



Centre Heights, Hampstead

Phase 1 Desk Study Report on Land
Contamination Issues



GB Card
& PARTNERS

Client:

Anaspel Limited

Job Reference:

GB/162

Date:

29th April 2014



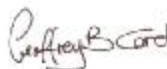


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1. Site location
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EXECUTIVE SUMMARY

GB Card and Partners was commissioned to undertake a desk based ground contamination assessment for a site known as Centre Heights, Finchley Road, Hampstead. Anaspel Limited (the Client) proposes to convert the upper floors of the 1960s multi-storey office building into residential units. No significant demolition or construction is anticipated other than refurbishment works.

As part of the submission to the Local Authority to seek Prior Approval, and to inform subsequent design, the requirement from the Client was to provide information relating to potential ground contamination that may impact the development or adjacent properties. A number of data sources have been utilised in the study, including internet based sources and commercially available data.

In general, no significant on or off site potential sources of ground contamination have been identified, other than the potential for asbestos containing materials (ACMs) within the building fabric. The risk of source contamination is therefore generally considered to be negligible. Furthermore, the concrete building structure, concrete oversite hardstanding and ground slab offer protection to possible contact or migration of any ground contaminants, further reducing the potential risks to receptors, including human health and structural materials.

The main risk is considered to be from the possible presence of ACMs. However, risks may be satisfactorily managed and reduced to an acceptable level through survey work, preparation of an asbestos register (if one does not already exist) and through appropriate control methods during construction/refurbishment works and maintenance procedures.

On the basis of the conversion proposals and the findings of this study, the contamination risks at the site are considered negligible. No further investigation works are considered necessary at this stage other than those in relation to asbestos. After the proposed change of use, with mitigation measures as proposed above, the site would not be contaminated land as described in Part 2A of the Environmental Protection Act 1990.



1. INTRODUCTION

GB Card and Partners was appointed by Anderson Wilde and Harris acting on behalf of Anaspel Limited (the Client) to undertake a desk based ground contamination assessment for a site known as Centre Heights in Hampstead. The site currently comprises a multi-storey mixed-use development and proposals are to refurbish the building to convert the office floorspace into residential units.

As part of the preliminary studies and to seek Prior Approval, a desk based ground contamination assessment is required. This assessment draws on readily available information relating to ground conditions, historic and current site development and surrounding land use that may influence contamination risks. The environmental setting, including environmental sensitivity, is considered as part of the assessment.

This report is produced to assist with the submission for Prior Approval and is restricted to contamination issues. No intrusive investigations have been undertaken as part of this assessment.

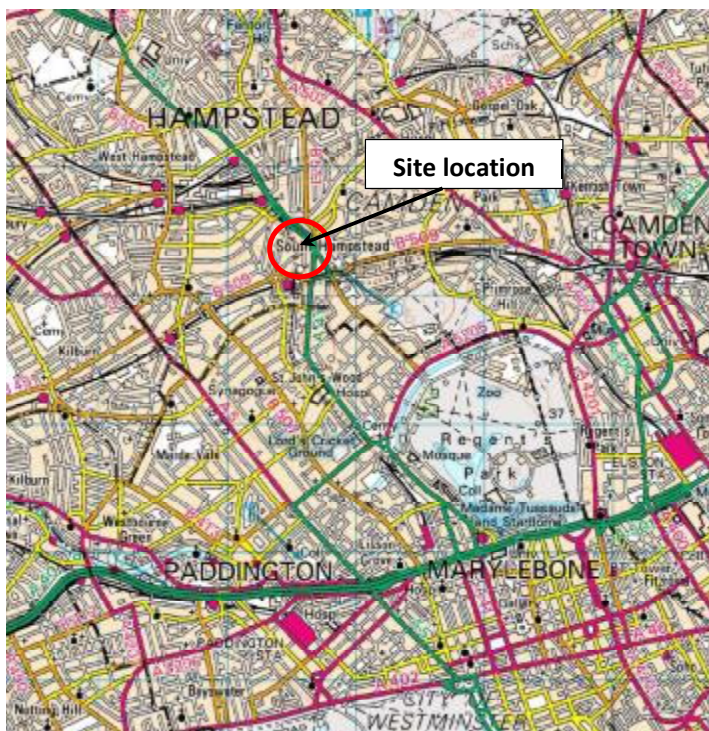


2. SITE LOCATION AND SETTING

2.1 Site location

The site is known as Centre Heights and is located at 137 Finchley Road, Hampstead, NW3 6JG. The approximate grid reference for the site is 526590,184370.

The property is situated on the corner of the A41 Finchley Road and Belsize Road and is located close to Swiss Cottage underground station, within a predominantly residential area of London. Belsize Park is situated a short distance to the east, with South Hampstead to the west. The site location is shown in Figure 1, below.



Ordnance Survey © Crown Copyright 2008. All rights reserved.
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Figure 1: Site location

2.2 Site description

The site comprises an irregular plot of land occupying an area of approximately 2,750m². The site is covered by a multi-storey 1960's mixed-use building, with



three levels of covered parking and associated access and hardstanding to the west of the building.

The site is bound to the east by Finchley Road and to the south by a residential development fronting on to Belsize Road. The northern and western boundaries are formed by residential development and areas of hardstanding.

A plan of the current layout is presented as Figure 2, below.



Figure 2: Site layout

2.3 Proposed development

The proposed development is understood to comprise the conversion of part of the building into residential units. No structural changes are anticipated, although some internal change may be expected. Much of the refurbishment will comprise cosmetic changes and provision of internal dividing walls. No external works or alterations are proposed.



3. DATA REVIEW

3.1 Summary

The desk based review has included readily available information on ground conditions, site usage, environmental database searches, historic maps and information provided by the client. Internet based sources have also been used and referenced as appropriate. The review relates only to contamination issues that may affect the proposed development or adjoining properties.

3.2 Data sources

The following data sources have been utilised in the preparation of this report:

- Information provided by the Client.
- Historical maps. Copies are provided in Appendix A.
- Envirocheck® report dated 15 April 2014. A copy of this report is provided in Appendix B.
- British Geological Survey (BGS) records for boreholes advanced in the immediate surrounding area. Copies are provided in Appendix C.
- Information available from the Environment Agency's *What's in my Backyard* website, accessed April 2014.

3.3 Historical development

The historical development of the site has been traced from Ordnance Survey map extracts that are readily available via the internet¹ and also obtained as part of an environmental disclosure report included as Appendix A. A summary of the main findings is presented below, although further detail may be identified from Appendix A.

In general, the site was shown on the earliest map viewed, dated 1871, to be occupied along the eastern boundary by residential properties, with gardens extending west across the site. Finchley Road is shown to the east and Belsize Road to the south. *Swiss Cottage* station (underground) is shown immediately

¹ Internet data: www.old-maps.co.uk, accessed April 2014.



south of the site with evidence of the tube tunnel passing immediately east of the site boundary. The surrounding area is predominantly residential.

The map of 1896 shows a *Bank* immediately east of the site, with further building outlines along the southern boundary. A slight change to the outlines of the building present on the site is notable between 1915 and 1935.

The next significant change is shown on the map of 1960 when the site is shown to be vacant in the northern half. The land use surrounding the site to the south and west has changed, with larger buildings being evident, assumed to be residential.

The map of 1967 shows Centre Heights to occupy the site in a similar outline to the present day development.

In summary, the site appears to have been residential or commercial throughout its history, with the surrounding land use being primarily residential. There is no evidence of significant sources of potential ground contamination such as manufacturing or significant industrial works.

3.4 Ground and groundwater conditions

The ground and groundwater conditions have been traced via internet based sources^{2,3} and a review of the geological map⁴ and memoirs for the region.

The geology is identified as comprising the London Clay Formation, with is a low permeability stratum. No superficial deposits are identified in the immediate area. Available borehole records for nearby sites confirm the ground conditions, with a selection of those obtained being included at Appendix C.

Groundwater is not anticipated at shallow depth below the site. The London Clay is classed as *Unproductive Strata*. The site does, however, lie within/on the edge of a groundwater source protection zone (SPZ), considered to be associated with the deep chalk aquifer. The SPZ II extends to the south east of the site. The site is not within an area considered at risk of flooding from rivers or sea.

² Internet source: <http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>, accessed April 2014.

³ Internet source: <http://maps.environment-agency.gov.uk/wiyby/wiybyController?ep=maptopics&lang=e>, accessed April 2014.

