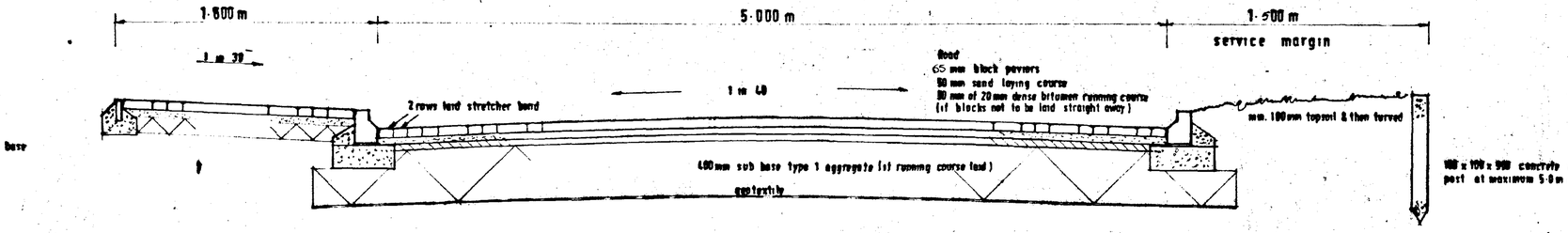
SERVICE MARGIN DETAIL



cross section through
flexible construction



cross section through
small unit pavior construction



REV. A. ROAD DETAILS AMENDED. 27/10/95

CONSTRUCTION DETAILS

All clauses referred to are taken from the Lincolnshire County Highways 'Development Road Layout Guide & Specification'.

SUB-BASE: Shall conform with Clause 10.1. Only Type 1 aggregate may be used. This shall comprise crushed rock, crushed concrete, crushed slag or well burnt non-plastic shale. The material shall be laid in one or more layers, each not exceeding 150mm compacted thickness, to give the specified total depth and width of sub-base. Each layer should be placed and spread evenly to avoid delay.

BASE COURSE: 300mm of dense bitumen macadam. This material shall be 20mm nominal size aggregate made and delivered in accordance with BS 4987 The binder shall be 100 pen bitumen. For footways the binder shall be 200 pen. Bituminous material must be compacted to a void content within the range 3%-6%. To achieve this double drum vibratory rollers. 3 tonnes minimum dead weight are recommended. All layers must be heated.

WEARING COURSE: 60mm of close graded bitumen macadam. This material shall be 10mm nominal size aggregate made and laid in accordance with BS 4987 Clause 2.3.3. This minimum PSV of aggregate used shall be 55. The binder shall be 100 pen bitumen. For footways this material shall be 6mm nominal size aggregate made and laid in accordance with BS 4987 Clause 2.3.3. Binder shall be 200 pen bitumen.

JOINTS IN EXTENSION CONSTRUCTION: All joints with existing bituminous construction shall be cut back by a vertical face of not less than the course thickness and all joints, including the vertical concrete face of margin channels and concrete kerbs shall be painted with a complete coat of 200 pen bitumen or an approved cold poured sealant.

KERBS CHANNELS AND EDGINGS: All kerbs channels and edgings irrespective of method of manufacture must comply with BS 340. Unless otherwise agreed they shall be manufactured by hydraulic pressure.

VEHICLE CROSSINGS: 300mm of sub-base to Clause .1.2. 90mm of dense bitumen macadam of 20mm nominal size compacted to a void content within the range 3%-6%. Finished with 15mm of dense bitumen macadam of 6mm nominal size to a void content within the range 3%-10%.

BLOCK PAVING: Clay pavers and concrete blocks shall be 60mm thick and shall comply with the current 'Specification for Precast Concrete Paving Blocks'.

Concrete blocks and clay pavers shall comply with Clauses 12.2 and 12.3. They shall be laid in accordance with the requirements of BS 6716 Part 3. Herringbone bond pattern is required for all vehicular trafficked areas. Only rectangular shaped blocks will be permitted.

DRAINAGE

TYPES OF PIPES: One type of pipe shall be used within any individual drain length including connections between manholes.

CONCRETE PIPES: Shall comply with the requirements of BS 5911 except that they may be supplied complete with flexible joints, as supplied by the manufacturer.

