DESK STUDY
AT
BIRCHILL ROAD,
KNOWSLEY INDUSTRIAL PARK,
MERSEYSIDE
FOR
ANTHONY ROCHE

REPORT NO. 3807

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CONTENTS

1. INTRODUCTION
   - 1.1 Site Location and Description
   - 1.2 Proposed Development
   - 1.3 Desk Study

2. DESK STUDY
   - 2.1 Site History
   - 2.2 Environmental Data Search
   - 2.3 Conclusions and Recommendations

APPENDICES
   - Environmental Data Search
   - Figures

DESK STUDY FOR BIRCHILL ROAD KNOWSLEY INDUSTRIAL PARK, MERSEYSIDE.

CLIENT:- MR A ROACHE

ENGINEER:- ANDREW R WILLIAMS AND ASSOCIATES

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1. INTRODUCTION

This report has been prepared following a facsimile instruction dated November 2001 from Mr Anthony Roche and comprises a desk study of the site concerned and includes the history of the site and an environmental data search.

1.1 Site Location and Description

The site is located on Knowsley Industrial Park, in the north west corner of a rectangular block of industrial buildings running along the east side of Birchill Road. Access to the site is via a side road entrance adjacent to Birchill Garage, which faces onto Birchill Road itself. The location of the site is given on Figures 1 and 2.

1.2 Proposed Development

The proposed development comprises three separate industrial units with car parking facilities located as follows:-

- In the south corner of the site directly west of the Merseyside Scaffold building.
- In the north east corner of the site approximately 15 metres north of the Merseyside Scaffold building.
- In the centre of the site attached to the eastern side of Birchill Garage.

The positions of these proposed developments are shown on Figure 2.

2. DESK STUDY

2.1 Site History

The past history of the site has been interpreted from the study of old Ordnance Survey plans, extracts of which were acquired from the Bodleian Library as follows: -

Date	Survey Reference	Scale	Figure
1908	LANCS 100.5 & LANCS 100.6	1:2500	3
1909	LANCS SW & LANCS NW	1:10560	4
1927	LANCS 100.5 & LANCS 100.6	1:2500	5
1928	LANCS SW & LANCS NW	1:10560	6
1956	SJ49NW	1:10560	7
1962	SJ4298-4398	1:2500	8
1962	SJ4299-4399	1:2500	9
1966	SJ49NW	1:10560	10
1971	SJ4298-4398	1:2500	11
1978	SJ49NW	1:10000	12
1990	SJ49NW	1:10000	13

Extracts from the above surveys are appended.

1908 to 1928

The earliest maps were for the years 1908 and 1909 when the site comprised of open farm land directly between Lower Ashcroft's Farm and Stockpit Farm, southwest of Draw Well Farm with Boundary Lane running along an undetermined line through the site. Through the intervening years between 1908 and 1928 the only developments or changes were to the boundaries of the various fields that surrounded the site. 400 metres east along Boundary Lane (to the east and west of the site are marl pits. The situation remained much the same up to at least 1928.

1956

The next map available was from 1956 when at this time the site comprised a series of buildings within an industrial estate with signs that it had once been part of a munitions site. The various buildings in close proximity to the site (and on other areas on the industrial estate seem to have surrounding embankments typical of a military establishment. Thus it seems likely the site may have been constructed during or in the build up to the Second World War.

1962-1990

During the period from 1956 until 1962 the site had been subject to some minor modifications with sections of the Lodge Works (later to become Birchill Garage) being demolished. Although areas of the site had been levelled and modified, general developments in and around the site are minor. By 1971 the Birchill Garage building is noted as a cleanser factory. The situation remains relatively unchanged until 1990

Present Day

The site presently comprises a series of buildings around which the proposed units are to be constructed with Merseyside Scaffold occupying an old engineering works and Birchill Garage occupying the cleanser factory.

Conclusions

The site remained part of a farmer's field or open land until at least 1928. Some time during or building up to the Second World War the site was constructed probably as a munitions factory and then partially converted into an industrial estate before the 1956 survey. Over the years the buildings around the site have been converted to industrial use and utilised in various ways that could give rise to environmental concerns and a risk of chemical and other contamination. This site history provides a background, which suggests the need to investigate potential contamination of the site.

2.2 Environmental Data Search

We have run an environmental data search for the area of the site using the Sitescope Data Base, a copy of which is appended and includes information from the Environment Agency.

The Environment Agency has recorded a number of pollution incidents within the area with 2 occurring within 250 metres. Both of the incidents were minor and in our opinion would not affect the site.

The data search indicates that there are no current or former registered landfill sites within 250 metres of the site and therefore the risk of migration of landfill gas would be negligible. However, if made ground is present on site then there would be a risk of the production of gas.

The site is underlain by a major aquifer with soils of high leaching potential. Consequently, if any contamination is present on site then there is a risk of contamination of the groundwater table.

The National Radiological Protection Board (NPRB) indicates that buildings constructed as part of the proposed development are unlikely to be affected by radon gas.

2.3 Conclusions and Recommendations

Our desk study has found that the site comprised farmland or an open area up to at least 1928 with a road running through the site along an as yet undetermined route. The site was then developed into what was most probably a munitions factory some time during, or in the period building up to the Second World War. The uncertainty as to the exact use of the buildings surrounding the proposed development means that there is the possibility of contamination from materials used in the development and manufacture of explosives and needs to be investigated further. In addition to this contamination, there are indications that the buildings surrounding the site were used in the manufacture of cleaning products, adding yet more concern. If any made ground is present beneath the site then there is a risk of the production of landfill gas and the installation and monitoring of gas standpipes would be necessary. It is therefore recommended that an intrusive contamination survey be undertaken along with the geotechnical investigation.

We anticipate that the site will be underlain, at least in part by some Made Ground associated with construction and demolition, in turn underlain by Boulder Clay. Geologically the drift deposits are likely to be underlain by 'Bunter' Sandstone. There is also a distinct possibility that the original road between Lower Ashcroft's Farm and Stockpit Farm runs through the site and that any drains associated with this road may have been filled during the industrial estates development.

We recommend that trial pit and borehole investigations are undertaken to observe and to take samples for contamination analysis and to enable parameters to be determined for foundation design for the proposed extension.

We would be happy to undertake the above Geotechnical and Environmental Consultancy work for you and would be pleased to provide you with a quotation for the work involved.