⁴ BGS (2006). Sheet 256 North London, 1:50,000 Geology Series, British Geological Survey, Keyworth, 2006.



3.5 Environmental disclosure report

An environmental disclosure report (Envirocheck®) was obtained from Landmark® and is included as Appendix B. This provides information on surrounding land use, pollution incidents, ground hazards etc. A summary of the main findings is presented below. Further detail is presented within Appendix B.

- There are four Local Authority Pollution Prevention and Control entries for sites within 250m of the property. These relate to three sites, being two dry cleaners and one petrol station site (two entries).
- The nearest surface water feature is approximately 134m south east of the site and is unidentified. It is possible this relates to a water body (outdoor pool) associated with a leisure centre or may be a culverted water body.
- There are two groundwater abstractions within 250m of the site to the south east, both relating to irrigation. The abstraction is noted as from the groundwater but the stratum is not identified. It is assumed this is from within the deep chalk aquifer.
- There are a number of potential geological hazard entries for the site, mainly being low or very low hazard risk, none of which is likely to be of concern in relation to contamination.
- There are 25 Contemporary Trade Directory entries within 250m of the site, most of which are listed as *Inactive*. Active entries include dry cleaning, printing, car sales and a petrol station.
- There is one fuel station entry within 250m of the site.
- The site is not identified as being in an area of sensitive land use, such as Adopted Green Belt, Environmentally Sensitive Area etc.
- The site does not lie within an area considered to be at risk from radon.
- There are no historic or registered waste or landfill sites within 500m of the site.



In summary, the sources of potential environmental hazards in the surrounding area are not considered to present a significant risk to the current proposed conversion.



4. PRELIMINARY RISK ASSESSMENT

4.1 Summary

The proposed development is to comprise the refurbishment of an existing multi-storey building and change in use from office space to residential of the upper floors. No demolition activities or excavation works are anticipated. Therefore, potential contamination risks are mainly those associated with the building structure. If historic ground/groundwater contamination is present then this may affect adjacent sites and therefore put liability onto the site owners; however, no such potential contamination sources have been identified by this study. The following preliminary assessment therefore considers potential contamination sources, possible migration pathways and contaminant receptors in relation to the current site conditions and the proposed development. The risk assessment and subsequent preliminary conceptual site model is in line with current guidance and in accordance with the requirements of Contaminated Land Report (CLR) 11⁵.

4.2 Contamination sources

There are few identified potential on site sources of contamination.

- **Made or Re-worked Ground** - Historically, there may be limited localised Made or Re-worked Ground associated with previous development. However, as this is likely to be associated with a residential use, potential for contamination is likely to be limited. It is also probable that Made Ground would have been removed as part of the construction works for the current structure. The soil gas generation potential of any residual Made Ground should be below
- **Asbestos containing materials (ACMs)** – Not identified but could potentially be present within the building fabric based on the age of the structure.

No significant potential off site sources of contamination have been identified.

⁵ Environment Agency. 2004. *Model Procedures for the Management of Land Contamination*. Contaminated Land Report 11.



4.3 Migration pathways

The main migration pathways will be:

- Possible migration of mobile contamination through service trenches/ducts.
- Air borne particles and/or gases.

The geology below the site is likely to be of low permeability (London Clay) and groundwater is not anticipated.

The hardstanding across the site prevents or significantly minimises contact with ground contamination or airborne dusts or gases and will remain as part of the proposed development.

Inhalation of asbestos containing materials, if present, may occur where ACMs are in a poor condition or damaged during construction/operation.

4.4 Receptors

Potentially sensitive receptors in the vicinity of the site include:

- Construction workers;
- The public;
- End users of the site; and
- Buildings/structures.

Adjacent properties may also be at risk from any mobile contamination encountered. Controlled water receptors are not considered to be of concern at this site based on the low permeability of the underlying soils, the distance to surface water receptors and the anticipated nature of the identified surface water feature.

4.5 Assessment of risk posed by contamination

The above conceptualisation of the source, pathway, receptor contaminant linkage model provides information to allow the following qualitative risk assessment to be made.



In order to assess the risk posed by the various source, pathway and receptor linkages that may exist, the following risk rating terminology has been adopted to describe the risks identified at the site. These are based on the Department of Environment (now DEFRA) and Contaminated Land Research Report series (CLR Report No. 6)⁶ site prioritisation and categorisation rating system, as defined below:

High risk: Contaminants are very likely to represent an unacceptable risk to receptors. The site is probably not suitable for its proposed use. Enforcement action is possible.

Medium risk: Contaminants likely to represent an unacceptable risk to identified receptors. The site is probably not suitable for its proposed use. Action is required in the medium term.

Low risk: Contaminants may be present but unlikely to result in an unacceptable risk to identified receptors. The site is probably suitable for proposed use. Action is unlikely to be needed whilst the site remains in its current use.

Negligible risk: If contamination sources are present they are considered to be minor in nature and extent. The site is suitable for its proposed end use. No further action is required.

A preliminary assessment of the risks posed by the identified pollutant linkages is provided in Table 1 in accordance with the requirements of CLR 11.

⁶ DoE. (1995). Prioritisation and categorisation procedure for sites which may be contaminated. CLR 6.



Table 1: Conceptual Site Model

Potential source	Receptor(s)	Exposure pathway(s)	Current risk rating
Contamination associated with past site use (localised Made Ground)	Current site users Future site users Neighbours Construction workers	Concrete floor slab and oversite hardstanding prevents contact.	Negligible – past use was residential. Made Ground likely to have been removed during construction. Site is covered in concrete. No significant contamination source (i.e. soil gas, radon, organic or inorganic contaminants) identified.
Asbestos containing materials	Future site users Neighbours Construction workers	Inhalation	Medium – reference to the asbestos register and careful construction/maintenance will mitigate potential risks.
Off-site sources	Future site users Buildings and structures	Via service trenches/ducts	Negligible – due to no significant identified sources and the presence of concrete hard cover across the site.

4.6 Preliminary conceptual site model and risk assessment

Table 1 summarises the preliminary risk assessment and conceptual site model. In summary, the risks are considered *negligible* as there are either no significant identified sources or the pathways are physically broken by the concrete hardstanding and ground slab provided by the existing structure. The exception is the potential risk from asbestos. No detail is currently available, so risks have been assessed as medium pending further investigation.



5. CONCLUSIONS AND RECOMMENDATIONS

The desk based assessment has identified no significant potential sources of ground contamination and a lack of migration pathways due to the presence of the concrete oversite/hardstanding and ground slab that covers the site at ground level. As such potential receptors are considered to be generally at a negligible risk from ground contamination.

The exception is the potential risks arising through the presence of asbestos containing materials within the building, if present. If an asbestos register does not already exist, an asbestos survey should be undertaken to assess for potential ACMs. In the event that ACMs are identified, providing adequate control measures are implemented during construction/refurbishment and a maintenance plan incorporated, then associated risks should be satisfactorily minimised and managed.

Based on the findings of this assessment report, specific mitigation measures for ground contamination are not required apart from possible control measures for the management and removal of any ACMs. Therefore, the overall contamination risk for the proposed redevelopment is considered to be *negligible*. After the proposed change of use, with mitigation measures as proposed above, the site would not be contaminated land as described in Part 2A of the Environmental Protection Act 1990. No further recommendations are made at this stage in relation to ground contamination issues.