BEDDING AND LAYING OF PIPES AND DUCTS: Pipes shall be laid on pipe bedding material having a grading within the range shown in table 2.5.3a and having a compaction fraction 0.2 or less. Brick or other hard material shall not be placed under the pipes for temporary support. Pipes laid with less than 1.2m of cover under carriageways and vehicle access crossings or less than 900mm under footways and verges shall be surrounded with 150mm C20P concrete. Pipe surrounds shall have a minimum cover of 300mm.

MANHOLES AND INSPECTION CHAMBERS: Shall be constructed of precast concrete sections complying with BS 5911, of brickwork or of concrete cast in situ, as shown on drawings. Brickwork shall be built in cement mortar in English bond. The joints of brickwork above corbelled shall be finished with a neat flat joint as work proceeds. Where the depth of invert of manhole exceeds 1 metre below the finished surface of the carriageway or the adjacent ground, step irons as specified in BS 1247 shall be built in a vertical interval of 300mm with alternative steps in line vertically and at 225mm centre to centre horizontally. Manhole covers and frames shall be manufactured in cast iron or ductile iron and shall comply with the requirements of BS 497. Heavy duty covers and frames in the carriageway, vehicle access crossings. Medium duty circular covers and frames shall be used in footways and verges. All manholes for drains shall be watertight on completion. Frames for covers shall be set in mortar. Two step of bars shall be supplied for each pattern of cover used. Flexible joints shall be provided within 500mm of the end of the pipes adjacent to manholes.

GULLIES: Precast concrete gullies shall be manufactured and comply with the BS 5911. Gullies shall be at least 750mm deep by 450mm diameter with 100mm outlet trapped and stoppered rodding eye and chain. Gulley covers and frames shall be Grade A Class 2 and shall have a minimum nominal width of 450mm with a minimum area of waterway of 500 cm². Spacing of gullies in each channel shall be determined on the basis of one gulley per 400m² of impervious area to be drained, including footways, access crossings, lay-bys and verges.

EXCAVATION, EMBANKMENTS AND FILLING: Gulley and excavation of the side slopes of cuttings, embankments and verges shall be carried out to an even surface with a minimum compacted surface thickness of 100mm of soil.

PROPOSED DEVELOPMENT AT
ARTHURS AVENUE
HOLBEACH

SOUTH HOLLAND D.C.
PLANNING DEPT.
17 AUG 1994
REF. S/0814/94/FL

DETERMINED PLAN

Road cross section & drainage

Meldrum Lee & Gillatt
Architects, Quantity Surveyors
Management & Cost Consultants

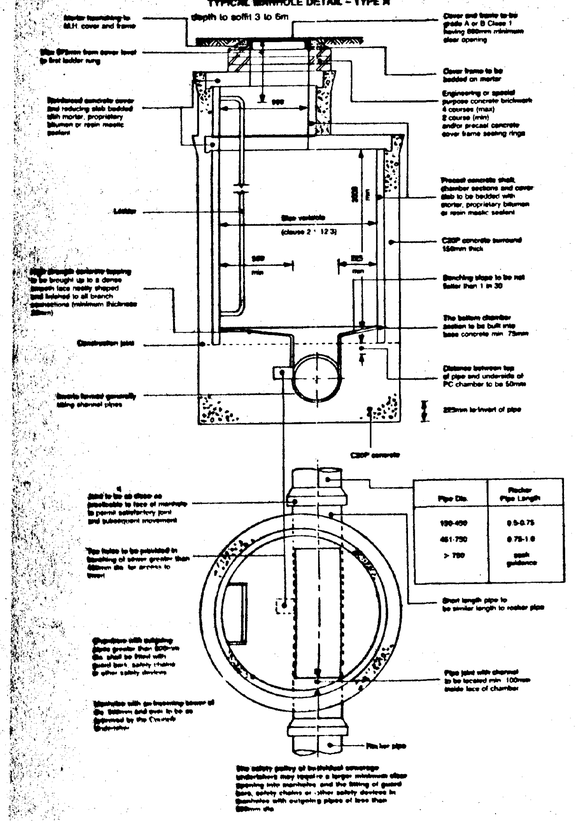
Issuing Office:
Boston (0205) 364795
Skegness (0754) 767066
Grantham (0476) 590179

Date
Drawn by GH
Scale 1/20 (road sections)
Checked by
Drawing No. 4978 - 48
Revision A

Do not scale. The Contractor is to check all dimensions on site and report any discrepancy to the Architect

