GROUND INVESTIGATION REPORT
for the site at
184 PALATINE ROAD, MANCHESTER, M20 2UJ
on behalf of
MS RAZZAQ

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Site:	**184 PALATINE ROAD, MANCHESTER, M20 2UJ**
Client:	**MS RAZZAQ**
Date:	**01 MARCH 2012**
Reference:	**LS 0432**
Version:	**1.0**

Prepared by:



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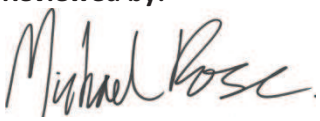

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FIGURE 2: Investigation Layout Plan

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1.0 INTRODUCTION

1.1 General

Land Science (Brighton) Limited was instructed by Ms Razzaq to undertake a phase I and phase II geotechnical and geo-environmental investigation in relation to the proposed new dwelling on the site at 184 Palatine Road, Manchester, M20 2UJ (see figure 1).

1.2 The Site

The site comprised a broadly rectangular shaped plot of land occupied by an existing two storey dwelling. A short dilapidated tarmacadam driveway led from Palatine Road to the south-east, and the grounds were mainly planted with trees and shrubs with limited areas of lawn. Ground levels sloped gently towards Palatine Road to the south-east. The site was located in a predominantly suburban area, and was surrounded by further residential properties to the north-west and south.

1.3 Form of Development

A new two or three storey dwelling with integral garage was proposed, including a basement within part of the building footprint. Figure 2 illustrates the layout of the proposed redevelopment.

1.4 Geotechnical Objectives

A geotechnical investigation was required, to provide an interpretation of ground conditions with respect to foundation design, pavement construction, soakaways, concrete specification, excavation stability, and basement construction parameters.

1.5 Geo-Environmental Objectives

Furthermore, a preliminary investigation into geo-environmental aspects of the site was required, in order to provide a generic quantitative risk assessment (GQRA) in respect of the proposed redevelopment, adjacent land uses, and the wider environment, in the context of the planning regime and PPS23.

1.6 Scope of Works

The following outline scope of works was agreed with the client:

- A basic desk study
- One day drilling window sampler boreholes and accompanying dynamic probes
- Installation of a standpipe, to be monitored on one subsequent occasion
- Geotechnical and geo-chemical analysis of soil samples as appropriate

The locations of window sampler boreholes are shown on figure 2. Five boreholes were sunk (CT1 to CT5) and dynamic probes were sunk adjacent to two positions (CT2 and CT5). The fieldwork was carried-out on 6 February 2012, with the return monitoring carried-out on 20 February 2011.

1.7 Conditions

Geotechnical and geo-environmental interpretations are inherently dependant on the conditions revealed by a limited set of data and the accepted means of interpreting that data in use at the time of the investigation. Every effort is made to ensure that such data is accurate and representative, and that any assessment is performed under current best practice. However, we do not accept any liability for the scope of the investigation, for conditions that have not been directly revealed through the investigation, or for the ultimate reliability of any published and current assessment criteria or procedures adopted in interpreting that data.

Any spatial or temporal extrapolation or inference is conjectural and no liability can be accepted for its accuracy; in particular, differing conditions may be revealed between or under points of investigation, and the concentrations or levels of mobile liquid and gaseous materials are likely to vary over time. It is also an inherent aspect of any investigation that areas of concern not previously anticipated are identified as works progress, and elements of the project design may vary during or after completion of the investigation; whilst every effort is made to tailor the investigation to suit within practical constraints as works progress, it may become necessary to undertake additional investigation work.

Information contained in this report is intended for the use of the Client and his agents for the purposes set-out in the text, and Land Science (Brighton) Ltd makes no warranty or representation whatsoever express or implied with respect to the use of this information by any other party or for uses other than those described. We do not indemnify the Client or any third parties against any dispute, claim or consequential losses arising from any finding or other result of this investigation report. No aspect of this report should be taken as a guarantee that a site is free of hazardous or potentially contaminative materials.

2.0 DESK STUDY

2.1 Geology

Online BGS mapping indicated the site to be directly underlain by Glaciofluvial Deposits (identified as sand and gravel, locally with lenses of silt, clay or organic material; characteristic 'sandur' (sheet) and valley train form; of glaciofluvial origin) overlying Wilmslow Sandstone Formation (fine to medium grained, red-brown to brick red, generally pebble-free, cross stratified, with sporadic siltstones).

2.2 Hydrogeology

The site overlies a land categorised as a Major Aquifer with soils of a high vulnerability classification. Given the sites low-lying location with watercourses nearby, shallow groundwater was possible. The site does not lie within a groundwater Source Protection Zone, an area placed around a potable water abstraction to protect the quality of the water source.

2.3 Hydrology

No surface water features were noted on site or in the immediate vicinity. The River Mersey was noted approximately 360m to the west. The site does not lie within an area indicated to be susceptible to flooding.

2.4 Radon and Ground Gases

In accordance with BRE 211:2007, the site does not lie within a higher Radon probability area, and Radon Protection Measures are not required for new dwellings of extensions locally.

With reference to Environment Agency mapping published online, no current or historical landfill sites were identified within the vicinity of the site. A number of landfill sites were identified some distance to the south and west, but were not considered significant in terms of the site and the proposed redevelopment.

2.5 Historical Maps

Historical maps dating back to 1894 were obtained as part of the desk study. The site initially formed part of the gardens to a substantial dwelling to the north (later known as St Anne's Square and The Grange); by 1956 the site is shown in its present layout, and remained essentially unchanged since. The site was surrounded by further gardens and residential dwellings throughout the period, with a tennis court shown to the south from 1964.

2.6 Previous Ground Investigations

Land Science (Brighton) Ltd was not aware of any previous investigation that may have been undertaken on the site.

3.0 INVESTIGATION

3.1 Soil Conditions

A summary of the ground conditions encountered is presented below. For full details, reference should be made to the Engineers logs presented in the Appendix.

Strata	Depth (base)	Description
Topsoil (CT1, CT2, CT3, CT5)	0.30-0.40m	Blacks sandy topsoil with roots.
Made Ground (CT4, CT5)	0.40-0.50m	CT4 – tarmacadam over gravelly sand with brick CT5 – dark brown fine sand with roots.
Glaciofluvial Deposits (granular)	4.20m	Brown fine to medium SAND with varying proportions of flint gravel.
Glaciofluvial Deposits (granular)	7.00m+	Brown gravelly CLAY

Summary of encountered conditions

3.2 Groundwater

Seepages of groundwater were encountered within CT5 at a depth of 4.50m. Due to associated instability, the standpipe was installed to a depth of 4.00m; water was noted at a depth of 3.89mbgl during the return monitoring visit.

3.3 Geotechnical Field Testing

Super Heavy Dynamic probes were undertaken at CT2 and CT5, and the results are summarised on the table below.

Strata	Depth (base)	SHDP Results	Equivalent SPT N	Relative density/consistency
Glaciofluvial Deposits (granular)	3.00m	N=2 to N=8 (mean N=5)	N=6 to N=24 (mean N=15)	Loose to medium dense
	4.20m	N=11 to N=37 (mean N=20)	N=33 to N=111 (mean N=60)	Dense to very dense
Glaciofluvial Deposits (granular)	7.00m+	N=2 to N=3 (4.50m) increasing to N=20 to N=24 (7.00m)	N=6 to N=9 (4.50m) increasing to N=60 to N=72 (7.00m)	Soft to firm, increasing to very stiff

Super Heavy Dynamic Probe Results

Hand Penetrometers were undertaken on cohesive materials at depth within CT5 at approximate 0.50m centres. The results decreased from 2.5kg/cm^2 at 5.00m to 1.0kg/cm^2 at 7.00m; these readings corresponded to undrained shear strengths of between 125kN/m^2 and 50kN/m^2 respectively, or firm to stiff becoming soft to firm consistency.

A falling head soakage test was undertaken in CT4, which gave an infiltration rate of $1.5x10^{-4}m.s^{-1}$. The result was considered to be appropriate for the types of materials encountered.

3.4 Geotechnical Laboratory Testing

Particle size distribution analyses were undertaken, as summarised below.

Strata	No. of tests	Cobbles (%)	Gravel (%)	Sand (%)	Silt/Clay (%)
Glaciofluvial Deposits (granular)	3	0.0	3.9-26.2	68.7-86.5	5.1-18.3

Summary of Particle Size Distribution analysis

Soil soluble Sulphate and pH determinations were undertaken, as summarised below.

Strata	No. of tests	pH value	Soil Soluble Sulphate
Glaciofluvial Deposits	5	7.4-7.6	0.21-0.76g/l

Summary of Soil Soluble Sulphate results

4.0 ENGINEERING CONSIDERATIONS

4.1 Foundations

It was understood that the proposed building was to be constructed upon a raft foundation with a basement over part of the building footprint. The raft foundation was to be reinforced concrete and include thickenings beneath load-bearing walls and columns to act as integral pad and strip foundations. The concrete floor slab was to be laid upon an engineered granular sub-base compacted to a suitable specification.

It is recommended that integral strip foundations are designed based on a maximum net allowable bearing capacity of 250kPa on the Glaciofluvial Deposits at depths of between 1.00m and 3.00m. Under these loadings, settlements should remain within tolerable limits.

The Glaciofluvial Deposits should be treated *en mass* as being non-shrinkable as defined by the NHBC Standards Chapter 4.2. The formation is likely to be frost susceptible, and the minimum foundation depth should be specified accordingly.

Values for the Modulus of Subgrade Reaction used for raft slab design are estimated at between 4800kN/m^3 and 16000kN/m^3 (for loose sands) and between 64,000kN/m^3 and 128,000kN/m^3 (for dense sands), based on published values.

4.2 Retaining Walls

The following parameters have been taken from BS8002:1994 (*Earth Retaining Structures*) and BSEN1997-1:2004 (so called *Eurocode 7*) and assume:

- Sloping ground level = 10°
- Ratio of $\beta/\varphi' = 0.33$
- Ratio of $\delta/\phi' = 0.0$

Parameter	Medium dense sands (i.e. Glaciofluvial deposits)
Unit weight of soil (saturated) γ_s	20.5kN/m^3
Angle of friction φ'	30°
Co-efficient of active pressure	0.37
Co-efficient of passive resistance	3.8

Retaining wall design parameters

4.3 Basement Design

Groundwater was recorded at a depth of 3.89mbgl; the site lies close to land identified as being susceptible to flooding. The site is raised relative to adjacent road level, which is not susceptible to flooding. It is considered that the maximum seasonal standing water level will not exceed 32.50mOD.

It may be necessary to assume shallower water or water from other sources in accordance with building regulations. The basement should be afforded with an appropriate degree of protection against water and water vapour ingress.

4.4 Excavations

Excavations into the sands may be susceptible to localised instability. Shallow temporary excavations may satisfactorily stand near-vertical. Deeper excavations or those that are to remain open for prolonged periods should either be battered back to a safe angle or temporary support used. Appropriate safety precautions should be adopted for all excavation works, based on an assessment of possible risks and hazards.

4.5 Pavements

Based on the field observations in conjunction with the particle size distribution analysis, the formation materials should be considered as being frost susceptible for pavement design purposes and a minimum pavement thickness of 450mm should be considered. A design CBR value of 20% is recommended based on TRRL report 1132.

4.6 Building Materials

The results of the Sulphate and pH analyses fell into Class DS-2 and ACEC class AC-2 of the current revision of BRE Special Digest 1. The advice of this publication should be taken for the design and specification of all sub surface concrete.

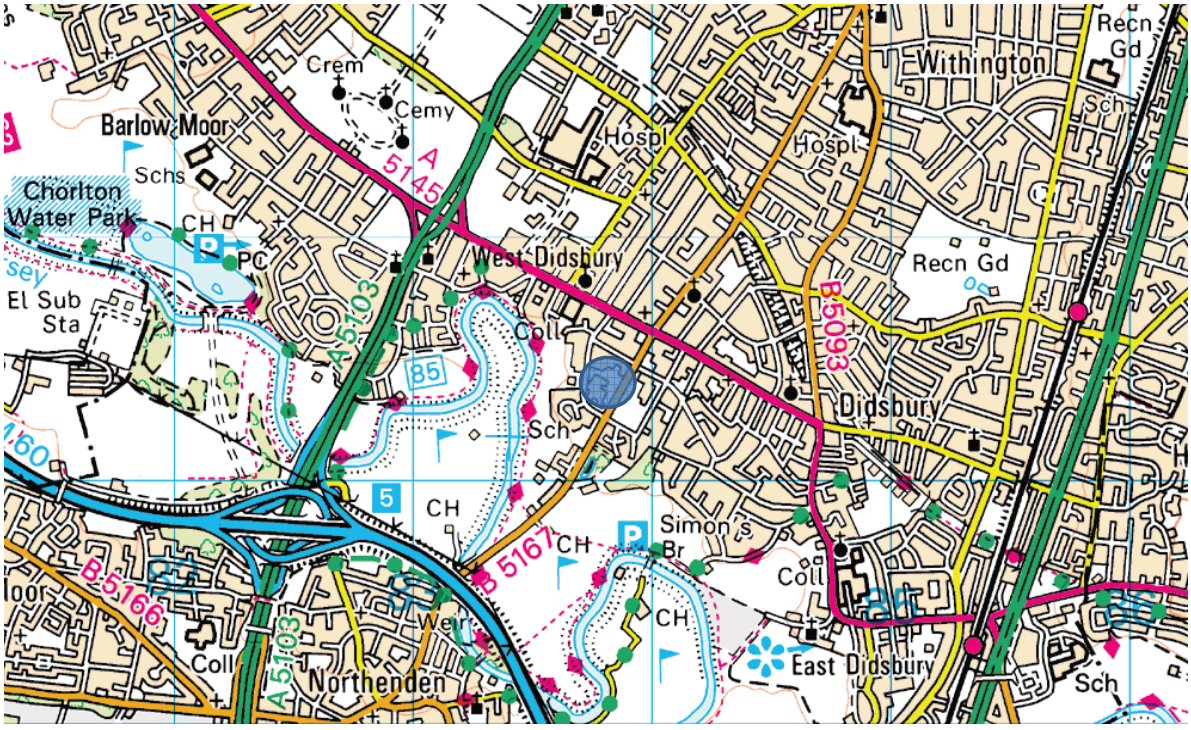
4.7 Soakaways

It is likely that soakaways will perform satisfactorily within the Undivided Lower Greensand, albeit at a moderately low infiltration rate. It is recommended that soakaways are designed based on a preliminary infiltration rate of $1.5x10^{-4}m.s^{-1}$.

4.8 Land Gases

Radon Protection Measures are not required.





TITLE:	Location			**REF:**	LS 0432
PROJECT:	184 Palatine Road, Manchester, M20 2UJ			**VERSION**	v1
CLIENT:	Isma Razzaq			**FIGURE:**	1
PREPARED:	ET	**CHECK:**	ET	**DATE:** 01/03/2012	**SHEET No:** page: 1 of 1

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TITLE:	Investigation Layout			**REF:** LS 0432
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CLIENT:	Isma Razzaq			**FIGURE:** 2
PREPARED: ET		**CHECK:** ET	**DATE:** 01/02/2012	**SHEET No:** page: 1 of 1

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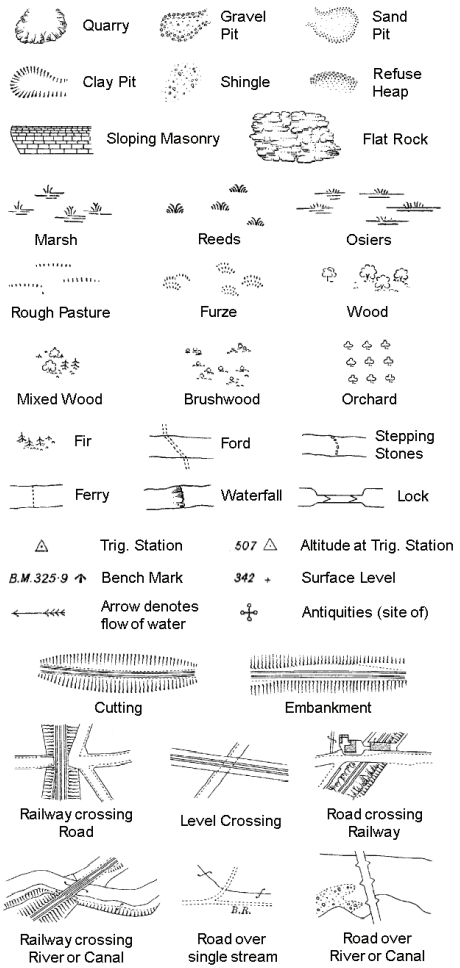
APPENDIX A

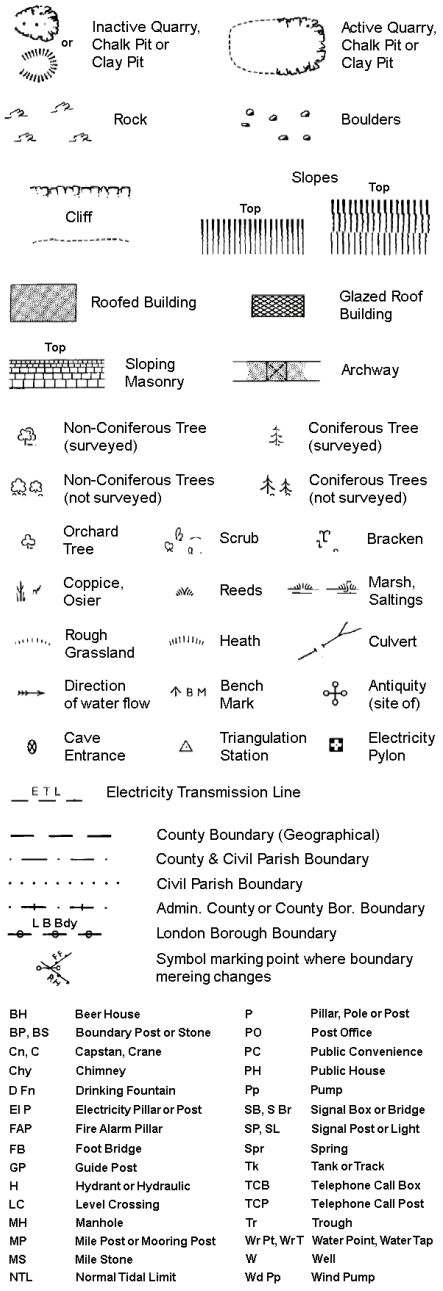
Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



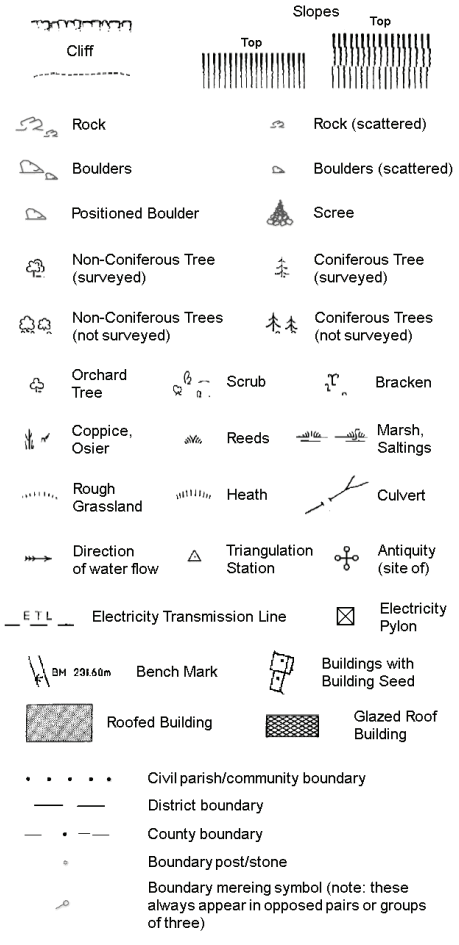
B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Lancashire And Furness	1:2,500	1894	1
Cheshire	1:2,500	1872	1
Cheshire	1:2,500	1898	1
Lancashire And Furness	1:2,500	1907	1
Cheshire	1:2,500	1910	1
Lancashire And Furness	1:2,500	1922	1
Lancashire And Furness	1:2,500	1935	1
Ordnance Survey Plan	1:1,250	1956	1
Ordnance Survey Plan	1:2,500	1956 - 1957	1
Ordnance Survey Plan	1:1,250	1964 - 1974	1
Large-Scale National Grid Data	1:1,250	1992	1
Large-Scale National Grid Data	1:1,250	1993 - 1997	1
Large-Scale National Grid Data	1:1,250	1994	1
Additional SIMs	1:1,250	1983 - 1987	1
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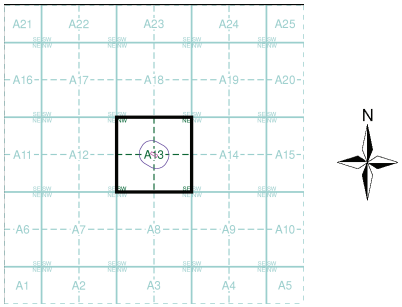
Additional SIMs	1:1,250	1992	1