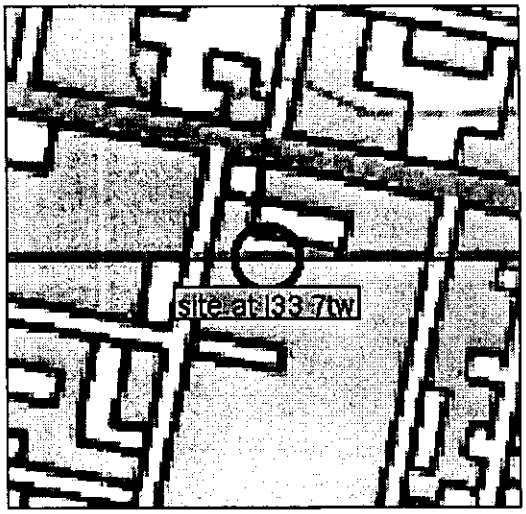
We trust that this report fulfils your present requirements but if you have any queries or we can be of further assistance please contact Mr. S. Cooper at our Preston Office.

SUB SURFACE NORTH WEST LIMITED,
REPORT No. 3807
DECEMBER 2001

C. A. Marsden, B.Sc.(Hons.), C.Eng., M.I.C.E.
Director
For and on behalf
Sub Surface Limited

ENVIRONMENTAL DATA SEARCH REPORT

3 Verify the site location



Grid Ref 343375 E 399000 N
Postcode L33 7TW

Site description:
Ashcroft Road
Knowsley Industrial Park
Liverpool
L33 7TW

Reference:

Site Mover

You may alter the location of the site using the Site Mover tool

(Scale x 1000)

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Previous step | Cancel | Next step

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Summary Results for L33 7TW

Number of hits per search band

Provider	Dataset	Postcode	0-250m	251-500m	501-1000m	1001-2000m
BGS	1:250,000 Solid Geology	--	1	1	1	2
BGS	Landfill Survey	--	0	0	1	1
BGS	Landslip	--	0	0	0	0
EA	Abstractions Licences	--	0	2	5	1
EA	Current Landfill	--	0	0	1	0
EA	Former Landfill	--	0	0	1	2
EA	Pollution Incidents	--	2	8	37	19
EA	Prosecutions & Enforcements	--	2	0	0	0
GWV	Groundwater Vulnerability	--	1	1	5	14
NRPB	Radon Risk	--	1	1	1	1

(-- means not applicable) Click on hit counts for details.

Free summary report | Display report | Display report with maps | Email report | Fee Note

Back to main menu | Log off

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Detailed Disclosure Report

Site description:
Ashcroft Road
Knowsley Industrial Park
Liverpool
L33 7TW

Reference:

Grid Ref:
343375E 399000N

British Geological Survey
1:250,000 Solid Geology
Records within 0-250m

Grid Reference	343375E 398999N
Direction	-
Formation Name	Sherwood sandstone group
Rock Type	Sandstone
Date Stamp	As at January 1999

Environment Agency
Pollution Incidents
Records within 0-250m

Grid Reference	343400E 399100N
Direction	-
Location	Kirkby
Date	19/02/1995
Incident Number	95440031
Notes	Fire water - none
Water Course	No Water Affected
Cause	Fire
Pollutant	General - firewater / foam
Source	No premises involved
Severity	Category 4 - Unsubstantiated Incident
Region	NW Region
Date Stamp	3 January 1988 - 31 December 1998

Grid Reference	343500E 398800N
Direction	South-East
Location	Acornsfield Road, Kirkby, Lancashire
Date	02/11/1999
Incident Number	33822
Notes	Fishy Odour On Acornfield Rd. Tb Visited Site And Confirmed Odour. Ps Contacted Contract Chemicals Who Said The Wind Direction Was Wrong. Contacted Baker Petrolite Who Said They Were Commisioning The
Effect	Water affected - Land affected - Air affected
Cause	Operator error
Pollutant	Fungicides
Source	Chemical manufacture
Severity	Category 3 - Minor Incident
Region	NW Region
Date Stamp	31 December 1999

Prosecutions & Enforcements

Records within 0-250m

Grid Reference	343300E 399100N
Direction	-
Type of Action	Enforcement
Operator	Croda Kerr Ltd
Location	Kirkby, Liverpool
Notice Date	06/08/94
Notice Expiry Date	07/06/94
Legislation	EPA 90 S.13
Date Stamp	As at February 1999

Grid Reference	343300E 399100N
Direction	-
Type of Action	Enforcement
Operator	Croda Kerr Ltd
Location	Kirkby, Liverpool
Notice Date	11/09/94
Notice Expiry Date	04/30/95
Legislation	EPA 90 S.13
Date Stamp	As at February 1999

Groundwater

Groundwater Vulnerability

Records within 0-250m

Grid Reference	343375E 398999N
Direction	-
Aquifer Type	Major Aquifer
Soil Permeability	Soils of high leaching potential (U) with little ability to attenuate diffuse source pollutants and in which non-absorbed diffuse source pollutants and liquid discharges have the potential to move rapidly to underlying strata or shallow groundwater.
Drift Deposits	No drift deposits present
Date Stamp	November 1999 (One-off Survey)

National Radiological Protection Board

Radon Risk

Records within 0-250m

Grid Reference	343375E 399000N
Direction	-
Radon Level	<1 percent of homes above the action level.
Date Stamp	February 1999