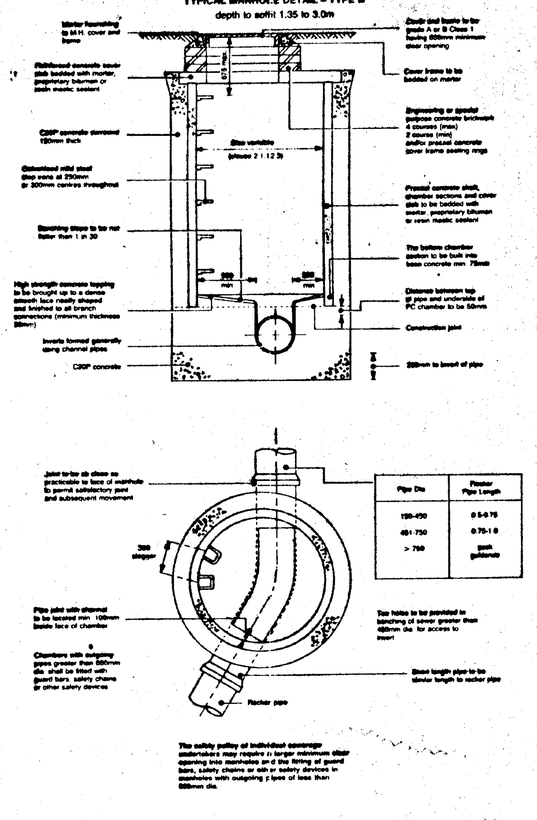
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FIGURE 1
TYPICAL MANHOLE DETAIL – TYPE A
depth to soffit 3 to 6m



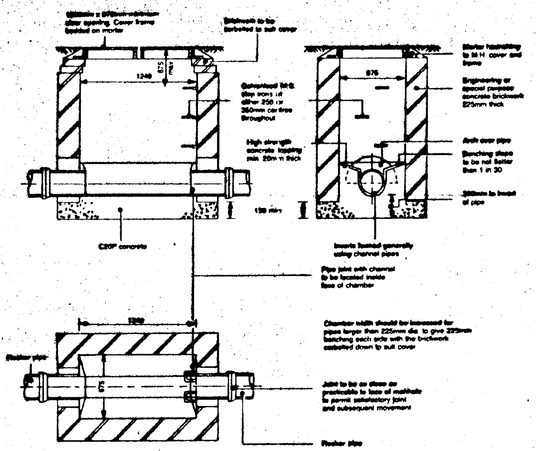
Pipe Dia	Rocker Pipe Length
150-450	0.5-0.75
451-750	0.75-1.0
> 750	seek guidance

FIGURE 2
TYPICAL MANHOLE DETAIL – TYPE B
depth to soffit 1.35 to 3.0m



Pipe Dia	Rocker Pipe Length
150-450	0.5-0.75
451-750	0.75-1.0
> 750	seek guidance

FIGURE 3
TYPICAL MANHOLE DETAIL – TYPE C
depth to soffit 1.0 to 1.35m



Diameter of largest pipe in manhole (mm)	Chamber section diameter (mm)
Less than 375mm	1200 (1050 where depth to soffit is 1.35m – 1.5m)
375 – 450	1350
500 – 700	1500
750 – 900	1800

The chamber height of a Type A manhole (benching to slab soffit) should normally be 2000mm. When this is impracticable Type B manholes are preferred subject to an absolute minimum chamber height of 900mm.

4. The dimensions of Types C, D, E and F manholes are to be as shown on the typical drawings.

5. The sizes quoted above are the minimum. If two pipes enter the manhole, the chamber size must be sufficient to accommodate adequate benching. All pipes built into the manhole invert should be installed with soffits level.