Historical Map - Segment A13



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Search Buffer (m): 100

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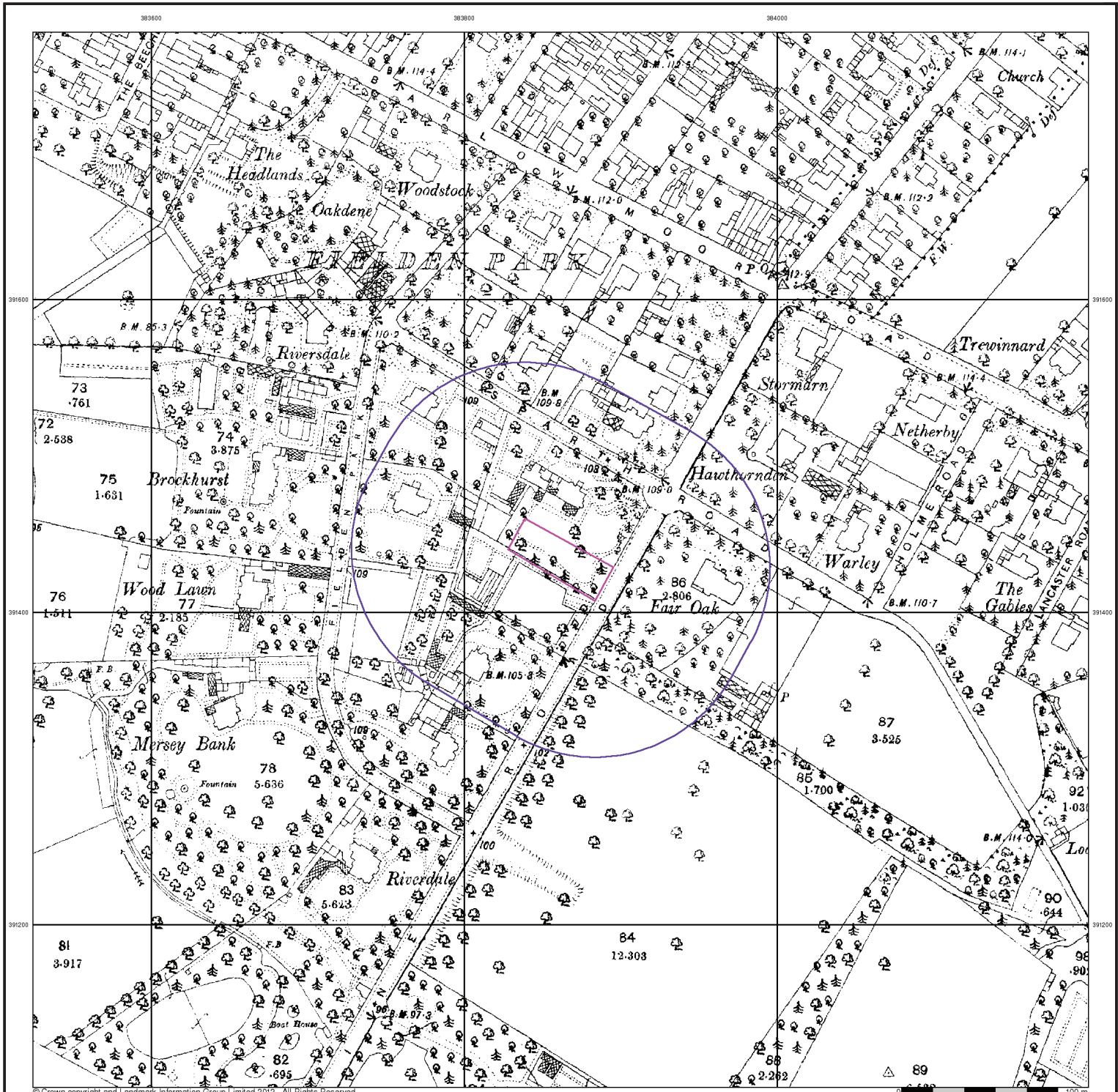

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Lancashire And Furness
Published 1894
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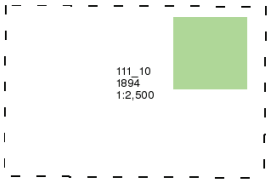

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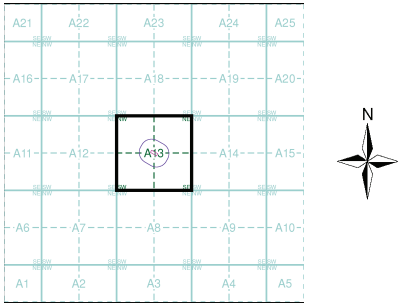

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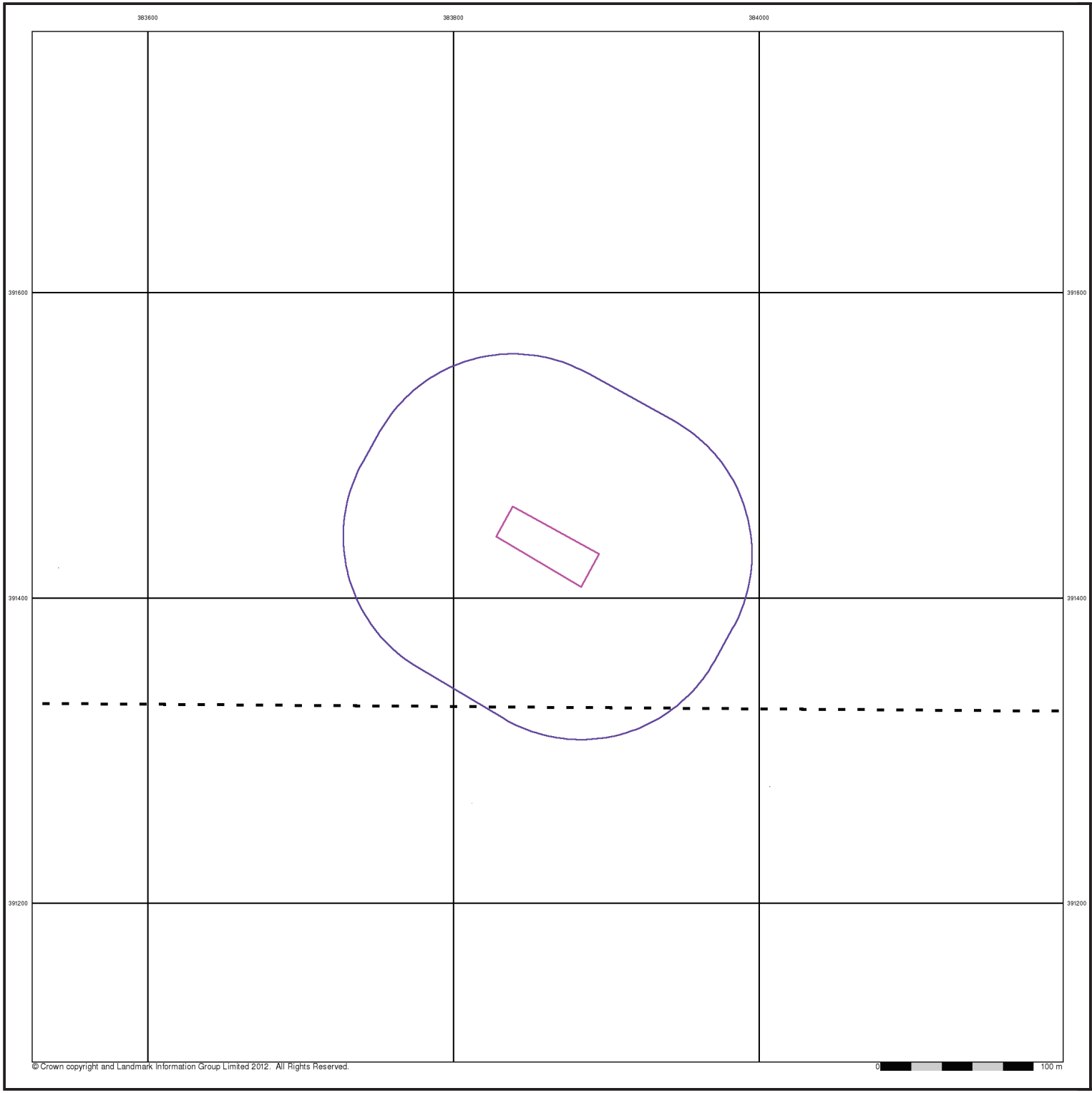

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Cheshire

Published 1872

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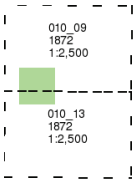

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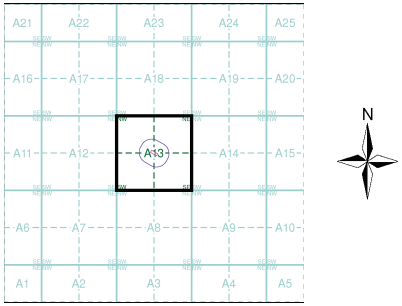

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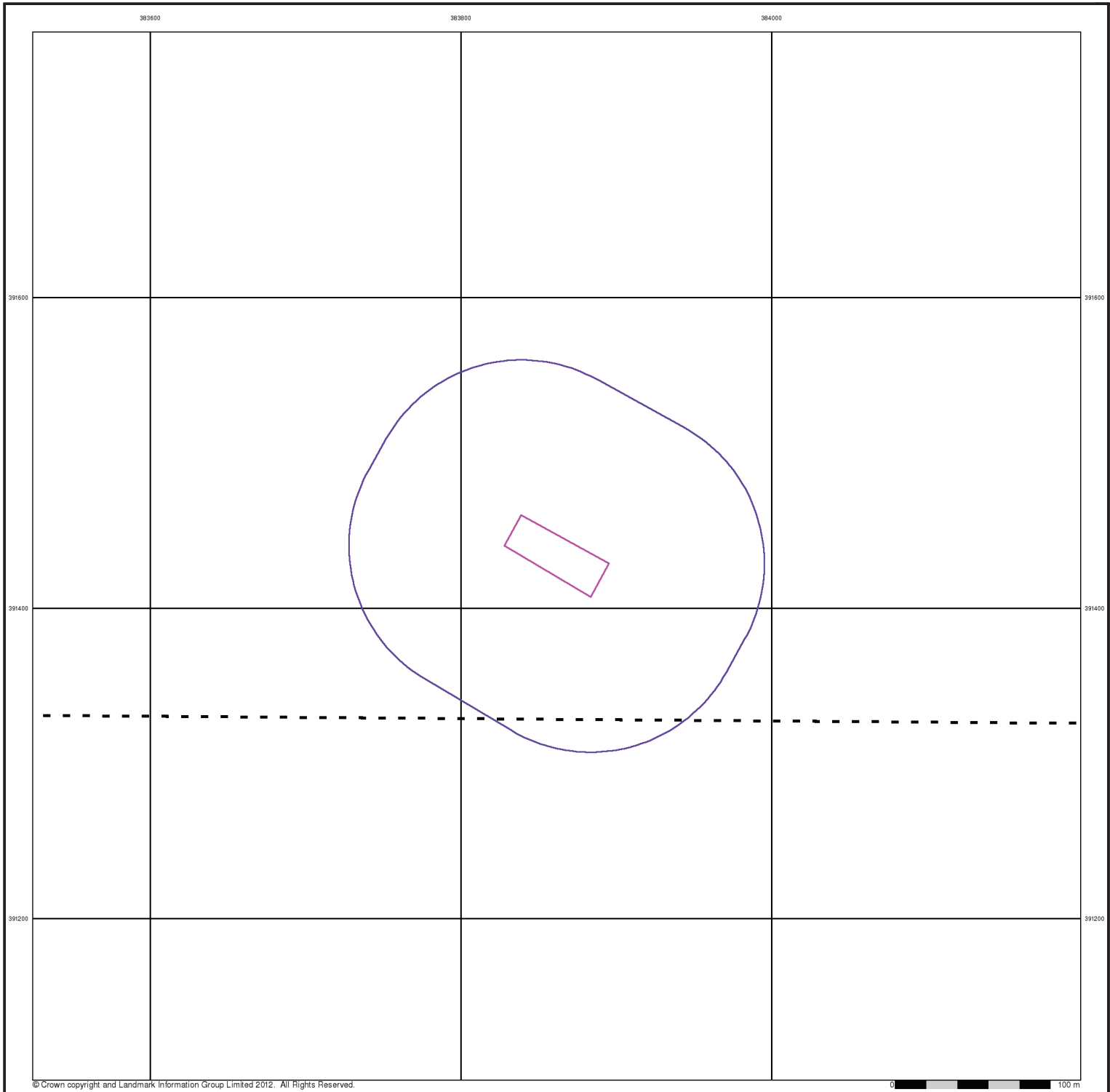

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Cheshire

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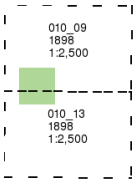

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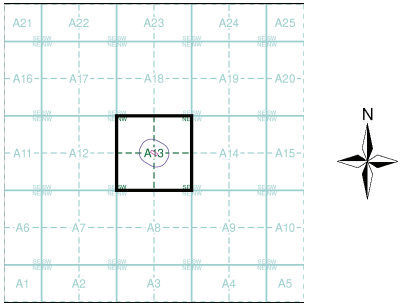

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Tel: 0844 844 9952
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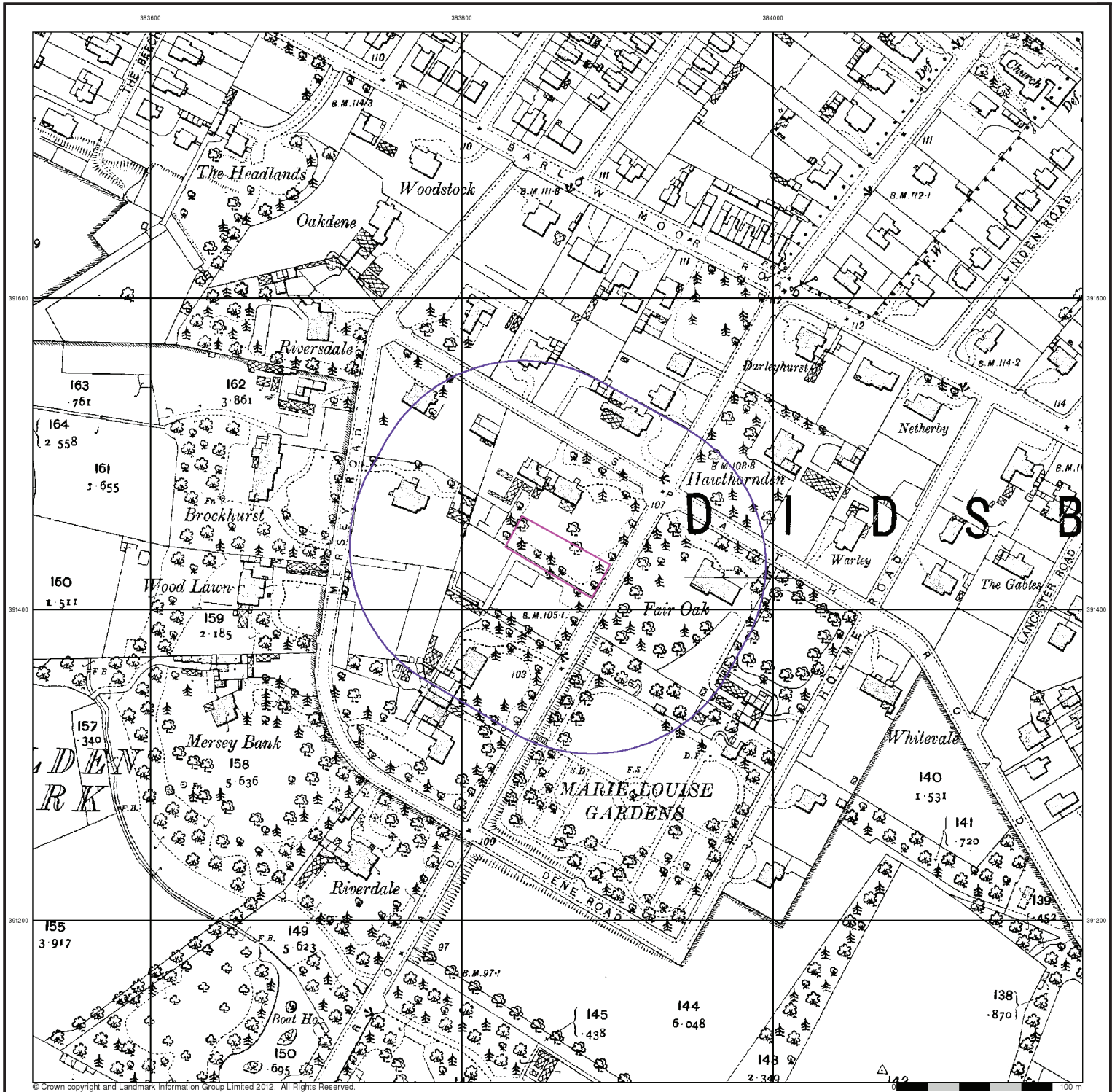

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Lancashire And Furness

Published 1907

Source map scale - 1:2,500

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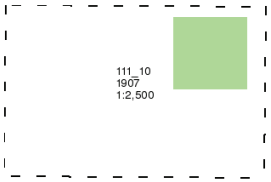
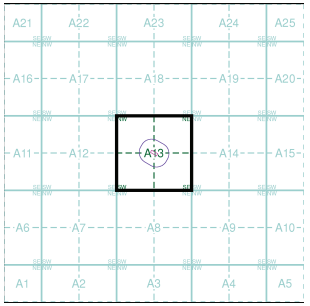
Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Slice:	A
Site Area (Ha):	0.16
Search Buffer (m):	100

Site Details

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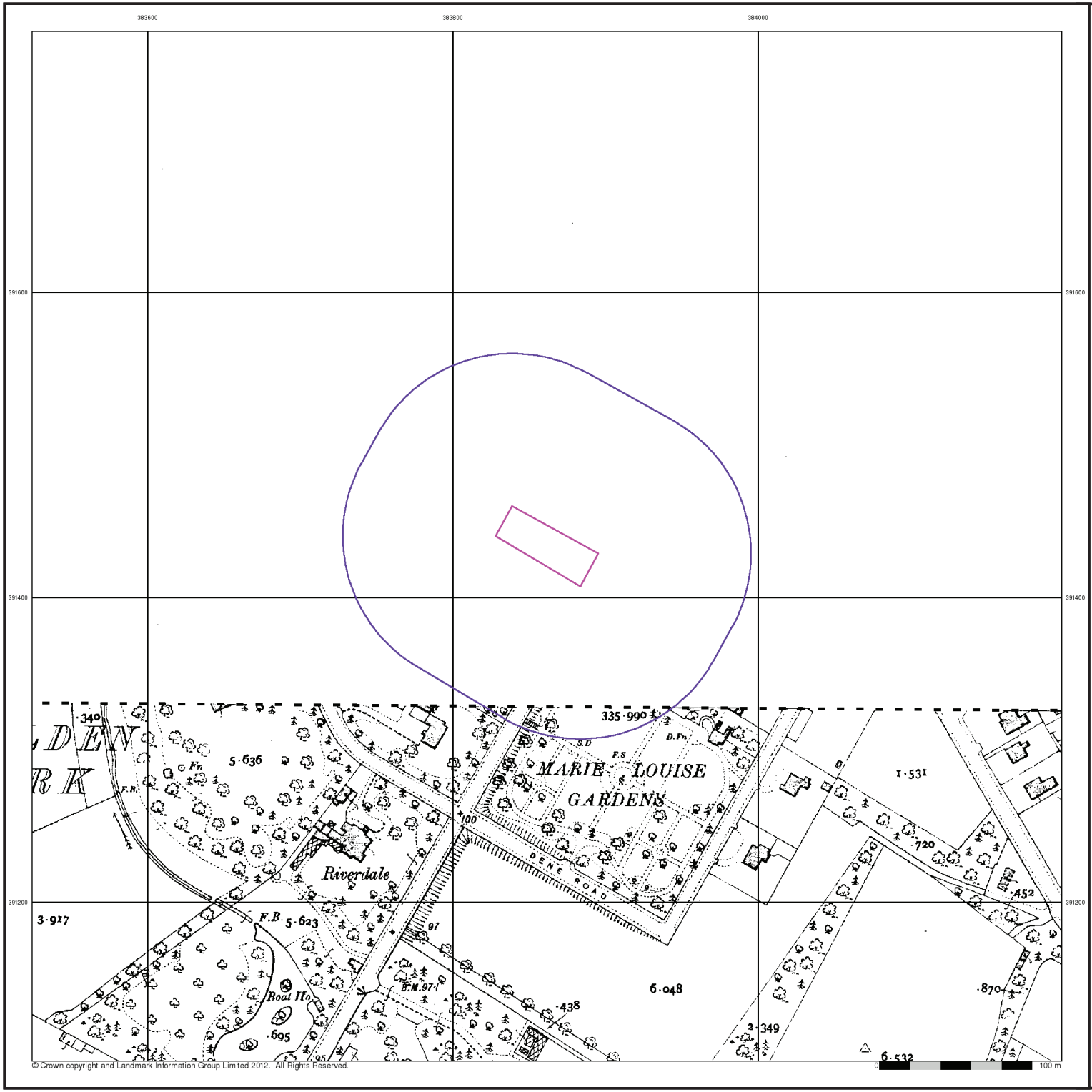