Return to summary

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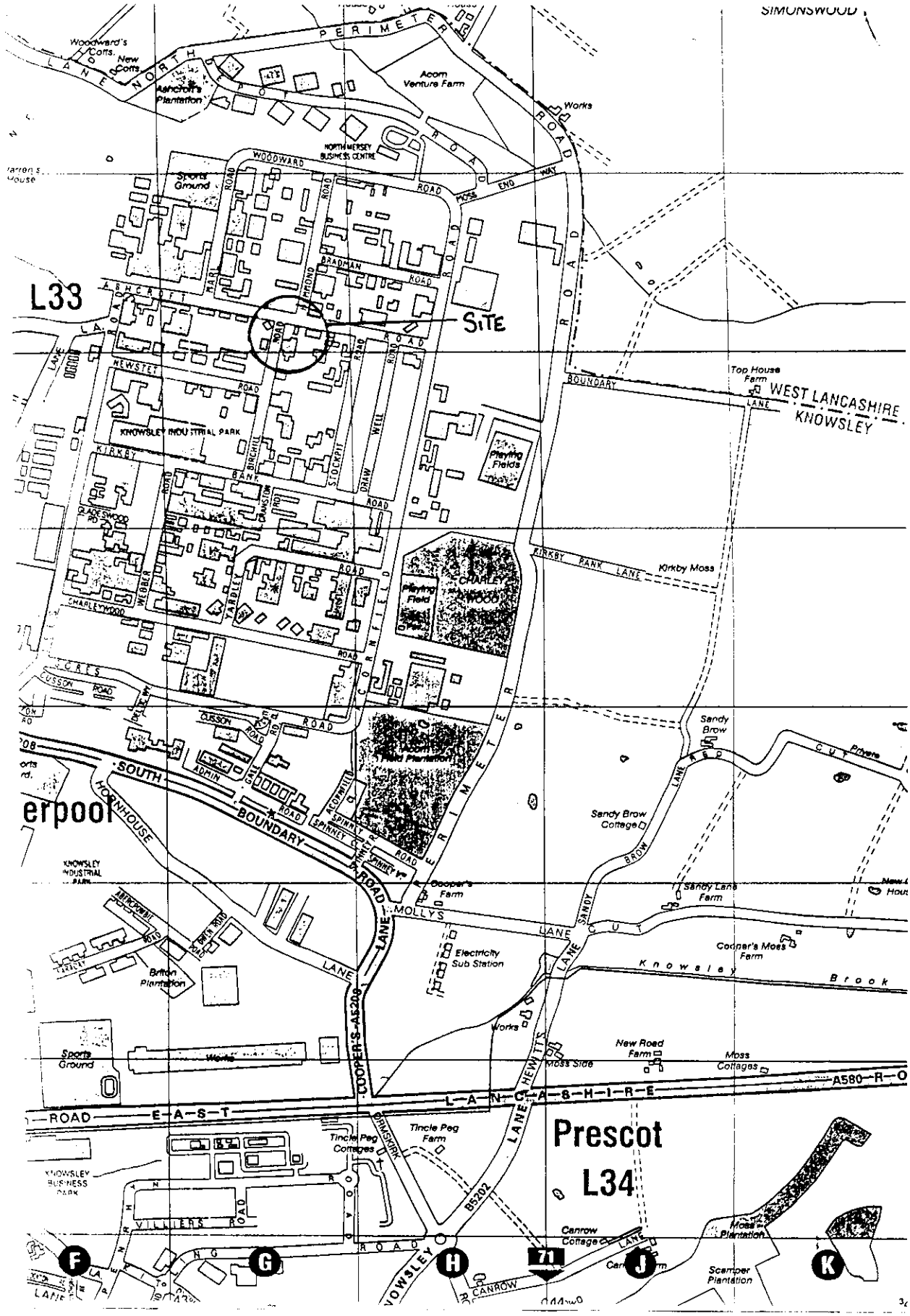
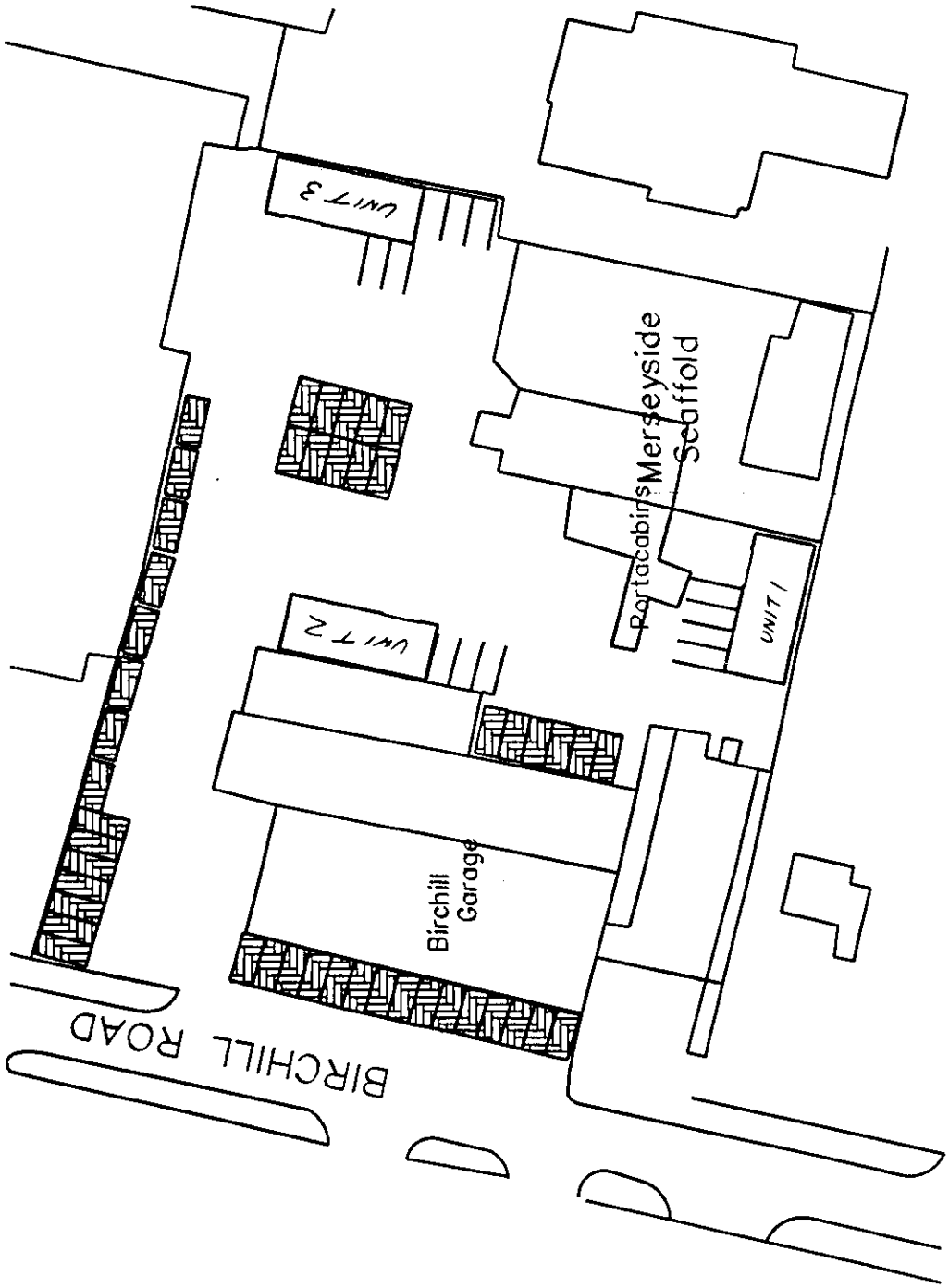
FIGURES



SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907	Location of site			
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 1 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:15000	Figure No. 1



SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907	Location of proposed developments			
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 2 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:15000	Figure No. 2



Re-surveyed in 1890 Revised in 1907.

PRICE 3/- NET.

CHARACTERISTICS AND SYMBOLS FOR BOUNDARIES, &c.