6. The design of special manholes and other structures must be agreed with the Council/Undertaker.

DRAINAGE

TYPES OF PIPES: One type of pipe shall be used within any individual drain length including connections between manholes.
CONCRETE PIPES: Shall comply with the requirements of BS# 5911 except that they may be supplied complete with flexible joints, as supplied by the manufacturer.
BEDDING AND LAYING OF PIPES AND DUCTS: Pipes shall be laid on pipe bedding material having a grading within the range shown in Table B.1.B.2a and having a compaction fraction 0.2 or less. Brick or other hard material shall not be placed under the pipes for temporary support. Pipes laid with less than 1.2m of cover under carriageways and vehicle access crossings or less than 900mm under footways and verges shall be surrounded with 150mm C20P concrete. Pipe surrounds shall have a minimum cover of 300mm.
MANHOLES AND INSPECTION CHAMBERS: Shall be constructed of precast concrete sections complying with BS 5911, of brickwork or of concrete cast in situ, as shown on drawings. Brickwork shall be built in cement mortar in English bond. The joints of brickwork where exposed shall be finished with a neat flat joint as work proceeds. Where the depth of invert of manholes exceeds 1 metre below the finished surface of the carriageway or the adjacent ground, step irons as specified in BS 1247 shall be built in a vertical interval of 300mm with alternative steps in line vertically and at 225mm centre to centre horizontally. Manholes covers and frames shall be manufactured in cast iron or ductile iron and shall comply with the requirements of BS 497. Heavy duty covers and frames in the carriageway, vehicle access crossings. Medium duty circular covers and frames shall be used in footways and verges. All manholes for drains shall be watertight on completion. Frames for covers shall be set in mortar. Two sets of keys shall be supplied for each pattern of cover used. Flexible joints shall be provided within 600mm of the end of the pipes adjacent to manholes.
GULLIES: Precast concrete gullies shall be unreinforced and comply with the BS 5911. Gullies shall be at least 750mm deep by 450mm diameter with 150mm outlet trapped and stoppered rodding eye and chain. Gulley covers and frames shall be Grade B Class 2 and shall have a minimum nominal width of 450mm with a minimum area of waterway of 650cm^2. Spacing of gullies in each channel shall be determined on the basis of one gulley per 180m^2 of impervious area to be drained, including footways, access crossings, lay-bys and verges.

FIGURE 4
TYPICAL MANHOLE DETAIL – TYPE D
depth to soffit less than 1.00m
Agreement of Council/Undertaker must be given before installation of this type of manhole

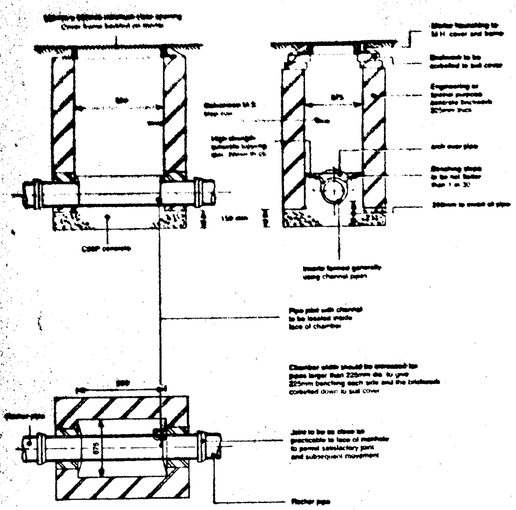


FIGURE 5
TYPICAL MANHOLE DETAIL – TYPE E
depth to soffit 1.0 to 1.35m
Location of this type of manhole restricted to areas where grade B Class 1 covers are to be used

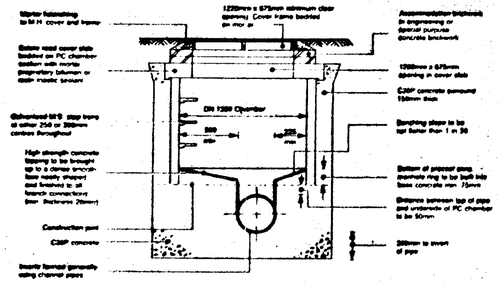


FIGURE 6
TYPICAL MANHOLE DETAIL – TYPE F
depth to soffit less than 1.0m
Agreement of Council/Undertaker must be given before installation of this type of manhole
Location of this type of manhole restricted to areas where grade B Class 1 covers are to be used