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Cheshire

Published 1910

Source map scale - 1:2,500

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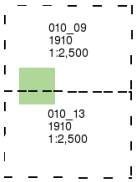
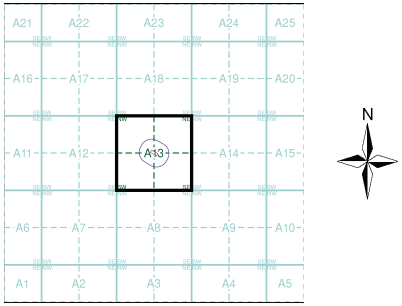
Map Name(s) and Date(s)



Historical Map - Segment A13



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Slice:	A
Site Area (Ha):	0.16
Search Buffer (m):	100

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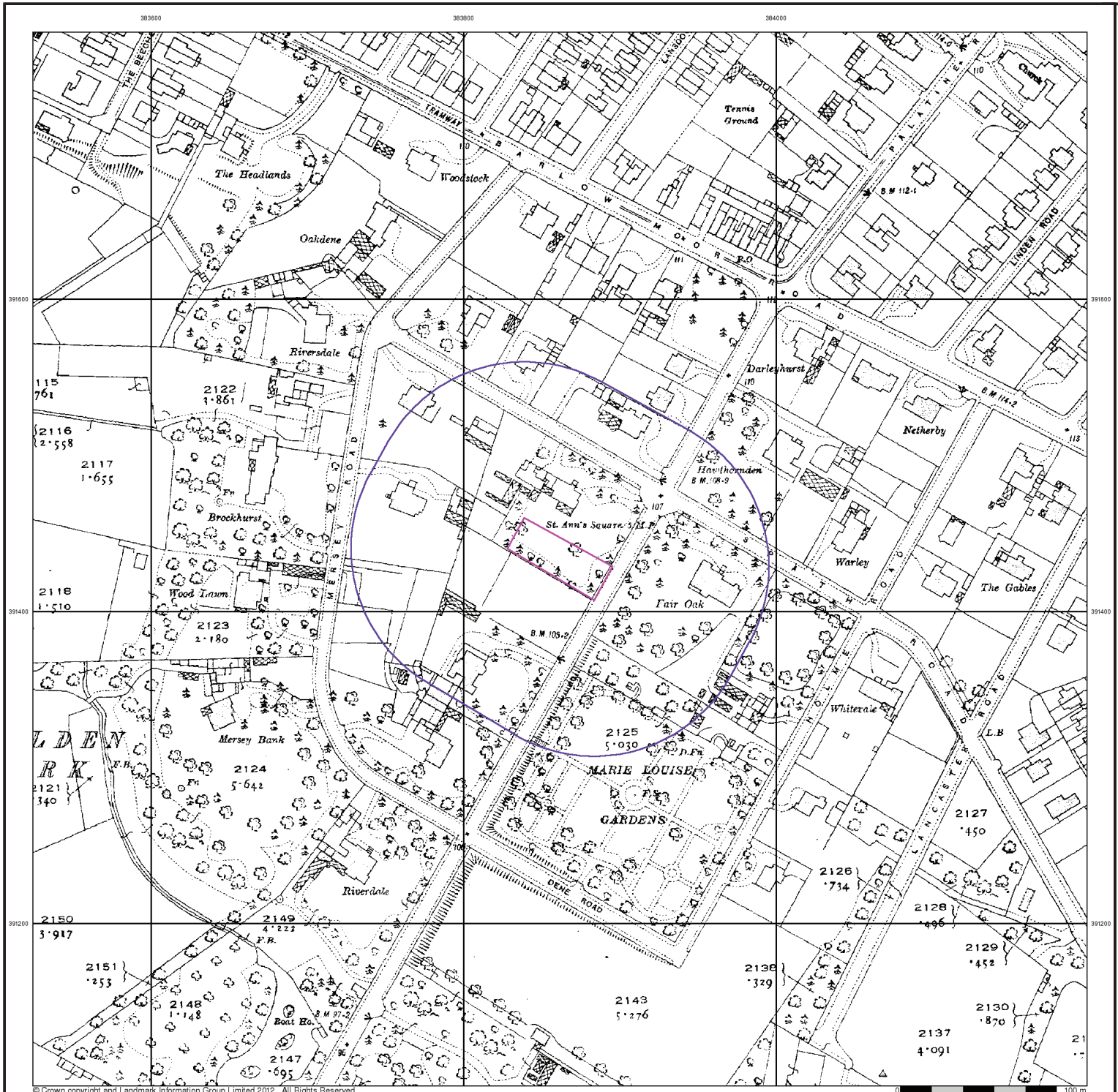

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Lancashire And Furness
Published 1922
Source map scale - 1:2,500

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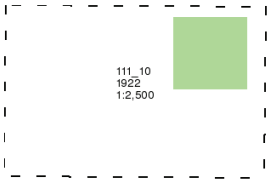
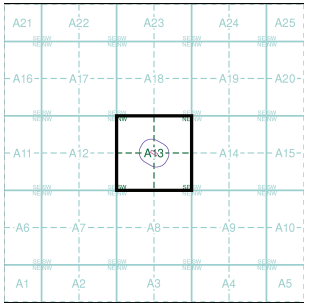
Map Name(s) and Date(s)



Historical Map - Segment A13



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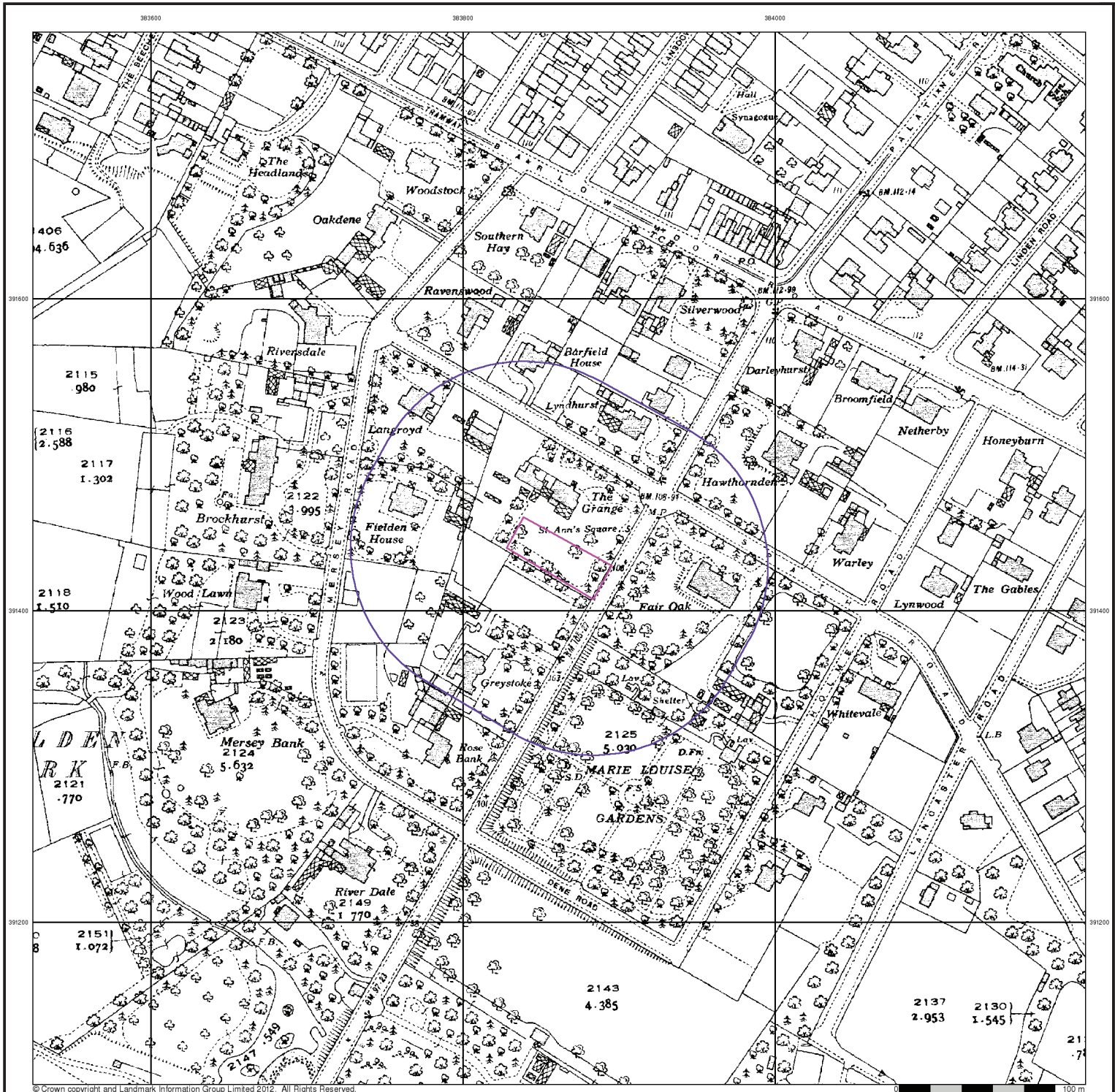

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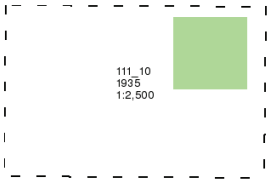
Lancashire And Furness

Published 1935

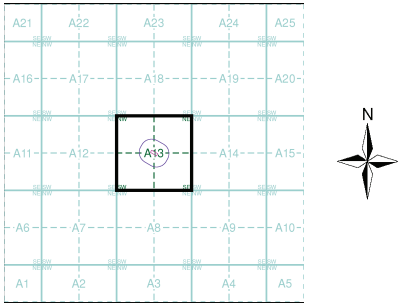
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



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Ordnance Survey Plan
Published 1956
Source map scale - 1:1,250

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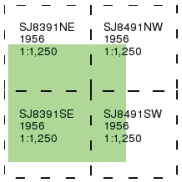
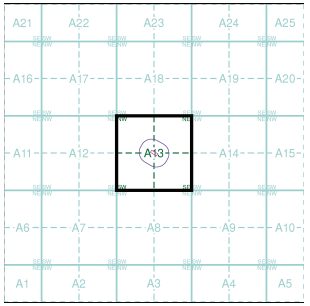
Map Name(s) and Date(s)



Historical Map - Segment A13



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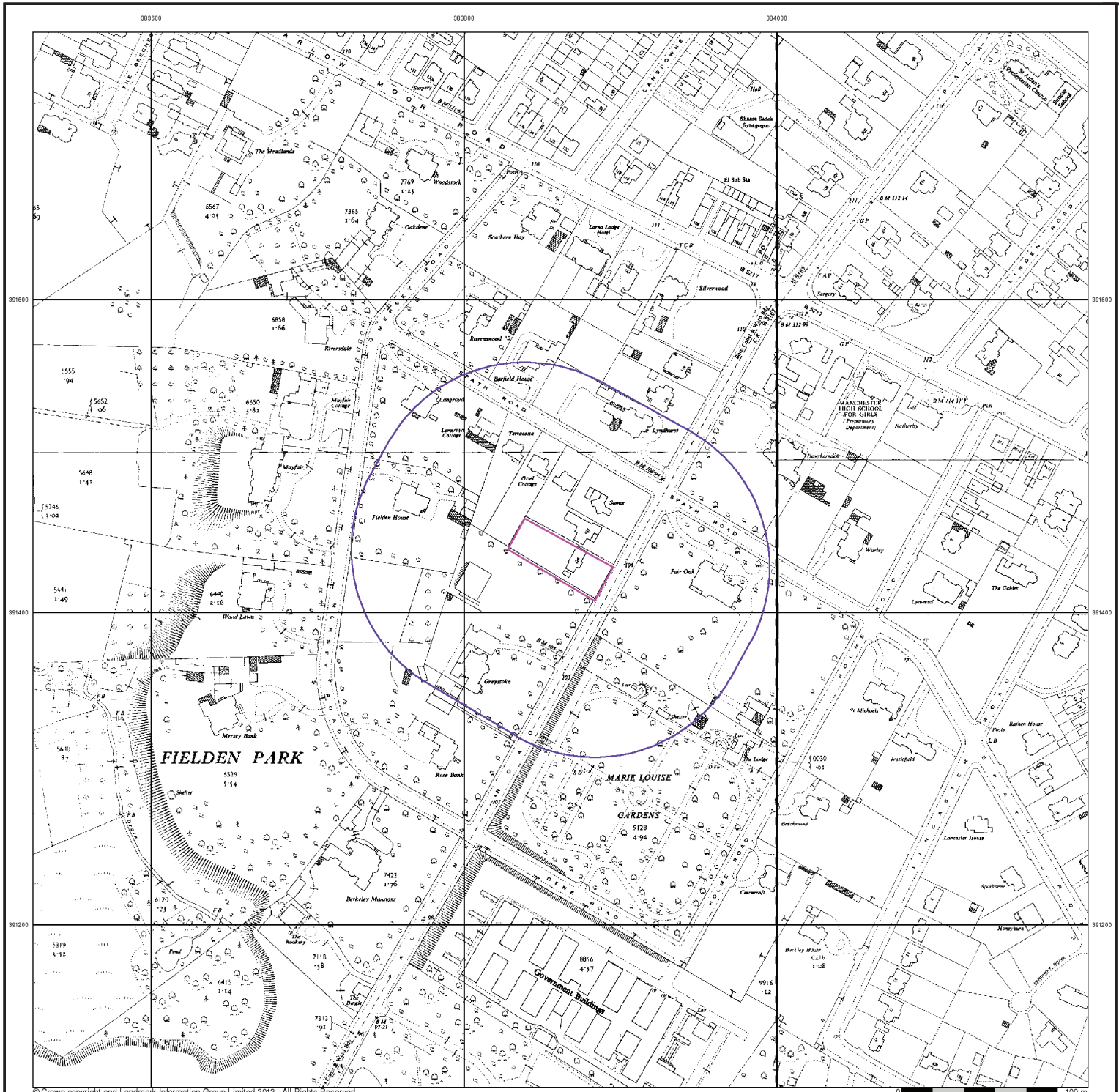

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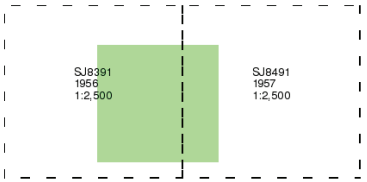
Ordnance Survey Plan

Published 1956 - 1957

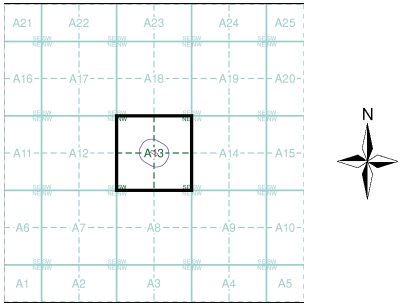
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Slice:	A
Site Area (Ha):	0.16
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Site Details

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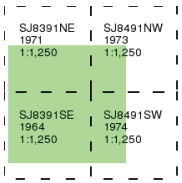
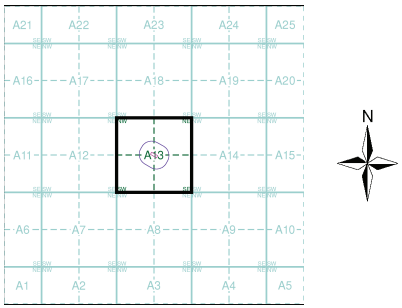
Ordnance Survey Plan
Published 1964 - 1974
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Slice:	A
Site Area (Ha):	0.16
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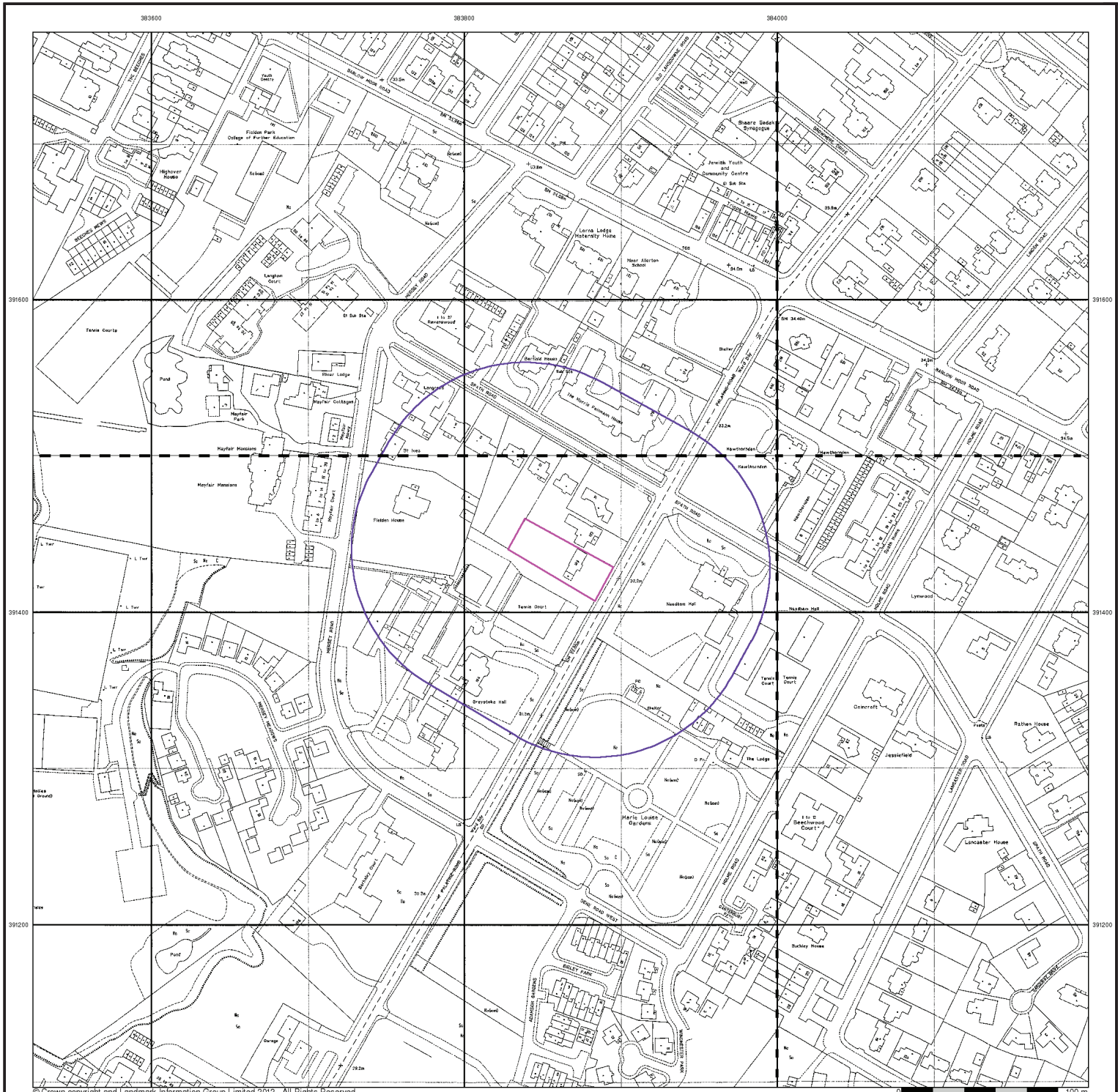

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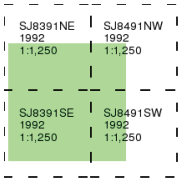
Large-Scale National Grid Data

Published 1992

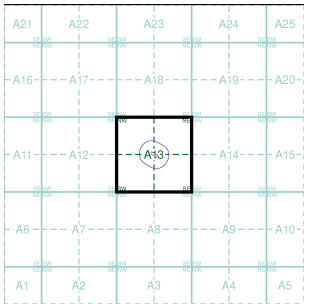
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Slice:	A
Site Area (Ha):	0.16
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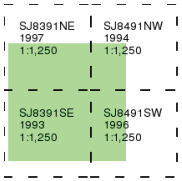
Large-Scale National Grid Data