SUB SURFACE
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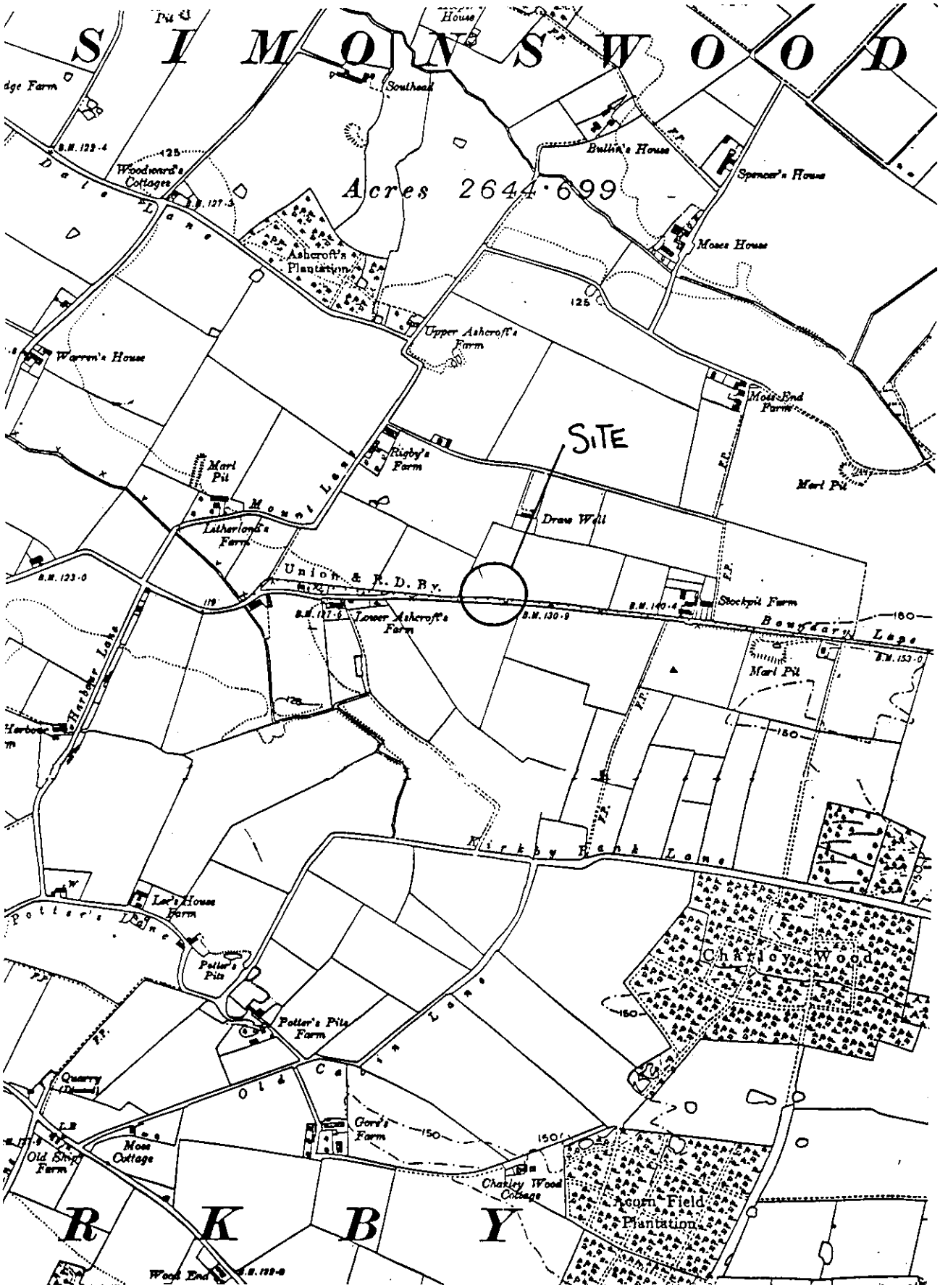
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

Site: BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK

Client: MR A. ROCHE

1908
LANCS - 100.5-100.6 COMBINED

Date Drawn	Date Checked	Sheet	Job No
17-Dec-01	17-Dec-01	3 / 13	3807
Drawn By	Checked By	Scale	Figure No
SEC		1:2500	3



SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907		1909 LANCS - SW-NW COMBINED		
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 4 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:10560	Figure No. 4

Righy's Farm

Righy's Farm Cottage

Mount Lane

Draw Well Farm

Lower Ashcroft's Farm

Stockpit Farm

Marl Pit

SITE

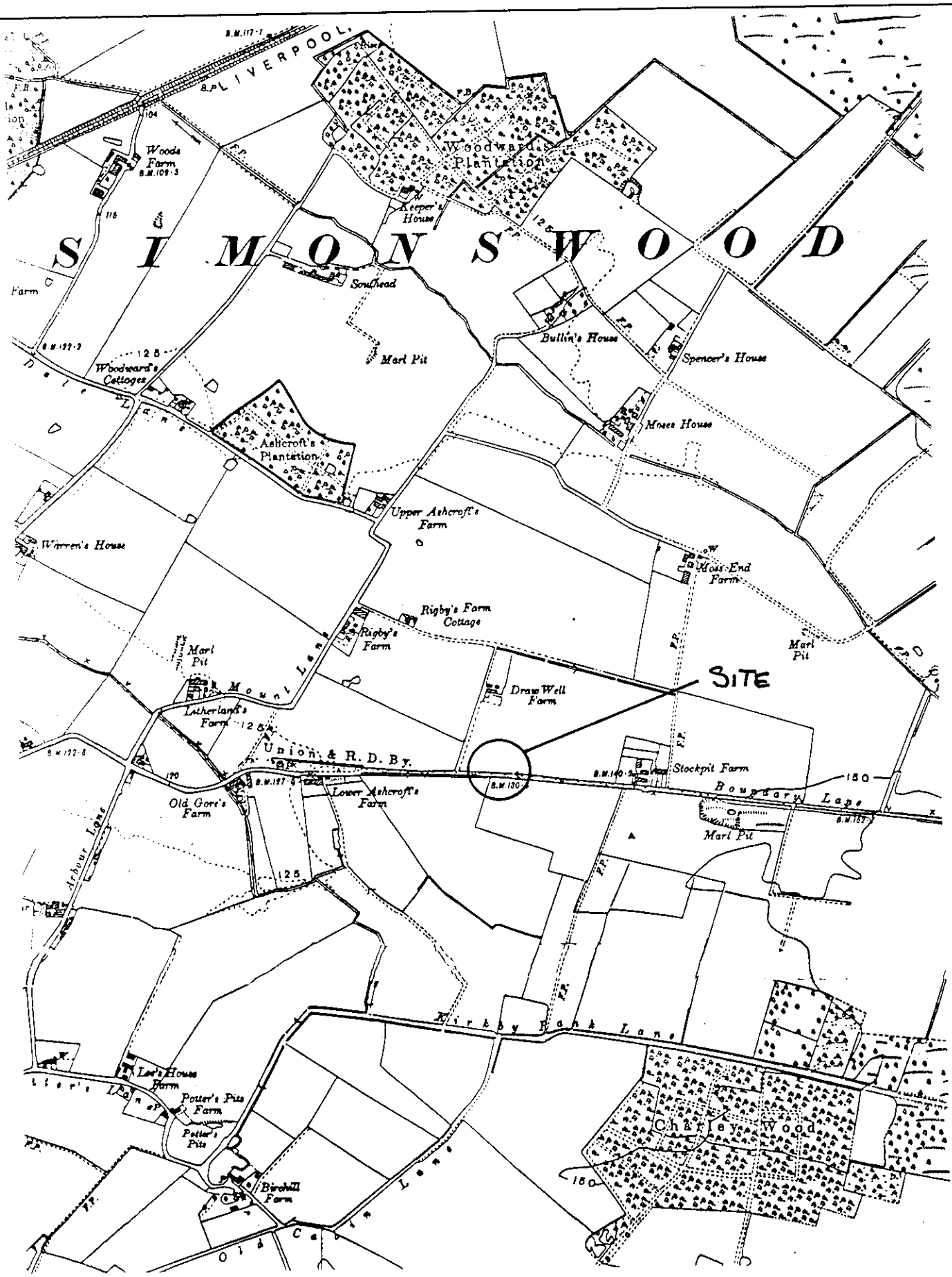
Resurveyed in 1890. Revised in 1925. Re-Levelled 1926.