Appendix A

Historic map extracts



GB Card
& PARTNERS

London

Published 1871 - 1872

Source map scale - 1:1,056

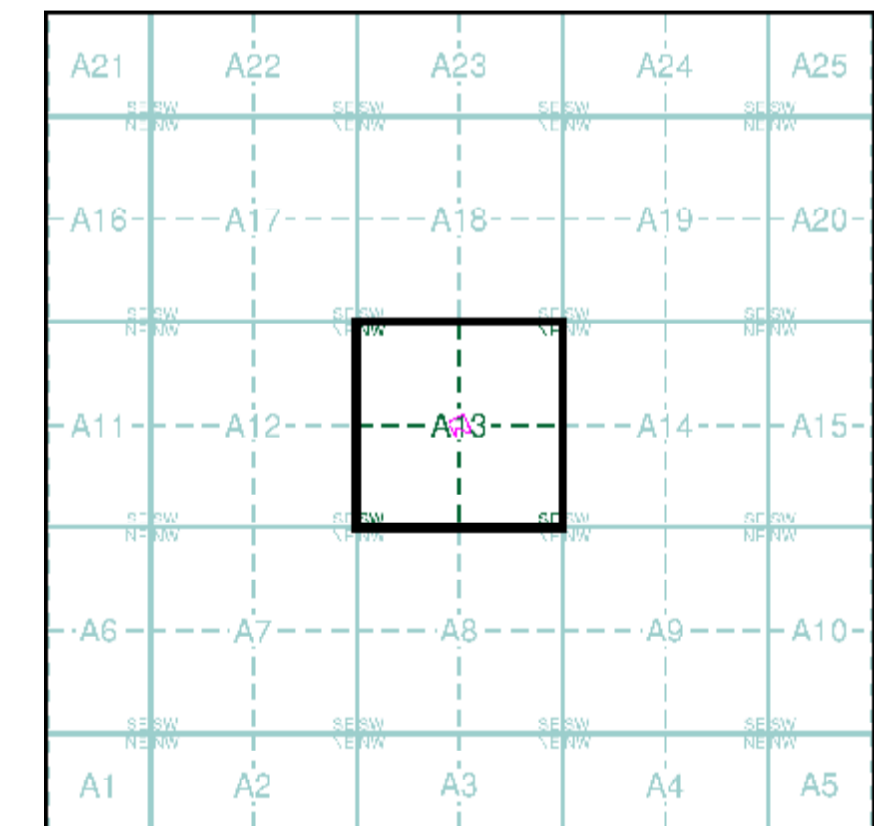
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

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)

006_00_009	006_00_010
1871	1871
1:1,056	1:1,056
006_00_019	006_00_020
1872	1871
1:1,056	1:1,056

Historical Town Plan - Segment A13

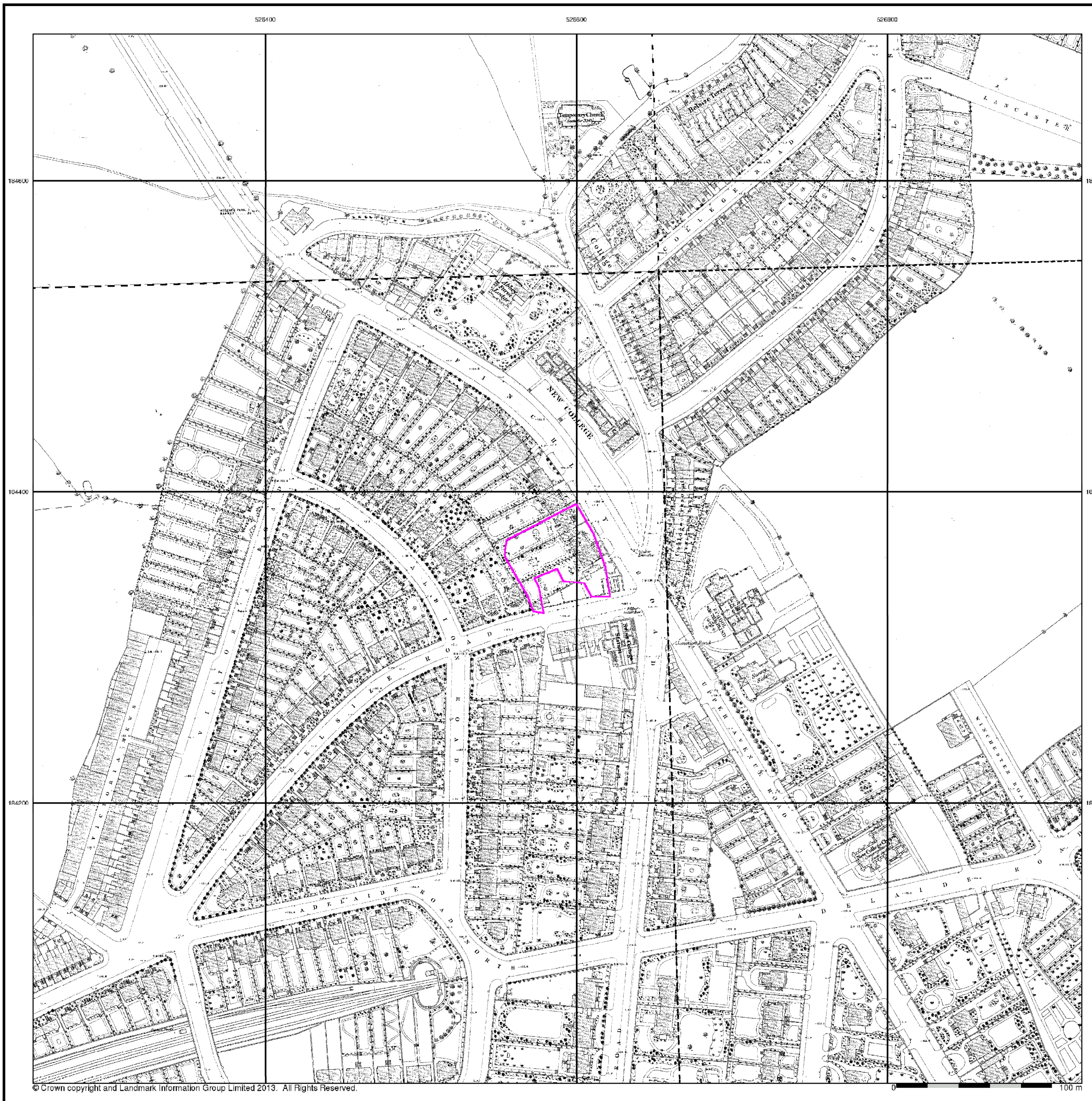


Order Details

Order Number: 55373660_1_1
 Customer Ref: GB/162
 National Grid Reference: 526590, 184350
 Slice: A
 Site Area (Ha): 0.25
 Search Buffer (m): 0

Site Details

Centre Heights, 137 Finchley Road, LONDON, NW3 6JG



London

Published 1895

Source map scale - 1:1,056

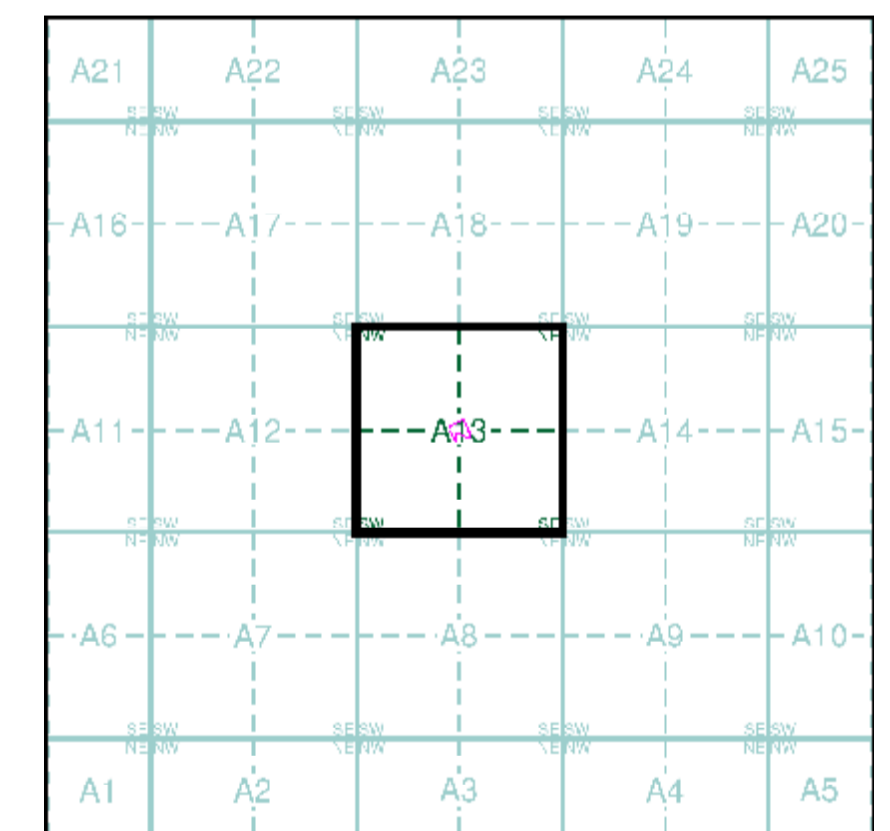
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

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Map Name(s) and Date(s)

006_00_009 1895 1:1,056	006_00_010 1895 1:1,056
006_00_019 1895 1:1,056	006_00_020 1895 1:1,056