Published 1993 - 1997

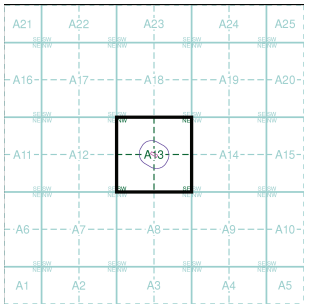
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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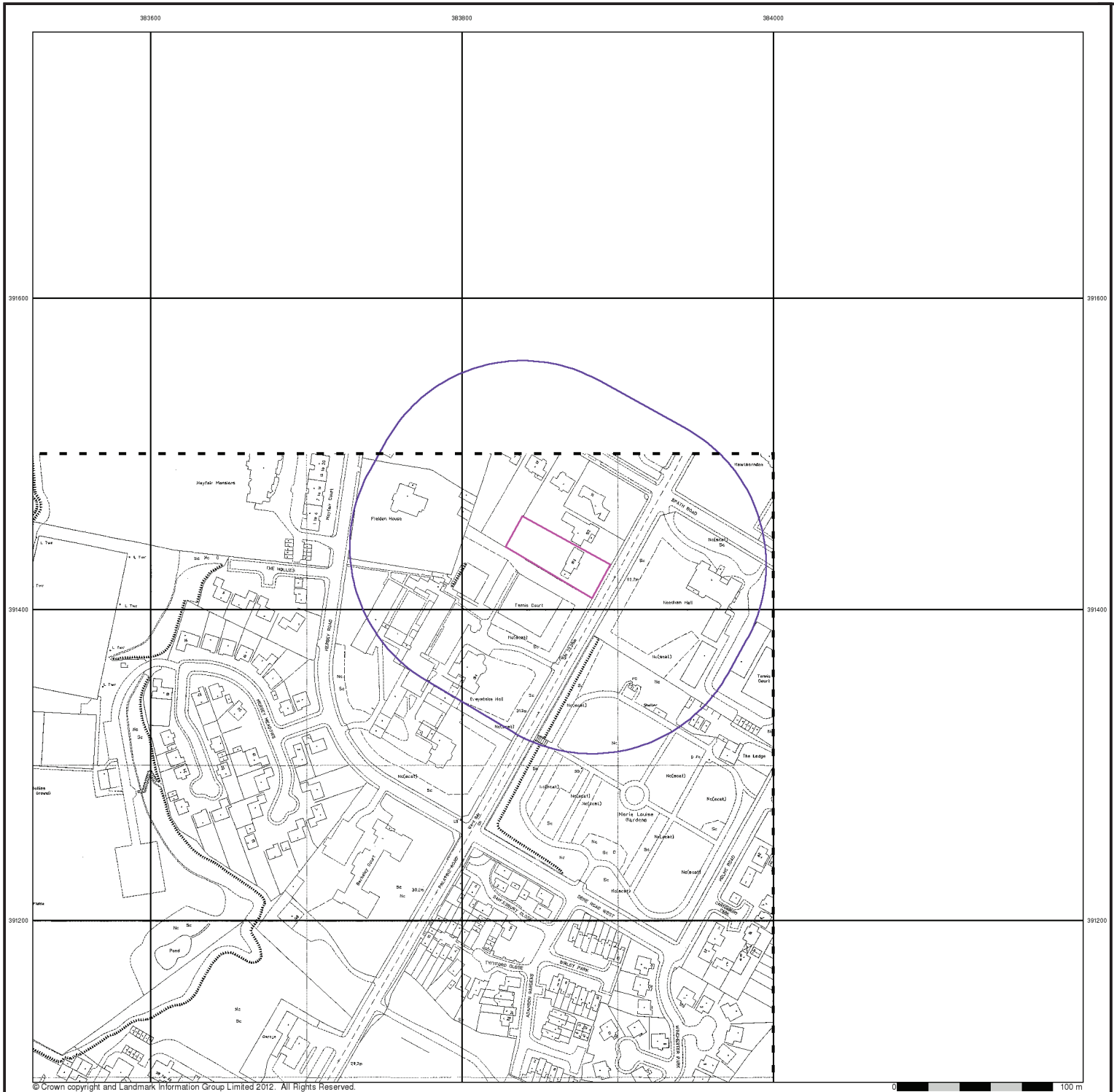

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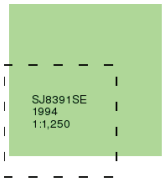
Large-Scale National Grid Data

Published 1994

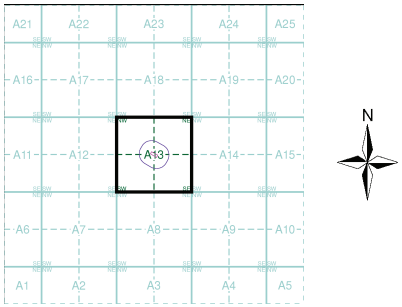
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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384000
391600
391400
391200
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Highover House
Longham Court
Tennis Courts
Pond
River Lodge
Mayfair Cottages
Mayfair Park
Mayfair Mansions
Mayfair Court
Fielden House
Tennis Court
Needham Hall
Greystoke Hall
MARIE LOUISE
GARDENS
The Lodge
Barlow R.C. High School
Berkeley Court
Pond
Garage
Lorna Lodge Maternity Home
Moor Allerton School
Barfield House
Ravenswood
Sandilands
Hawthornden
Lynwood
Broomfield Court
Beechwood Court
Lancaster House
Ratnon House
Concrete
Jessieland
Buckley House
PALATINE ROAD
DENE ROAD
DENE ROAD WEST
LANCASTER AVENUE
HOLME ROAD
SPRATH ROAD
LINDEN ROAD
OLD LANDSDOWN
Jewish Youth & Community Centre
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Garage
Wood Bdy
Tennis Courts
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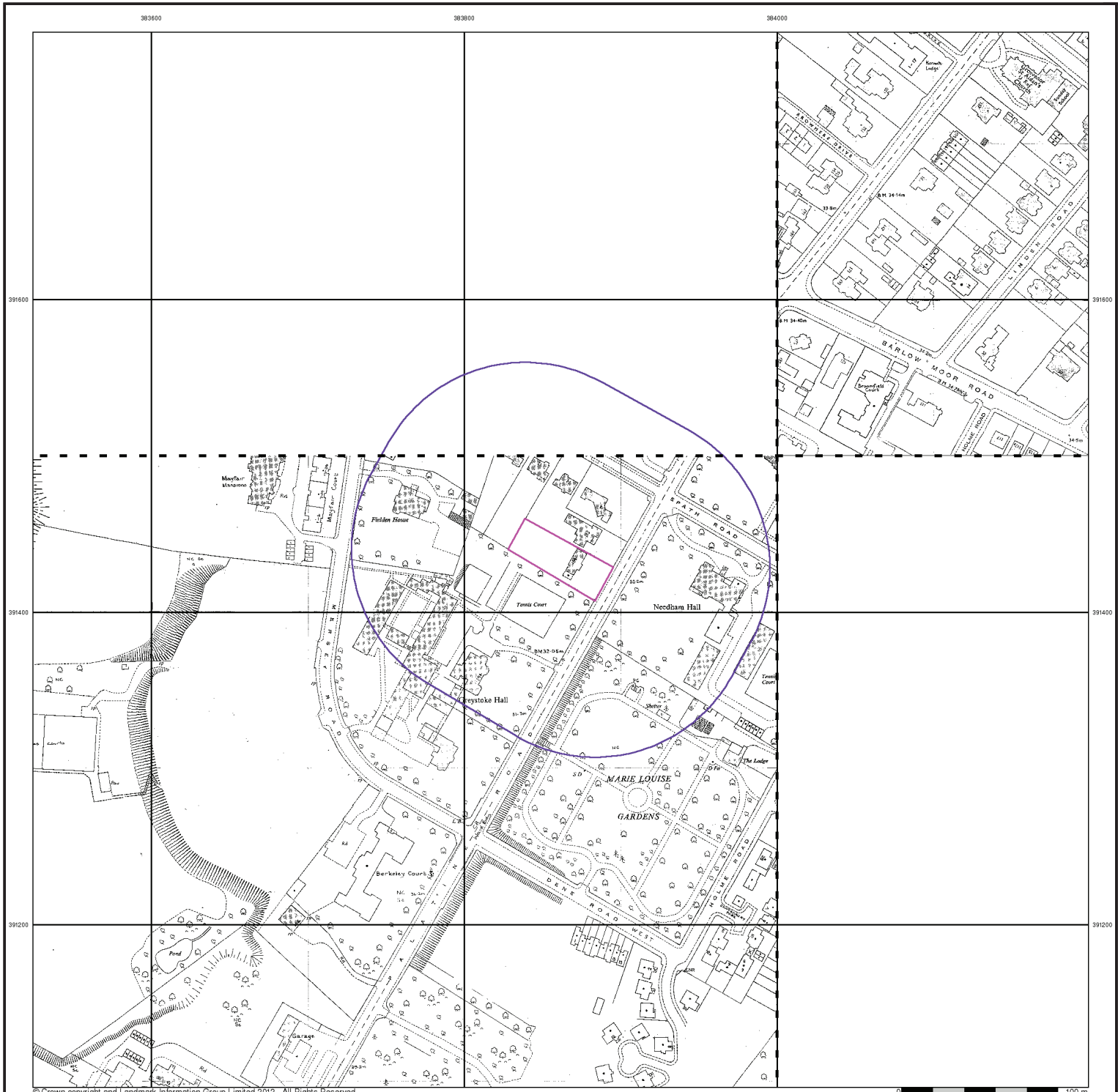

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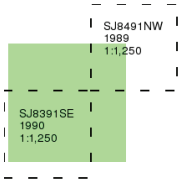
Additional SIMs

Published 1989 - 1990

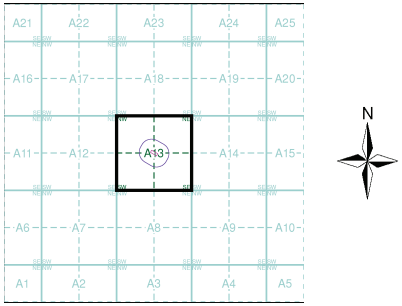
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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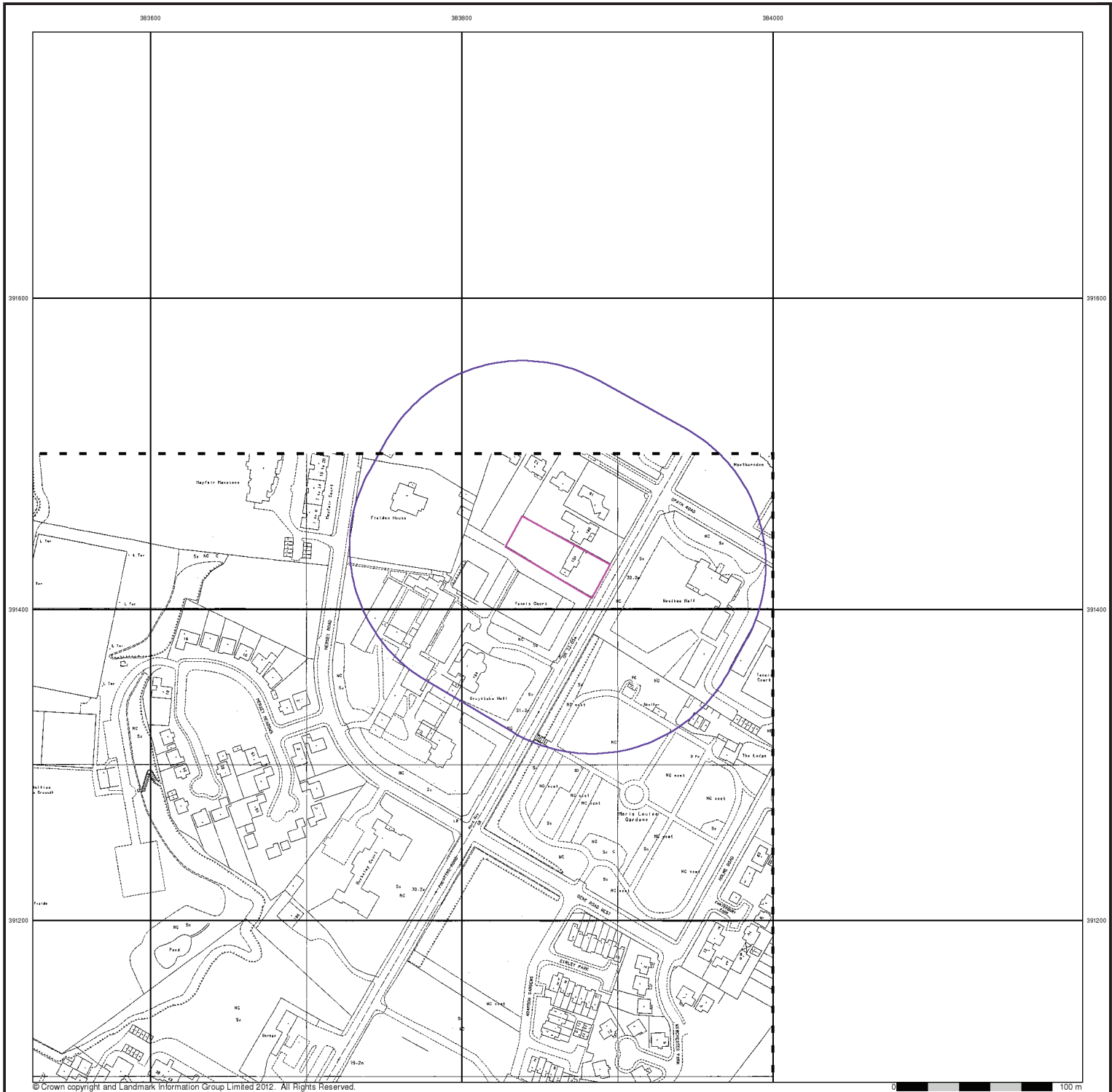

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Additional SIMs

Published 1992

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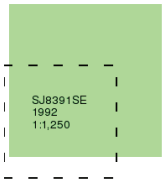
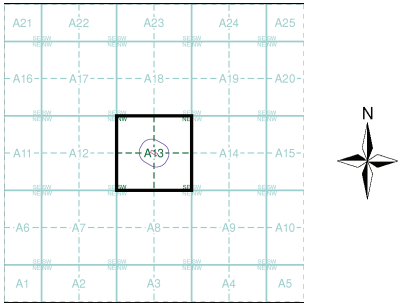


Historical Map - Segment A13



Order Details

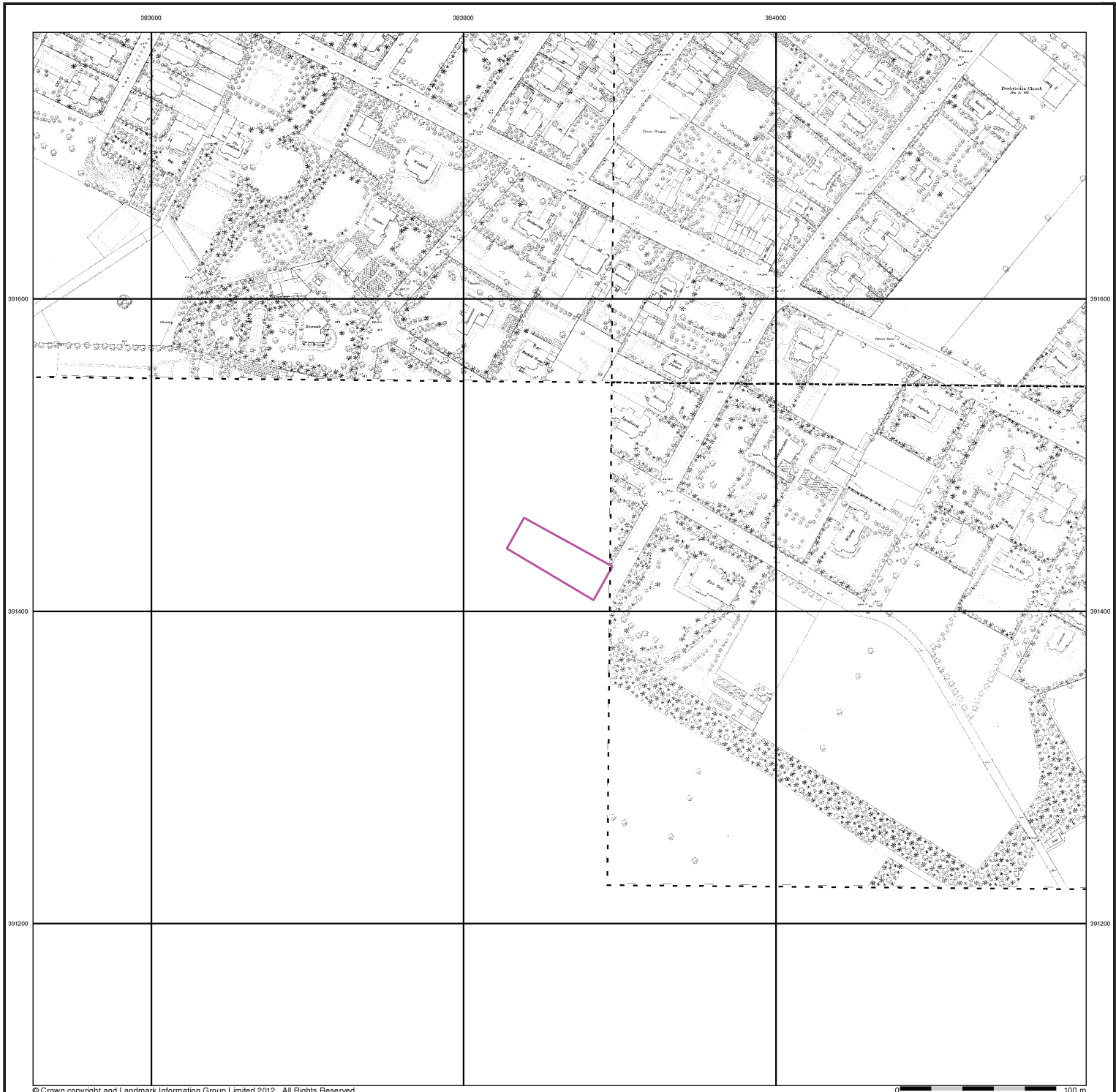
Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Slice:	A
Site Area (Ha):	0.16
Search Buffer (m):	100

Site Details

184 Palatine Road, MANCHESTER, M20 2UJ

Landmark® Information Group

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Envirocheck® Historical

Lancashire And Furness

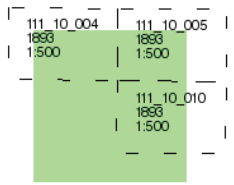
Published 1893

Source map scale - 1:500

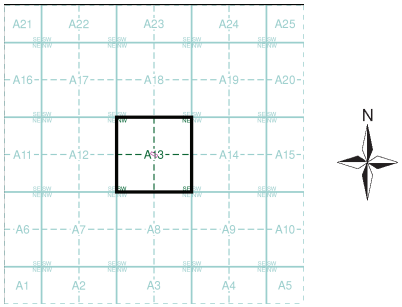
The 1:500 scale Ordnance Survey mapping was introduced in 1855 as a replacement for the 1:528 scale and to compliment the 1:2500 scale that had been implemented in 1853. By 1895, the 1:500 scale covered most towns over a population of about 4000 at the time of survey, although very few towns were mapped more than once at this scale, and none have been since 1910. The 1:500 scale gives particular emphasis to such features as lamp posts, man holes, arched passages and minor building projections. Also often featured are divisions between tenements, interior ground floor layouts of public buildings, and on earlier plans, the functions of the various parts of larger industrial premises are also indicated. Content of the plans does vary however, from one town to the next in terms of, for example, the completeness of railway tracks and the coverage of public buildings.

Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)



Historical Town Plan - Segment A13



Order Details

Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Slice:	A
Site Area (Ha):	0.16
Search Buffer (m):	0

Site Details

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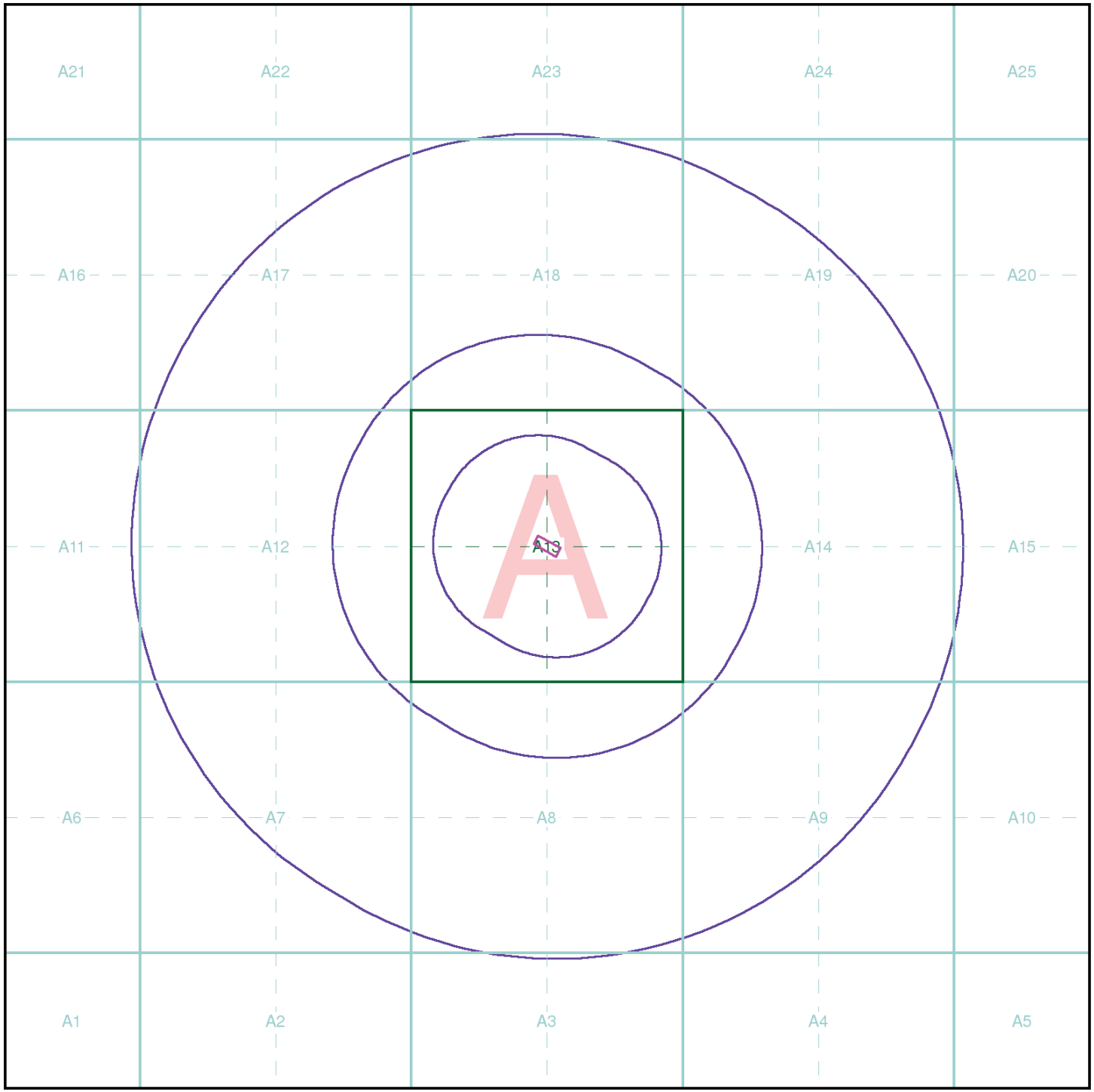

Envirocheck®

Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:

Ordnance Survey® Licensed Partner

British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL

Environment Agency

NATURAL ENGLAND

Envirocheck reports are compiled from 136 different sources of data.

Client Details

Mr E Toms, Land Science Brighton Ltd, Carlton House, 28-29 Carlton Terrace, Hove, East Sussex, BN41 1UR

Order Details

Order Number:	37437849_1_1
Customer Ref:	LS 0432
National Grid Reference:	383860, 391430
Site Area (Ha):	0.16
Search Buffer (m):	1000

Site Details

184 Palatine Road, MANCHESTER, M20 2UJ

Landmark® Information Group
Tel: 0844 844 9952
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Web: www.envirocheck.co.uk

LANDMARK STANDARD TERMS AND CONDITIONS

DEFINITIONS

In these Terms, the following terms have the following meanings:

"Agreement" has the meaning set out in clause 1.d.

"Authorised Reseller" means an agent or reseller who We have duly appointed to resell Our Reports and Services.

"Consumer" means a natural person acting for purposes other than his trade, business or profession.

"Content" means any data, computing and information services and software, and other content and documentation or support materials and updates included in and/or supplied by or through the Websites, in Reports or Services or in any other way by Us and shall include both material developed by or on behalf of Us and Third Party Content.

"End User" means either: (i) a Consumer or a Consumer's friend or family member who uses the Services provided to the Consumer; or (ii) where You are not a Consumer, an employee of Yours who uses the Services provided to You; or (iii) a person identified in clause 2.b or their respective employees.

"Fees" means any charges levied by Us or an Authorised Reseller for Services provided to You.

"First Purchaser" means the first person, or legal entity to purchase the Property Site following provision of a Report.

"First Purchaser's Lender" means the funding provider for the First Purchaser.

"Information Pack" means a pack compiled by or on behalf of the owner or prospective buyer of the Property Site, designed to aid the marketing or purchase of the Property Site and containing information provided by or on behalf of the owner or prospective buyer of the Property Site.

"Intellectual Property Rights" means copyright, patent, design right (registered or unregistered), service or trade mark (registered or unregistered), database right or other data right, moral right or know how or any other intellectual property right.

References to "We", "Us" and "Our" are references to Landmark Information Group Limited, whose registered office is 7 Abbey Court, Eagle Way, Exeter, EX2 7HY.

"Order" means the request for Services from Us by You.

"Property Site" means a land site in relation to which We provide a Service.

"Report" includes any information that We supply to You including all reports, services, datasets, software or information contained in them.

"Services" means the provision of any service by Us pursuant to these Terms, including without limitation, any Report.

"Supplier" means any third party organisation that provides services, software, data, information and other content or functionality of any form to Us.

"Terms" means these terms and conditions.

"Third Party Content" means the services, software, data, information and other content or functionality provided by Suppliers and linked to or contained in the Services.

"Website" means any website hosted by Us and includes the Content and any report, service, document, data-set, software or information contained in such websites or derived from them.

References to "You", "Your" and "Yourself" refer to the contracting party who accesses the Website or places an Order with Us.

1. Basis of Contract

a. These Terms govern the relationship between Us and You where You purchase Services from Us. Where these Terms are not expressly accepted by You, they will be deemed to have been accepted by You, and You agree to be bound by these Terms, when You place any Order, or pay for any Services provided to You by Us.

b. You shall take all reasonable steps to check that the details that You provide in relation to Your Order are complete, accurate and correct and that the Report has been prepared for the correct location and property type. Neither We nor any Suppliers shall have any liability for errors or omissions in information provided by or on behalf of You or from Your failure to check that the Report relates to the correct location or property.

c. We may modify these Terms, and may discontinue or revise any or all other aspects of the Services at Our sole discretion, with immediate effect and without prior notice, including without limitation changing the Services available at any given time. Any amendment or variation to these Terms shall be posted on Our Websites. You acknowledge that it shall remain Your responsibility to check Our Website from time to time for any such amendments or variation to these Terms. Continued Orders of the Services by You shall be deemed an acceptance by You to be bound by any such amendments to the Terms.

d. These Terms together with Your Order, the Fees and delivery details in relation to Your Order and Our privacy policy, which is available on the Website, constitute the entire agreement between the parties relating to the supply of Services to You by Us ("Agreement"). You acknowledge that You have not relied on any statement, promise or representation made or given by or on behalf of Us which is not set out in the Agreement or delivery details. Nothing in this clause 1.d shall limit or exclude any liability for fraud.

e. These Terms shall prevail at all times to the exclusion of all other terms and conditions including any terms and conditions which You may purport to apply even if such other provisions are submitted in a later document or purport to exclude or override these Terms and neither the course of conduct between parties nor trade practice shall act to modify these Terms.

2. Services and Licensed Use

a. Subject to clauses 6.d, 6.k and 6.l, We shall use all reasonable skill, care and diligence in the performance of the Services.

b. Subject always to these Terms You may, without further charge, make the Services available to:

i. the owner of the whole or part of the Property Site at the date of the Report;

ii. any person who purchases the whole or part of the Property Site;

iii. any person who provides funding secured on the whole or part of the Property Site;

iv. any person for whom You act in a professional or commercial capacity in relation to the Property Site;

v. any person who acts for You in a professional or commercial capacity in relation to the Property Site; and/or

vi. prospective buyers of the whole or part of the Property Site as part of an Information Pack but for the avoidance of doubt, We shall have no liability to such prospective buyer unless the prospective buyer subsequently purchases the Property Site, and the prospective (or actual) buyer shall not be entitled to make the Service available to any other third party.

c. You shall not hold yourself out or describe yourself as Our agent or an agent of any of the Suppliers.

d. You shall ensure that acknowledgements of copyright and database right ownership are included in a conspicuous position in all copies of the Content. You may not delete any of Our or the Suppliers' intellectual property protection notices (including without limitation copyright notices or trade marks) from the Content.

e. You shall use Your best endeavours to use adequate technological and security measures, including measures We or Suppliers may reasonably recommend from time to time, to ensure that all Content which You hold or are responsible for is secure from unauthorised use or access.

f. The Content shall only be used strictly in accordance with these Terms and not for any other purpose; nor shall any use of the Content be made that would or might be deemed to be disparaging to Us, the Suppliers or any of them. You shall not be entitled to resell or rent any Content or otherwise any supply products incorporating such Content for commercial sale or rental.

g. You shall not reverse engineer, separate or otherwise tamper with the Content so that Content can be extracted and used for any purpose outside the scope of the Agreement.

h. If You are a Company or public body, You agree that the licensed use of Content pursuant to the Agreement always excludes its use by any of Your subsidiaries, holding companies or subsidiaries of such holding companies (as such terms are defined in section 1159 of the Companies Act 2006) or by any government entity associated with You (in each case as applicable). You agree, and shall procure, that any such company or entity shall enter into a separate agreement with Us.

i. All other uses of the Content are prohibited. If You wish to use the Content in a manner which is not authorised by the Terms, then You must contact Us to seek the necessary consents or licences (which may include further licences from the Suppliers), for which there may be additional Fees.

j. You agree to notify Us as soon as You suspect any infringement of Our or any of Our Supplier's intellectual property rights and You agree to give Us all reasonably required assistance in pursuing any potential infringement.

3. Intellectual Property and Confidentiality

a. You acknowledge and agree that all Intellectual Property Rights in Content are and shall continue to be owned by Us or Our Suppliers and nothing in the Agreement shall transfer, assign or grant any rights to You (save for the licence as set out above).

b. Subject to any use of the Content in accordance with these Terms, You acknowledge and agree that You shall, and shall procure that any person to whom You provide access to the Content shall, treat as strictly private and confidential the Services, the Content and all information which they obtain from the Services and Content. You agree to indemnify Us against all liabilities, damages, penalties, costs, expenses (including legal expenses on an indemnity basis) or other loss suffered or incurred by Us in relation to any breach or alleged breach of this clause 3.b.

4. Termination

a. At any time, We may terminate the Agreement with immediate effect by giving You written notice:

i. if You are in breach of the Terms and, if such breach is capable of remedy, You fail to remedy the breach within 30 days of written notice from Us specifying the breach and requiring it to be remedied; and

ii. if You have a receiver or administrative receiver or administrator appointed over You or any part of Your undertaking or assets or shall pass a resolution for winding up (otherwise than for the purpose of a bona fide scheme of solvent amalgamation or reconstruction) or if a court of competent jurisdiction shall make an order to that effect or if You become subject to an administration order or enter into a voluntary arrangement with Your creditors or shall cease or threaten to cease to carry on business or if You are presented with a bankruptcy petition.

b. In the event of the termination or expiry of the Agreement:

i. You shall, subject to clause 4.b.iii, immediately cease to use the Report and any Content;

ii. You shall, subject to clause 4.b.iii, within 30 days of such termination or expiry, destroy all Content in any media which You hold or for which You are responsible and provide, at Our request, a sworn statement by a duly authorised person that You no longer hold such Content;

iii. except in the event of termination by Us under clause 4.a, You may retain Content in an archive following expiry of the Agreement for the sole purpose of addressing a complaint or challenge from a regulator or other third party regarding Your use of such Content during the term of the Agreement. Your rights are on condition that: (a) the archive rights do not apply to Content that include third party Intellectual Property Rights (other than Content provided by Ordnance Survey to the extent that the Intellectual Property Rights in such Content are owned by Ordnance Survey); (b) You shall not disclose Content retained under this clause 4.b.iii to any regulator or other third party except strictly to the extent necessary for the relevant purpose of addressing a complaint or challenge from a regulator or other third party and in paper or read-only electronic format only; (c) You must store such Content separately from any other data which You hold; and (d) subject to clause 6.a, We shall have no liability for Your use of it following termination or expiry of the Agreement; and

iv. the parties shall have no further obligations or rights under the Agreement, without prejudice to those which have accrued to either party prior to termination or expiry save that the "Definitions", clauses 2.c to 2.j (inclusive), this clause 4.b, clauses 5.d, 6, 7, 9, 10 and 11 together with those other clauses the survival of which is necessary for the interpretation or enforcement of the Agreement or which by their nature can be reasonably interpreted as surviving the expiry or termination of the Agreement, shall continue to have effect after such expiry or termination.

5. Payments

a. An individual or a monthly invoice showing all Orders created by You will be generated subject to these Terms. You will pay the Fees at the rates set out in Our or Our Authorised Reseller's invoice within 30 days of the date of each invoice without deduction, counterclaim or set off. Where Your order comprises a number of Services or severable elements within any one or more Services, any failure by Us or its Authorised Reseller to provide an element or elements of the Services shall not prejudice Our or Our Authorised Reseller's ability to require payment in respect of the Services delivered to You. You acknowledge that time is of the essence with respect to the payment of such invoices.

b. VAT shall be due in addition to any Fees. You shall pay any other applicable indirect taxes related to Your use of the Services.

c. Neither We nor any Authorised Reseller shall be required to notify You in advance of any amendment to the Fees and the placing of any further Order for Services shall be deemed acceptance of any revisions to the Fees.

d. If You fail to pay by the due date any amount due and payable by You under the Agreement, We shall be entitled, but not obliged to, charge You interest on the overdue amount, payable by You immediately on demand, accruing from the due date up to the date of actual payment, after as well as before judgment, at the rate set out in the Late Payment of Commercial Debts (Interest) Act 1998 from time to time and fixed sum compensation under the Late Payment of Commercial Debts Regulations 2002. Such interest shall accrue on a daily basis.

6. Liability

a. Nothing in these Terms excludes or limits either party's liability for death or personal injury caused by that party's negligence or wilful default or for fraud, and the remainder of this clause 6 is subject to this provision. If You are a Consumer, Your statutory rights (which include, for example, that We will provide the Services to a reasonable standard and within a reasonable time) are not affected by anything in these Terms.

b. Save as set out in clause 6.a, We shall not be liable to You or to any End User in contract, tort (including negligence) or for breach of statutory duty or in any other way for:

i. any indirect or consequential losses (which includes any loss that could not have been reasonably expected by You and Us at the time of entering into these Terms);

ii. loss arising from or in connection with loss of revenues, profits, contracts or business or failure to realise anticipated savings; or

iii. loss of goodwill or reputation.

c. Save as set out in clause 6.a, Our total liability to You and/or any End User in contract or tort (including negligence) or for breach of statutory duty shall not exceed an amount of ten million pounds (£10,000,000) per claim or series of connected claims.

d. The Content that Services are based on is derived from third party sources. Therefore, save as set out in clause 6.l in respect of risk assessments and professional opinions, We do not warrant the accuracy or completeness of any information or Content provided, unless We should reasonably have been alerted to any omission, error or inaccuracy in the Content. Such Content is provided specifically from the sources as described by Us and We do not claim that these represent an exhaustive or comprehensive list of all sources that might be consulted.

e. You acknowledge and agree that neither You nor any End User shall have any claim or recourse against any Supplier of Third Party Content.

f. You acknowledge and agree that We do not warrant that the online supply of Content or Services or any internet ordering service will be: uninterrupted or error free or provide any particular facilities or functions; free from defects; free from software viruses; free of error from computer malfunction, inaccurate processing; free from corruption of data whilst geo-coding, processing by computer or electronic means or in the course of transmission; or similar, although We will use reasonable endeavours to correct any such issues within a reasonable period of them becoming known (which may be limited to notifying the relevant Supplier). Time shall not be of the essence in providing the Content or Services.

g. You acknowledge and agree that no physical inspection of the Property Site

reported on is carried out as part of any Services offered by Us and We do not warrant that all land uses or features whether past or current will be identified in the Services. The Services do not include any information relating to the actual state or condition of any Property Site nor should they be used or taken to indicate or exclude actual fitness or unfitness of a Property Site for any particular purpose nor should it be relied upon for determining saleability or value or used as a substitute for any physical investigation or inspection.

h. You acknowledge and agree that We will not be held liable in any way if a Report is used otherwise than as provided for in these Terms and/or in the Report.

i. You acknowledge and agree that the Services have not been prepared to meet Your or anyone else's individual requirements and it is Your responsibility to ensure that the Services ordered are suitable for Your (or the End User's) intended purpose.

j. You acknowledge and agree that You shall, on receipt of a Report carry out a reasonable inspection to satisfy Yourself that there are no apparent defects or failures with respect to the description and location of the Property Site and shall promptly inform Us if there are any such defects or failures.

k. All liability for any insurance products purchased by You rests solely with the insurer. We do not endorse any particular product or insurer and no information contained within the Services should be deemed to imply otherwise. You acknowledge that if You Order any such insurance We will deem such as Your consent to forward a copy of the Report to the insurers. Where such policy is purchased, You acknowledge and agree that all liability shall remain with the insurers and that You are entirely responsible for ensuring that the insurance policy offered is suitable for Your needs and should seek independent advice. We do not guarantee that an insurance policy will be available on a Property Site. You acknowledge and agree that all decisions with regard to the offer of insurance policies for any premises will be made solely at the discretion of the insurers and We accept no liability in this regard. The provision of a Report does not constitute any indication by Us that insurance will be available on the Property Site.

l. We may provide You with professional opinions or a risk assessment in a Report. You acknowledge and agree that We shall carry out (or procure that third parties carry out) such assessment with reasonable skill and care and that We shall be liable where any such risk assessment is carried out negligently. Notwithstanding the foregoing We shall not be liable for any inaccurate statement, opinion or risk rating in a Report which resulted from a reasonable interpretation of the Content.

m. Neither You, nor any End User or any other person may rely on a Service more than 12 months after it was originally provided.

n. You shall use all reasonable endeavours to ensure that End Users acknowledge and agree to the limitations and exclusions of liability set out in this clause 6.

7. Contribution

a. Save where expressly provided, this clause 7 shall apply solely to Envirosearch Residential Reports (regardless of the result of such Report). Nothing in this clause 7 shall operate to override or vary the provisions of clause 6.

b. We are prepared to offer, without any admission or inference of liability, a contribution towards the costs of any remediation works required under a Notice (as defined below) on the terms of this clause 7 ("the Contribution").

c. In the event that a Remediation Notice is served on the First Purchaser or First Purchaser's Lender of a Property Site under Part IIA of the Environmental Protection Act 1990 ("the Notice") We shall contribute to the cost of such works as either the First Purchaser or First Purchaser's Lender (but not both) are required to carry out under the Notice subject to the provisions of this clause 7 and on the following terms:

   i. the Contribution shall only apply to contamination or a pollution incident present or having occurred prior to the date of the Report;

   ii. the Contribution shall only apply where the Property Site is a single residential dwelling house or a single residential flat within a block of flats. For the avoidance of doubt, this obligation does not apply to any commercial property, nor to any Property Site being developed or redeveloped whether for residential purposes or otherwise;

   iii. the Contribution is strictly limited to the cost of works at the Property Site and at no other site; and

   iv. the Contribution will not be paid in respect of any of the following: (1) radioactive contamination of whatsoever nature, directly or indirectly caused by or contributed to or arising from ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel or the radioactive toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof; (2) asbestos arising out of or related in any way to asbestos or asbestos-containing materials on or in structures or services serving the structures; (3) naturally occurring materials arising from the presence or required removal of naturally occurring materials except in circumstances where such materials are present in concentrations which are in excess of their natural concentration; (4) intentional non-compliance arising from the intentional disregard of or knowing wilful or deliberate non-compliance by any owner or occupier of the Property Site with any statute, regulation, administrative complaint, notice of violation, or notice letter of any Regulatory Authority; (5) any condition which is known or ought reasonably to have been known to the First Purchaser or the First Purchaser's Lender prior to the purchase of the Report; (6) any condition which is caused by acts of war or an act of terrorism; (7) any property belonging to or in the custody or control of the First Purchaser which does not form a fixed part of the Property Site or the structure; (8) any fines liquidated damages punitive or exemplary damages; (9) any bodily injury including without limitation, death, illness or disease, mental injury, anguish or nervous shock; (10) any financial loss in respect of any loss of any rental, profit, revenue, savings or business or any consequential indirect or economic loss damage or expense including the cost of rent of temporary premises or business interruption; and/or (11) any losses incurred following a material change in use of, alteration or development of the Property Site.

d. Without prejudice to Your other rights and remedies under the Agreement, the maximum sum that shall be contributed by Us in respect of any Contribution shall be limited to £60,000. In the event that more than one Report is purchased on the Property Site the Contribution will only be payable under the first Report purchased by or on behalf of any First Purchaser or First Purchaser's Lender and no Contribution will be made in respect of subsequent Reports purchased by or on behalf of such First Purchaser, First Purchaser's Lender or any person connected to them.

e. We shall only pay a Contribution where the Notice is served within 36 months of the issue date of the Report.

f. Any rights to a Contribution under this clause 7 are not assignable in the event of a sale of the Property Site and We shall not make any Contribution after the date of completion of such sale.

g. In the event the First Purchaser or First Purchaser's Lender wishes to claim any Contribution, it shall notify Us in writing within 3 months of the date of the Notice. The First Purchaser or First Purchaser's Lender (as applicable) shall comply with all Our reasonable requirements with regard to the commission and conduct of the remediation works to be carried out under the Notice, and in the event the First Purchaser or First Purchaser's Lender (as applicable) does not do so, including without limitation, obtaining Our prior written consent to any estimates for such works or complying with any other reasonable request by Us, We shall not be required to pay any Contribution. Notwithstanding the payment of the Contribution by Us the First Purchaser or First Purchaser's Lender as applicable shall take all reasonable steps to mitigate any costs incurred in connection with the conduct of works required under the terms of any Notice.

h. In the event that the First Purchaser or First Purchaser's Lender receives any communication from a statutory authority to the effect that there is an intent to serve a notice received under Part IIA of the Environmental Protection Act 1990 You shall ensure that they advise Us within a maximum period of two months from receipt of such communication. This clause 7.h and the service of any notice under it shall not affect the provisions of clauses 7.e and 7.g, and any such communications, even if advised to Us will not operate as notice under clause 7.e.

i. We reserve the right at any time prior to a claim for Contribution being made in accordance with clause 7.g above, to withdraw the offer of payment of Contributions without further notice.