1927 LANCS - 100.5-100.6 COMBINED	
Date Drawn: 17-Dec-01	Job No: 3807
Date Checked: 17-Dec-01	Sheet: 5 / 13
Checked By:	Scale: 1:2500
Drawn By: SEC	Figure No.: 5

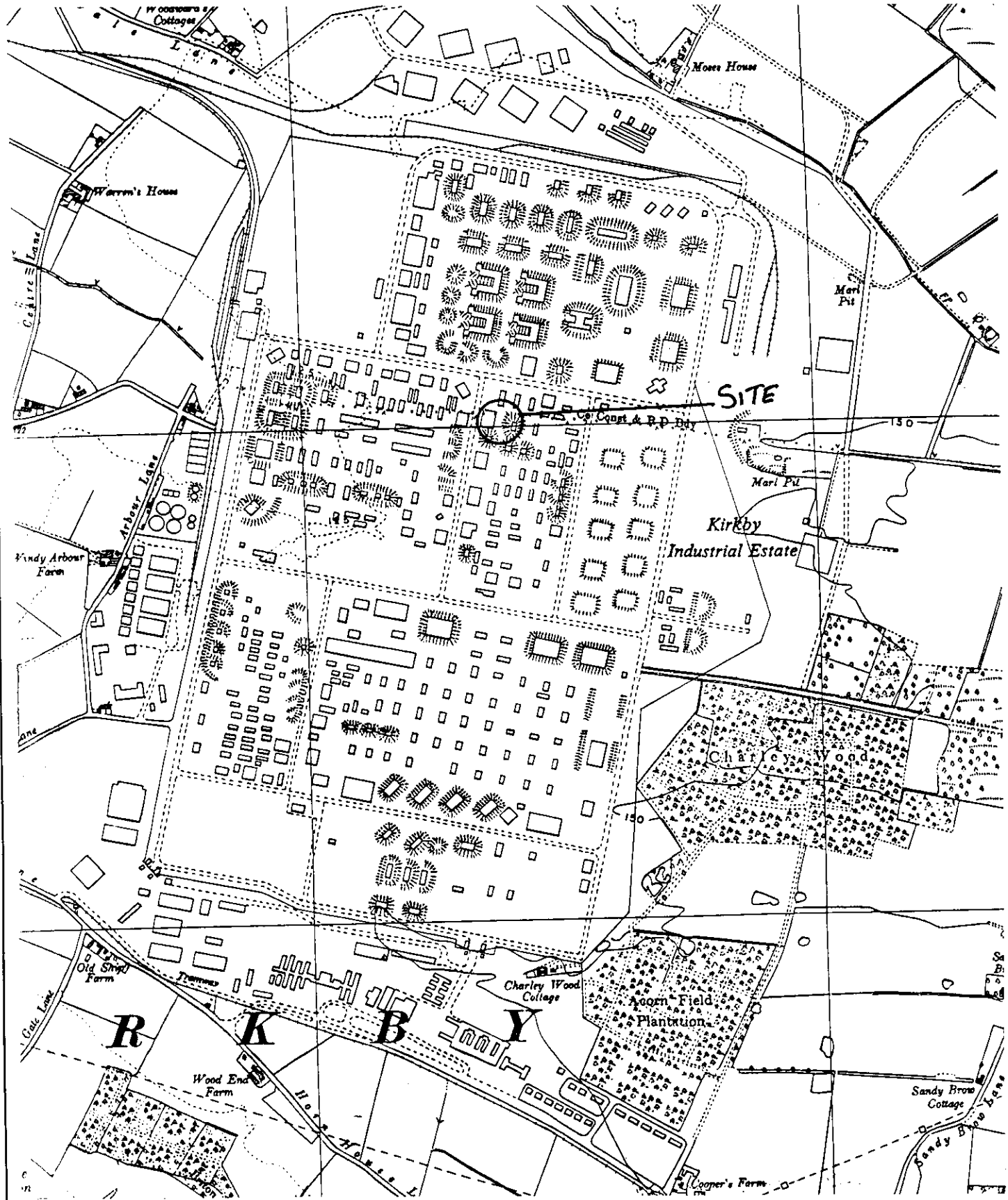
SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2DS. Tel. (01772) 561135 Fax (01772) 204907