Historical Town Plan - Segment A13

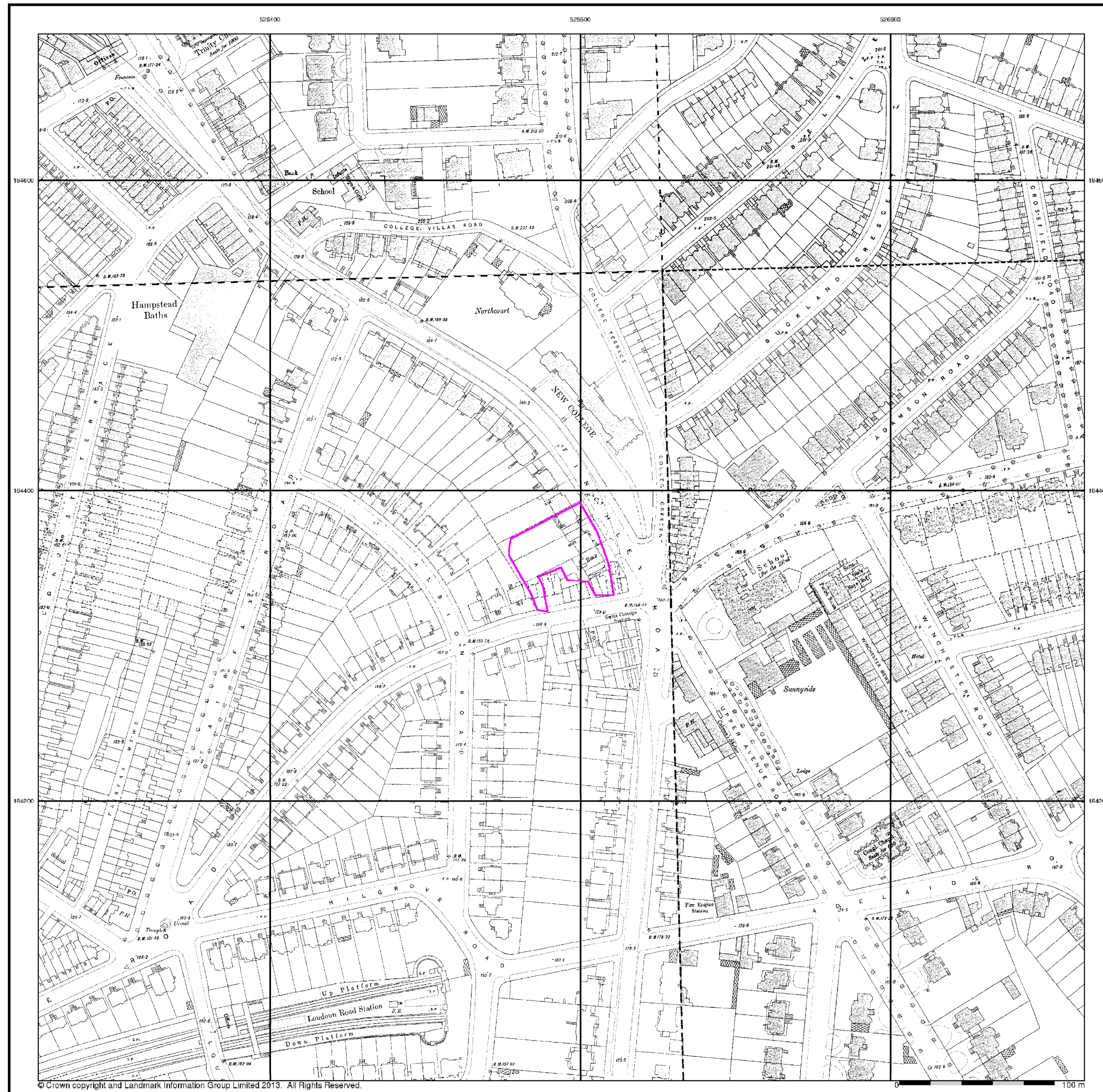


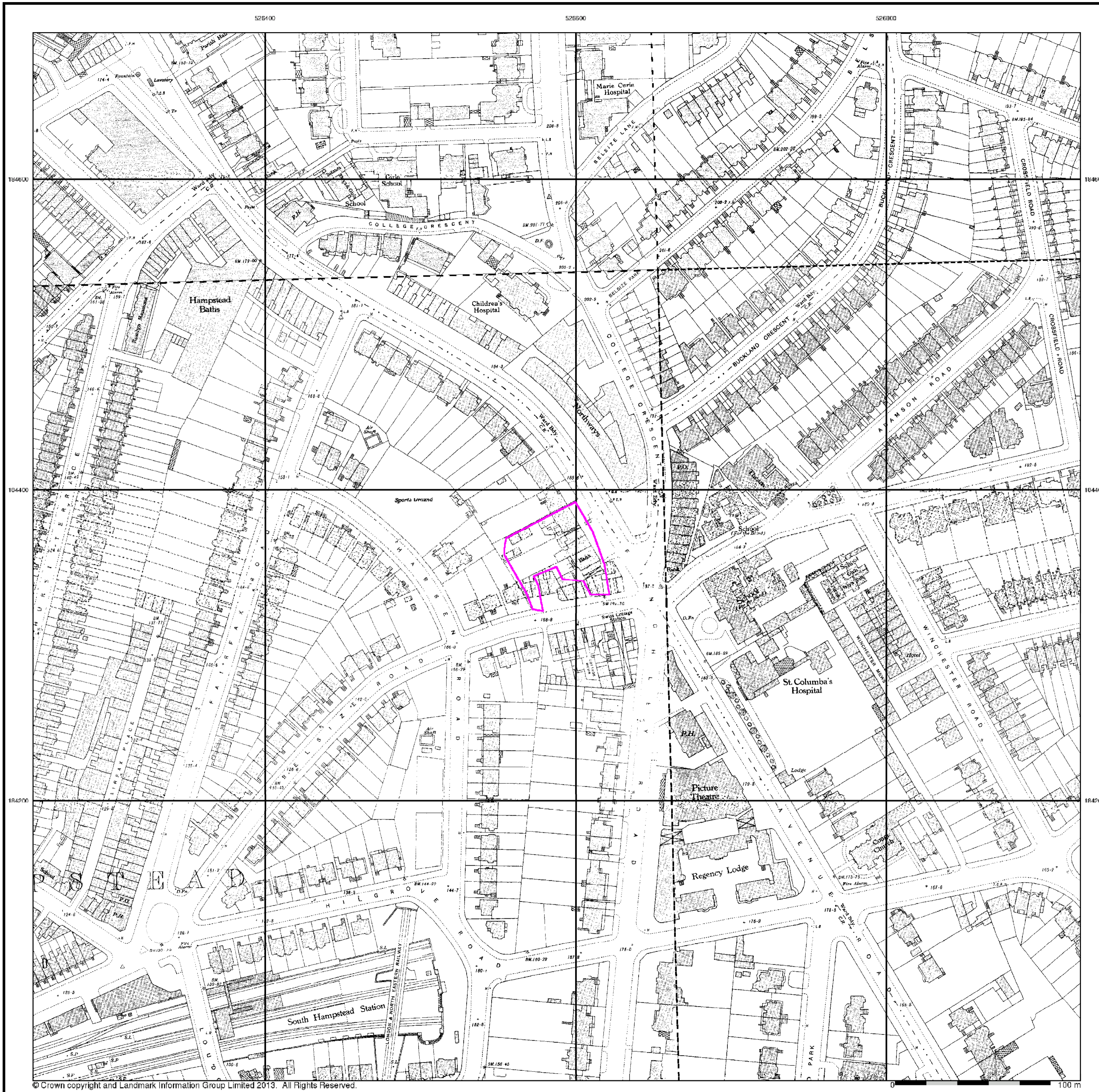
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Site Details