8. Assignment and Sub-contracting

a. We shall be entitled to assign or transfer the Agreement as We reasonably see fit.

b. The Agreement is personal to You. You shall not assign, transfer, sub-licence or otherwise deal with any of Your rights and obligations under the Agreement without Our prior written consent.

c. We may authorise or allow Our contractors and other third parties to provide to Us and/or to You services necessary or related to the Services and to perform Our obligations and exercise Our rights under these Terms, which may include collecting payment on Our behalf.

9. Events Beyond Our Control

a. Neither party to the Agreement shall be liable for any delay or failure to perform their obligations caused by any circumstance beyond their control, and such party shall be entitled to a reasonable extension of time for the performance of such obligation.

10. Complaints and Dispute Resolution

a. Any complaints in relation to the Services should, in the first instance, be in writing addressed to the Customer Service Support Manager at Our registered office. We will (or Our agents will) respond to any such complaints in writing as soon as practicably possible.

b. If any dispute arises out of or in connection with the Terms of the Agreement or their validity ("Dispute") the parties undertake, subject to clause 10.c, that prior to commencement of court proceedings they will negotiate in good faith to settle such Dispute by mediation in accordance with the Centre for Effective Dispute Resolution Model Mediation Procedure as in force from time to time, which Procedure is deemed to be incorporated by reference into this clause. Unless otherwise agreed between the parties, the mediator will be nominated by the Centre for Effective Dispute Resolution. To initiate the mediation a party shall give notice in writing to the other party to the dispute requesting a mediation. The mediation will start not later than 21 days after the date of service of such notice. If the Dispute has not been resolved to the mutual satisfaction of the parties within 60 days (or such other period as they shall agree) after the date of service of such notice then either party may refer the Dispute to the courts in accordance with clause 11.f.

c. Clause 10.b shall be without prejudice to the rights of termination stated in clause 4.a and in addition shall not prevent Us from:

   i. applying for injunctive relief in the case of: (1) breach or threatened breach of confidentiality; or (2) infringement or threatened infringement of Our or Our Suppliers' intellectual property rights; or

   ii. pursuing a debt claim for the payment of the Fees.

11. General

a. If any provision of the Agreement is found by either a court or other competent authority to be void, invalid, illegal or unenforceable, that provision shall be deemed to be deleted from the Agreement and never to have formed part of the Agreement and the remaining provisions shall continue in full force and effect.

b. No delay, failure or omission on Our, or any Supplier's, part in enforcing, exercising or pursuing any right, power, privilege, claim or remedy conferred by or arising under the Agreement or by law shall be deemed to be or construed as a waiver of that or any other right, power, privilege, claim or remedy, nor shall any single or partial exercise of any such right, power, privilege, claim or remedy preclude the exercise of that or any other right, power, privilege, claim or remedy.

c. Our privacy policy as displayed on Our Website and updated from time to time governs the use that We shall make of any information provided by You or an End User.

d. A person who is not a party to any contract made pursuant to these Terms shall have no right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Agreement and We shall not be liable to any such third party in respect of the Products, save that any Supplier may enforce any of these terms and conditions against You in accordance with the Contracts (Rights of Third Parties) Act 1999. Notwithstanding any other provisions of the Agreement, We may rescind or vary the Agreement in accordance with its terms without the consent of the Suppliers and accordingly section 2(1) of the Contracts (Rights of Third Parties) Act 1999 shall not apply.

e. You shall ensure that each End User complies with and is bound by the Terms and shall procure that We may in Our own right enforce such terms and conditions against the End User pursuant to the Contracts (Rights of Third Parties) Act 1999. You shall be responsible for End User's compliance with the Terms and You shall be liable for all breaches of the Terms by the End Users as if they were breaches by You.

f. The Agreement and any non-contractual obligations arising out of or in connection with it shall be governed by and construed in accordance with the laws of England and, subject to clause 10.b, each party irrevocably submits to the exclusive jurisdiction of the courts of England and Wales.

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Environment Agency

Enter a postcode or place name:

M20 2UJ Go

Other topics for this area...

Risk of Flooding from Rivers and Sea

Risk of Flooding from Rivers and Sea

Map legend

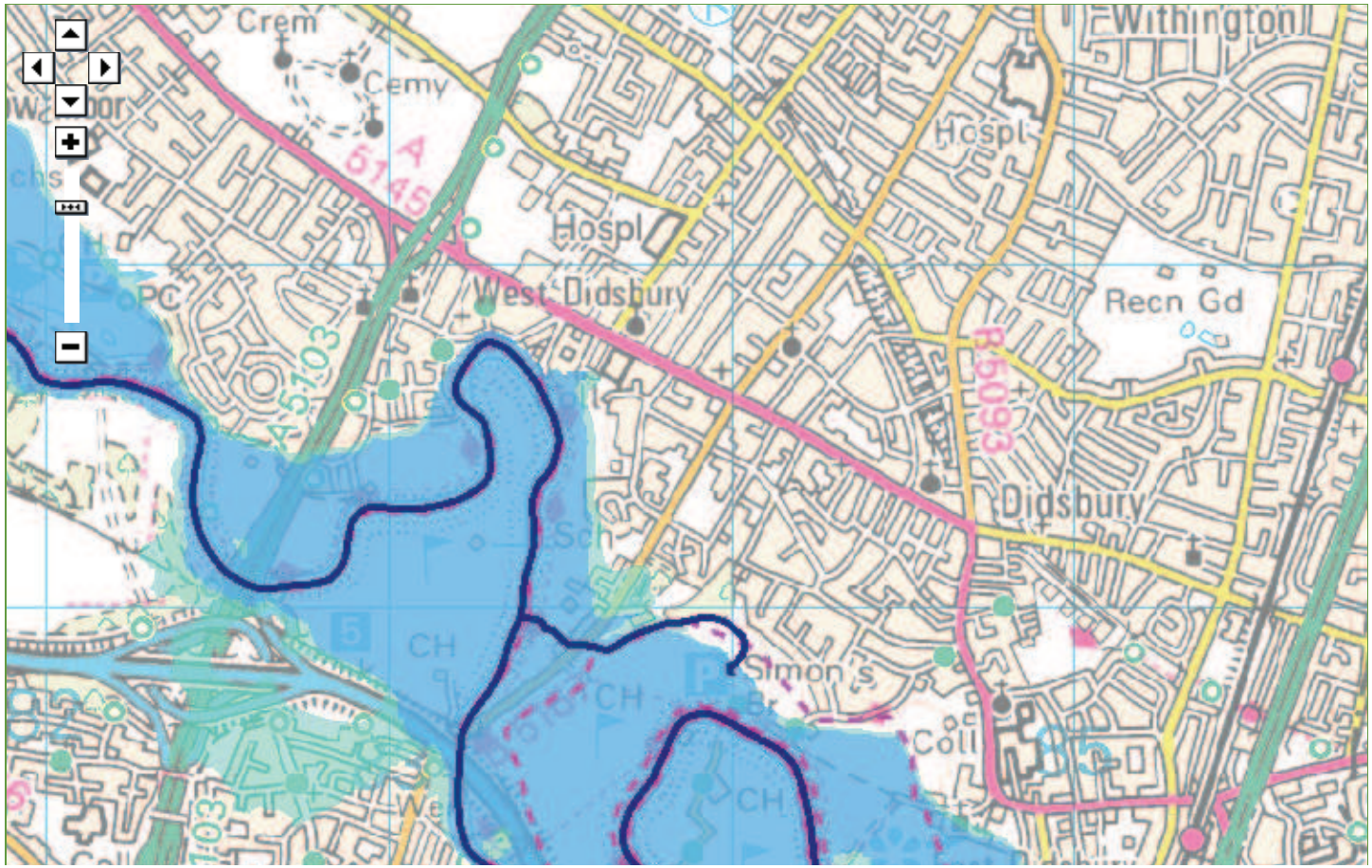
Click on the map to see what is the Risk of Flooding at a particular location.

Flood Maps

- Flooding from rivers or sea without defences
- Extent of extreme flood
- Flood defences
- Areas benefiting from flood defences
- Main rivers

M20 2UJ at scale 1:20,000

Data search Text only version



Environment Agency

Enter a postcode or place name:

Go

Other topics for this area...

Groundwater

Groundwater

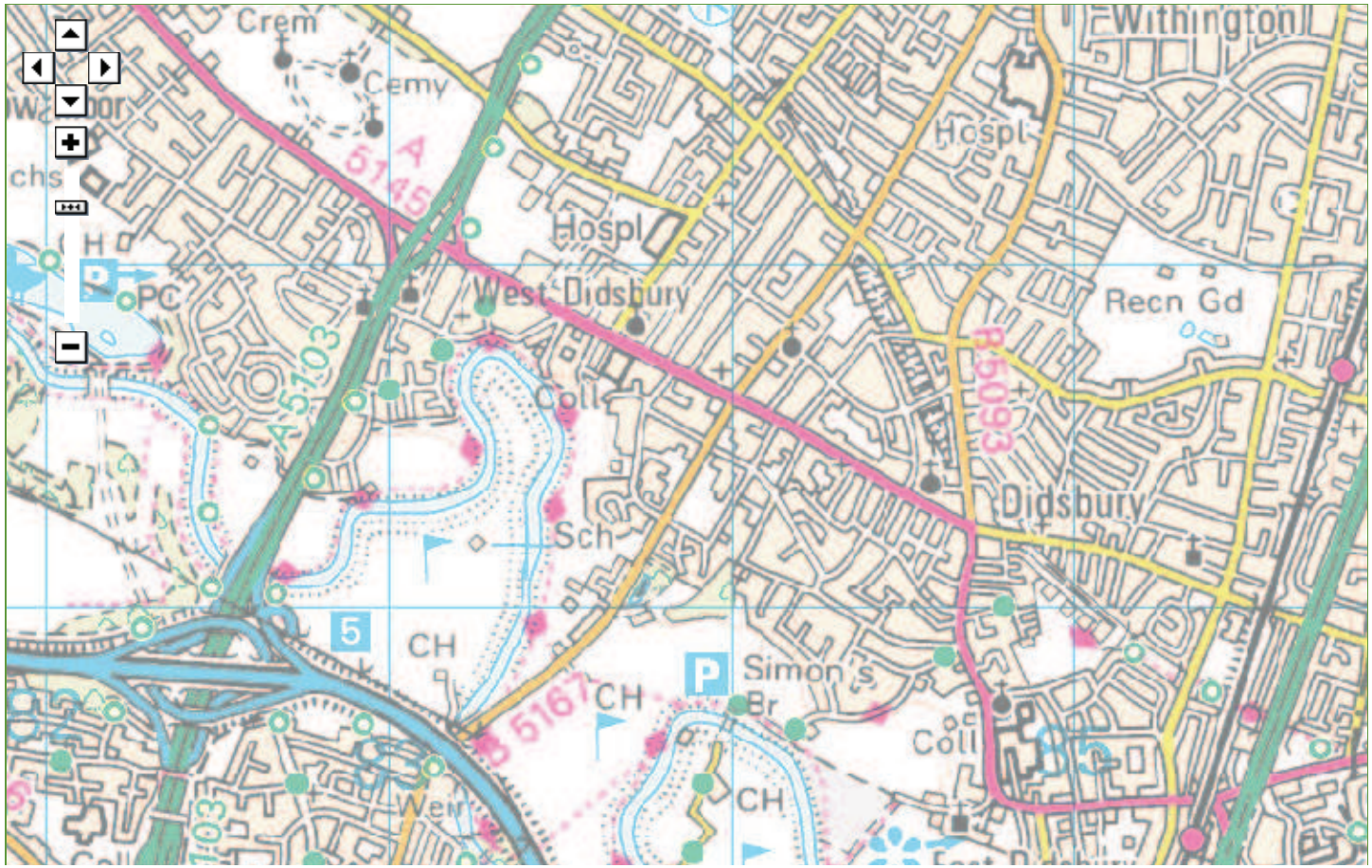
Map legend

Click on a catchment to see more details

- Groundwater source protection zones
  - Inner zone (Zone 1)
  - Outer zone (Zone 2)
  - Total catchment (Zone 3)
  - Special interest (Zone 4)
- Aquifer Maps - Superficial Deposits Designation
  - Principal
  - Secondary A
  - Secondary B
  - Secondary (undifferentiated)
  - Unknown (lakes and landslip)
- Aquifer Maps - Bedrock

Map of X: 383,873; Y: 391,432 at scale 1:20,000

Data search Text only version



Environment Agency

Enter a postcode or place name:

Go

Other topics for this area...

Groundwater

Groundwater

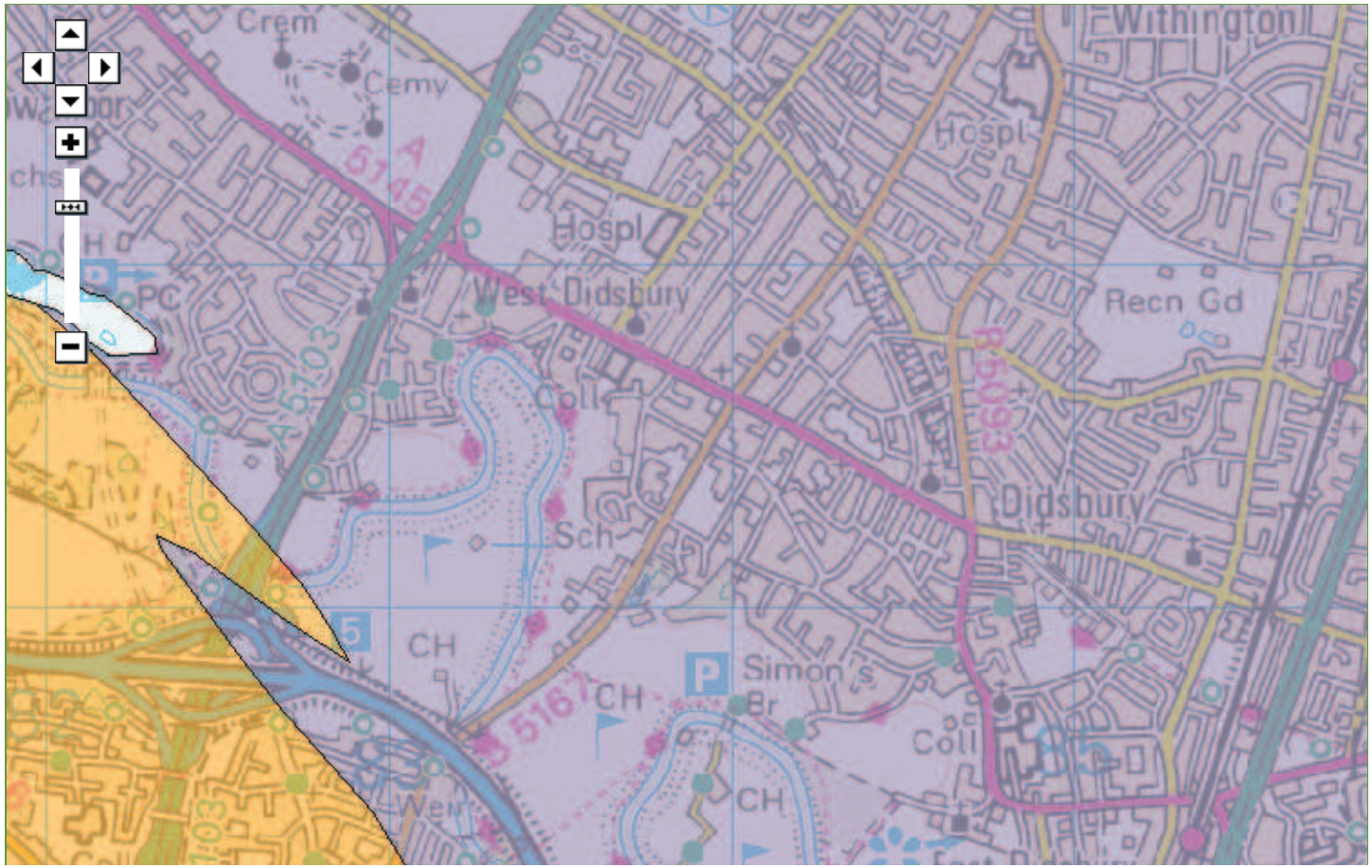
Map legend

Click on a catchment to see more details

- Groundwater source protection zones
- Aquifer Maps - Superficial Deposits Designation
- Aquifer Maps - Bedrock Designation
- Groundwater Vulnerability Zones
  - Major Aquifer High
  - Major Aquifer Intermediate
  - Major Aquifer Low
  - Minor Aquifer High
  - Minor Aquifer Intermediate
  - Minor Aquifer Low

Map of X: 383,873; Y: 391,432 at scale 1:20,000

Data search Text only version



Environment Agency

Enter a postcode or place name:

Go

Other topics for this area...

Pollution

Pollution

Map legend

Click on a feature for details of that site

- Industrial Pollution
  - Fuel & Power
  - Metal
  - Mineral
  - Chemical
  - Waste
  - Water
  - Radioactive
  - Associated
  - Other
  - Not Classified
- Industrial Operator Scores (OPRA)
- Permitted Sites
- Pollution Incidents
  - Major

Map of X: 383,873; Y: 391,432 at scale 1:20,000

Data search Text only version



Environment Agency

Enter a postcode or place name:

Go

Other topics for this area...

Waste Directory

Waste Directory

Map legend

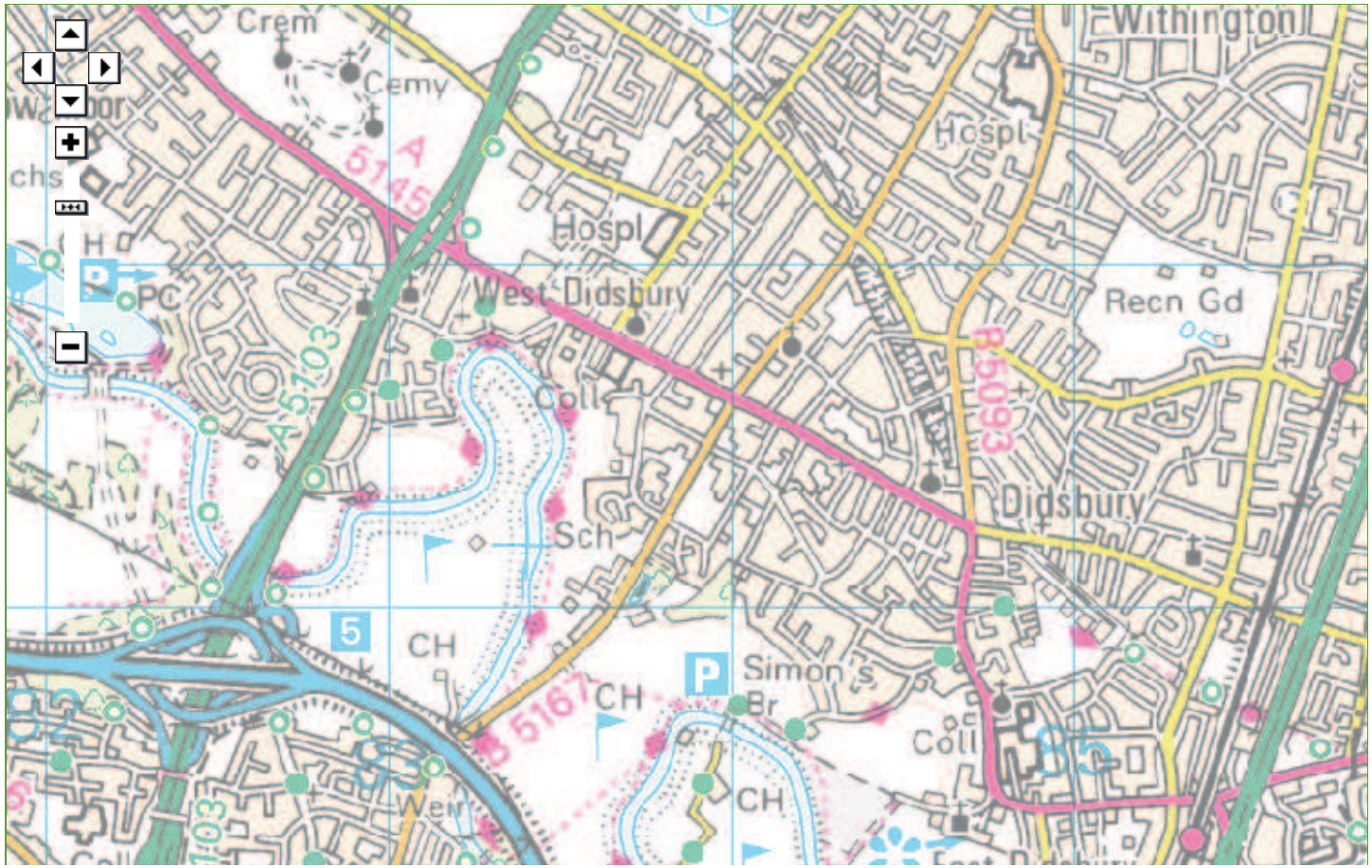
Click on a site to see what waste they accept

Waste Directory

Waste sites

Map of X: 383,873; Y: 391,432 at scale 1:20,000

Data search Text only version



Environment Agency

Enter a postcode or place name:

Go

Other topics for this area...