Site: BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK

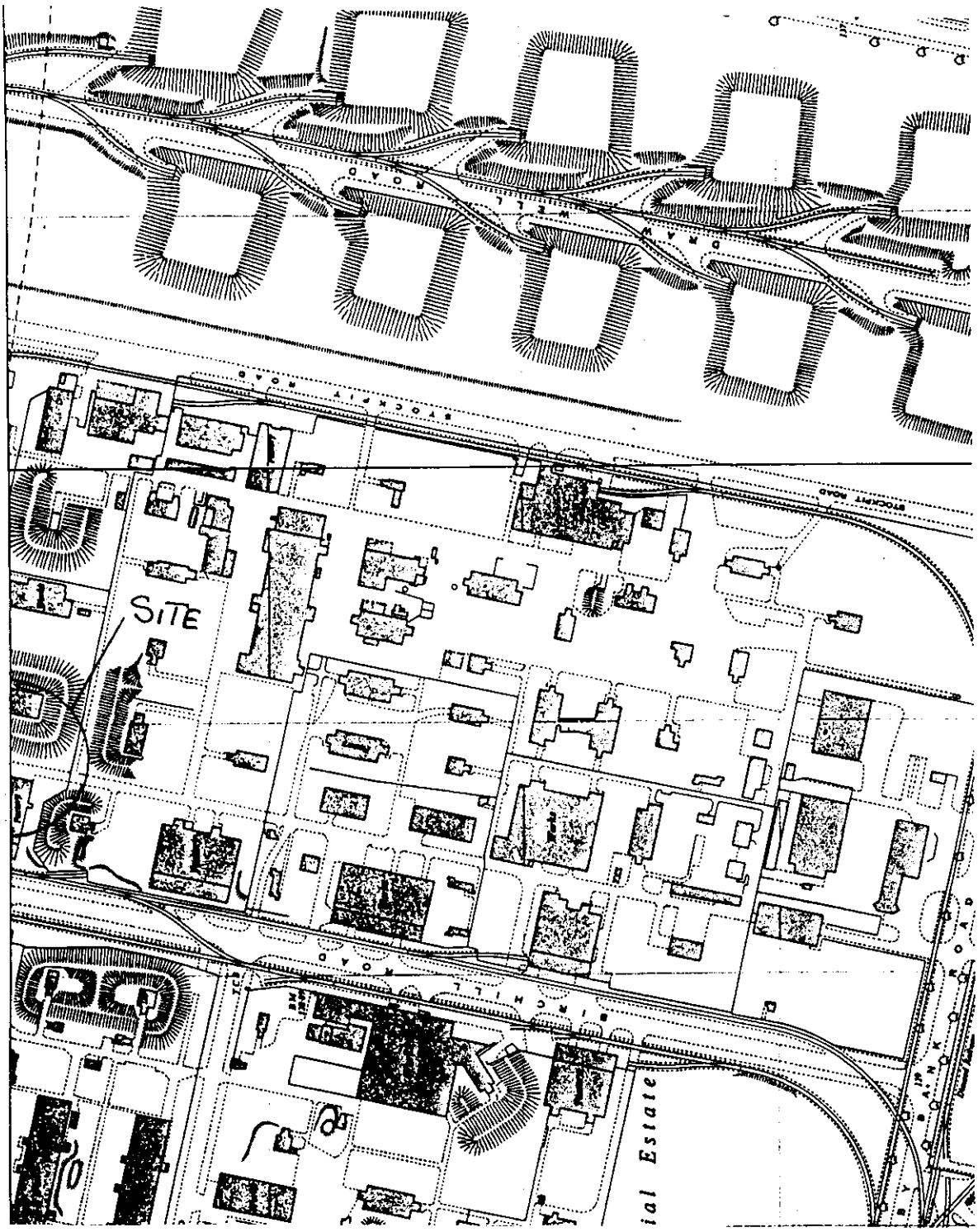
Client: MR A. ROCHE



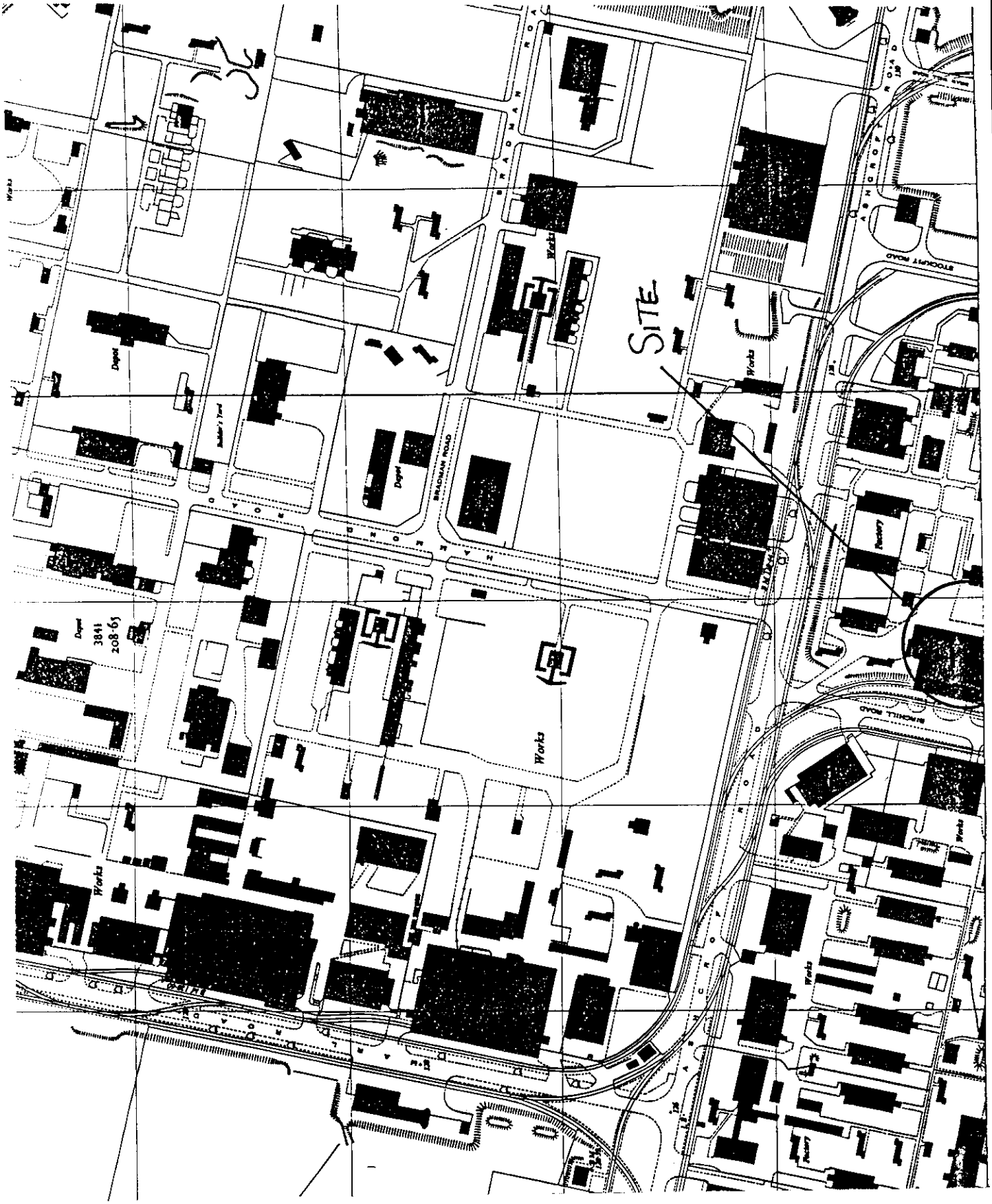
SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907	1928 LANCS - SW-NW COMBINED			
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 6 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:10560	Figure No. 6