Centre Heights, 137 Finchley Road, LONDON, NW3 6JG





London
Published 1936 - 1939
Source map scale - 1:1,056

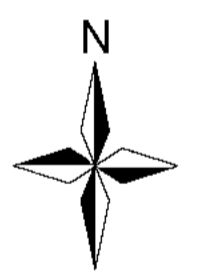
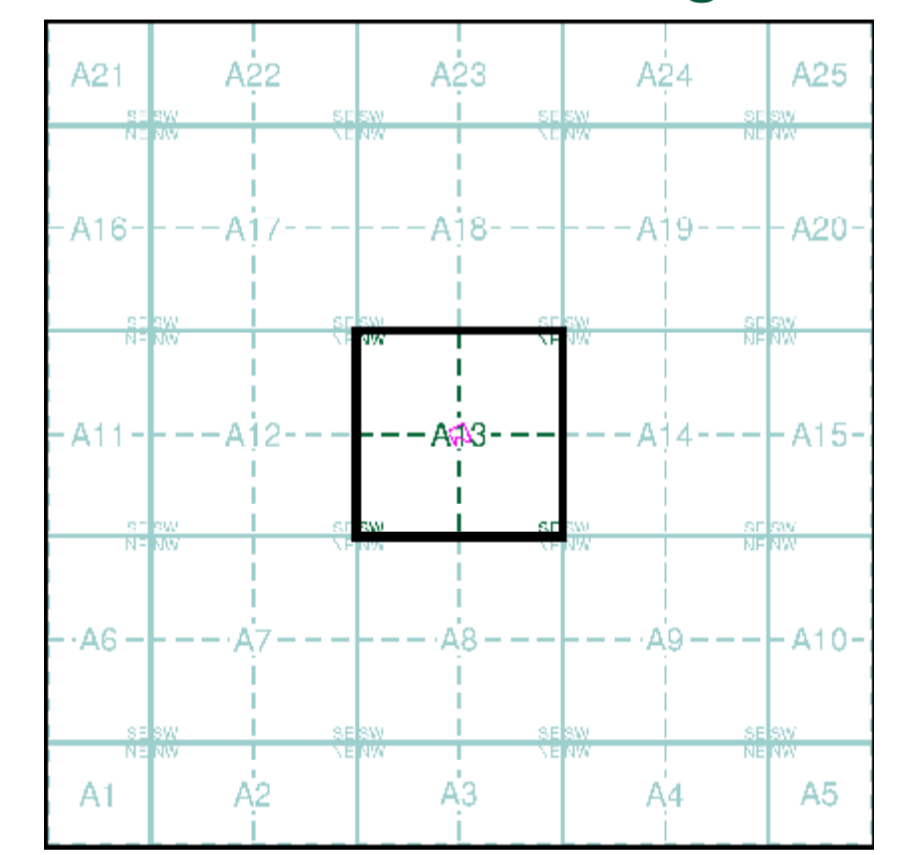
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the Ordnance Survey and a 'skeleton' survey of the capital, showing little more than streets, street names, frontages and altitudes, was undertaken between 1848 and 1850. The majority of the 1:1056 surveys were later replaced by 1:500 surveys; although almost all the remainder were revised at this scale, sometimes more than once before 1895. The type of detail shown on the 1:1056 scale is broadly similar to that on 1:500; the apparent omission of minor details such as sewer access points and street lights may be as much a reflection of the generally earlier date of these plans, as of the specification of the map.

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)

006_00_009 1936 1:1,056	006_00_010 1937 1:1,056
006_00_019 1939 1:1,056	006_00_020 1938 1:1,056

Historical Town Plan - Segment A13



Order Details

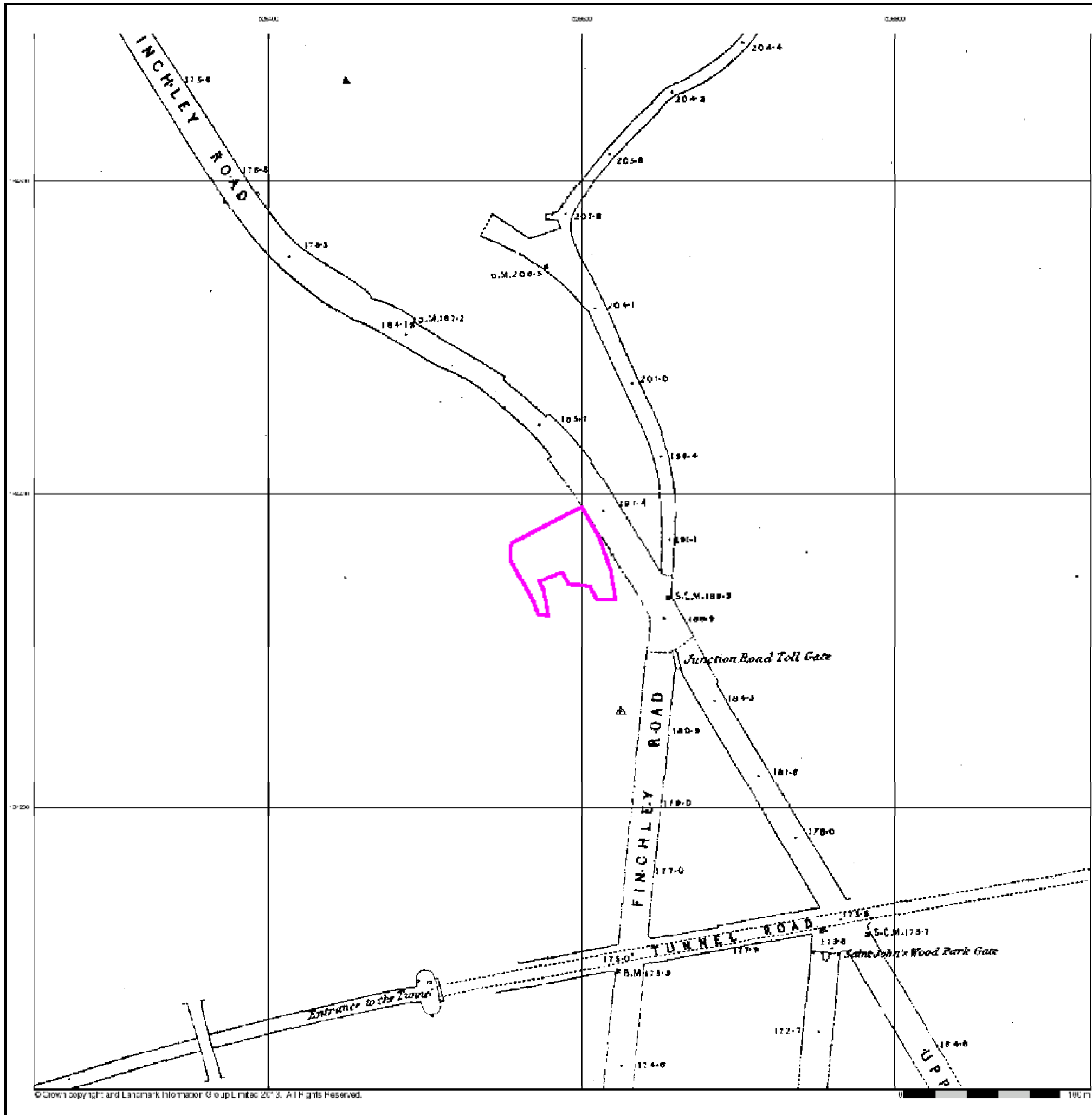
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 Customer Ref: GB/162
 National Grid Reference: 526590, 184350
 Slice: A
 Site Area (Ha): 0.25
 Search Buffer (m): 0

Site Details

Centre Heights, 137 Finchley Road, LONDON, NW3 6JG



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



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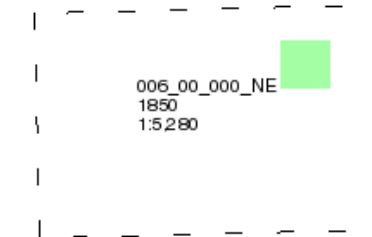
London
Published 1850

Source map scale - 1:5,280

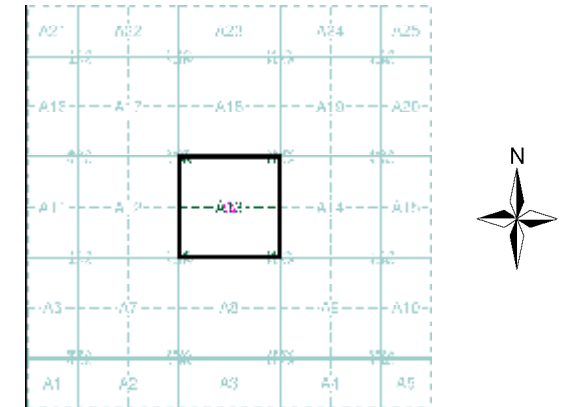
The historical town plans shown derive from Ordnance Survey mapping from the early to mid 1850s. The 1:2640 scale was introduced in the early 1850s, to survey districts covered by the Local Boards of Health and for a map of the Osborne Estate of Queen Victoria. The general style is similar to that of the early 1:2500s published shortly afterwards. 1:5280 scale was surveyed shortly afterwards in the mid 1850s as general purpose mapping with a standard of content similar to the more contemporary 1:10,560 mapping. The scale was also used for a reduction of the 1:1056 'skeleton survey' of London that was undertaken between 1848 and 1850.

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: 55373660_1_1
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 Site Area (Ha): 0.25
 Search Buffer (m): 0

Site Details

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

Historical Mapping Legends

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

Quarry **Gravel Pit** **Sand Pit**
Clay Pit **Shingle** **Refuse Heap**
Sloping Masonry **Flat Rock**
Marsh **Reeds** **Osiers**
Rough Pasture **Furze** **Wood**
Mixed Wood **Brushwood** **Orchard**
Fir **Ford** **Stepping Stones**
Ferry **Waterfall** **Lock**
Trig. Station **Altitude at Trig. Station**
B.M. 325.9 **Bench Mark** **Surface Level**
Arrow denotes flow of water **Antiquities (site of)**
Cutting **Embankment**
Railway crossing Road **Level Crossing** **Road crossing Railway**
Railway crossing River or Canal **Road over single stream** **Road over River or Canal**
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
County Borough Boundary (England)
County Burgh Boundary (Scotland)
Boundary Post or Stone **Police Call Box**
B.R. Bridle Road **Pump**
E.P. Electricity Pylon **S.P. Signal Post**
F.B. Foot Bridge **Sl. 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

Inactive Quarry, Chalk Pit or Clay Pit **Active Quarry, Chalk Pit or Clay Pit**
Rock **Boulders**
Cliff **Slopes** **Top**
Roofed Building **Glazed Roof Building**
Sloping Masonry **Archway**
Non-Coniferous Tree (surveyed) **Coniferous Tree (surveyed)**
Non-Coniferous Trees (not surveyed) **Coniferous Trees (not surveyed)**
Orchard Tree **Scrub** **Bracken**
Coppice, Osier **Reeds** **Marsh, Saltings**
Rough Grassland **Heath** **Culvert**
Direction of water flow **Bench Mark** **Antiquity (site of)**
Cave Entrance **Triangulation Station** **Electricity Pylon**
Electricity Transmission Line
County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
London Borough Boundary
Symbol marking point where boundary mereing changes
BH. Bear 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**
EIP. 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**
N.T.L. Normal Tidal Limit **Wd Pp. Wind Pump**

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

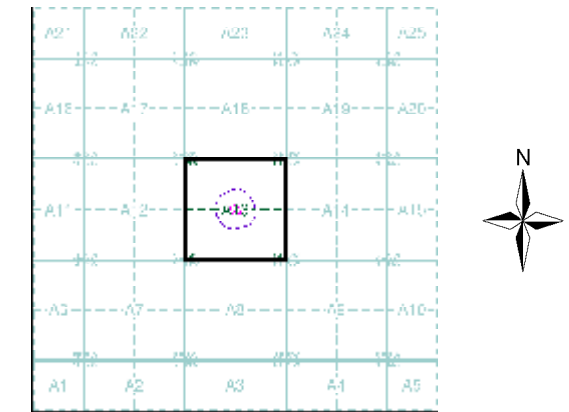
Cliff **Slopes** **Top**
Rock **Rock (scattered)**
Boulders **Boulders (scattered)**
Positioned Boulder **Scree**
Non-Coniferous Tree (surveyed) **Coniferous Tree (surveyed)**
Non-Coniferous Trees (not surveyed) **Coniferous Trees (not surveyed)**
Orchard Tree **Scrub** **Bracken**
Coppice, Osier **Reeds** **Marsh, Saltings**
Rough Grassland **Heath** **Culvert**
Direction of water flow **Triangulation Station** **Antiquity (site of)**
Electricity Transmission Line **Electricity Pylon**
Bench Mark **Buildings with Building Seed**
Roofed Building **Glazed Roof Building**
Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)
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**
EI Gen Sta. Electricity Generating Station **Sewage Ppg Sta. Sewage Pumping Station**
EIP. Electricity Pole, Pillar **SB, S Br. Signal Box or Bridge**
EI 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 Governor **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**



Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
London	1:2,500	1871	2
London	1:2,500	1896	3
London	1:2,500	1915	4
London	1:2,500	1935	5
Historical Aerial Photography	1:1,250	1946 - 1949	6
Ordnance Survey Plan	1:1,250	1954	7
Ordnance Survey Plan	1:2,500	1955	8
Ordnance Survey Plan	1:1,250	1960 - 1967	9
Ordnance Survey Plan	1:1,250	1967 - 1971	10
Additional SIMs	1:1,250	1971 - 1985	11
Ordnance Survey Plan	1:1,250	1973	12
Supply of Unpublished Survey Information	1:1,250	1973 - 1974	13
Additional SIMs	1:1,250	1984 - 1986	14
Large-Scale National Grid Data	1:1,250	1991	15
Large-Scale National Grid Data	1:1,250	1994 - 1995	16

Historical Map - Segment A13



Order Details

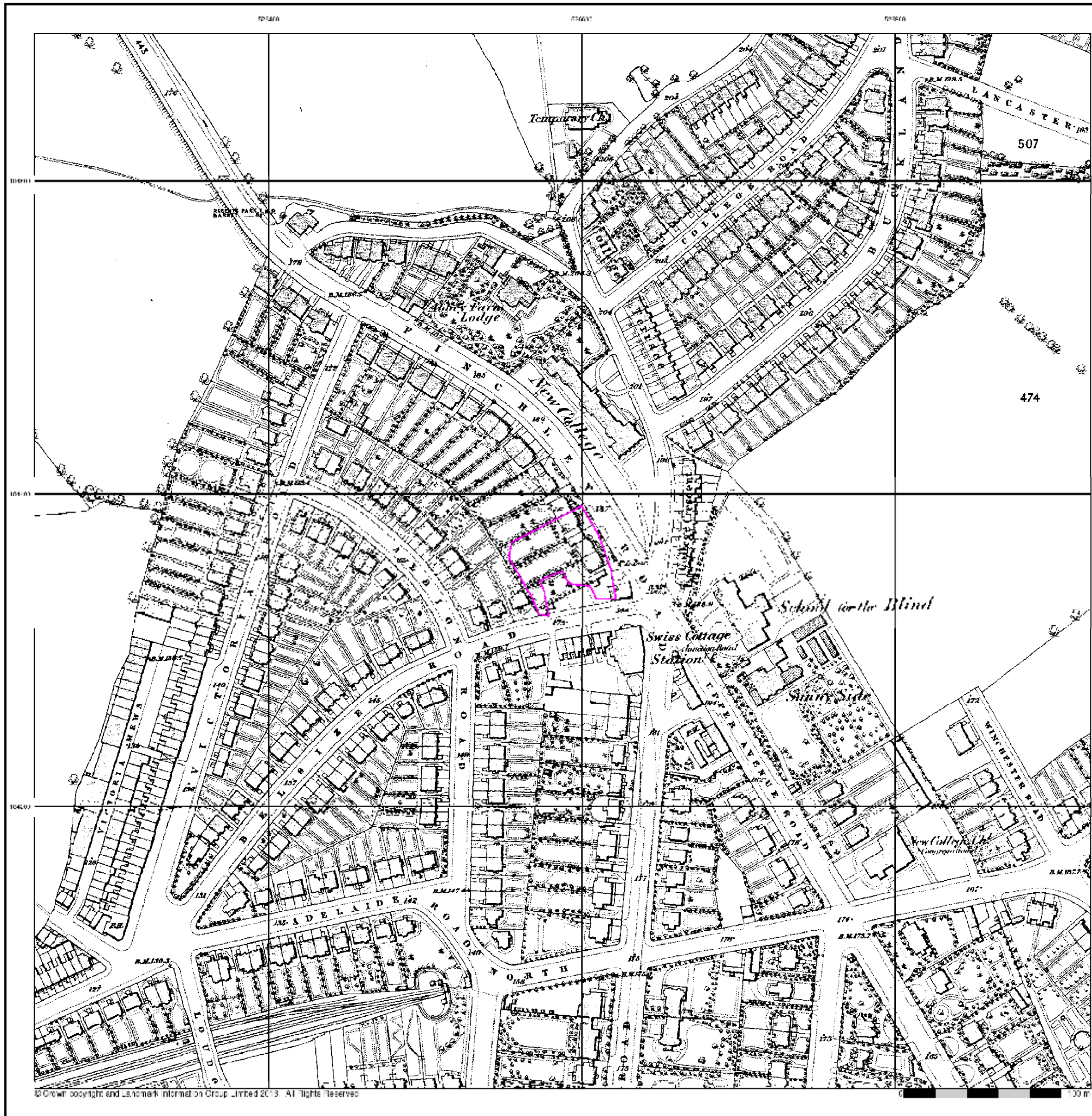
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 National Grid Reference: 526590, 184350
 Slice: A
 Site Area (Ha): 0.25
 Search Buffer (m): 100

Site Details

Centre Heights, 137 Finchley Road, LONDON, NW3 6JG



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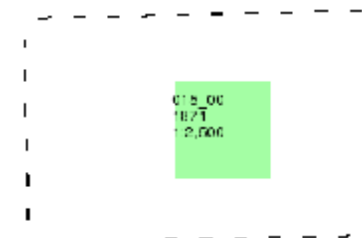


London
Published 1871

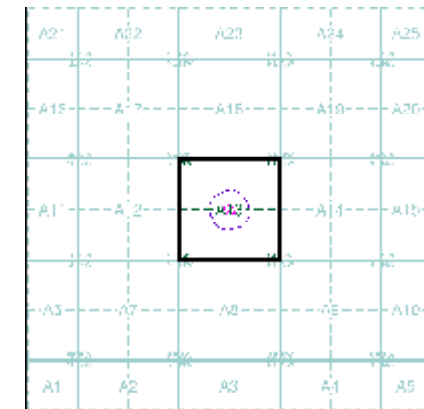
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered 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

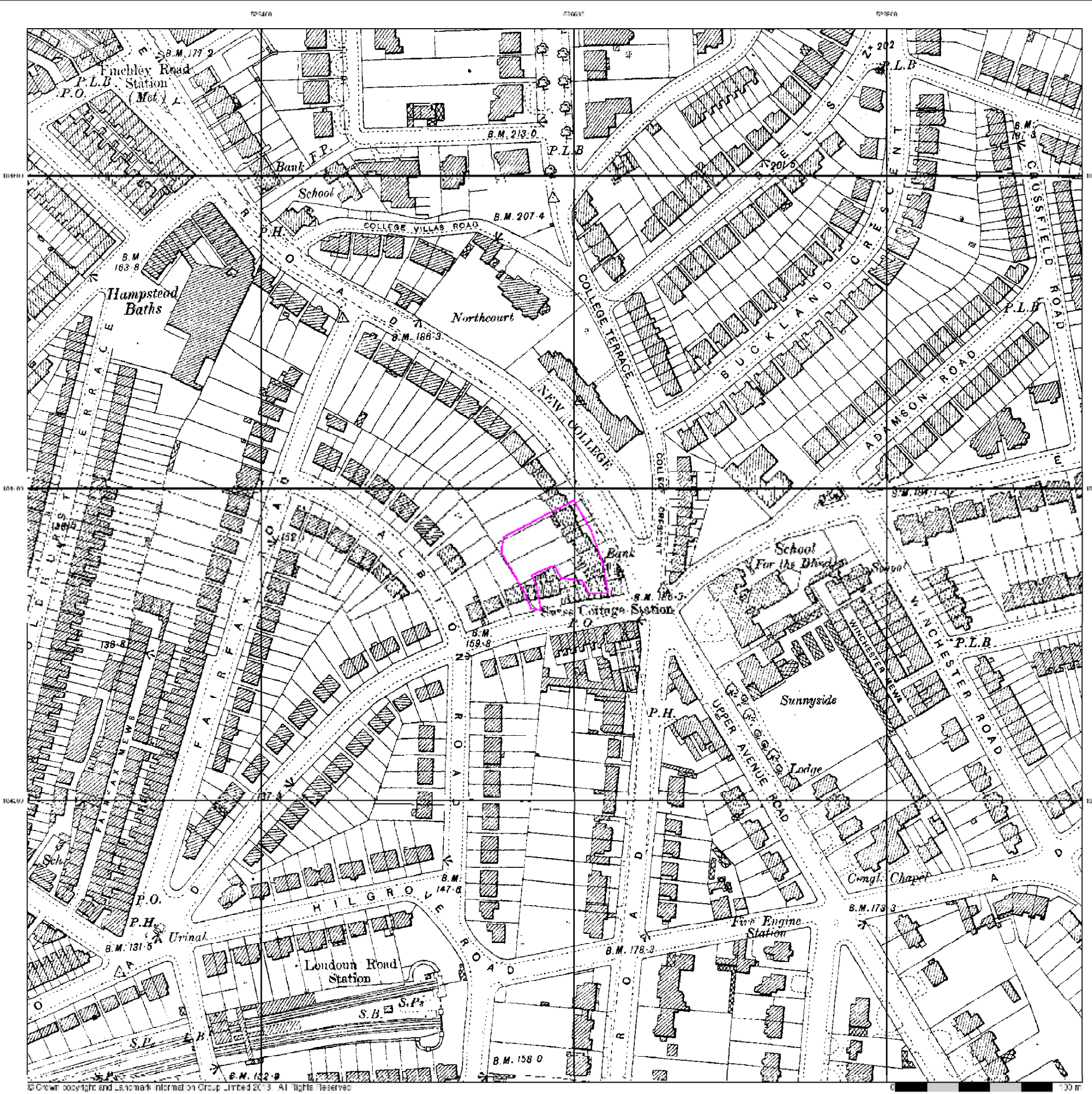
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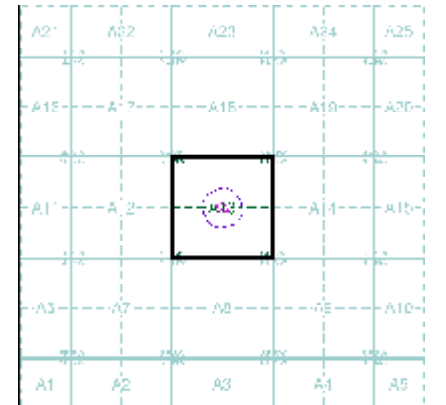
London
Published 1896
Source map scale - 1:2,500

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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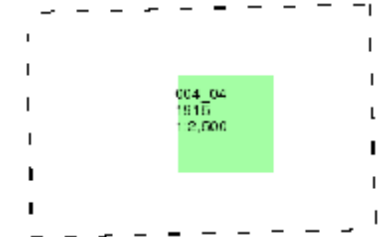
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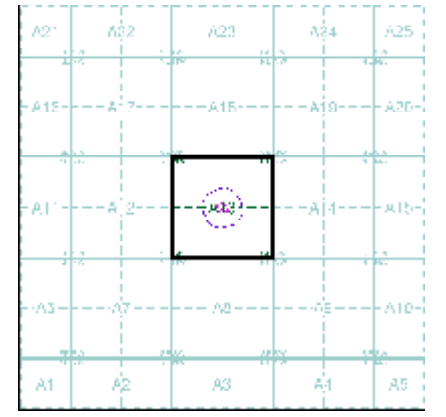
London
Published 1915
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 55373660_1_1
 Customer Ref: GB/162
 National Grid Reference: 526590, 184350
 Slice: A
 Site Area (Ha): 0.25
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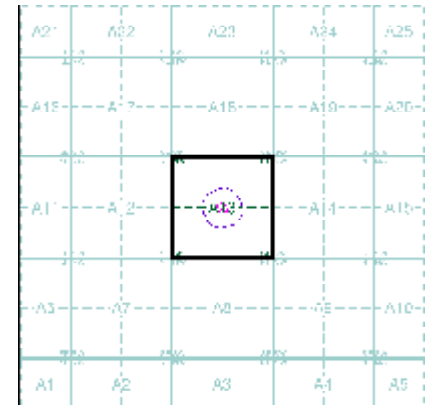
London
Published 1935
Source map scale - 1:2,500

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Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 55373660_1_1
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Historical Aerial Photography

Published 1946 - 1949

Source map scale - 1:1,250

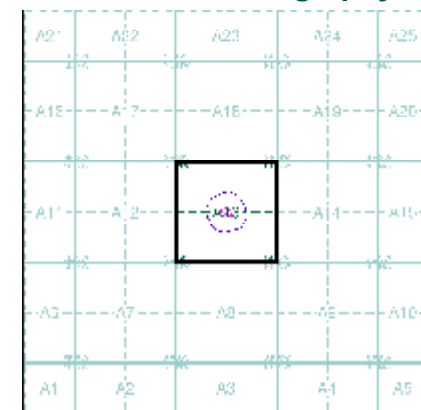
The Historical Aerial Photos were produced by the Ordnance Survey at a scale of 1:1,250 and 1:10,560 from Air Force photography. They were produced between 1944 and 1951 as an interim measure, pending preparation of conventional mapping, due to post war resource shortages. New security measures in the 1950's meant that every photograph was re-checked for potentially unsafe information with security sites replaced by fake fields or clouds. The original editions were withdrawn and only later made available after a period of fifty years although due to the accuracy of the editing, without viewing both revisions it is not easy to spot the edits. Where available Landmark have included both revisions.

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Map Name(s) and Date(s)

TO2684NW 1946 1:1,250	TO2684NE 1946 1:1,250
TO2684SW 1949 1:1,250	TO2684SE 1946 1:1,250

Historical Aerial Photography - Segment A13



Order Details

Order Number: 55373660_1_1
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**Ordnance Survey Plan
Published 1954**

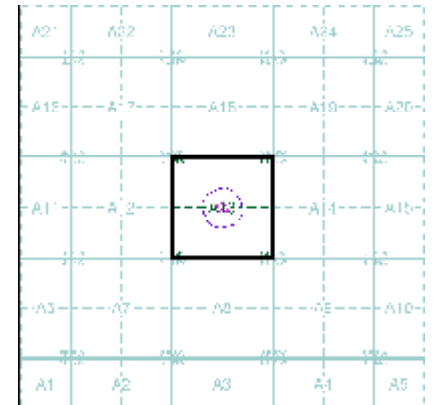
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered 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)

TC2684NW 1954 1:1,250	TC2684NE 1954 1:1,250
TC2684SW 1954 1:1,250	TC2684SE 1954 1:1,250

Historical Map - Segment A13



Order Details

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Ordnance Survey Plan

Published 1955

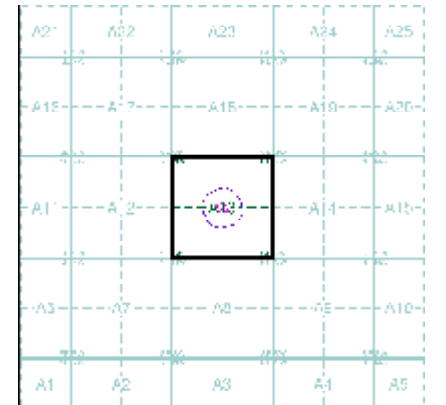
Source map scale - 1:2,500

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Map Name(s) and Date(s)

OS/68/525
1:2500

Historical Map - Segment A13



Order Details

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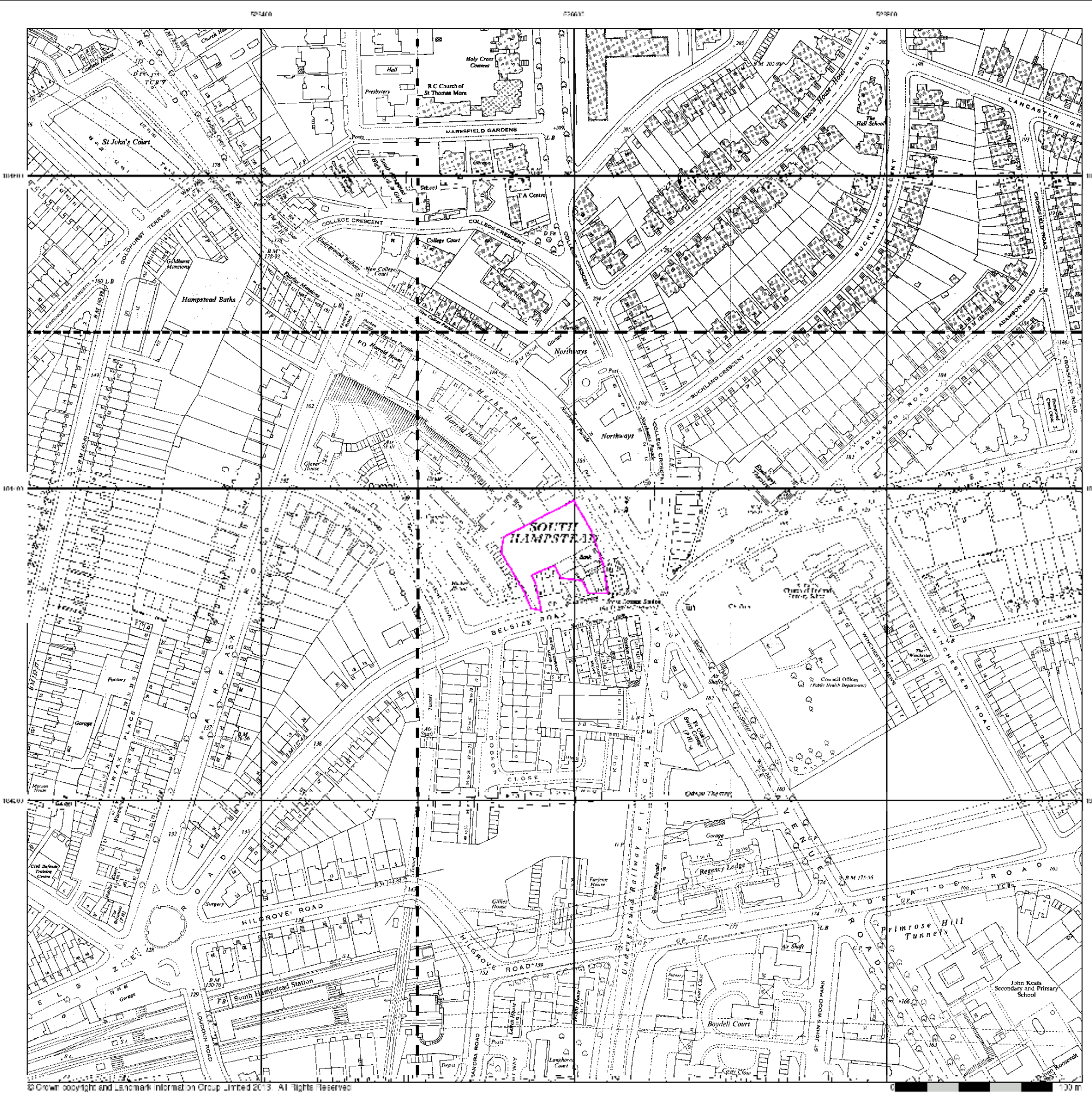
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**Ordnance Survey Plan
Published 1960 - 1967**

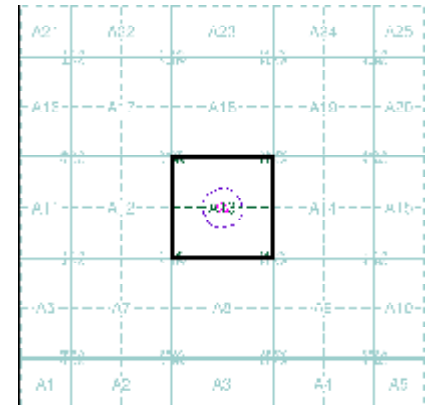
Source map scale - 1:1,250

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)

TC2684NW 1960 1:1,250	TC2684NE 1967 1:1,250
TC2684SW 1962 1:1,250	TC2684SE 1962 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 55373660_1_1
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**Ordnance Survey Plan
Published 1967 - 1971**

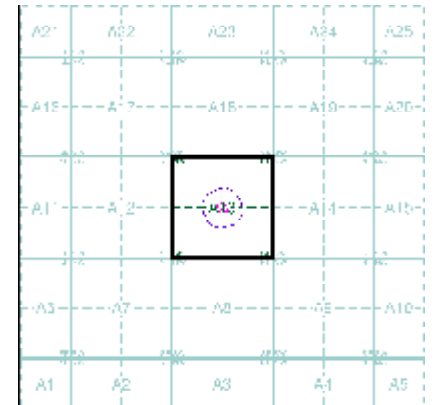
Source map scale - 1:1,250

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)

TC2684NW 1971 1:1,250	
TC2684SW 1967 1:1,250	TC2684SE 1967 1:1,250

Historical Map - Segment A13



Order Details

Order Number: 55373660_1_1
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