Landfill

Waste

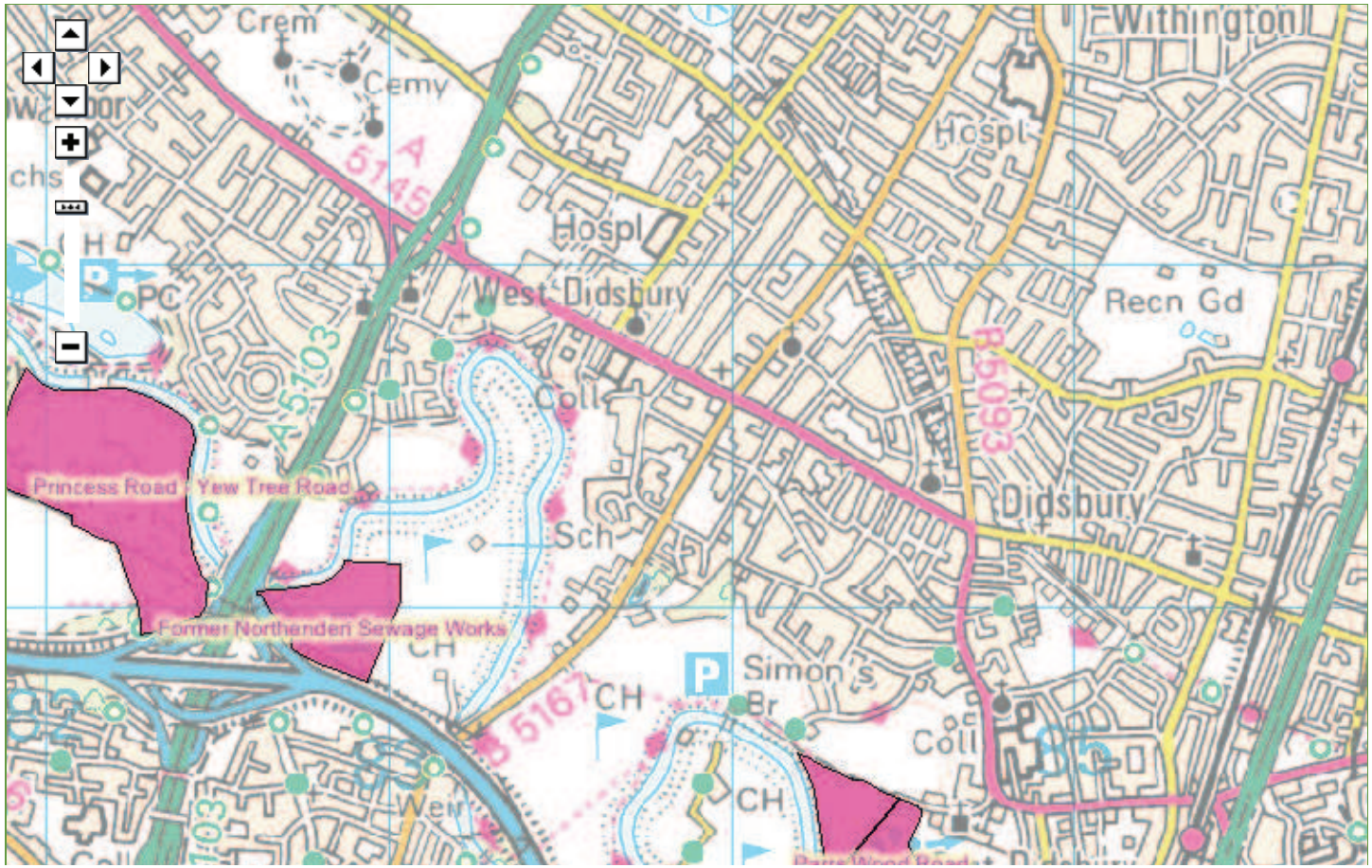
Map legend

Click on a feature for details of that site

- Authorised Landfill
- Site boundary
- Historic landfill
- Site boundary

Map of X: 383,873; Y: 391,432 at scale 1:20,000

Data search Text only version



Radon Risk Report for addresses in England and Wales

Issued by the Health Protection Agency and the British Geological Survey using Address Point®. Fee paid £3.00 + VAT. Email receipt issued by Secure Trading Ltd.

Address searched: 184 Palatine Road, Manchester, M20 2UJ

Numerical grid reference for this address:

383873 East

391432 North

Date of report: 29/02/2012

Guidance for existing properties

Is this property in a radon Affected Area? - NO

The answer to the standard enquiry on house purchase known as CON29 Standard Enquiry of Local Authority; 3.13 Radon Gas: Location of the Property in a Radon Affected Area is:

No, this property is not in a Radon Affected Area as defined by the Health Protection Agency.
The estimated probability of the property being above the Action Level for radon is:0-1%

The result may not be valid for buildings larger than 25 metres.

This report informs you of the estimated probability that this particular property is above the Action Level for radon. This does not necessarily mean there is a radon problem in the property; the only way to find out whether it is above or below the Action Level is to carry out a radon measurement in an existing property.

Radon Affected Areas are designated by the Health Protection Agency. HPA advises that radon gas should be measured in all properties within Radon Affected Areas.

If you are buying a currently occupied property in a Radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were above the Radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and the results of re-testing confirmed the effectiveness of the measures.

Further information is available from HPA or www.ukradon.org.

Guidance for new buildings and extensions to existing properties

What is the requirement under Building Regulations for radon protection in new buildings and extensions at the property location? - None

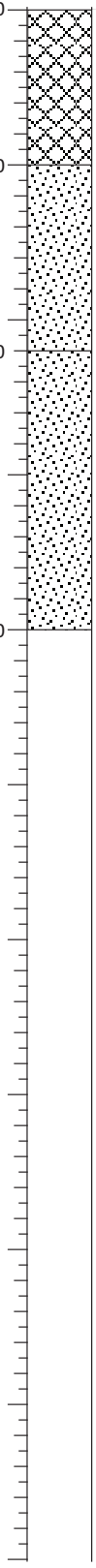
If you are buying a new property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

See the Radon and Building Regulations for more details.

Report design 27 July 2011. V 2011.12

APPENDIX B

DESCRIPTION		TESTING	SAMPLING	WATER	FILL
MADE GROUND – Black sandy TOPSOIL with roots (12mm diameter)	0.00		0.10 - 0.50 D		
Orange brown and grey silty fine SAND to 0.80m- occasional fine roots	0.50		0.50 - 1.10 D		
Brown slightly gravelly fine SAND. Gravel is medium sub-angular	1.10		1.10 - 1.50 D 1.50 - 2.00 D		
	2.00				



Borehole complete at 2.00m

REMARKS

Stability: No instability encountered

Groundwater: No groundwater encountered.

Chiselling: Not applicable

Casing/dia: Not applicable

Backfilling: Position backfilled with arisings

Obstructions: No obstructions encountered

Others: Hand excavated to 1.00mbgl

TITLE: **Borehole log**		REFERENCE: **LS0432**	POSITION: **CT1**
PROJECT: **184 Palatine Road**		ELEVATION: **N/A**	CO-ORDINATES: **Not to scale**
CLIENT: **Isma Razzaq**		METHOD: **Archway "Dart" Windowless**	
DRILLED BY: **AA DRILLING**	LOGGED BY:	STARTED: **06/02/2012**	SCALE: **Not to scale**
INPUTTED BY: **AC**	CHECKED BY: **ET**	COMPLETED: **06/02/2012**	SHEET No: **Page: 1 of 1**

Land Science

CARLTON HOUSE, 28-29 CARLTON TERRACE, PORTSLADE, BRIGHTON, BN41 1UR
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

DESCRIPTION		TESTING	SAMPLING		WATER	FILL
Paving	0.00					
	0.05		0.05 - 0.40	D		
MADE GROUND – Black sandy TOPSOIL						
	0.40		0.40 - 1.10	D		
Orange brown fine SAND with occasional roots (2mm diameter to 0.80m)						
	1.10		1.10 - 1.50	D		
Brown slightly gravelly fine SAND. Gravel is fine to medium angular and sub-angular						
			1.50 - 2.00	D		
Poor sample recovery below 2.00m			2.00 - 3.00	D		
	3.00					

Borehole complete at 3.00m

REMARKS

Stability: No instability encountered

Groundwater: No groundwater encountered.

Chiselling: Not applicable

Casing/dia: Not applicable

Backfilling: Position backfilled with arisings

Obstructions: No obstructions encountered

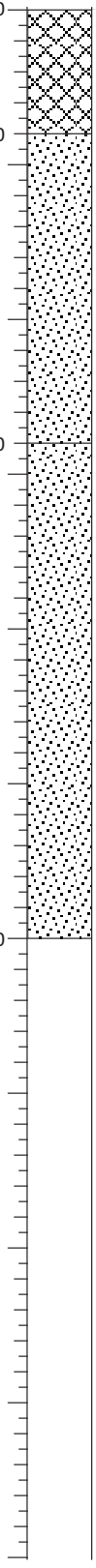
Others: Hand excavated to 1.00mbgl

TITLE: **Borehole log**		REFERENCE: **LS0432**	POSITION: **CT2**
PROJECT: **184 Palatine Road**		ELEVATION: **N/A**	CO-ORDINATES: **Not to scale**
CLIENT: **Isma Razzaq**		METHOD: **Archway "Dart" Windowless**	
DRILLED BY: **AA DRILLING**	LOGGED BY:	STARTED: **06/02/2012**	SCALE: **Not to scale**
INPUTTED BY: **AC**	CHECKED BY: **ET**	COMPLETED: **06/02/2012**	SHEET No: **Page: 1 of 1**

Land Science

CARLTON HOUSE, 28-29 CARLTON TERRACE, PORTSLADE, BRIGHTON, BN41 1UR
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

DESCRIPTION		TESTING	SAMPLING		WATER	FILL
MADE GROUND – Black sandy TOPSOIL	0.00		0.10 - 0.40	D		
Orange brown fine SAND	0.40		0.40 - 1.00	D		
			1.00 - 1.40	D		
Brown gravelly fine SAND. Gravel is fine to medium angular and sub-angular	1.40		1.40 - 2.00	D		
			2.00 - 2.50	D		
			2.50 - 3.00	D		
	3.00					



Borehole complete at 3.00m

REMARKS

Stability: No instability encountered

Groundwater: No groundwater encountered.

Chiselling: Not applicable

Casing/dia: Not applicable

Backfilling: Position backfilled with arisings

Obstructions: No obstructions encountered

Others: Hand excavated to 1.00mbgl

TITLE: **Borehole log**		REFERENCE: **LS0432**	POSITION: **CT3**
PROJECT: **184 Palatine Road**		ELEVATION: **N/A**	CO-ORDINATES: **Not to scale**
CLIENT: **Isma Razzaq**		METHOD: **Archway "Dart" Windowless**	
DRILLED BY: **AA DRILLING**	LOGGED BY:	STARTED: **06/02/2012**	SCALE: **Not to scale**
INPUTTED BY: **AC**	CHECKED BY: **ET**	COMPLETED: **06/02/2012**	SHEET No: **Page: 1 of 1**

Land Science

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TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

DESCRIPTION		TESTING	SAMPLING		WATER	FILL
Tarmacadam	0.00					
MADE GROUND – Dark brown gravelly fine SAND with brick cobbles. Gravel is fine to coarse angular with brick	0.15		0.15 - 0.40	D		
Orange brown fine SAND with roots (5mm diameter to 0.80m)	0.40		0.40 - 1.00	D		
Brown gravelly fine SAND. Gravel is medium angular and sub-angular	1.00		1.00 - 1.50	D		
			1.50 - 2.00	D		
Borehole collapsed in to 1.70m						
	2.00					

Borehole complete at 2.00m

REMARKS

Stability: No instability encountered
Groundwater: No groundwater encountered.
Chiselling: Not applicable
Casing/dia: Not applicable
Backfilling: Position backfilled with arisings
Obstructions: No obstructions encountered
Others: Hand excavated to 1.00mbgl

TITLE: **Borehole log**		REFERENCE: **LS0432**	POSITION: **CT4**
PROJECT: **184 Palatine Road**		ELEVATION: **N/A**	CO-ORDINATES: **Not to scale**
CLIENT: **Isma Razzaq**		METHOD: **Archway "Dart" Windowless**	
DRILLED BY: **AA DRILLING**	LOGGED BY:	STARTED: **06/02/2012**	SCALE: **Not to scale**
INPUTTED BY: **AC**	CHECKED BY: **ET**	COMPLETED: **06/02/2012**	SHEET No: **Page: 1 of 1**

Land Science
CARLTON HOUSE, 28-29 CARLTON TERRACE, PORTSLADE, BRIGHTON, BN41 1UR
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

DESCRIPTION		TESTING	SAMPLING		WATER	FILL
MADE GROUND – Black sandy TOPSOIL with roots (10mm diameter)	0.00		0.10 - 0.30	D		
MADE GROUND – Dark brown fine SAND with roots (8mm diameter)	0.30		0.30 - 0.50	D		
Brown fine to medium SAND with occasional roots (8mm diameter to 0.75m)	0.50		0.50 - 1.00	D		
			1.00 - 1.50	D		
			1.50 - 2.00	D		
Brown fine SAND AND GRAVEL. Gravel is fine to medium angular and sub-angular	2.00		2.00 - 2.40	D		
Brown slightly gravelly fine SAND. Gravel is fine to medium angular and sub-angular	2.40		2.40 - 3.00	D		
			3.00 - 3.50	D		
			3.50 - 4.00	D		
Borehole collapsed in to 4.00m Gas/water monitoring pipe installed at 4.00m			4.00 - 4.50	D		
Stiff becoming firm brown slightly gravelly CLAY. Gravel is medium angular	4.20					
Seepage at 4.50m			4.50 - 5.00	D		
	5.00					

Continued next page

REMARKS

Stability: No instability encountered
Groundwater: No groundwater encountered.
Chiselling: Not applicable
Casing/dia: Not applicable
Backfilling: Position backfilled with arisings
Obstructions: No obstructions encountered
Others: Hand excavated to 1.00mbgl

TITLE: **Borehole log**		REFERENCE: **LS0432**	POSITION: **CT5**
PROJECT: **184 Palatine Road**		ELEVATION: **N/A**	CO-ORDINATES: **Not to scale**
CLIENT: **Isma Razzaq**		METHOD: **Archway "Dart" Windowless**	
DRILLED BY: **AA DRILLING**	LOGGED BY:	STARTED: **06/02/2012**	SCALE: **Not to scale**
INPUTTED BY: **AC**	CHECKED BY: **ET**	COMPLETED: **06/02/2012**	SHEET No: **Page: 1 of 2**

Land Science
CARLTON HOUSE, 28-29 CARLTON TERRACE, PORTSLADE, BRIGHTON, BN41 1UR
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

DESCRIPTION		TESTING	SAMPLING	WATER	FILL
Stiff becoming firm brown slightly gravelly CLAY. Gravel is medium angular	5.00	5.00 H = 2.5 kg/cm2	5.00 - 5.50 D		
		5.50 H = 2.3 kg/cm2	5.50 - 6.00 D		
		6.00 H = 1.3 kg/cm2	6.00 - 6.50 D		
		6.50 H = 0.8 kg/cm2	6.50 - 7.00 D		
	7.00	7.00 H = 1.0 kg/cm2			

Borehole complete at 7.00m

REMARKS

Stability: No instability encountered

Groundwater: No groundwater encountered.

Chiselling: Not applicable

Casing/dia: Not applicable

Backfilling: Position backfilled with arisings

Obstructions: No obstructions encountered

Others: Hand excavated to 1.00mbgl

TITLE: **Borehole log**		REFERENCE: **LS0432**	POSITION: **CT5**
PROJECT: **184 Palatine Road**		ELEVATION: **N/A**	CO-ORDINATES: **Not to scale**
CLIENT: **Isma Razzaq**		METHOD: **Archway "Dart" Windowless**	
DRILLED BY: **AA DRILLING**	LOGGED BY:	STARTED: **06/02/2012**	SCALE: **Not to scale**
INPUTTED BY: **AC**	CHECKED BY: **ET**	COMPLETED: **06/02/2012**	SHEET No: **Page: 2 of 2**

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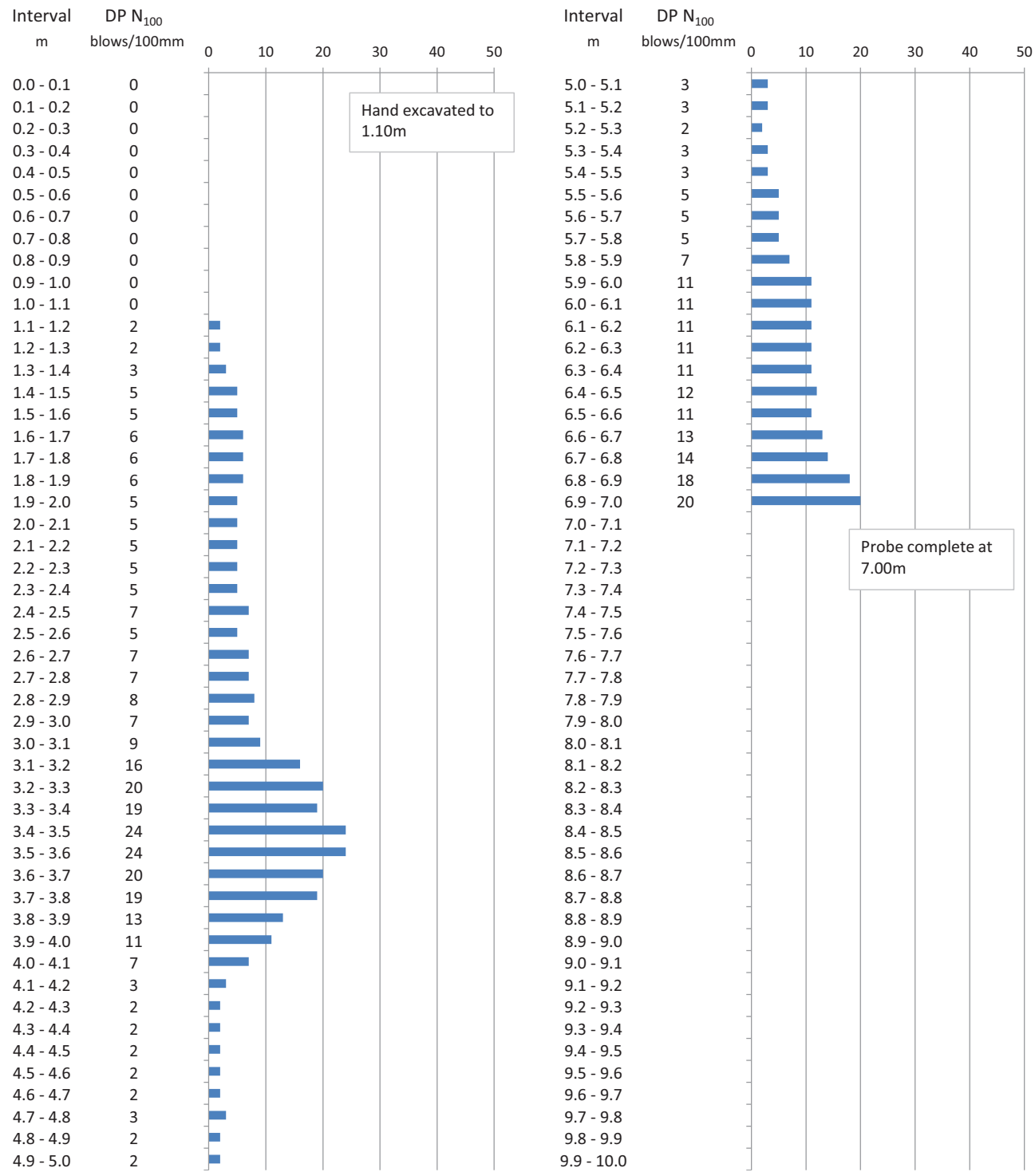
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