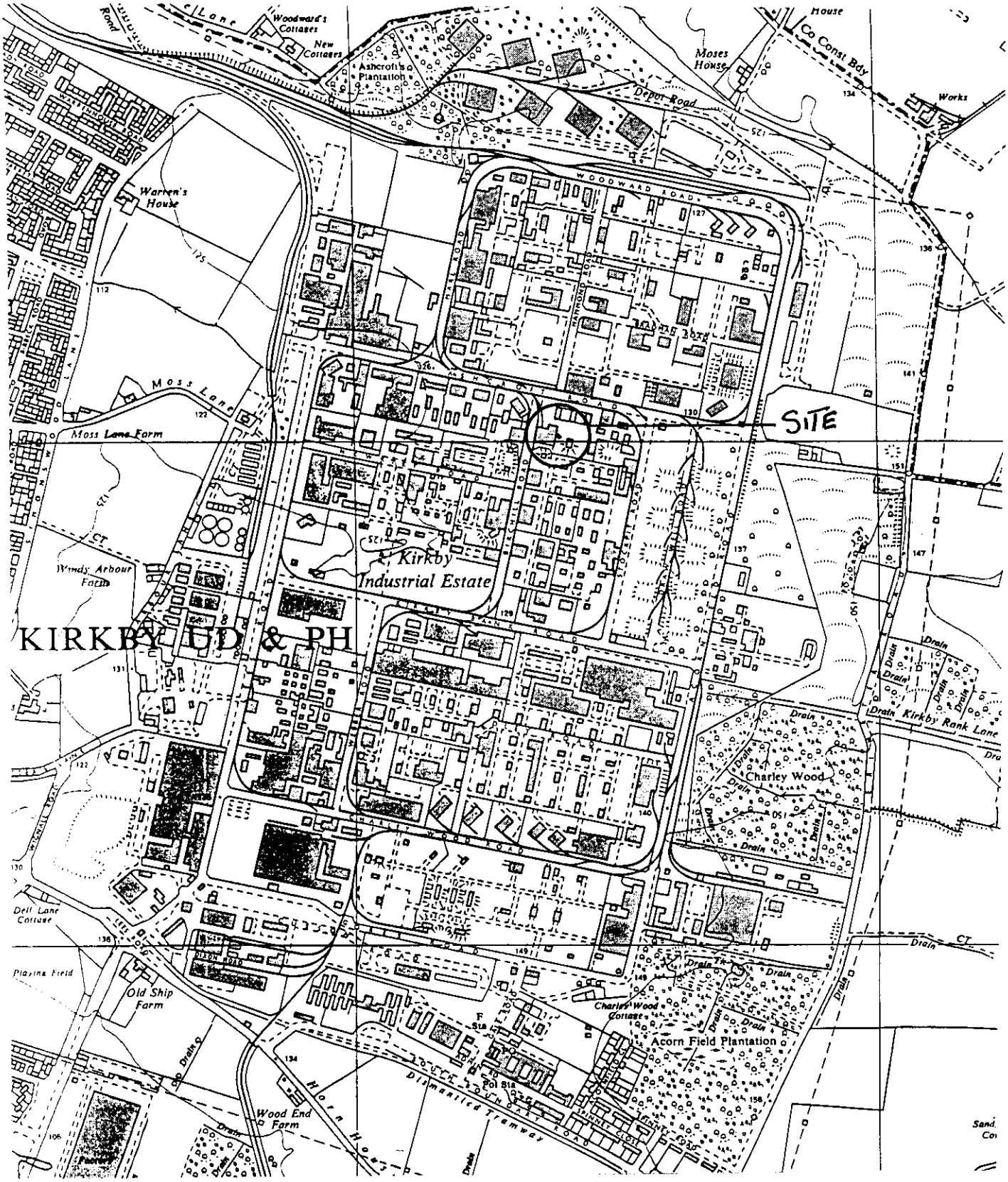
SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907		1956 SJ49NW		
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 7 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:10560	Figure No. 7



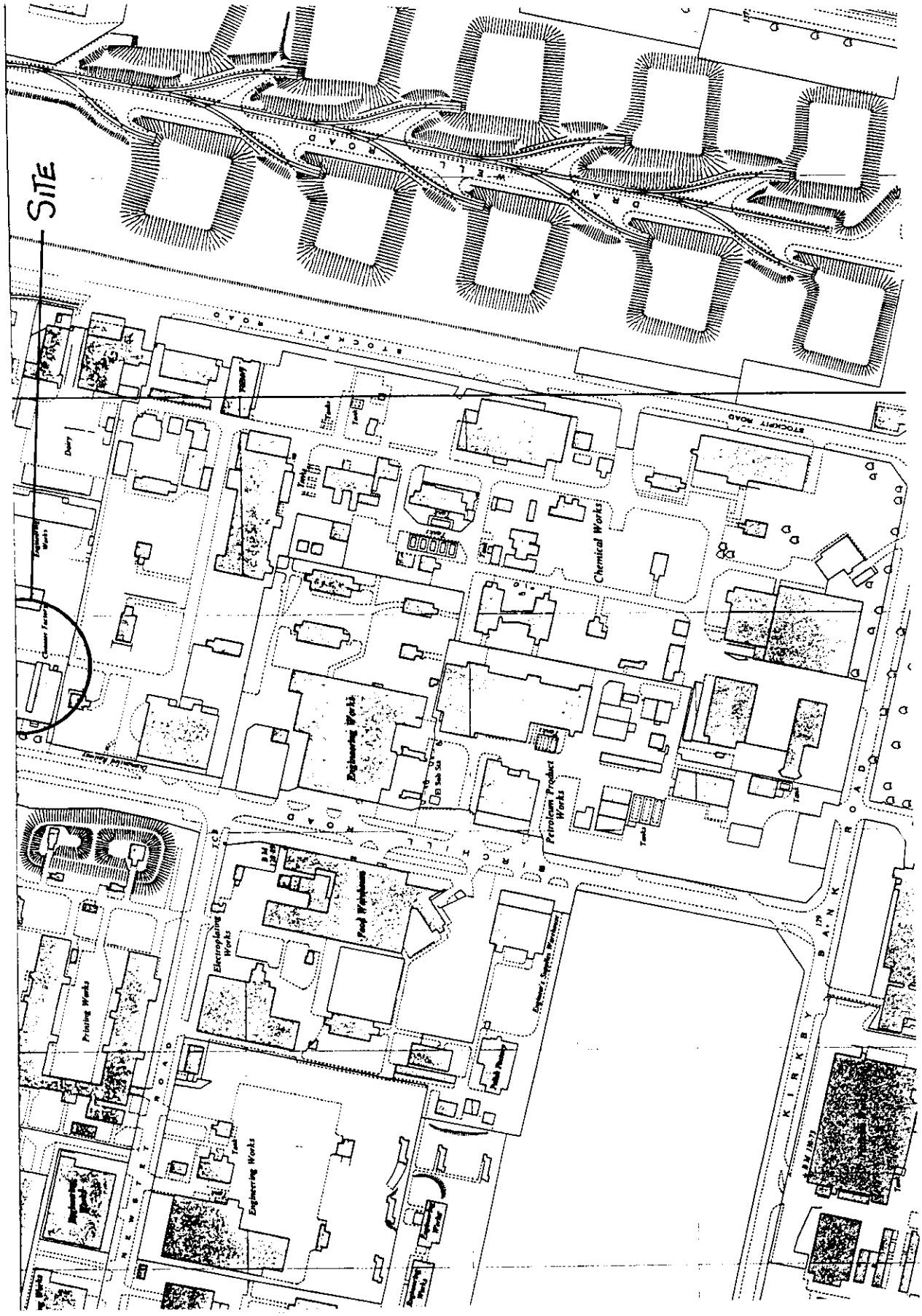
SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907	1962 SJ4298-SJ4398			
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 8 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:2500	Figure No. 8



SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907		1962 SJ4299-SJ4399		
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 9 / 13	Job No. 3807
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:2500	Figure No. 9



SUB SURFACE SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS 3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907		1966 SJ49NW			
Site BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	Date Drawn 17-Dec-01	Date Checked 17-Dec-01	Sheet 10 / 13	Job No. 3807	
Client MR A. ROCHE	Drawn By SEC	Checked By	Scale 1:10560	Figure No. 10	



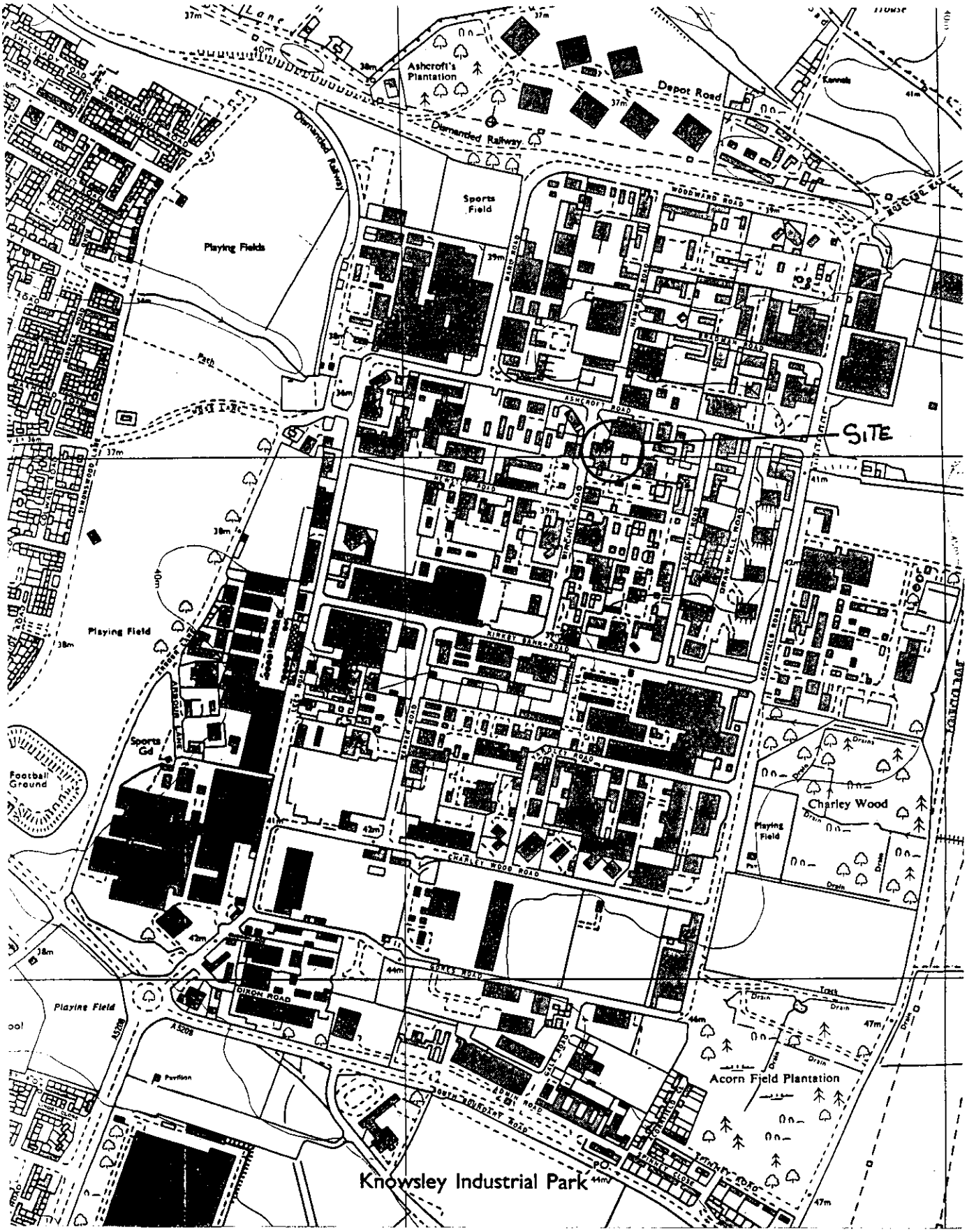
SUB SURFACE

SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS

3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

1971
SJ4298-SJ4398

Site	Date Drawn	Date Checked	Sheet	Job No.
BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	17-Dec-01	17-Dec-01	11/ 13	3807
Client	**Drawn By**	**Checked By**	**Scale**	**Figure No.**
MR A. ROCHE	SEC		1:2500	11



SUB SURFACE
SITE INVESTIGATION AND SPECIALIST GEOTECHNICAL CONSULTANTS
3 Peel Street, Preston, PR2 2QS. Tel. (01772) 561135 Fax (01772) 204907

1990
SJ49NW

Site	Date Drawn	Date Checked	Sheet	Job No.
BIRCHILL ROAD, KNOWSLEY INDUSTRIAL PARK	17-Dec-01	17-Dec-01	13 / 13	3807
Client	**Drawn By**	**Checked By**	**Scale**	**Figure No.**
MR A. ROCHE	SEC		1:10000	13