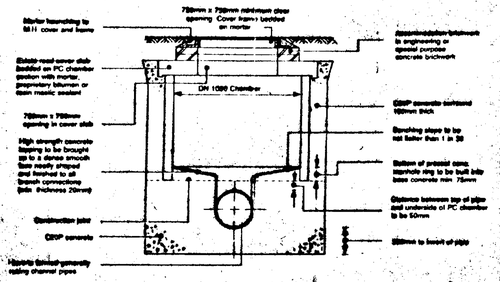
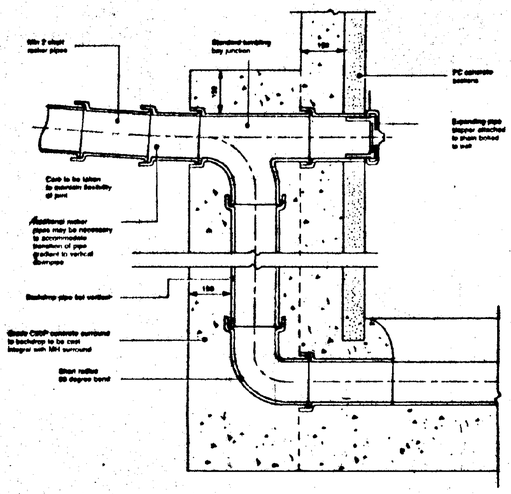


FIGURE 7
TYPICAL VERTICAL BACKDROP DETAIL
Note: steeper gradients are preferred to the use of backdrops



DETERMINED PLAN

PROPOSED DEVELOPMENT AT
ARTHURS AVENUE
HOLBEACH

SOUTH HOLLAND D.C.
PLANNING DEPT.
17 AUG 1994
REF 0804/94

Dramage details

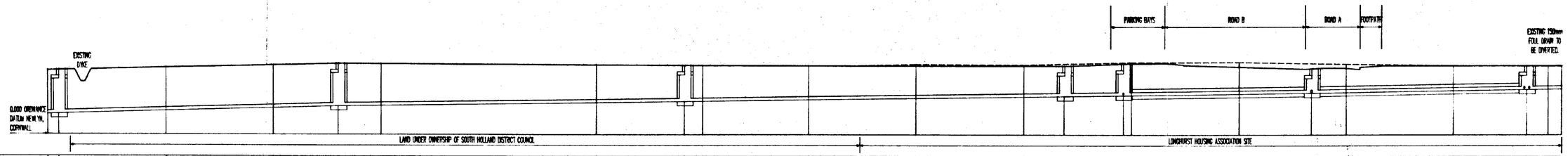
MLG **Meldrum Lee & Gillatt**
Architects Quantity Surveyors
Management & Cost Consultants

Issuing Office:
Boston (0205) 364799
Skegness (0754) 767066
Grantham (0476) 590139

Date: /// | Drawn by:
Scale: — | Checked by: PC
Drawing No: 4978 – 51 | Revision:

Do not scale. The Contractor is to check all dimensions on site and report any discrepancy to the Architect

AMI ADMEL 913181/8



Chainage	0.000	10.000	20.000	26.010	30.000	40.000	50.000	58.26	60.000	70.000	80.000	90.000	93.760	99.260	100.000	110.000	116.760	120.000	130.000	138.760	130.00
Proposed Ground Level											3.200	3.200			3.305	3.151		3.084	3.190		3.200
Existing Ground Level	3.010	3.120	3.240	3.315	3.305	3.276	3.250	3.227	3.225	3.207	3.257	3.235			3.350	3.362		3.270	3.190		3.170
Foul Water Manhole	AMS Ref. 5526	150mm DIA. E.S. PIPES LAID AT 1:70 WITH MIN. 100mm GRANULAR BED AND SURROUND		EXIT	150mm DIA. E.S. PIPES LAID AT 1:139 WITH MIN. 100mm GRANULAR BED AND SURROUND			EXIT2	150mm DIA. E.S. PIPES LAID AT 1:140 WITH MIN. 100mm GRANULAR BED AND SURROUND				F4	F3	150mm DIA. E.S. PIPES LAID AT 1:140 WITH MIN. 150mm CONCRETE BED AND SURROUND		F2	150mm DIA. E.S. PIPES LAID AT 1:140 WITH MIN. 150mm CONCRETE BED AND SURROUND		F1	
Cover Level	3.010			3.315				3.227					3.200	3.300			3.081				3.200
Invert Level	0.960			1.325				1.537					1.781	2.088			1.934				2.088

Longitudinal Section Through Adoptable Foul Water Sewers
Scale 1:200 Horizontal 1:100 Vertical

DETERMINATION PLAN

PROPOSED DEVELOPMENT AT
ARTHURS AVENUE HOLBEACH
LINCOLNSHIRE

SOUTH HOLLAND D.C.
PLANNING DEPT.
17 AUG 1994
REF 0804/94...

LONGHURST HOUSING ASSOCIATION LTD

LONGITUDINAL SECTION THROUGH
ADOPTABLE FOUL WATER SEWER

MLG
Meldrum Lee & Gillatt
Architects, Quantity Surveyors
Management & Cost Consultants

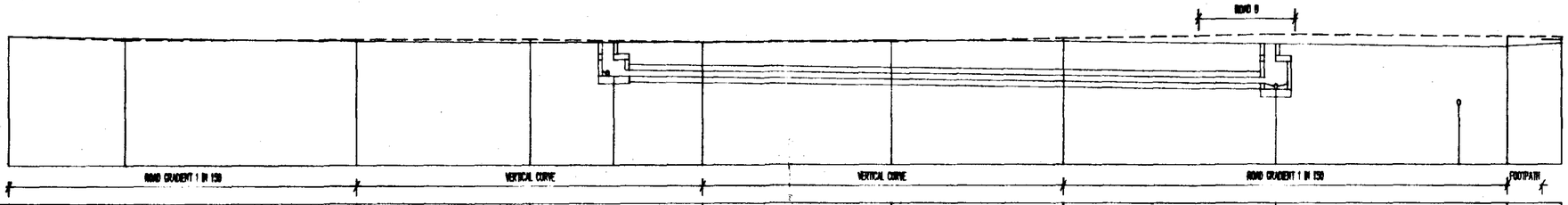
Issuing Office:
Boston (0205) 364795
Skegness (0754) 767066
Grantham (0476) 590129

Date: February 1994
Drawn by: DAL
Scale: 1:100 & 1:200
Checked by:
Drawing No: 4978–55
Revision:

Do not scale. The Contractor is to check all dimensions on site and report any discrepancy to the Architect

AM ADMEL 912181 B

Road A

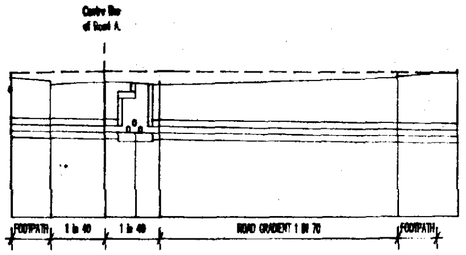


Chainage	0.000	6.000	18.000	27.000	36.000	46.000	55.000	66.000	78.000
Existing Ground Level	3.338	3.239	3.255	3.257	3.182	3.180	3.270	3.362	3.300
Proposed Level	3.338	3.290	3.210	3.177	3.185	3.218	3.185	3.112	3.025
Surface Water System				S1 CL 3.180	150mm dia. Extra Strength pies at 1 in 150 with 150mm concrete bed and surround.				
Surface Water Invert				2.312					
Foul Water System								F2	
Foul Water Invert							(Surface Water Branch Inlet) 2.084	1.934 (Main Invert)	

Longitudinal Section Through Road and Sewers
Scale 1:200 Horizontal 1:100 Vertical

NOTE.
ALL GRADIENTS GIVEN ARE CHANNEL GRADIENTS.

Road B



Chainage	-2.50	0.000	2.500	13.500
Existing Ground Level	3.338	3.362	3.362	3.330
Proposed Level	3.050	3.112	3.050	3.233
Foul Water Manhole			F2 F1 to F3 150mm dia. Extra strength pipes at 1 in 140 with 150mm concrete bed and surround.	
Cover Level			3.081	
Invert Level	(S.Water) 2.084		1.934 (Main Invert)	

Longitudinal Section Through Road and Sewers
Scale 1:200 Horizontal 1:100 Vertical

DETERMINED PLAN

Revision C. Jan 1994. Invert levels to S1 and F2 amended.
Revision B. Jan 1994. Road levels amended and additional length of sewer added.

Proposed Development at Arthurs Avenue, Holbeach Lincolnshire

SOUTH HOLLAND D.C. PLAN DEPT. 17 AUG 1994 REF 0804/94

Longhurst Housing Association Ltd

Road and Sewer Sections

MLG Meldrum Lee & Gillatt
Architects, Quantity Surveyors
Management & Cost Consultants

Issuing Office:
Boston (0205) 364795
Skegness (0754) 767066
Grantham (0476) 590129

Date October 1993 | Drawn by DAL
Scale 1:100 1:200 | Checked by
Drawing No 4978-47 | Revision C

Do not scale. The Contractor is to check all dimensions on site and report any discrepancy to the Architect.

AM ADMEL 921701