Interval m	DP N_{100} blows/100mm
0.0 - 0.1	0
0.1 - 0.2	0
0.2 - 0.3	0
0.3 - 0.4	0
0.4 - 0.5	0
0.5 - 0.6	0
0.6 - 0.7	0
0.7 - 0.8	0
0.8 - 0.9	0
0.9 - 1.0	0
1.0 - 1.1	0
1.1 - 1.2	2
1.2 - 1.3	2
1.3 - 1.4	3
1.4 - 1.5	5
1.5 - 1.6	5
1.6 - 1.7	6
1.7 - 1.8	6
1.8 - 1.9	6
1.9 - 2.0	5
2.0 - 2.1	5
2.1 - 2.2	5
2.2 - 2.3	5
2.3 - 2.4	5
2.4 - 2.5	7
2.5 - 2.6	5
2.6 - 2.7	7
2.7 - 2.8	7
2.8 - 2.9	8
2.9 - 3.0	7
3.0 - 3.1	9
3.1 - 3.2	16
3.2 - 3.3	20
3.3 - 3.4	19
3.4 - 3.5	24
3.5 - 3.6	24
3.6 - 3.7	20
3.7 - 3.8	19
3.8 - 3.9	13
3.9 - 4.0	11
4.0 - 4.1	7
4.1 - 4.2	3
4.2 - 4.3	2
4.3 - 4.4	2
4.4 - 4.5	2
4.5 - 4.6	2
4.6 - 4.7	2
4.7 - 4.8	3
4.8 - 4.9	2
4.9 - 5.0	2
5.0 - 5.1	3
5.1 - 5.2	3
5.2 - 5.3	2
5.3 - 5.4	3
5.4 - 5.5	3
5.5 - 5.6	5
5.6 - 5.7	5
5.7 - 5.8	5
5.8 - 5.9	7
5.9 - 6.0	11
6.0 - 6.1	11
6.1 - 6.2	11
6.2 - 6.3	11
6.3 - 6.4	11
6.4 - 6.5	12
6.5 - 6.6	11
6.6 - 6.7	13
6.7 - 6.8	14
6.8 - 6.9	18
6.9 - 7.0	20
7.0 - 7.1	
7.1 - 7.2	
7.2 - 7.3	
7.3 - 7.4	
7.4 - 7.5	
7.5 - 7.6	
7.6 - 7.7	
7.7 - 7.8	
7.8 - 7.9	
7.9 - 8.0	
8.0 - 8.1	
8.1 - 8.2	
8.2 - 8.3	
8.3 - 8.4	
8.4 - 8.5	
8.5 - 8.6	
8.6 - 8.7	
8.7 - 8.8	
8.8 - 8.9	
8.9 - 9.0	
9.0 - 9.1	
9.1 - 9.2	
9.2 - 9.3	
9.3 - 9.4	
9.4 - 9.5	
9.5 - 9.6	
9.6 - 9.7	
9.7 - 9.8	
9.8 - 9.9	
9.9 - 10.0	

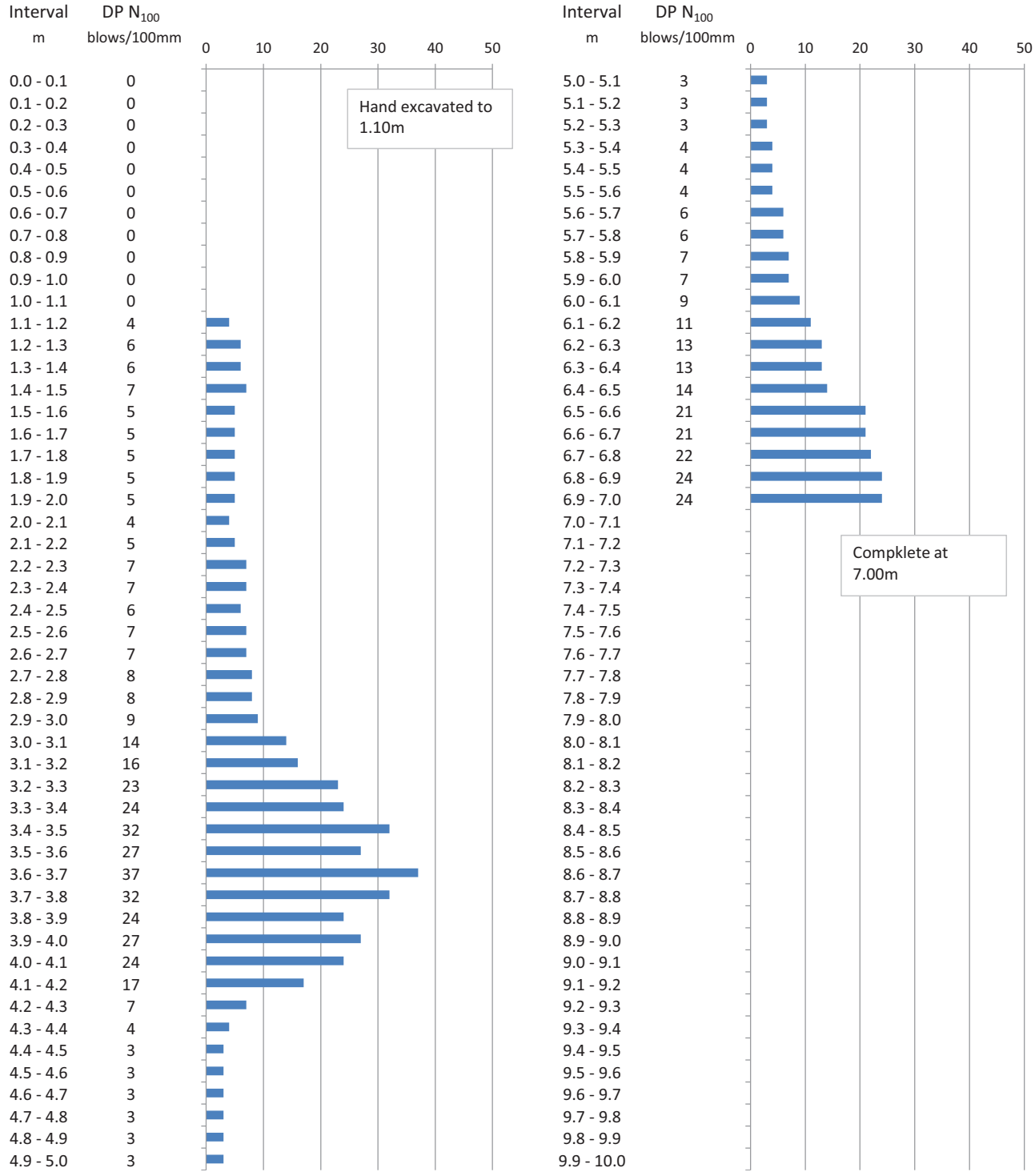


Hammer mass	63.5 kg	**Rod weight**	6 kg	**Date Completed**	06/02/2012
Gravity constant	9.8 N/kg	**Base of cone**	0.002 m^2	**Ground level**	Not available
height of fall	0.750 m	**Friction correction**	None	**Drilling rig**	Archway Dart
Anvil weight	30 kg	**Friction precautions**	None	**Contractor**	AA Drilling

Methodology EN DD1997-3:1999 "Eurocode 7 : Geotechnical Design - design assisted by field testing", Clause 6
Remarks

TITLE:	Super Heavy Dynamic Probing (SHDP) record	**REF:**	LS0432
PROJECT:	184 Palatine Road	**POSITION:**	P1 (CT2)
CLIENT:	Isma Razzaq	**GRID REF:**	N/A
OPERATIVES:	TR/AJ	**CHECKED:** ET	**DATE:** 06/02/2012	**SHEET:**	1 of 1

Land Science
CARLTON HOUSE, 28-29 CARLTON TERRACE, PORTSLADE, BRIGHTON, BN41 1UR
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK



Hammer mass	63.5 kg	**Rod weight**	6 kg	**Date Completed**	06/02/2012
Gravity constant	9.8 N/kg	**Base of cone**	0.002 m^2	**Ground level**	Not available
height of fall	0.750 m	**Friction correction**	None	**Drilling rig**	Archway Dart
Anvil weight	30 kg	**Friction precautions**	None	**Contractor**	AA Drilling

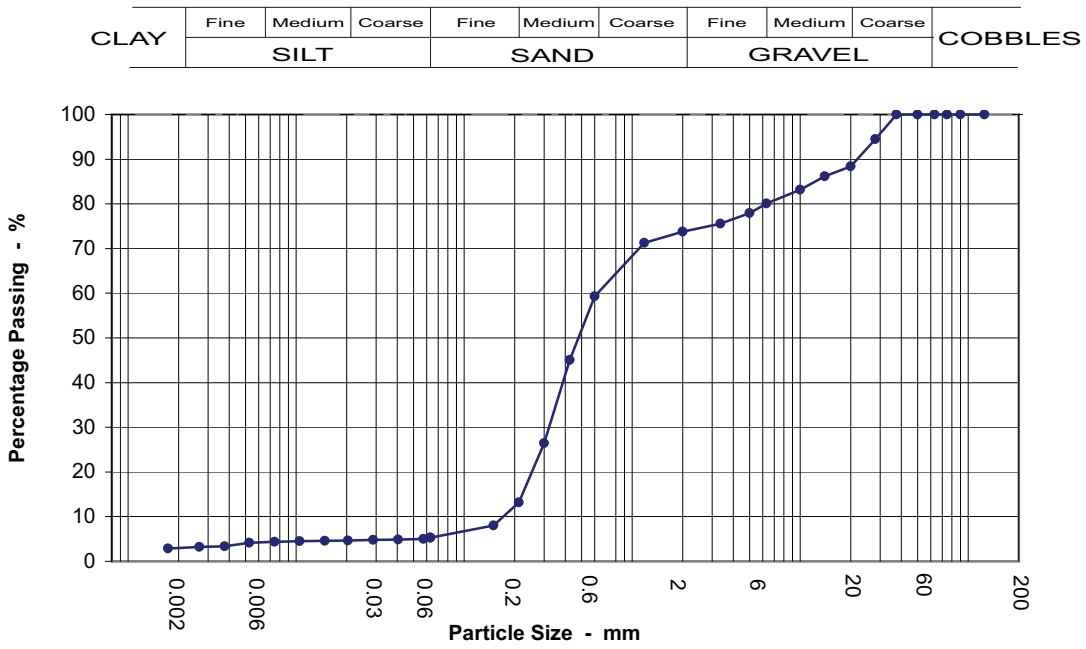
Methodology EN DD1997-3:1999 "Eurocode 7 : Geotechnical Design - design assisted by field testing", Clause 6
Remarks

TITLE:	Super Heavy Dynamic Probing (SHDP) record			**REF:**	LS0432
PROJECT:	184 Palatine Road			**POSITION:**	P2 (CT5)
CLIENT:	Isma Razzaq			**GRID REF:**	N/A
OPERATIVES:	TR/AJ	**CHECKED:**	ET	**DATE:** 06/02/2012	**SHEET:** 1 of 1

Land Science
CARLTON HOUSE, 28-29 CARLTON TERRACE, PORTSLADE, BRIGHTON, BN41 1UR
TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** BRIGHTON@LANDSCIENCE.CO.UK

APPENDIX C

K4 SOILS	PARTICLE SIZE DISTRIBUTION BS 1377 : Part 2 : 1990 : Clause 9	Our Report No:	12251
		Project No:	LS0432
Location	Palatine Road, Manchester	Borehole / Trial Pit No:	CT1
		Depth	1.10 - 2.00 m
Visual Soil Description	Brownish grey slightly clayey slightly silty gravelly SAND (gravel is fmc and sub-angular to rounded)	Sample Type/No	- 0



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.057	5
90	100	0.041	5
75	100	0.029	5
63	100	0.020	5
50	100	0.015	5
37.5	100	0.011	4
28	94	0.007	4
20	88	0.005	4
14	86	0.004	3
10	83	0.003	3
6.3	80	0.002	3
5	78		
3.35	76		
2	74		
1.18	71		
0.6	59		
0.425	45		
0.3	26		
0.212	13		
0.15	8		
0.063	5		

Test Method	
BS 1377 : Part 2 : 1990	
Sieving	Clause
Sedimentation	Clause 9.5
Suitable Amount Of Sample Received	Yes

Sample Proportions	
Cobbles	0.0
Gravel	26.2
Sand	68.7
Silt	2.1
Clay	3.0

Grading Analysis	
D100	125.0
D60	0.6
D10	0.2
Uniformity Coefficient	4

K4 SOILS LABORATORY
Unit 8 Olds Close Olds Approach
Watford Herts WD18 9RU.
E-mail: k4soils@aol.com

Approved Signatories:
K.Phaure(Tech.Mgr) J.Phaure(Lab.Mgr)

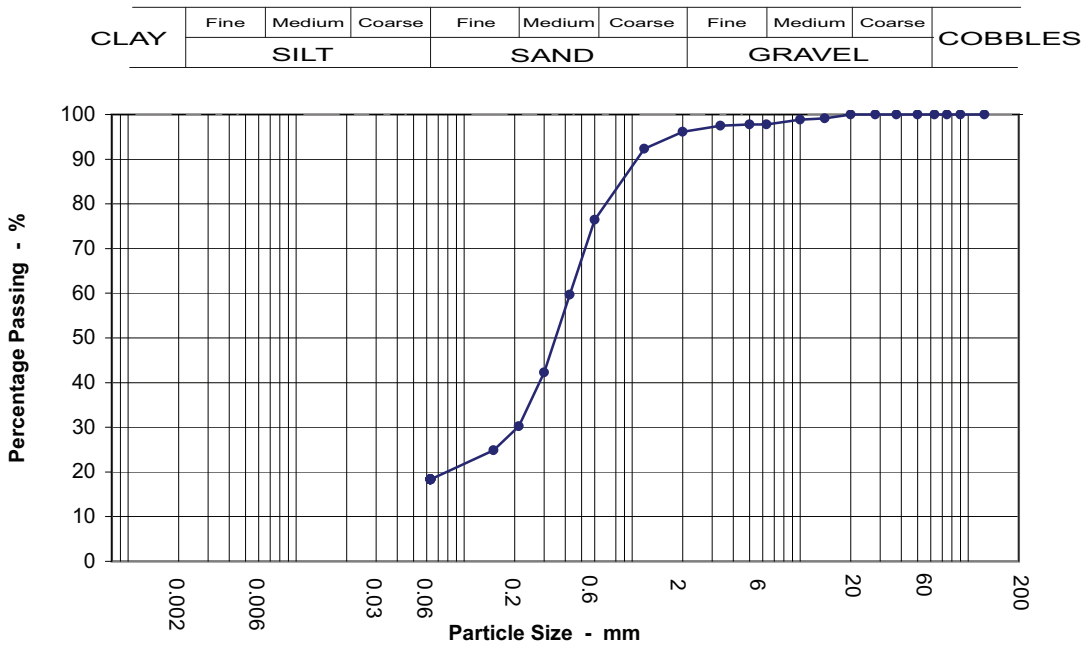
Test results relate only to the sample numbers shown above

Checked and Approved
Initials: kp
Date: 20/02/2012

UKAS TESTING

All samples connected with this report, incl any on 'hold' will be disposed off according to company policy. A copy of this policy is available on request.

K4 SOILS	PARTICLE SIZE DISTRIBUTION BS 1377 : Part 2 : 1990 : Clause 9	Our Report No:	12251
		Project No:	LS0432
Location	Palatine Road, Manchester	Borehole / Trial Pit No:	CT2
		Depth	0.40 m
Visual Soil Description	Brown slightly gravelly slightly clayey SAND (gravel is fm and sub-angular to sub-rounded)	Sample Type/No	- 0



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	99		
6.3	98		
5	98		
3.35	97		
2	96		
1.18	92		
0.6	76		
0.425	60		
0.3	42		
0.212	30		
0.15	25		
0.063	18		

Test Method	
BS 1377 : Part 2 : 1990	
Sieving	Clause
Sedimentation	N/A
Suitable Amount Of Sample Received	Yes

Sample Proportions	
Cobbles	0.0
Gravel	3.9
Sand	77.8
Silt & Clay	18.3

Grading Analysis	
D100	125.0
D60	0.4
D10	
Uniformity Coefficient	N/A

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Date: 20/02/2012

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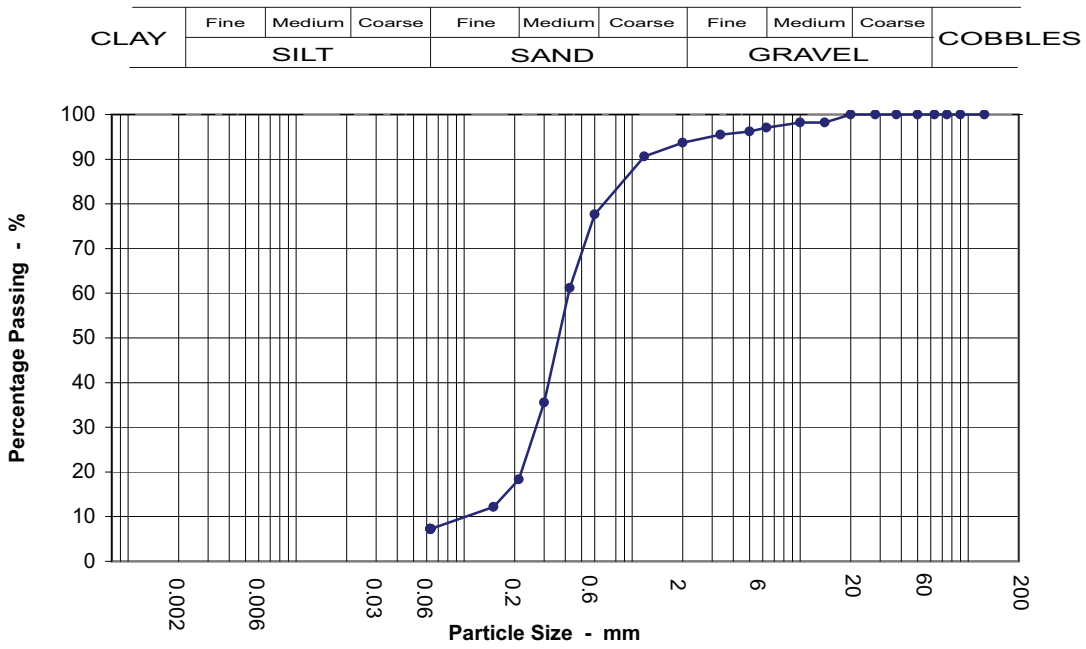
K4 SOILS	PARTICLE SIZE DISTRIBUTION BS 1377 : Part 2 : 1990 : Clause 9	Our Report No:	12251
		Project No:	LS0432
Location	Palatine Road, Manchester	Borehole / Trial Pit No:	CT4
		Depth	0.40 m
Visual Soil Description	Greyish brown slightly clayey slightly gravelly SAND (gravel is fm and sub-angular to sub-rounded)	Sample Type/No	- 0



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	98		
10	98		
6.3	97		
5	96		
3.35	95		
2	94		
1.18	91		
0.6	78		
0.425	61		
0.3	36		
0.212	18		
0.15	12		
0.063	7		

Test Method	
BS 1377 : Part 2 : 1990	
Sieving	Clause
Sedimentation	N/A
Suitable Amount Of Sample Received	Yes

Sample Proportions	
Cobbles	0.0
Gravel	6.3
Sand	86.5
Silt & Clay	7.2

Grading Analysis	
D100	125.0
D60	0.4
D10	0.1
Uniformity Coefficient	4

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Approved Signatories:
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Test results relate only to the sample numbers shown above

Checked and Approved
Initials: kp
Date: 20/02/2012

UKAS TESTING

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Project Name:	Palatine Road, Manchester		
Client:	Land Science	Project no:	LS0432
		Our job no:	12251

K4 SOILS

Borehole No:	Sample No:	Depth m	Description	pH	Sulphate content (g/l)
CT2	-	1.10	Grey brown gravelly SAND (gravel is fmc and sub-angular to rounded)	7.5	0.21
CT3	-	0.40	Brown SAND	7.7	0.38
CT3	-	1.40	Grey brown gravelly SAND (gravel is fmc and sub-angular to rounded)	7.4	0.46
CT3	-	2.50	Grey brown gravelly SAND (gravel is fmc and sub-angular to rounded)	7.5	0.47
CT4	-	1.00	Grey slightly gravelly SAND (gravel is fmc and sub-angular to rounded)	7.6	0.76

Date
20/02/2012

Summary of Test Results

BS 1377 : Part 3 :Clause 5 : 1990

Determination of sulphate content of soil and ground water : gravimetric method

Checked and Approved

Initials : kp

Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU