

# LONDON BOROUGH OF TOWER HAMLETS – SMALL SITES INITIATIVE CHRISTIAN STREET, E1 1AY


## Geotechnical and Geo-Environmental Desk Study


JUNE 2019




**Christian Street, E1 1AY**

**Geotechnical and Geo-Environmental Desk Study**

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Report No 10030721-ARC-04-XX-RP-YY-0001-01-Geotechnical and Environmental Desk Study

Date JUNE 2019

**VERSION CONTROL**

Version	Date	Author	Changes
01	June 2019	Ed Morris	1 <sup>st</sup> Issue

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# 1 INTRODUCTION

## 1.1 Terms of Reference

Arcadis Consulting (UK) Limited (Arcadis) has been commissioned by London Borough of Tower Hamlets (LBTH) 'the Client' to undertake a number of technical surveys for a site at Christian Street ('the Site').

LBTH is seeking to unlock small, publicly-owned sites in the borough. This is with the aim to increase the supply of small surplus sites to market, potentially increase affordable housing availability and, at the same time, to encourage individual and community led housebuilders to take on the sites for development.

In preparation for marketing the sites to prospective purchasers (autumn 2019), LBTH is commissioning planning, legal and technical due diligence surveys. The purpose of the surveys is to enable purchasers to make robust and sensible proposals for the land in terms of both development-potential and land value.

The objectives of this review are to:

- Review geo-environmental information regarding the Site and its surrounding area; and
- Provide outline information on potential geo-environmental and geotechnical constraints which may impact on the land value or redevelopment potential for the site.

The site location is shown in Figure 1 below.



Figure 1: Site Location Plan (source: Groundsure)

## 1.2 Sources of Information

As part of this desk study report various sources of information have been used and are detailed below:

- The online British Geological Survey (BGS) Geology of Britain Map Viewer (Ref. 1);
- Historical borehole records available through BGS website (above) (Ref. 1);
- Historical Ordnance Survey maps obtained from Groundsure (included in Appendix A);
- Environmental Information from Groundsure Enviro Insight (Appendix B);
- Current publicly available aerial images and maps from Google maps (Ref. 2);
- Unexploded Ordnance data obtained from Bomb Sight National Archives website (Ref. 3);
- Zetica Regional Unexploded Ordnance Risk Map (Ref. 8), and
- A site walkover by Arcadis.

## 1.3 Limitations and Expectations

This report has been prepared for the Client in accordance with the terms and conditions of appointment. Arcadis cannot accept any responsibility for any use of or reliance on the contents of this report by any third party. The copyright of this document, including the electronic format shall remain the property of Arcadis.

This report has been compiled from a number of sources, which Arcadis believes to be trustworthy. However, Arcadis is unable to guarantee the accuracy of information provided by others. The report is based on information available at the time of writing. Consequently, there is a potential for further information to become available, which may change this report's conclusion and for which Arcadis cannot be responsible.

## 2 SITE SETTING AND HISTORY

### 2.1 Site Location

Table 2.1: Details relating to Site Location

Site Location / Address	Christian Street, London, E1 1AY
National Grid Reference	534427,180983
Approximate Site Area	The Site is rectangular in shape and covers an area of approximately 0.0069 hectares.
Description of Site	<p>The Site is currently used as a small carpark covered by hardstanding. Christian Street borders the site to the east, terraced houses to the north and a mosque is located to the south and the west.</p> <p>Gates to access residential buildings and gardens are located to the rear of the parking area. No manhole covers or drains are visible on the site.</p>
Topography	The topography of the site is ostensibly flat at approximately 11m Above Ordnance Datum (AOD). The immediate surrounding area is generally level, with the local topography sloping very gently down towards the River Thames to the south.
Surrounding Area	<p>The Site is situated within a predominantly residential area with apartment buildings of various ages and occasional green open spaces. A railway line is situated approximately 30m south of the site and runs in a roughly east-west direction. Christian Street, adjacent to the east of the site, runs north-south and underpasses the railway approximately 30m to the south.</p> <p>A multipurpose sports pitch with hardstanding surface is situated roughly 50m northeast of the site.</p>

### 2.2 Site History

A review of the available historical Ordnance Survey maps (Appendix A) has been undertaken to assess the historical development of the Site and surrounding areas.

It is not the intention of this report to provide a full history, but to identify those past uses on and within the vicinity of the Site that could have resulted in contamination of the soils and/or waters. Significant changes to the land use of the Site and surrounding areas are summarised in Table 2.2 below.

Table 2.2 History of Site and Surrounding Area

Date	Historical Development (Site and Surrounding Area)
1873 - 1875	<p>The Site comprises a portion of a building marked as a sugar refinery.</p> <p>The surrounding land comprises terraced residential houses with numerous industrial units in close proximity to the Site. This includes a charcoal works approximately 15m east of the Site, another sugar refinery roughly 30m southeast, a sugar refinery and oil works 20-30m southwest and various warehouses 55m south of the Site.</p> <p>Several stables were present c. 50m north of the Site and an engineering works 120m north of the Site. A railway line lies 30m south of the Site and comprises a number of tracks running in an east-west direction.</p>
1880	<p>No significant changes are noted on-site.</p> <p>A wine store is marked at 230m northwest of the Site, the majority of the wider area</p>

Date	Historical Development (Site and Surrounding Area)
	(250m radius of the Site) comprises terraced housing.
1896	<p>The Site is no longer labelled as a Sugar Refinery but appears relatively unchanged.</p> <p>The Charcoal Works and Sugar Refinery 20m east of the Site is no longer labelled as such.</p> <p>An oil &amp; colour works are marked 80m southwest of the Site, south of the railway line.</p> <p>A coal depot is marked 150m southeast of the Site, a wool warehouse is marked 250m northwest of the Site and a railway station 250m west of the Site.</p>
1916	<p>The Site has been converted from an industrial works to terraced housing.</p> <p>The works 20m east of the Site have been redeveloped and is labelled as a school.</p>
1948	<p>No significant changes are noted on-site.</p> <p>The building adjacent to the south of the Site is labelled as Taimud Torah Synagogue.</p> <p>This post-WWII mapping edition shows a number of areas which were previously residential dwellings as un-marked parcels of land. This is noted 40m west of the Site and 70-80m east of the Site where ruins have been labelled on Wicker Street.</p> <p>A Butter Factory and drug mill are marked 230m northwest of the Site. Four wool works are labelled 150-250m west of the Site.</p> <p>An electrical substation is marked 140m south of the Site and a coach building works is situated 200m southeast of the Site.</p> <p>An apartment block has been built 175-200m northwest of the Site, and the footprints of future apartment blocks are noted 100-200m north of the Site.</p>
1951	<p>No significant changes are noted on-site.</p> <p>A number of houses have been built in the area that was bombed to the west of the Site.</p> <p>An electrical substation is noted 80m east of the Site.</p> <p>A tank is noted 200m west of the Site adjacent to the railway.</p>
1952 - 1957	<p>No significant changes are noted on-site</p> <p>An electrical substation is noted 170m north of the Site.</p>
1958 - 1963	<p>No significant changes are noted on-site.</p> <p>The residential properties 50–100m north of the Site now appear demolished.</p> <p>The Butter Factory 230m northwest of the Site is now labelled as an unidentified factory.</p> <p>The wool warehouses 150-250m west of the Site are now labelled as unidentified factories.</p>
1965 - 1966	<p>No significant changes are noted on-site.</p> <p>The depot 100m southeast of the Site is no longer shown.</p>
1965 - 1966	<p>No significant changes are noted on-site.</p> <p>The residential houses 50m northeast of the Site appear demolished.</p>
1973 - 1978	<p>No significant changes are noted on-site.</p> <p>The coach works 200m southeast of the Site is no longer labelled.</p> <p>The terraced housing at Philchurch Street and Forbes Street 100m northwest of the Site</p>

Date	Historical Development (Site and Surrounding Area)
	<p>now appears demolished.</p> <p>The railway line that spurs off the mainline 50-180m west of the Site has been dismantled.</p> <p>The section of dismantled railway 200-250m west of the Site is now labelled as a car park.</p>
1976 - 1994	No significant changes are noted on or off-site.
2019 (from publicly available aerial photography)	The Site is a currently a car park situated adjacent to gardens and garages for the surrounding terraced housing and a mosque.

### Summary of Site History

The site was previously developed as a sugar refinery, which was demolished and the land subsequently redeveloped for terraced housing by 1916, so there is potential for Made Ground to be present.

The surrounding area has a rich industrial history and several potential off-site sources of contamination have been identified including further sugar refineries, oil works, chemical works, engineering works, charcoal works, coal depots, railway lines, colour works, butter factories, coachworks, wool works, drug mills and electrical substations.

Based on the local topography which slopes gently down towards the River Thames in the south; a number of sources can be discounted as potential contaminants as they occur down the anticipated hydraulic gradient of the site. This includes the sugar refinery 30m southeast (c. 1880), the various warehouses 70m south (c. 1873-1916), oil & colour works 80m southwest (c. 1896), coal depot 150m south (c.1897), railway line 250m west (present), electrical substation 140m south and 80m east (c. 1948).

Other sources can be discounted due to the distance from the site, as it is unlikely that contaminants have migrated in significant quantities onto the site. This includes the wine store (c.1880) and drug mill (c.1916) 230m northwest, butter factory (c. 1948) 230m northwest and wool warehouses (1896) 250m northwest and 150m west.

Nevertheless the Charcoal Works previously 20m east of the site (c. 1896) and the engineering works 110m north of the site (c. 1873) may have impacted the site.

## 2.3 Unexploded Ordnance

With reference to the Zetica Unexploded Bomb Risk Map for the Site (Ref. 8), the Site is designated as lying within an area denoted as "high" bomb risk (Appendix C). A strategic Luftwaffe target has been identified 500m south of the site at St George in the East and a UXO find has been mapped 500m west of the site (Ref. 8). Further reference has been made to the Bomb Sight National Archives (Ref. 3) which indicates that 3 high explosive bombs were dropped within approximately 100m around the Site.

### 3 PHYSICAL AND ENVIRONMENTAL SETTING

#### 3.1 Published Geology, Hydrogeology and Hydrology

With reference to the sources of information detailed in section 1.2, the following information has been obtained.

Table 3.1 Information Regarding Geology, Hydrogeology and Hydrology

Geology / Aquifer Status	<p>Superficial Deposits: Langley Silt Member which is designated as Unproductive Strata.</p> <p>Solid Geology: London Clay Formation which is designated as Unproductive Strata.</p>
BGS Boreholes (within 100m of the site)	<p>There are 31 borehole records within 100m of the Site, the closest is TQ38SW1168 roughly 4m northwest.</p> <p>TQ38SW1168 recorded Made Ground to 3.6m, followed by a gravelly sand to 6.7m, overlying fissured firm silty clay with silt pockets to 10m. A water strike was recorded at 7.1m.</p> <p>Further borehole records approximately 10m east (TQ38SW4824) and 21m east (TQ38SW4823) recorded Made Ground to 3.0m and both terminated at that depth.</p> <p>TQ38SW4800 30m northeast recorded Made Ground to 3.6m and sandy gravel to 8.4m overlying fissured firm silty clay to 10m.</p>
Within a Source Protection Zone	Not recorded within 500m of the Site boundary.
Licensed Groundwater Abstraction Points	<p>There are four licenced groundwater abstraction points noted within 1km of the Site.</p> <p>The nearest is approximately 420m west of the site and relates to an historical potable water abstraction in Eastgate (Licence no: 28/39/39/0048) for drinking, cooking, sanitary, washing, small gardens, commercial, industrial and public services.</p>
Surface Water Feature	The River Thames is located approximately 850m southwest of the site flowing east.
Likely Groundwater Flow Direction	Based on the published geology significant groundwater flow within Langley Silt Member and London Clay bedrock is not expected to be present. However, based on the local topography, any shallow groundwater would likely flow towards the south. Perched groundwater may also be present within or at the base of the Made Ground.

#### 3.2 Environmental Public Registers

Public register information from the Groundsure Report (Appendix B) for the Site and the surrounding area (within 250m radius) has been summarised in Table 3.2 below.

It is not the purpose of this section to provide a comprehensive account of the environmental data but only to detail those factors that could impact the Site.

Table 3.2. Environmental Data

Data type	Description	Distance (m) and Direction
Radon	The Site is not in a radon affected area as less than 1% of properties are above the Action Level.	N/A

Data type	Description	Distance (m) and Direction
Discharge Consent	None recorded within a 250m radius of the Site.	N/A
Pollution Incidents to controlled waters	None recorded within 250m of the Site.	N/A
Landfill sites (current and historical)	None recorded within 250m of the Site.	N/A
Potentially Infilled Land	2 areas recorded south of the Site in relation to the redevelopment of the London Docks in the 1894 and 1966.	250m south
Contemporary Trade Directory Entries	Textile manufacturers	37m southwest
	Printers	40m south
	Workshop - MOT testing centre	41m southeast
	Vehicle repair workshop	64m southwest
	Electricity substation	138m north
	Electricity substation	156 southwest
	Distribution & haulage	169m east
	Tyre Shop	209m southwest
	Car dealership	209m southwest
	Electricity substation	210m north
	Construction and tool hire shop	214m northwest
	Vehicle repair workshop	234m northeast
	Electrical substation	239m east
	Petrol filling station	243m south
	Distribution and haulage	247m northwest

The majority of the Contemporary Trade Directory Entries listed above are located more than 100m from the Site. Given the distance from the Site, it is considered unlikely that contamination from the majority of these entries would have impacted the Site.

Given also that the majority of the entries (including those closest to the Site) are south of the Site and likely down hydraulic gradient, it is unlikely that contaminants would migrate onto the site. The London Clay bedrock and unproductive superficial strata (Langley Silt) would limit the vertical and horizontal migration of contaminants.



## 4 PRELIMINARY CONCEPTUAL MODEL

Geo-environmental assessments are required in accordance with current regulatory guidance (CIRIA C552 - Ref. 4 and CLR11 – Ref.5) to consider the significance of potential contamination in terms of plausible contaminant source-pathway-receptor contaminants linkages. As part of this process, it is necessary to develop a conceptual model of these potential contaminant linkages by identifying the potential contamination sources, sensitive receptors and any potential exposure pathways. A risk assessment is then undertaken to determine the potential for these contaminant linkages to be complete.

### 4.1 Potential Contaminant Sources

Based on the information obtained from the historical and environmental research, the following potential sources of contamination have been identified on and off-site (Table 4.1).

It should be noted that it is considered unlikely that all these substances would be present at significant concentrations within the site.

Table 4.1: Potential sources of contamination on-site

Source	Potential Contaminants
<b>On Site</b>	
Made Ground is likely to be present on the Site from previous development and demolition.	Asbestos, metals, Polycyclic Aromatic Hydrocarbons (PAH), hydrocarbons, ground gas
Former sugar refinery	Asbestos, heavy metals, PAHs, hydrocarbons
London Clay bedrock underlying the site	Sulphates (aggressive ground conditions)
<b>Off site</b>	
Former charcoal works and engineering works	Hydrocarbons, PAHs, metals, asbestos, chlorinated solvents, ammoniacal liquors and coal tar

### 4.2 Potential Receptors

The proposed land use is currently unknown. As a precautionary approach the potential receptors detailed below take into consideration the proposed future land use as residential properties with private gardens and landscaped areas. It is considered possible that any potential contamination within the soils may be disturbed during the construction phase, or during gardening or landscaping undertaken by any future site users.

#### 4.2.1 Human Health

- Future site users (residents, visitors, maintenance workers and contractors)

Contamination risks to construction workers are not appraised by chronic (long term) exposure human health risk assessments. There are no appropriate published criteria applicable to assessment of potential risks to construction workers. The potential risks should be addressed by a site-specific construction workers risk assessment and implementation of appropriate health and safety measures, to adequately mitigate any potential risks. All works should be conducted in accordance with the CDM regulations 2015 (Ref. 6) or any other relevant guidance. Construction workers are not considered further as human health receptors.

#### 4.2.2 Controlled Waters

No sensitive controlled water receptors were identified. The River Thames is located approximately 850m south of the site and given the distance is not considered a plausible receptor.



### 4.2.3 Buildings

- Underground/structures/services (water pipes, concrete, foundations) including sulphate attack
- Proposed buildings

## 4.3 Potential Pathways

Potential pathways are the routes that link the receptor to the contamination. The potential pathways for this site are summarised in the table below.

Table 4.2: Potential Contaminative Pathways

Receptor	Pathway
Human health (future site users/residents, visitors, maintenance workers and contractors)	<p>Accidental ingestion of contaminants within soil, water and dust</p> <p>Inhalation of dust, vapours and ground gases</p> <p>Dermal contact with contaminants within soil, water and dust</p> <p>Ingestion of contaminated vegetables and soil attached to vegetables</p>
Buildings	<p>Direct contact of building services or foundations with contaminants in the soil and Made Ground</p> <p>Gas and / or vapour accumulation in confined and poorly ventilated spaces</p> <p>Sulphate attack on buried concrete (direct contact)</p>

## 4.4 Preliminary Qualitative Risk Assessment

Primary sources of on-site contamination are considered to be associated with the previous use of the site as a sugar refinery and general Made Ground which is likely to be present from former development and demolition of buildings.

Without mitigation, future site users may be at risk from contaminants within the Made Ground / underlying soils if exposure occurs in gardens or soft landscaped areas, especially if soils are disturbed by activities such as digging / gardening.

If significant depths of Made Ground containing putrescible matter is found to be present, ground gas / vapours could be generated which could accumulate in confined spaces/buildings and pose risk to future site users.

Sensitive controlled water receptors are not considered likely to be present. However, this may need re-evaluating if significant groundwater is encountered during the site works.

The London Clay is a source of naturally occurring sulphates which could impact buried concrete.

This risk will need to be further understood through intrusive investigation into the ground conditions and potential contaminants in the soils. If the Site is found to be contaminated, mitigation measures will be required to break the source-pathway-receptor linkages.

## **5 Waste Management and Potential Development Constraints**

### **5.1 Waste Management**

Consideration should be given to the disposal of waste soils/Made Ground which are likely to be generated by the development. Chemical testing of soils/Made Ground is likely to be required to inform a waste classification assessment and determine the potential disposal options. It should be noted that the waste contractor may require testing of the actual material to be disposal prior to acceptance, and there is no obligation on a landfill operator to accept the waste.

Soils suspected of being contaminated should be segregated from soils which appear to be 'clean' and should not be used elsewhere on the site as fill or landscaping unless they can be proven to be fit for purpose.

Imported topsoil for gardens and landscaped areas should be clean, fit for purpose and validated as necessary.

### **5.2 Potential Development Constraints**

Hardstanding is present across the Site which may need to be removed or broken out. A ground investigation is recommended to determine the potential contamination present and geotechnical conditions on the Site. From experience, the potential for the need to undertake significant remediation is moderate given the Site's previous industrial use as a sugar refinery. However, the anticipated predominantly cohesive geology would likely limit impacts from off-site sources. Nevertheless, detailed ground investigation has not been undertaken, therefore ground conditions are still unknown at this stage.

The following potential environmental conditions have been identified that will warrant further consideration and/or implementation:

- Removal of former foundations and concrete obstructions (if present);
- Excavation and replacement of upper part of Made Ground as necessary to support foundation solution;
- Asbestos protection measures during disturbance of Made Ground (depending on the findings of the ground investigation);
- Provision of gas protection measures (depending on the findings of the ground investigation);
- Provision of contaminant resistant water supply pipes (depending on the findings of the ground investigation);
- Provision of clean cover system in garden areas and public open space;
- Potentially further investigation and consultancy advice to support planning obligations;
- Potential for UXO.

## 6 Geotechnical Considerations

Ground conditions anticipated at the site are likely to comprise Made Ground as the site has previously been developed. Based on published geological maps and the nearest historical BGS borehole recorded approximately 4m northwest of the site, Made Ground is expected to roughly 3m followed by superficial deposits anticipated to a depth of at least 7m bgl, underlain by a significant thickness of London Clay. The anticipated geology of the site should be confirmed through an intrusive investigation.

Potential founding solutions will be dependent on the encountered thickness of Made Ground and the geotechnical properties of the natural deposits. Made Ground is generally considered unsuitable for foundations due to its variable composition and its potential for high total and differential settlement.

Below ground structures and services associated with previous structures may be present and will require removal prior to redevelopment. Ground disturbance caused by the removal of historical structures may increase the thickness of Made Ground already present beneath the site locally.

At this stage, conventional shallow foundations may not be appropriate for the site, but this would depend on the thickness of the Made Ground and the underlying ground conditions. Deeper trench fill may be possible although the maximum practical extent of this type of foundation is in the region of 2-2.5m. In areas of deeper Made Ground, or where deeper soft / loose bands are recorded either piling or ground treatment e.g. vibro-stone columns should provide a suitable foundation solution. The advice of a specialist ground improvement contractor should be sought to verify the suitability of the ground for treatment.

Consideration will need to be given to the planting of future trees when considering the depths of the foundations. In addition, the risks associated with the London Clay include high plasticity clay which are subject to shrinkage, swelling and sulphate attack and should be considered during the investigation / design.

## 7 Conclusions and Recommendations

The Site is currently a car park situated adjacent to private gardens and garages for the terraced housing to the north and the mosque to the south. An intrusive site investigation has not been undertaken at this stage.

The Site was previously developed as a sugar refinery and later redeveloped into terraced housing by 1916, therefore Made Ground is anticipated to be present and potential contamination related to the Sites previous industrial use may be present.

Potential receptors are considered to be future Site users, proposed buildings and underground structures / services. No sensitive Controlled Water receptors have been identified.

Potential geo-environmental constraints have been identified that may impact on the future development. Whilst levels of contamination may be present within the underlying soils, mitigation of risks to Site end users may be delivered by the appropriate design of the development itself (i.e. the use of hardstanding to limit the pathway for human exposure) rather than large scale removal of materials.

### 7.1 Design Considerations

Potential risks to human health and the built environment have been identified. It is recommended that an intrusive site investigation should be undertaken prior to redevelopment to quantify these risks. This should include for chemical testing of soils, groundwater monitoring (if present) and gas monitoring in accordance with the recommendations in CIRIA C665 (Ref. 7) and CLR 11 (Ref. 5) and consideration of shrinkage/swelling of London Clay and sulphate attack to below ground concrete.

### 7.2 Construction Considerations

During construction, a watching brief should be undertaken to identify the presence of any unforeseen contamination. If contamination is encountered, all works should cease until the advice of a suitably qualified professional can be sought.

Construction / demolition workers should use appropriate PPE and follow the site-specific contractors risk assessment which should include risks to human health from potential contamination. Due to the historic phases of development and demolition, consideration should be given to the potential presence of asbestos within the Made Ground.

Good site management practices should be adopted during the construction phase such as covering stockpiles to minimise surface runoff/dust creation.

There is a potential risk from UXO, and it is recommended that a site-specific detailed desk study is undertaken prior to any intrusive investigations or earthworks. A watching brief from a UXO specialist may be required.

Underground and above ground services may be present beneath the Site and these will need to be taken into consideration during the proposed development.

## 8 References

1. British Geological Survey (BGS) [online]. Available at: <https://mapapps.bgs.ac.uk/geologyofbritain/home.html>. Accessed May 2019.
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4. CIRIA C552 (2001) Contaminated land risk assessment. A guide to good practice.
5. DEFRA and the Environment Agency, 2004. Model Procedures for the Management of Land Contamination, Guidelines for Environmental Risk Assessment and Management, Contaminated Land Report 11 (CLR11).
6. The Construction (Design and Management) Regulations 2015.
7. CIRIA C665 (2007) Assessing risks posed by hazardous ground gases to buildings (revised).
8. Zetica Regional Unexploded Ordnance Risk Map (Ref. 4); Available at <https://zeticauxo.com/downloads-and-resources/risk-maps/>. Accessed May 2019.

## **APPENDIX A**

### **Historical Ordnance Survey Maps**



#### Site Details:

26 HODGESON HOUSE,  
CHRISTIAN STREET, LONDON,  
E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** 1056 Scale Town Plan

**Map date:** 1873-1875

**Scale:** 1:1,056

**Printed at:** 1:1,056



Surveyed 1873  
Revised N/A  
Edition 1875  
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Map legend available at:  
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**Grid Ref:** 534427, 180983

**Map Name:** 1056 Scale Town Plan

**Map date:** 1875

**Scale:** 1:1,056

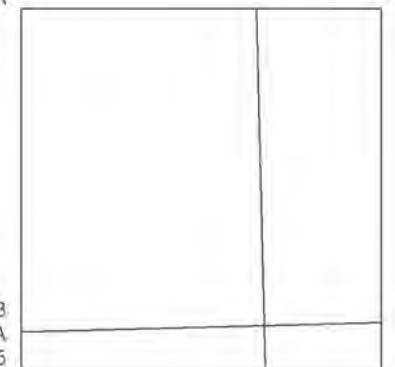
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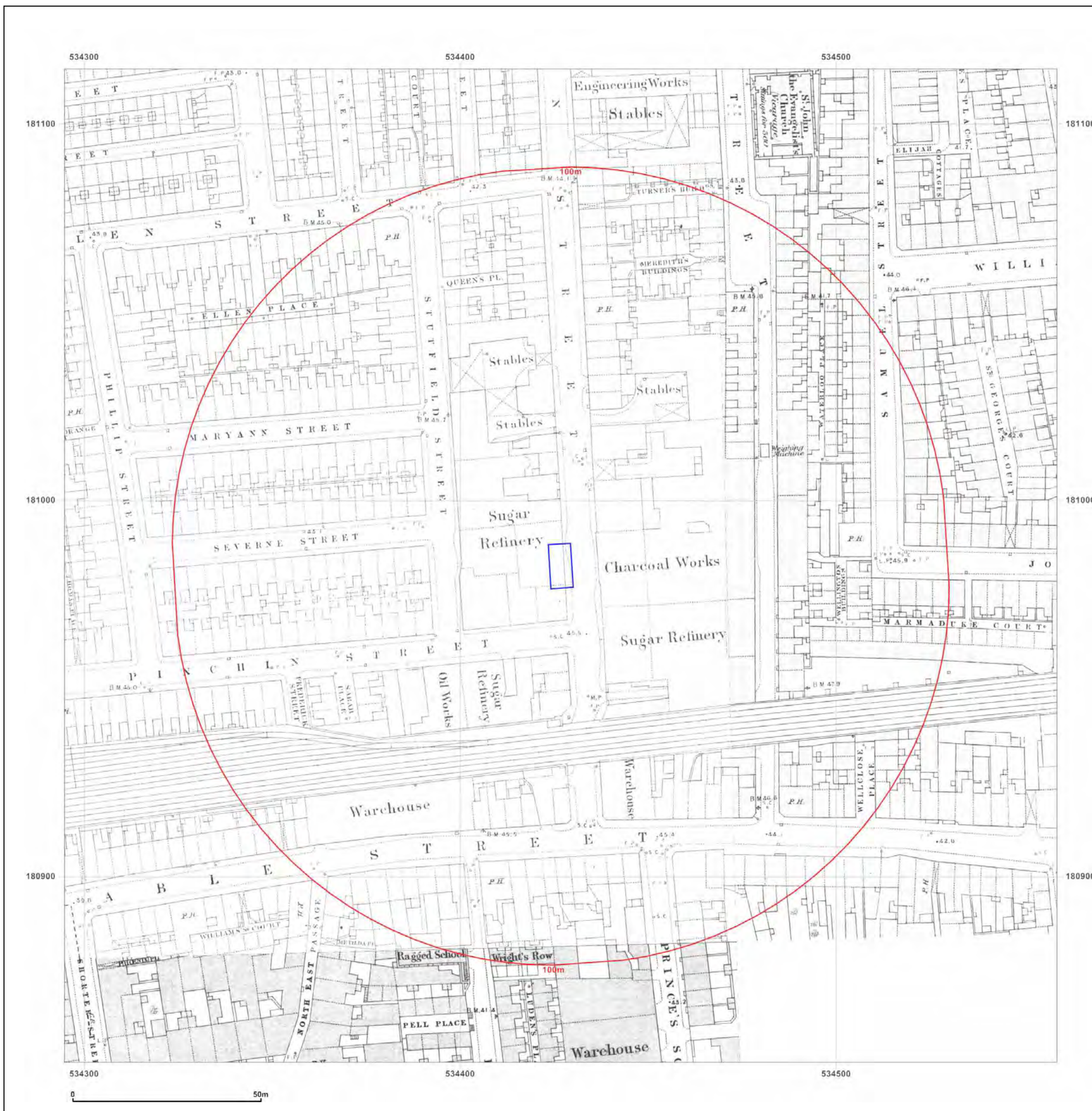


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#### Site Details:

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CHRISTIAN STREET, LONDON,  
E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** County Series

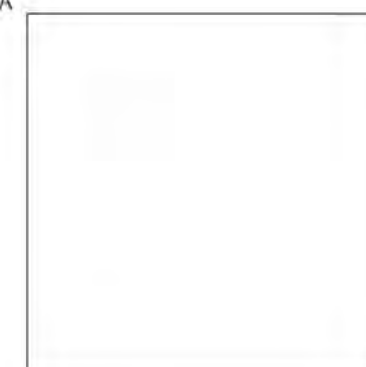
**Map date:** 1880

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1873  
Revised N/A  
Edition 1880  
Copyright N/A  
Levelled N/A

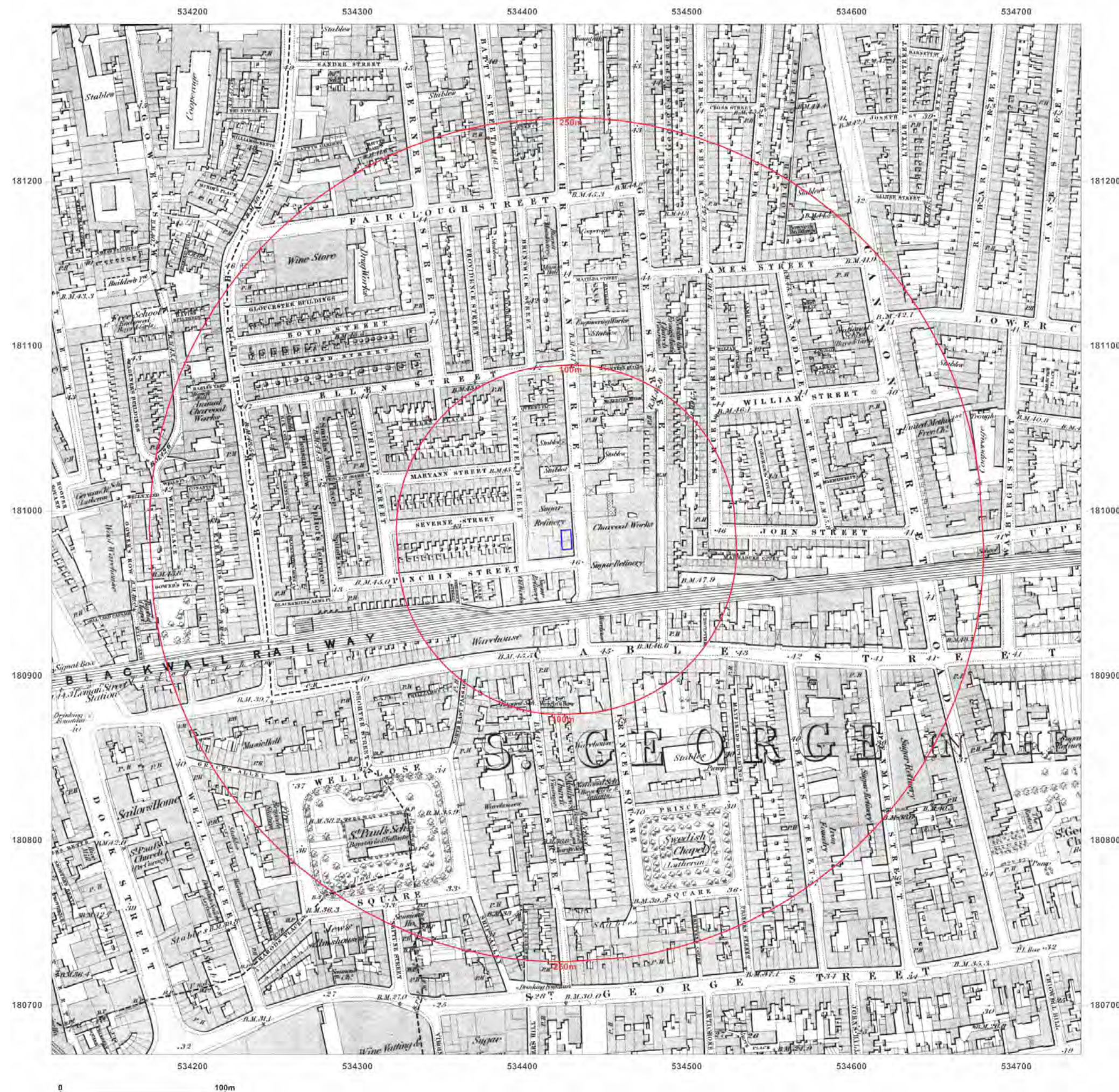


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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** 1056 Scale Town Plan

**Map date:** 1896

**Scale:** 1:1,056

**Printed at:** 1:1,056



Surveyed 1894  
Revised N/A  
Edition 1896  
Copyright N/A  
Levelled N/A

Surveyed 1894  
Revised N/A  
Edition 1896  
Copyright N/A  
Levelled N/A

Surveyed 1894  
Revised N/A  
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Surveyed 1894  
Revised N/A  
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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: County Series

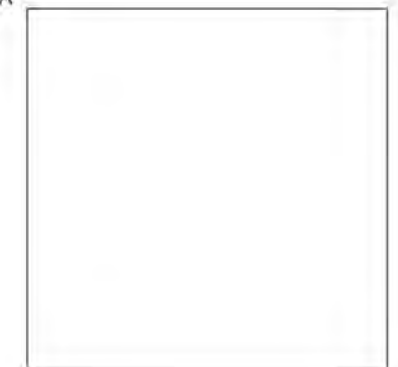
Map date: 1896

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1896  
Revised 1896  
Edition N/A  
Copyright N/A  
Levelled N/A

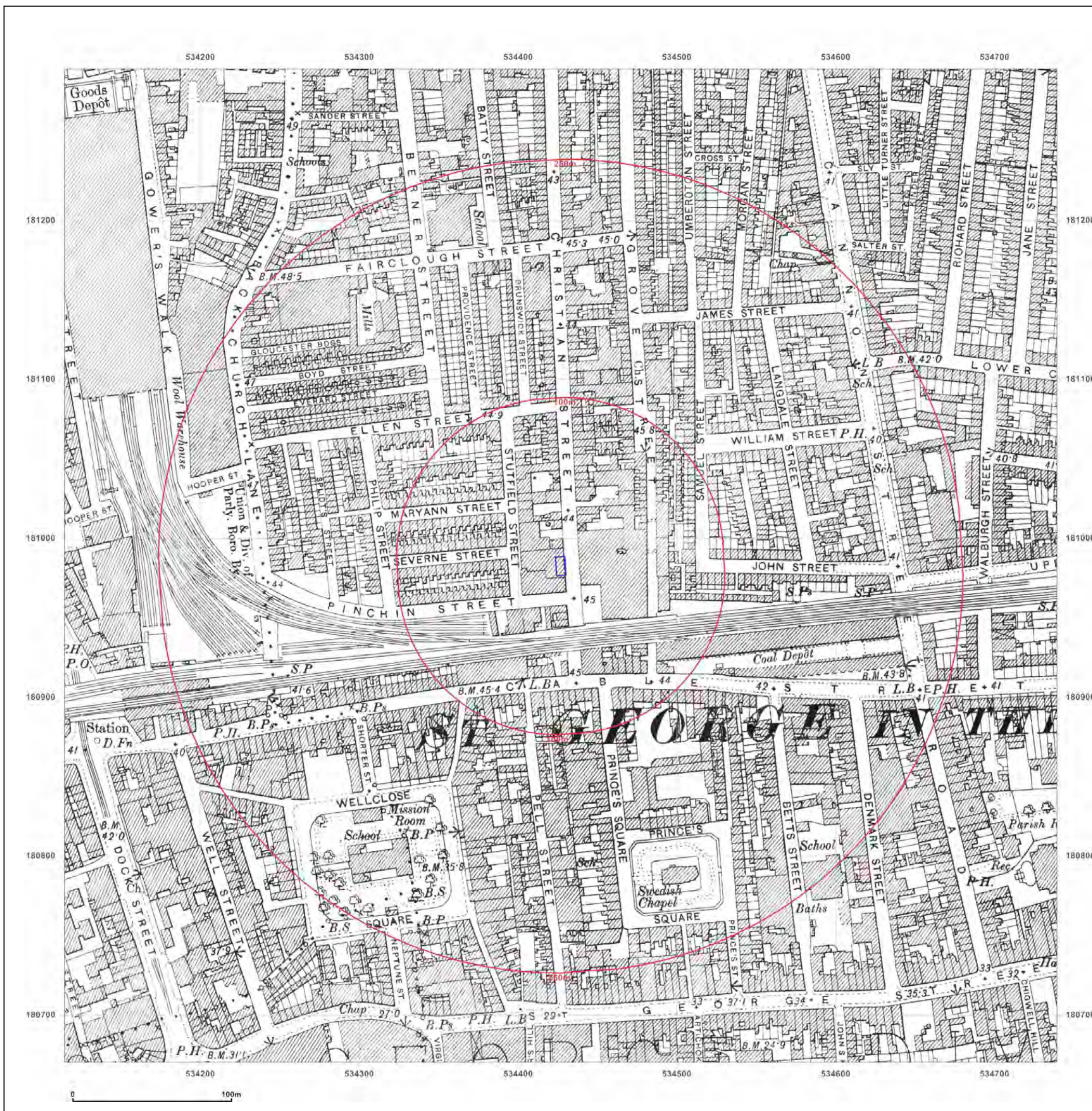


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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: County Series

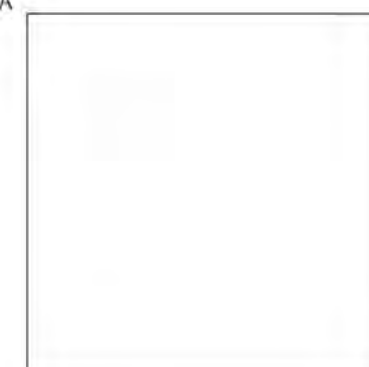
Map date: 1916

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1916  
Revised 1916  
Edition N/A  
Copyright N/A  
Levelled N/A

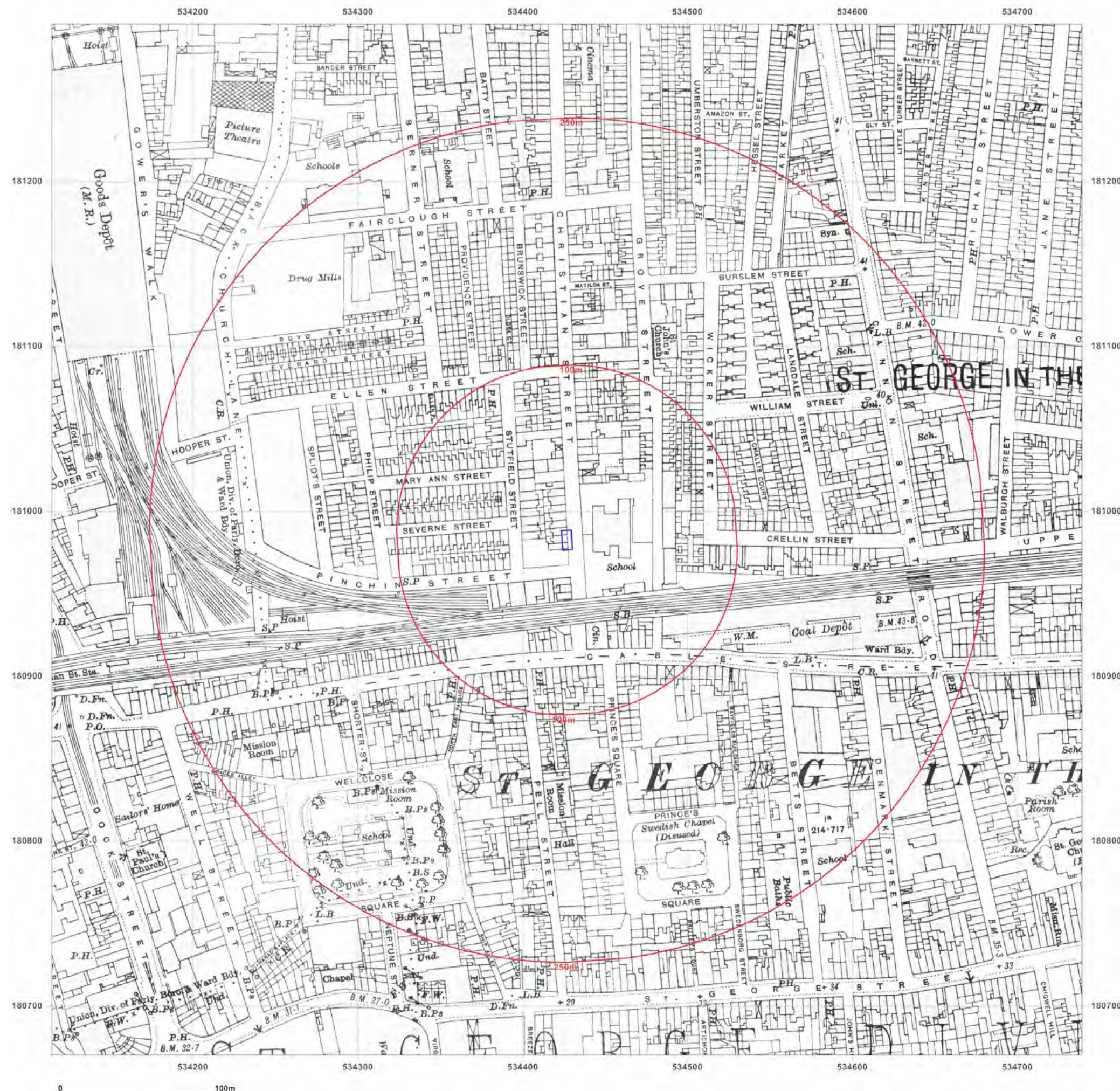


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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1948

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1948  
Revised 1948  
Edition N/A  
Copyright N/A  
Levelled 1934

Surveyed 1948  
Revised 1948  
Edition N/A  
Copyright N/A  
Levelled 1934

Surveyed 1948  
Revised 1948  
Edition N/A  
Copyright N/A  
Levelled 1934

Surveyed 1948  
Revised 1948  
Edition N/A  
Copyright N/A  
Levelled 1934

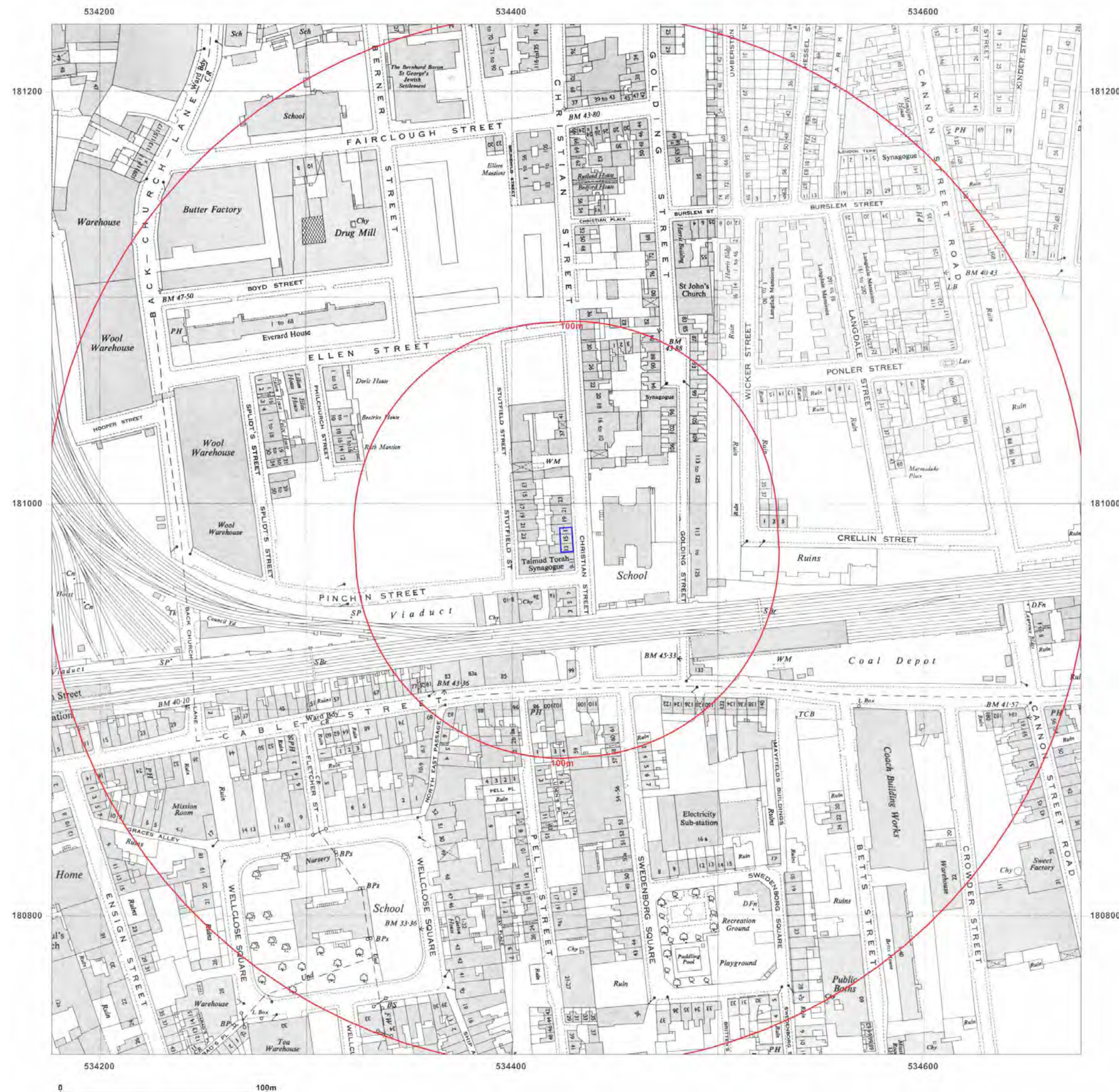


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E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

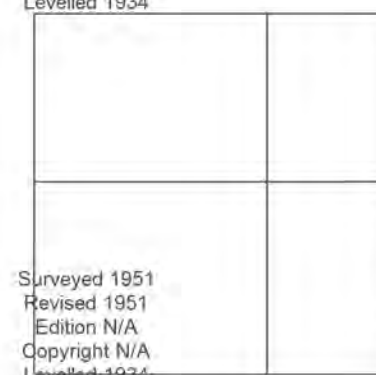
**Map date:** 1951

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed 1951  
Revised 1951  
Edition N/A  
Copyright N/A  
Levelled 1934



Surveyed 1951  
Revised 1951  
Edition N/A  
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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1951

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A  
Revised N/A  
Edition 1951  
Copyright N/A  
Levelled 1934

Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1951  
Levelled N/A

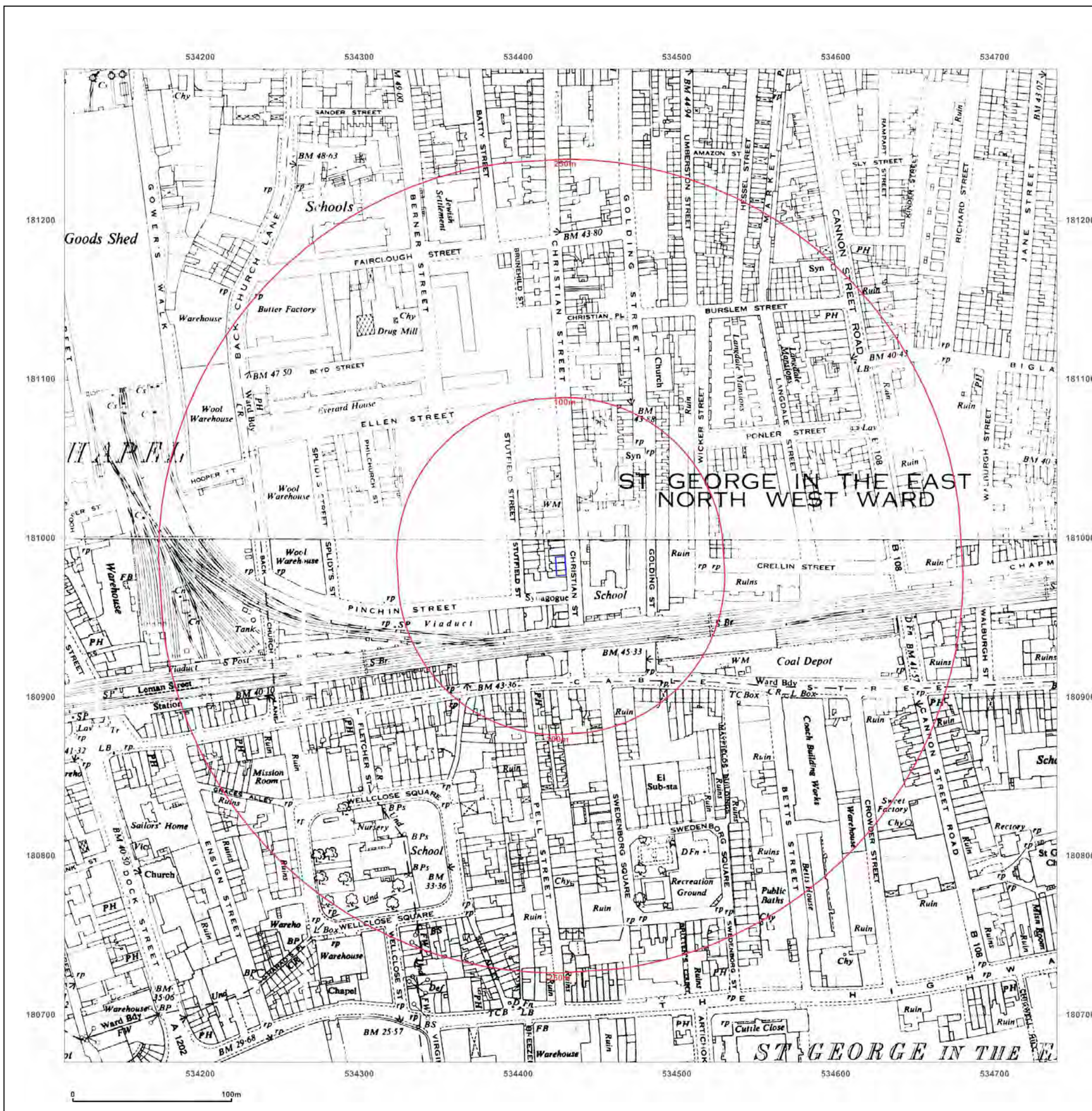


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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

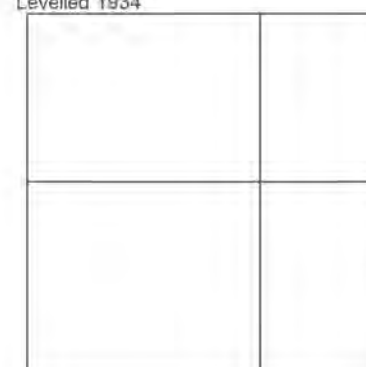
**Map date:** 1952-1957

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed N/A  
Revised 1951  
Edition 1952  
Copyright N/A  
Levelled 1934



Surveyed 1948  
Revised 1957  
Edition N/A  
Copyright N/A  
Levelled 1953

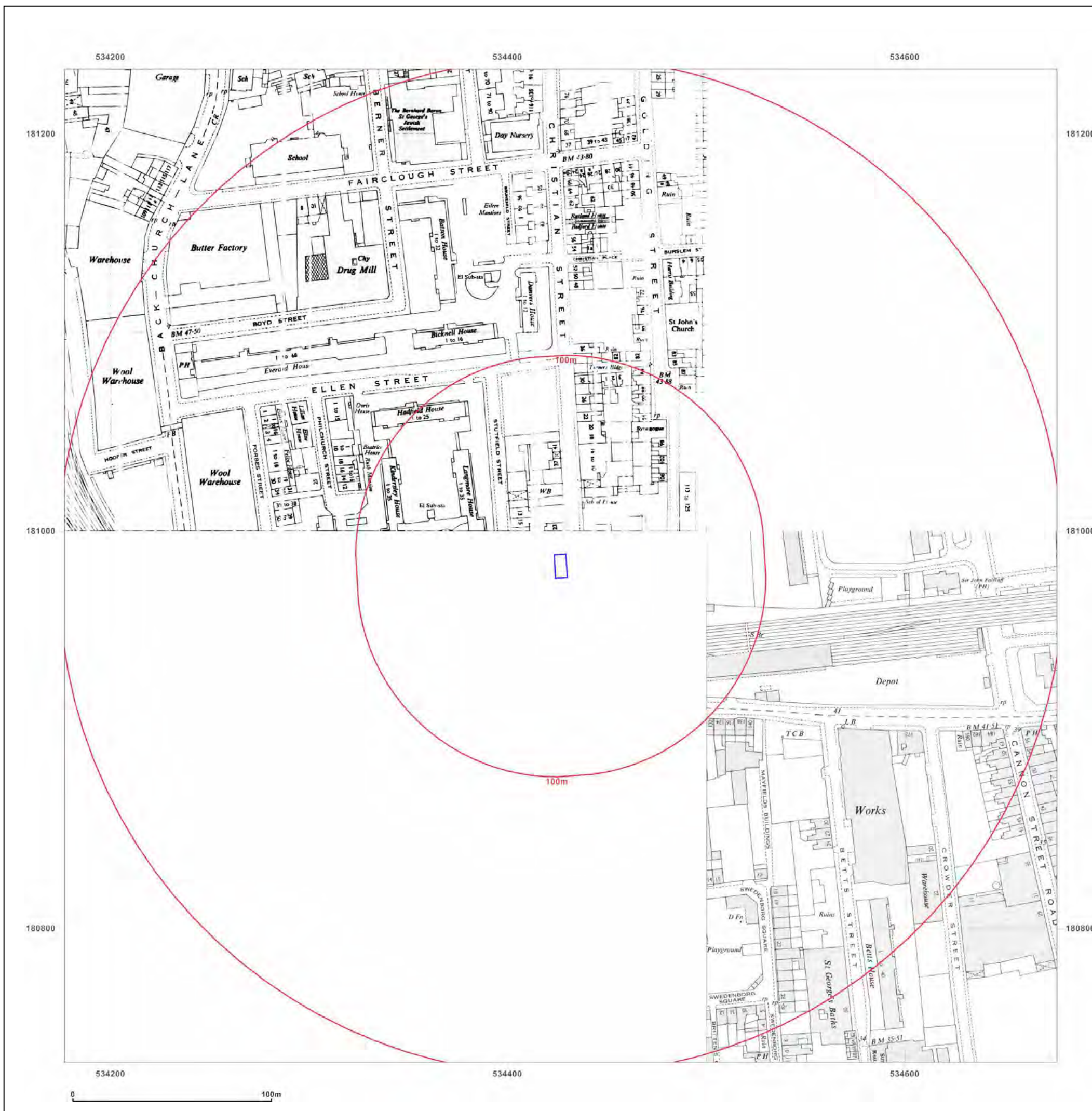


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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

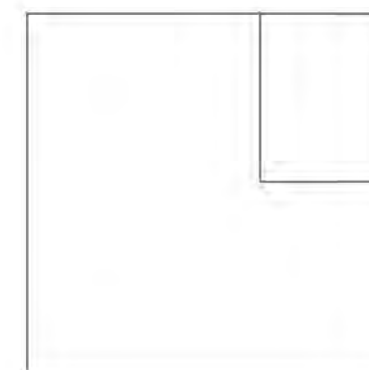
**Map date:** 1958

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed 1948  
Revised 1957  
Edition N/A  
Copyright 1958  
Levelled 1953

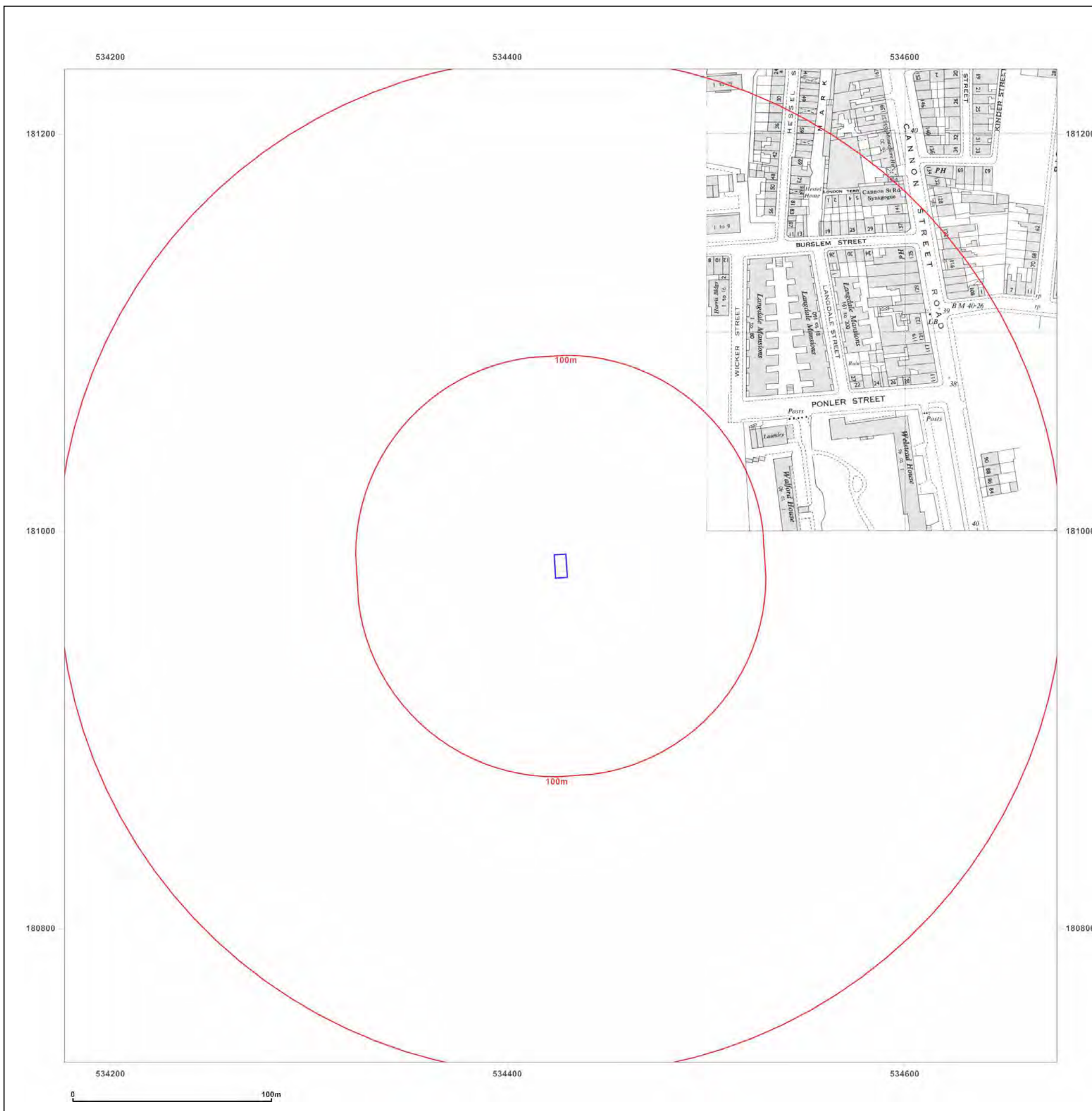


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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1958-1963

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1948  
Revised 1961  
Edition N/A  
Copyright 1962  
Levelled 1954

Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1948  
Revised 1963  
Edition N/A  
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Revised N/A  
Edition N/A  
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E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1965-1966

**Scale:** 1:2,500

**Printed at:** 1:2,500



Surveyed 1965  
Revised 1965  
Edition N/A  
Copyright 1968  
Levelled 1956

Surveyed 1949  
Revised 1970  
Edition N/A  
Copyright 1971  
Levelled 1953

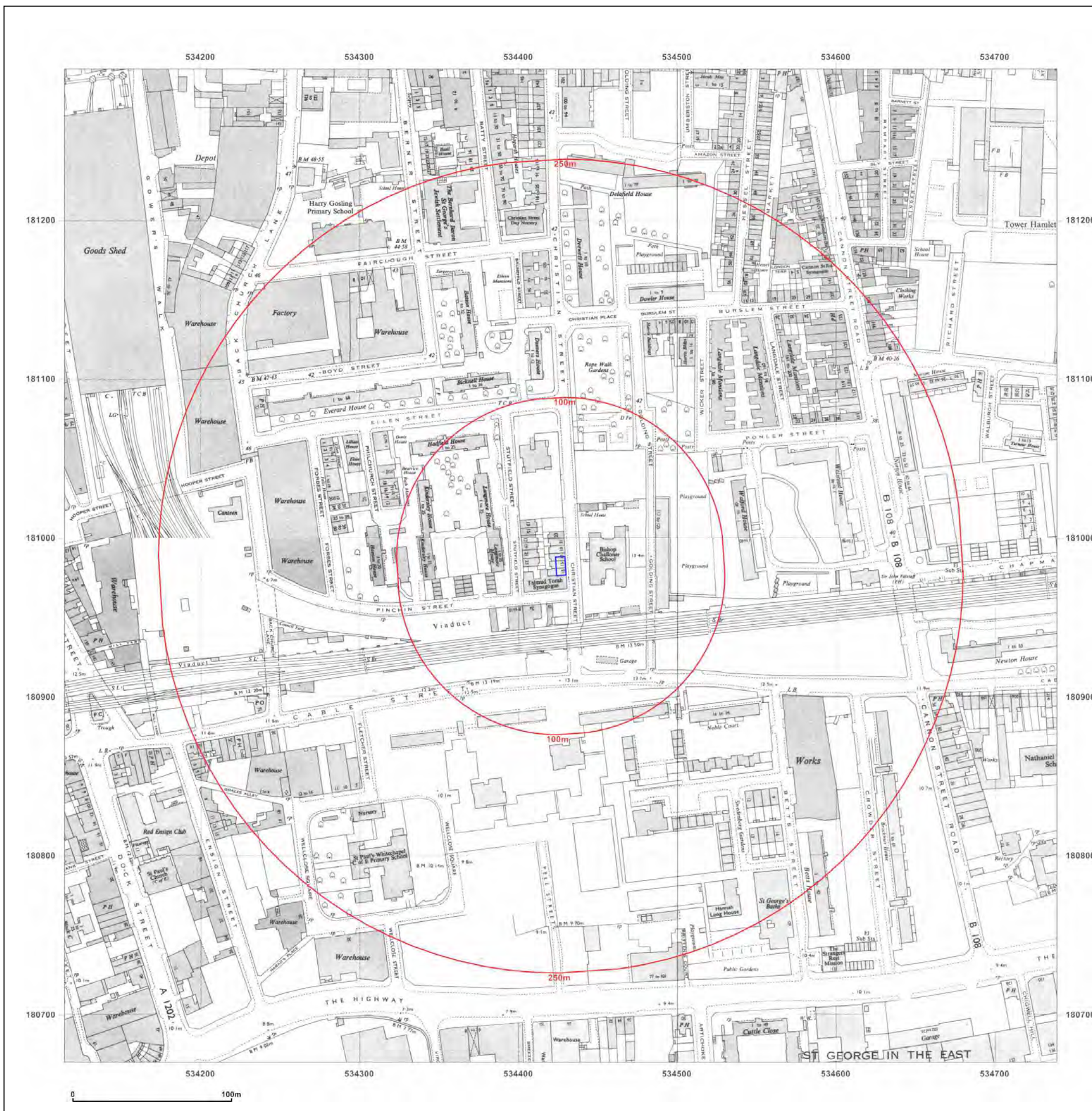


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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1965-1968

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed N/A  
Revised 1965  
Edition N/A  
Copyright N/A  
Levelled N/A

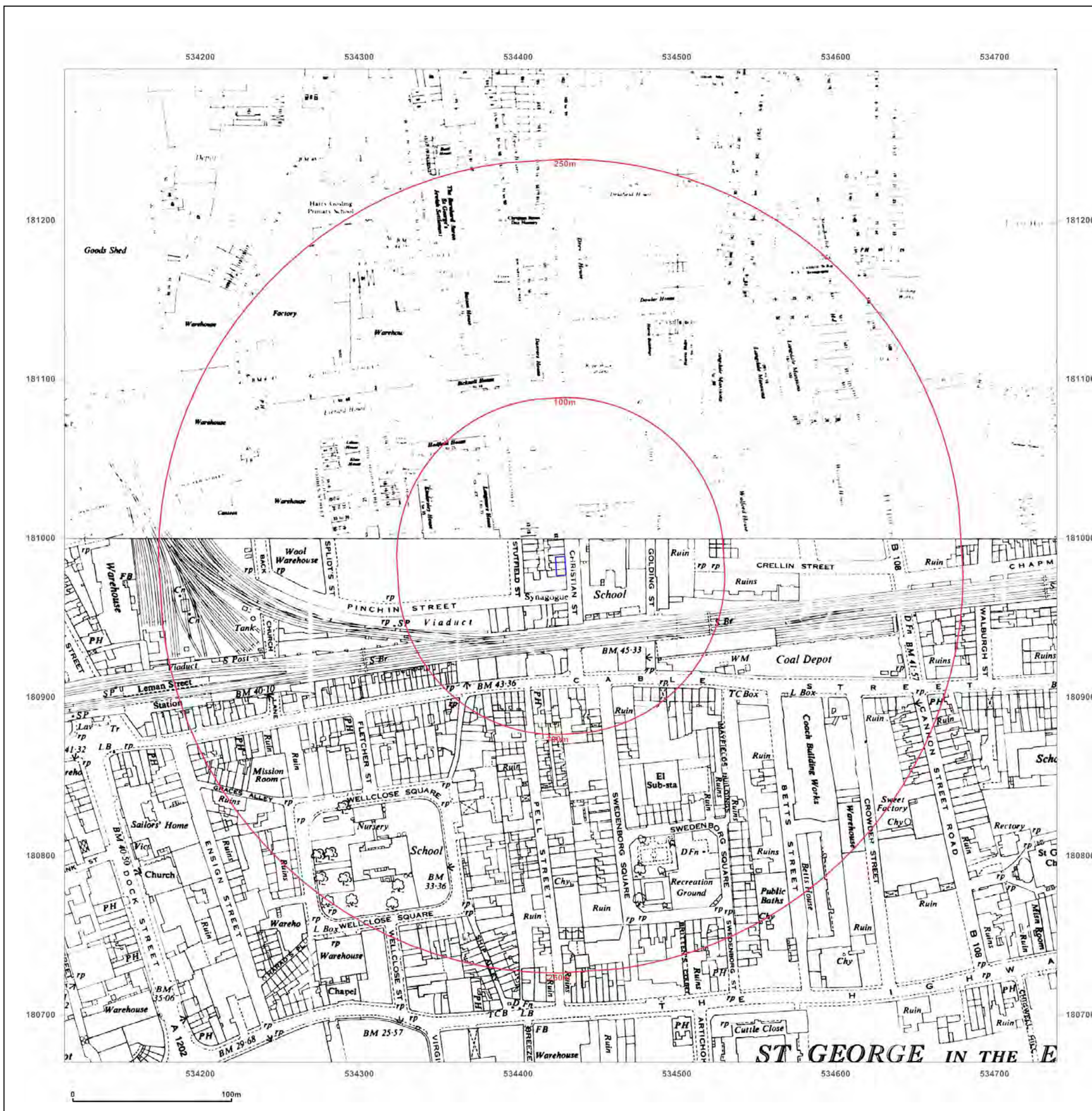


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E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1966-1969

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed 1968  
Revised 1968  
Edition N/A  
Copyright 1969  
Levelled 1956

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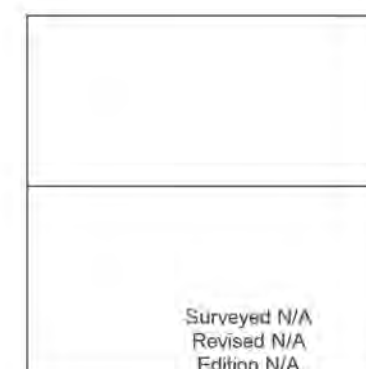
**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1971

**Scale:** 1:2,500

**Printed at:** 1:2,500



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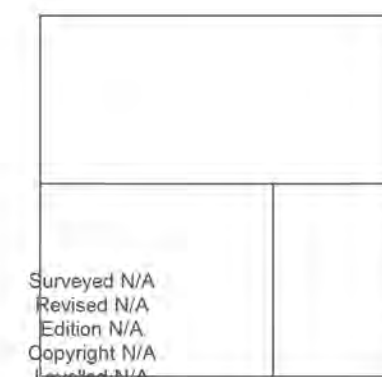
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**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1974

**Scale:** 1:1,250

**Printed at:** 1:2,000



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Revised N/A  
Edition N/A  
Copyright N/A  
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Revised N/A  
Edition N/A  
Copyright N/A  
Levelled N/A

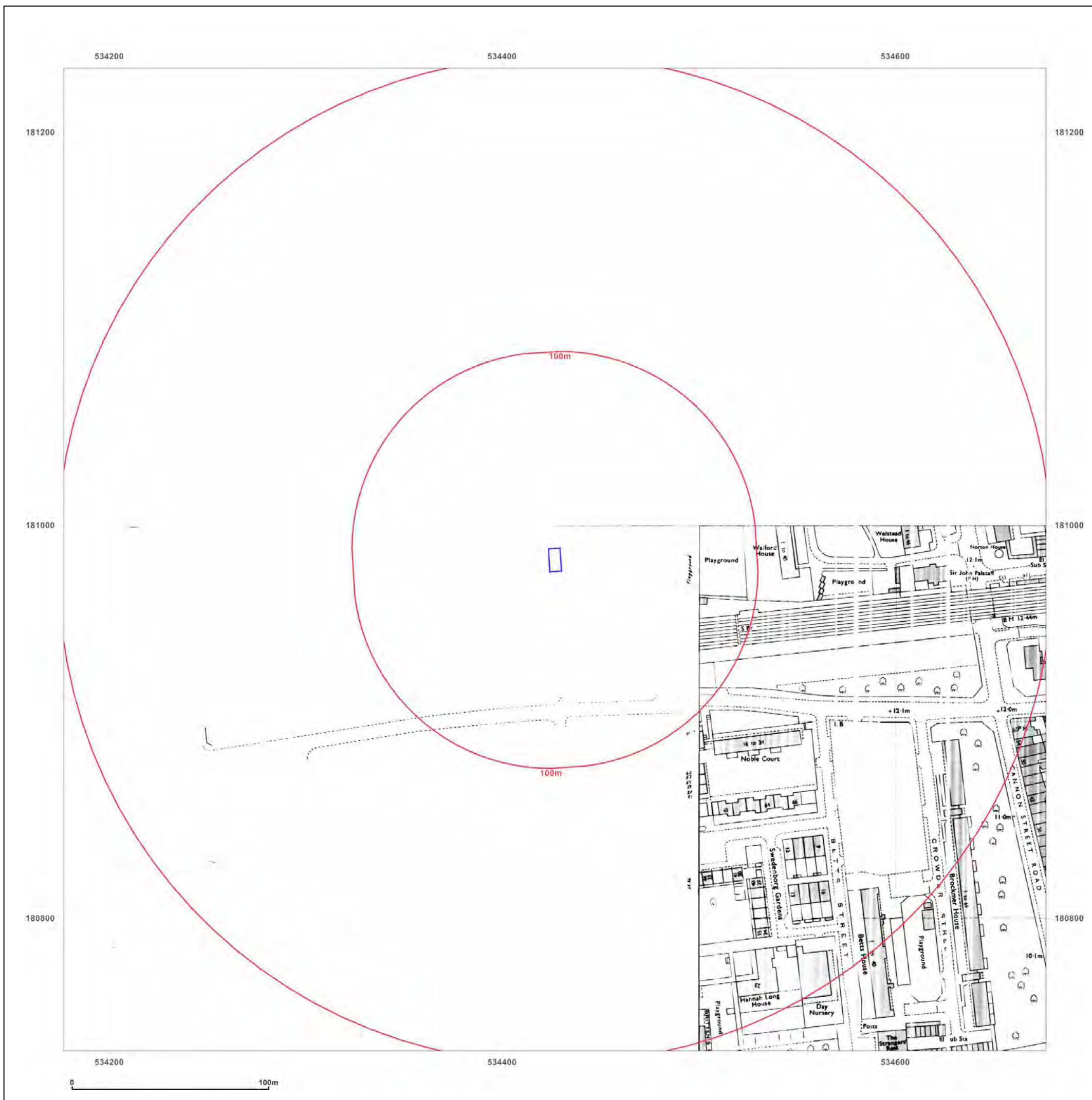


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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1973-1978

Scale: 1:1,250

Printed at: 1:2,000



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Revised N/A  
Edition N/A  
Copyright 1978  
Levelled N/A

Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1976  
Levelled N/A

Surveyed 1948  
Revised 1972  
Edition N/A  
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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1976-1981

**Scale:** 1:1,250

**Printed at:** 1:2,000



Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1981  
Levelled 1977

Surveyed 1981  
Revised 1981  
Edition N/A  
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Revised N/A  
Edition N/A  
Copyright 1976  
Levelled N/A

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Revised N/A  
Edition N/A  
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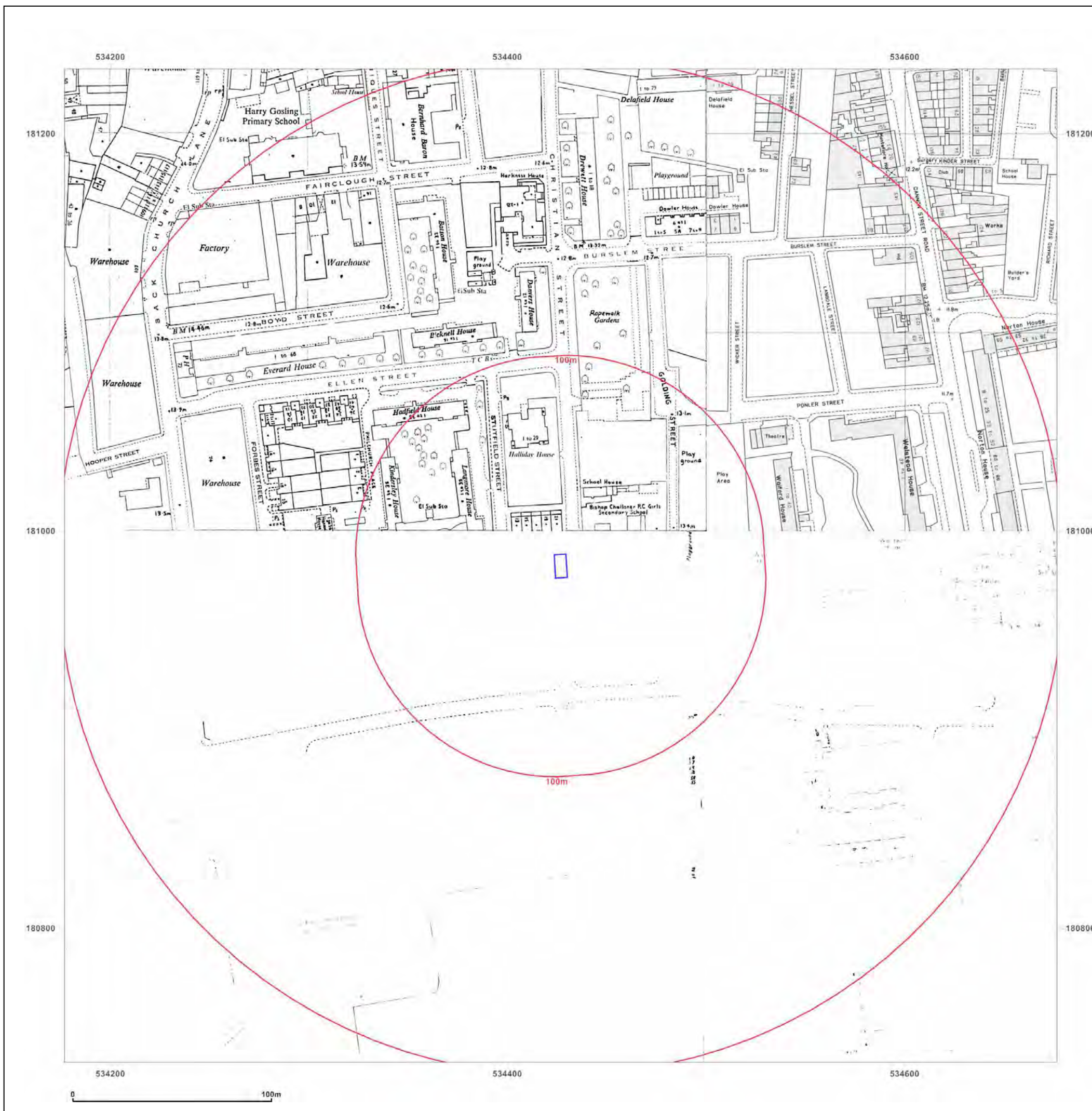


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Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1982

Scale: 1:1,250

Printed at: 1:2,000



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Revised 1981  
Edition N/A  
Copyright 1982  
Levelled N/A

Surveyed N/A  
Revised N/A  
Edition N/A  
Copyright 1982  
Levelled 1972

Surveyed N/A  
Revised N/A  
Edition N/A  
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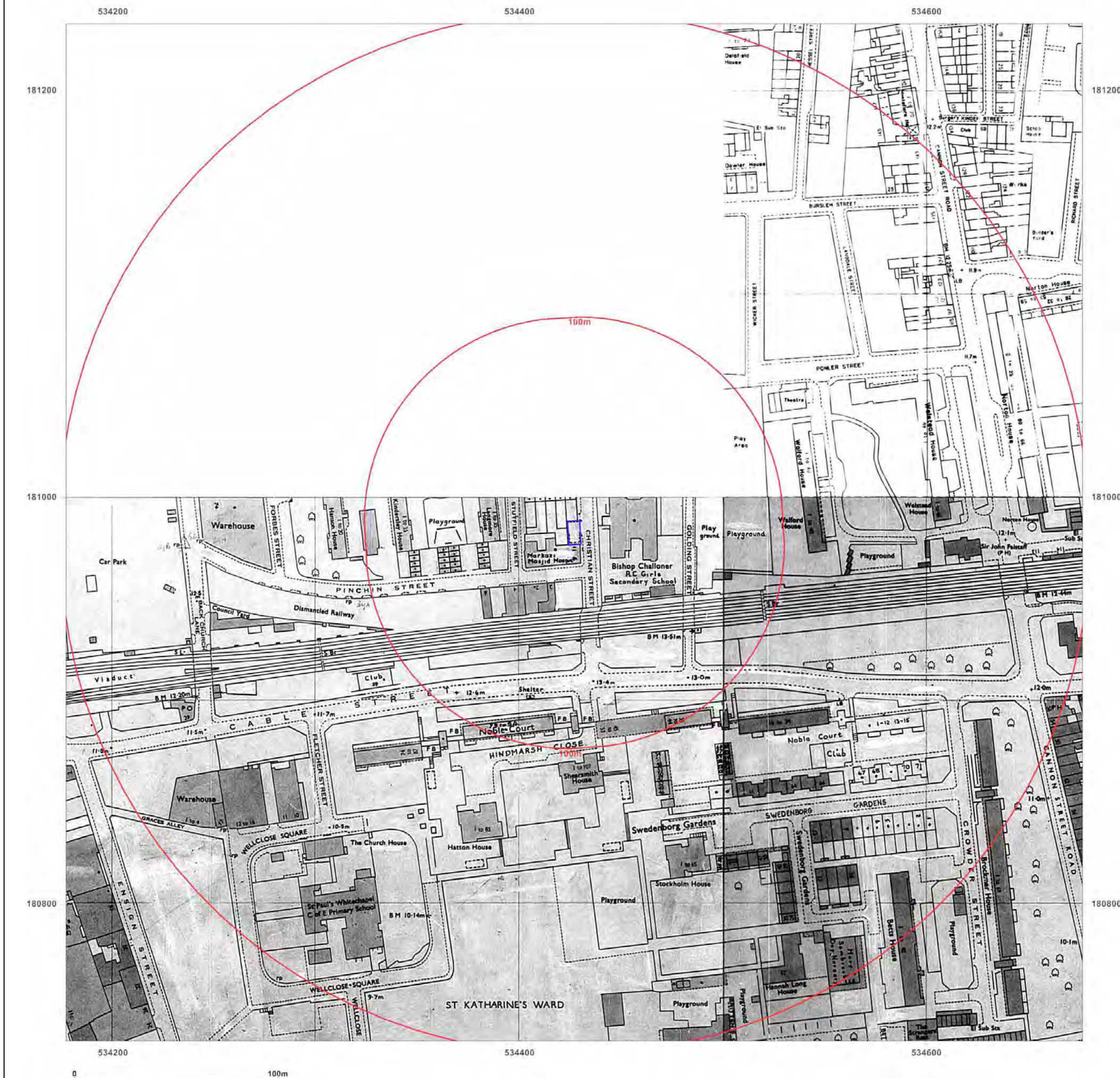


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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 1987-1990

Scale: 1:1,250

Printed at: 1:2,000



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Edition N/A  
Copyright 1990  
Levelled 1970

Surveyed 1972  
Revised 1987  
Edition N/A  
Copyright 1987  
Levelled 1972

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Revised 1989  
Edition N/A  
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Revised N/A  
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#### Site Details:

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E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1989-1991

**Scale:** 1:1,250

**Printed at:** 1:2,000



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Revised N/A  
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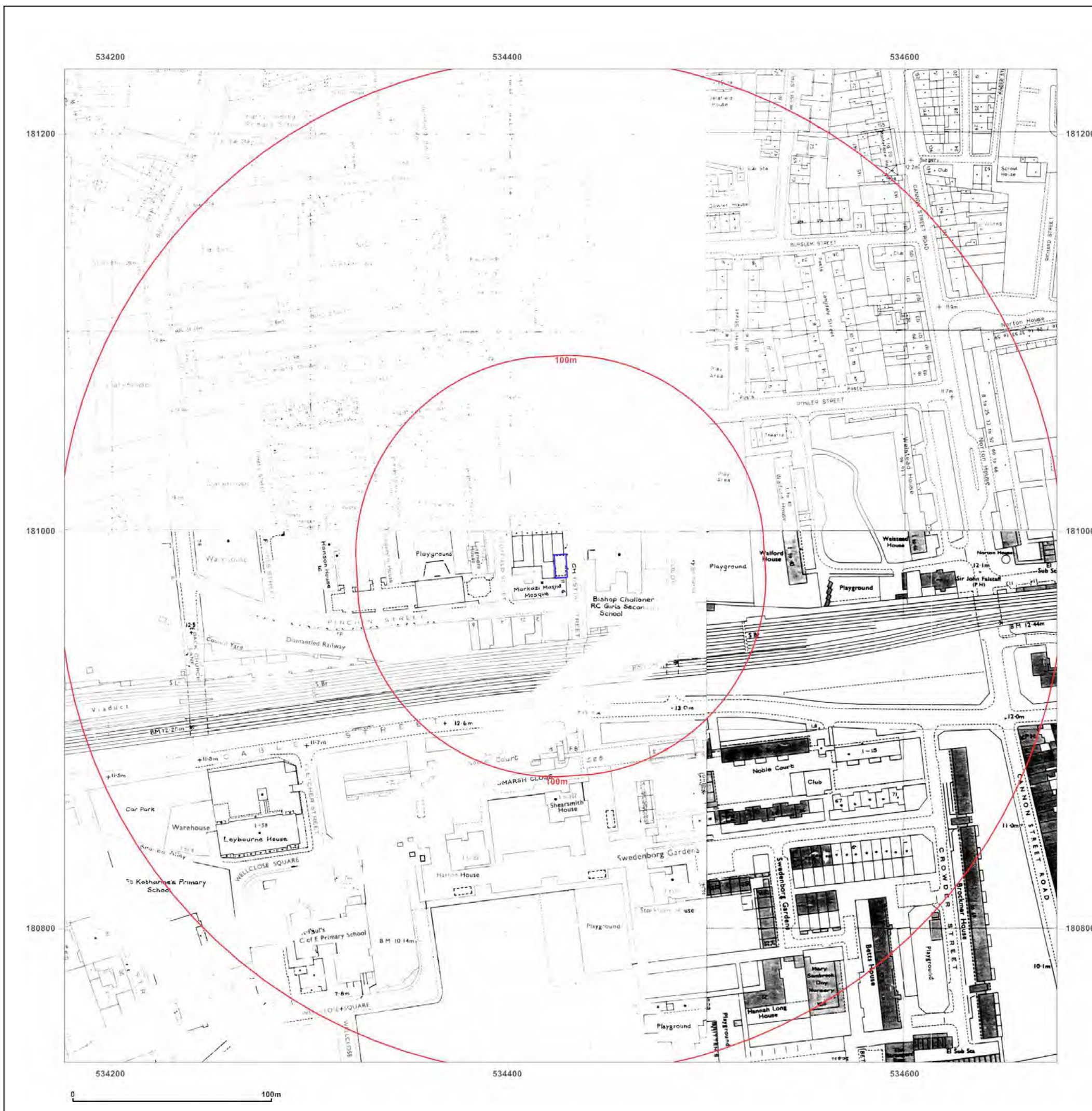


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**Map Name:** National Grid

**Map date:** 1991

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Edition N/A  
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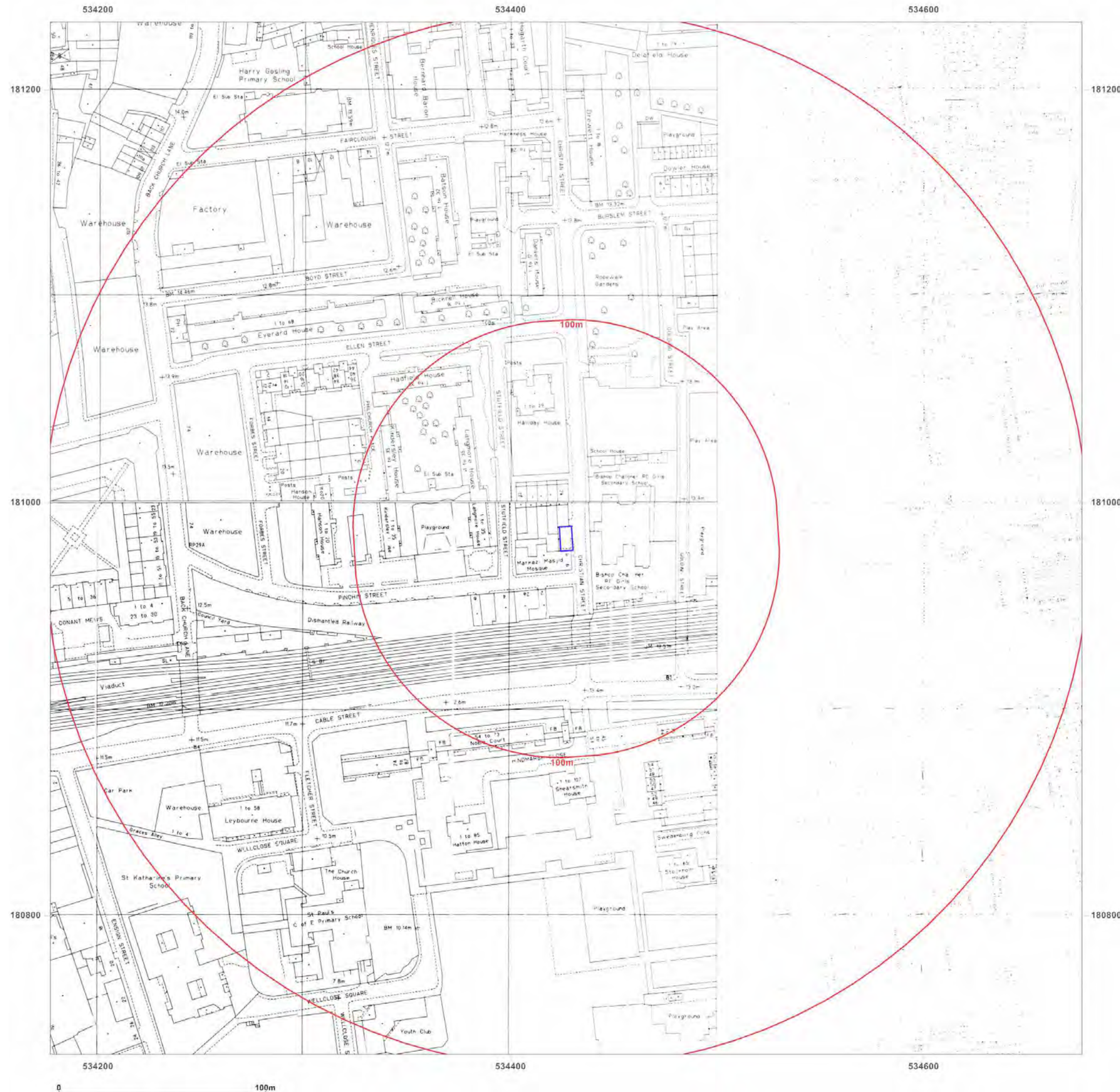


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**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1991-1992

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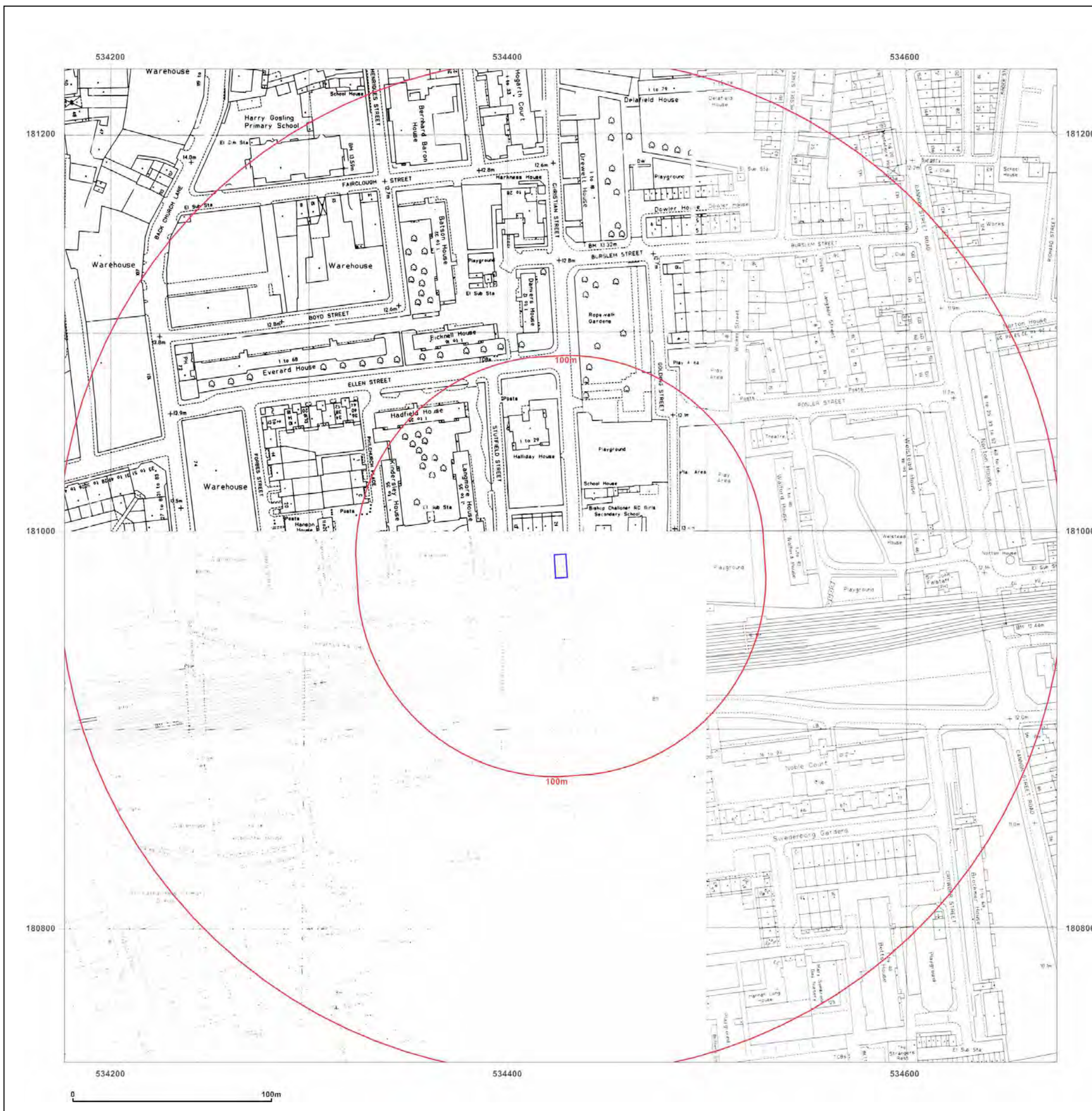


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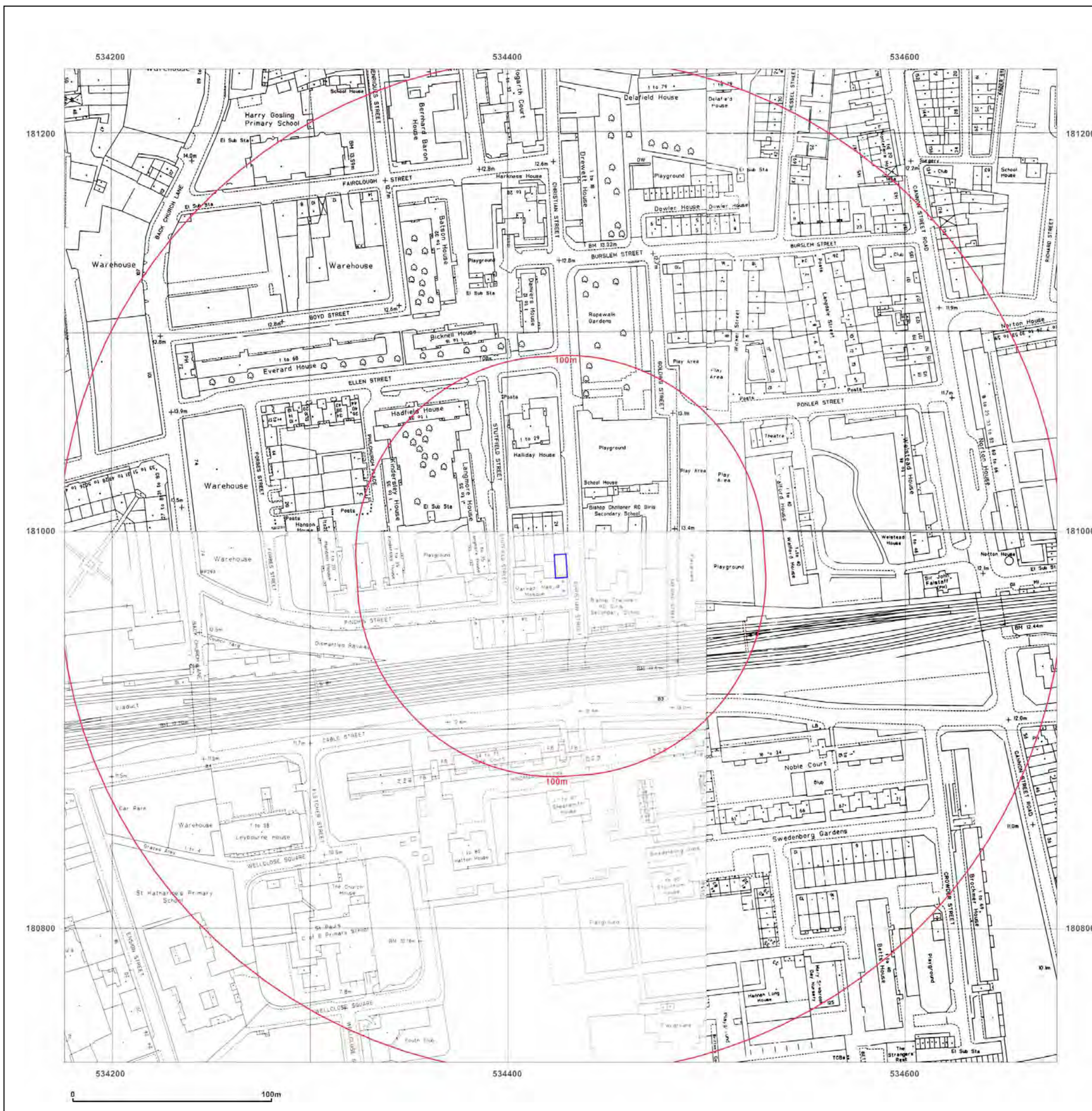


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**Client Ref:** 14025461  
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**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1992

**Scale:** 1:1,250

**Printed at:** 1:2,000



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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1991-1994

**Scale:** 1:1,250

**Printed at:** 1:2,000



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Revised N/A  
Edition N/A  
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Revised N/A  
Edition N/A  
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Revised 1991  
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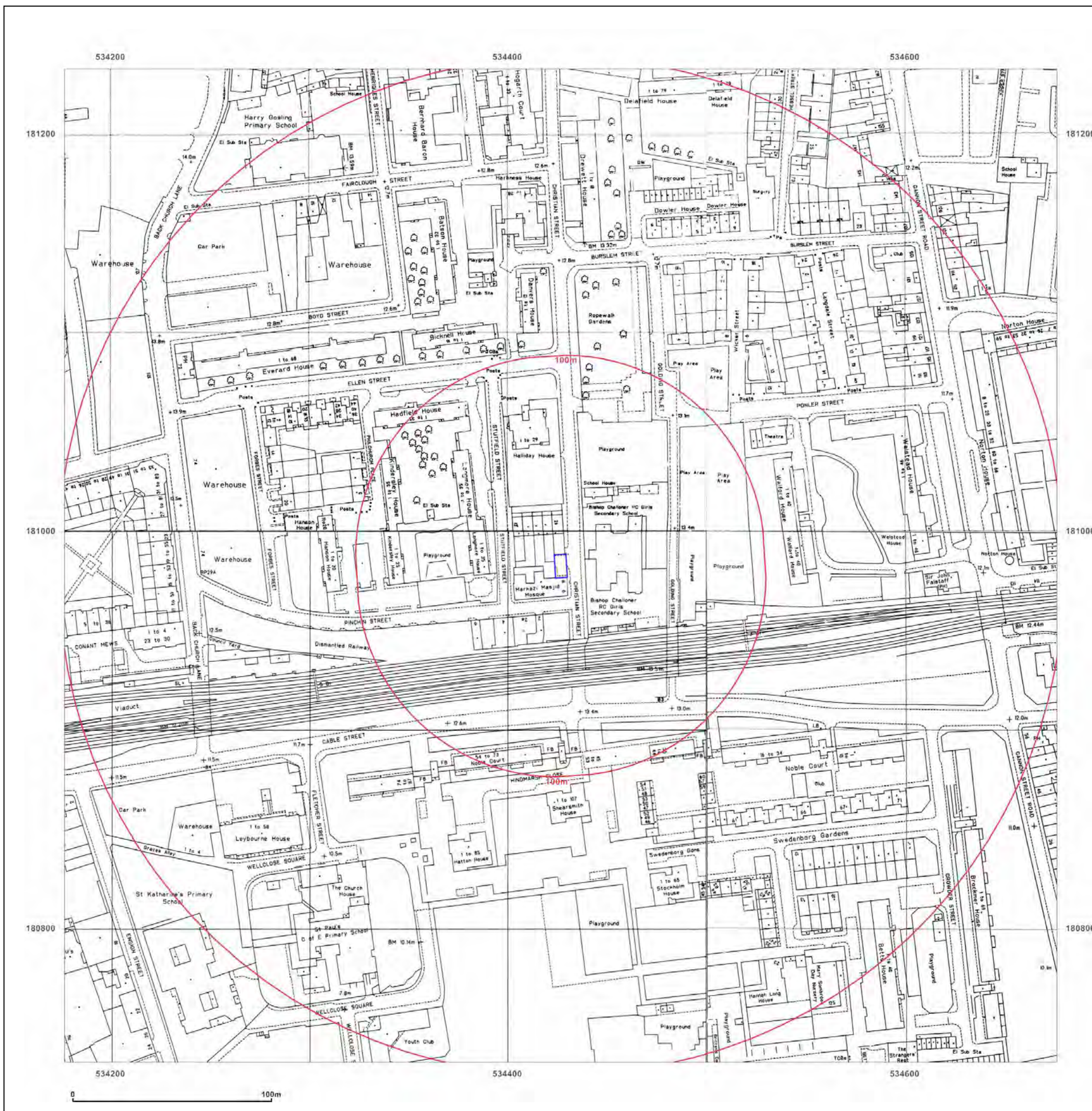


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**Map date:** 1992-1994

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Revised 1994  
Edition N/A  
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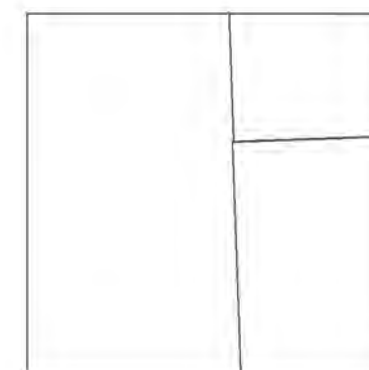
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**Printed at:** 1:10,560



Surveyed 1863  
Revised 1883  
Edition N/A  
Copyright N/A  
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Surveyed 1867  
Revised 1867  
Edition N/A  
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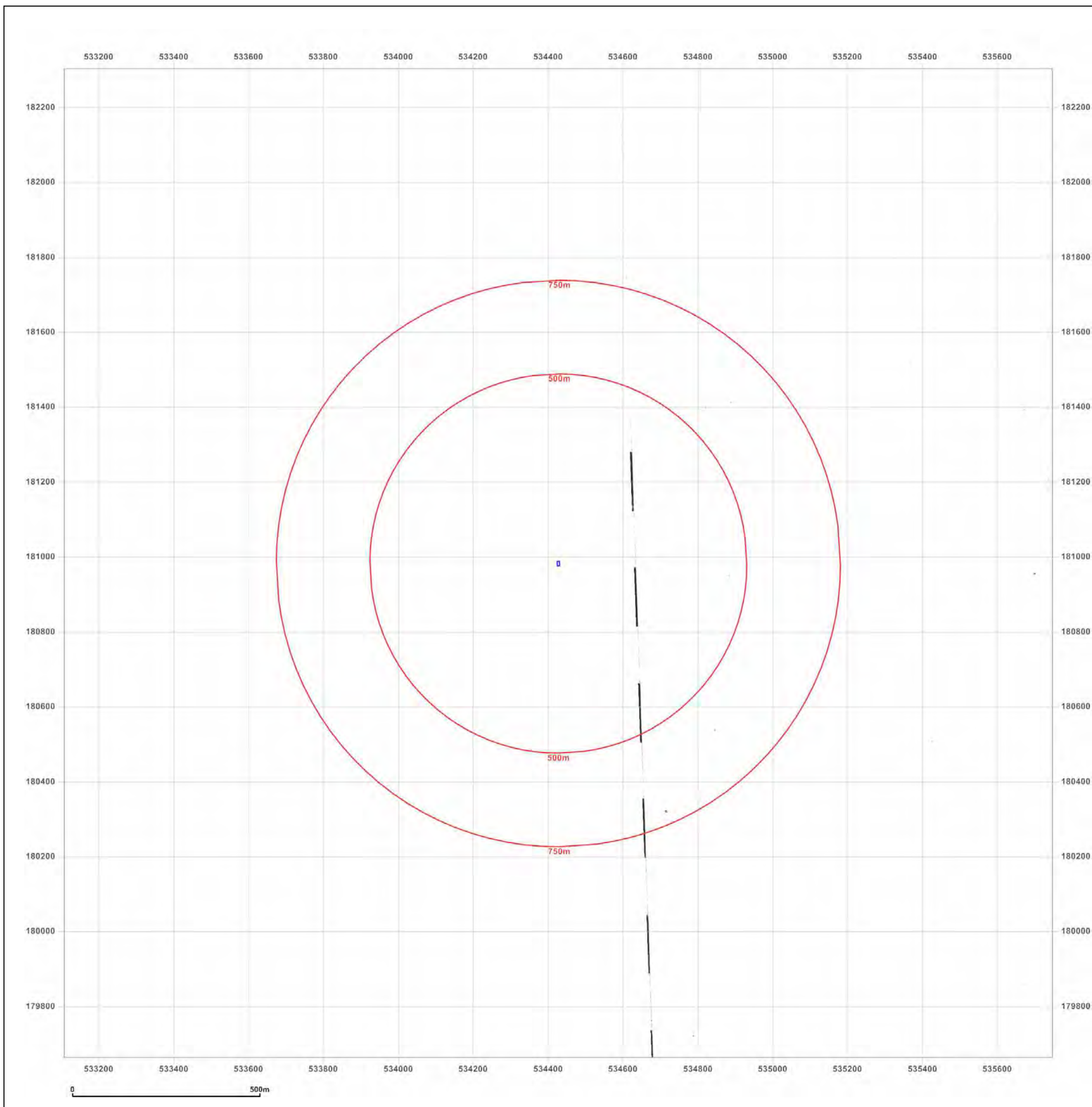


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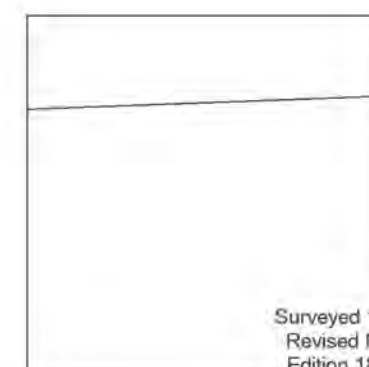
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**Map date:** 1872

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Surveyed 1863  
Revised N/A  
Edition 1872  
Copyright N/A  
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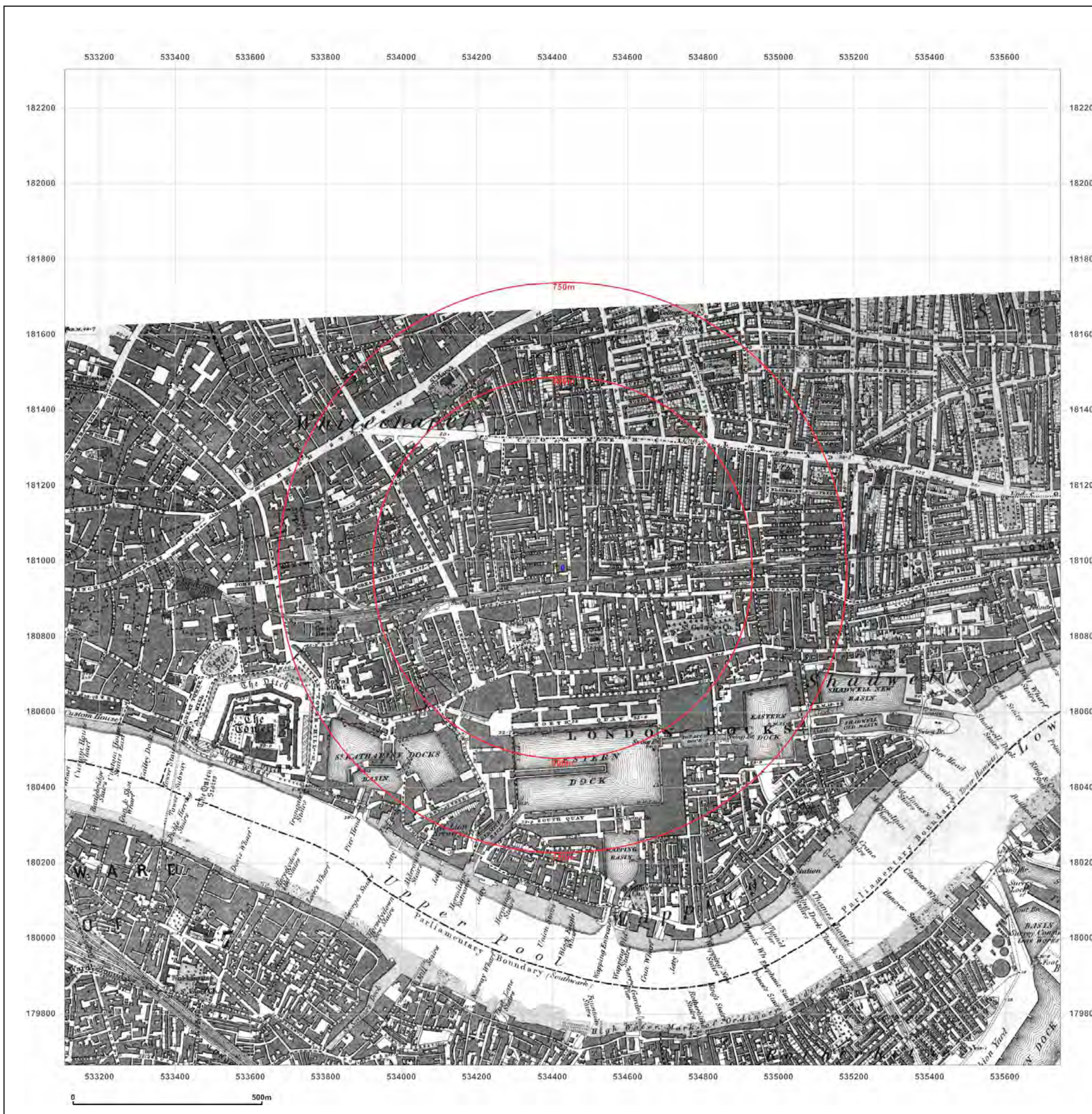


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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** County Series

**Map date:** 1873

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1873  
Revised 1873  
Edition N/A  
Copyright N/A  
Levelled N/A

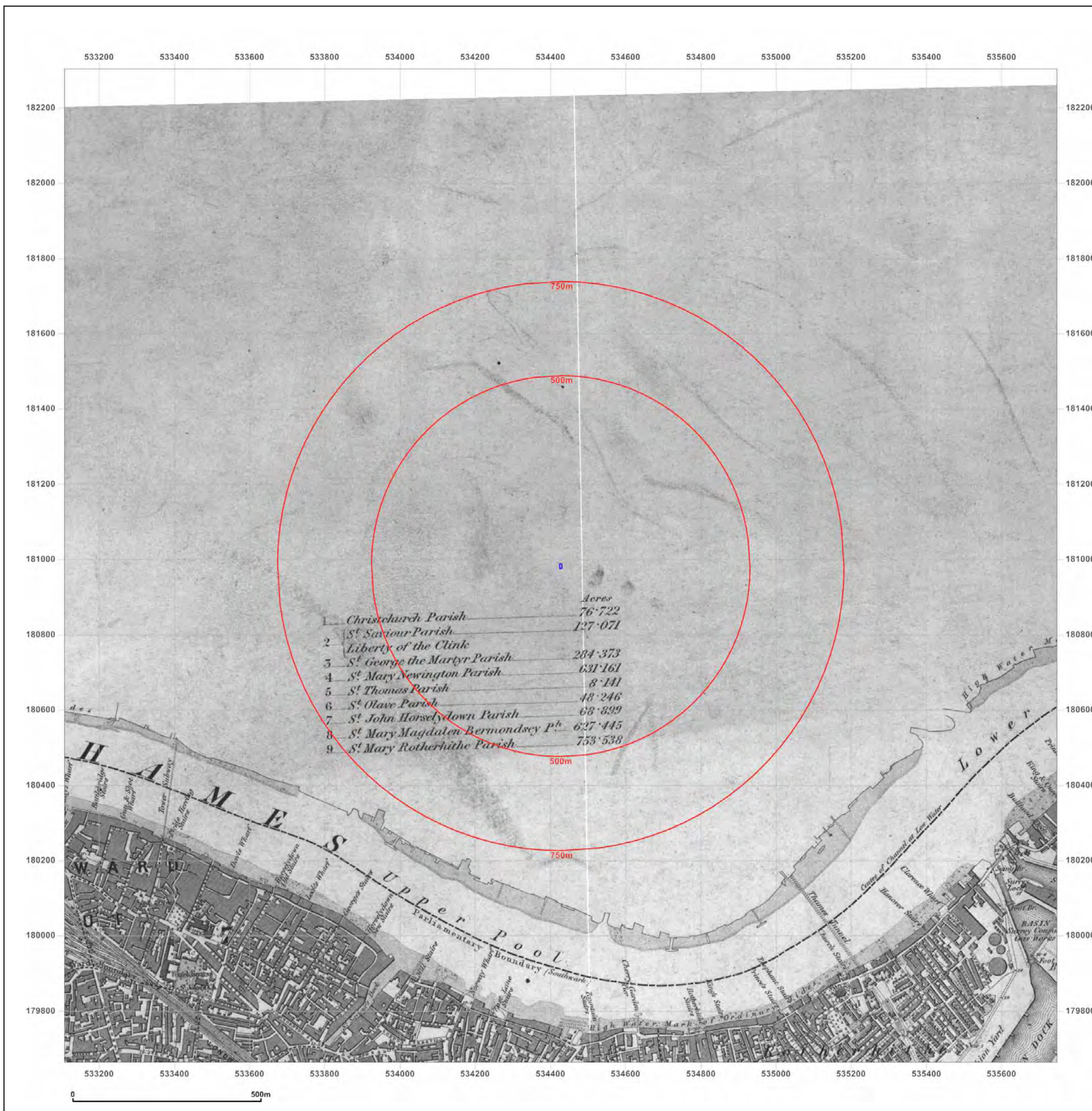


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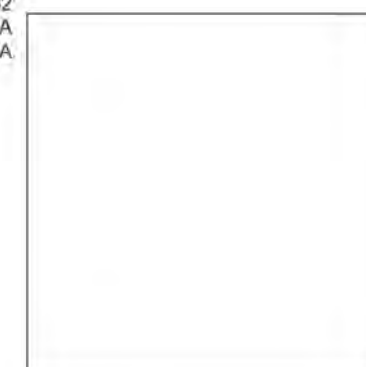
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Surveyed 1873  
Revised 1873  
Edition 1882  
Copyright N/A  
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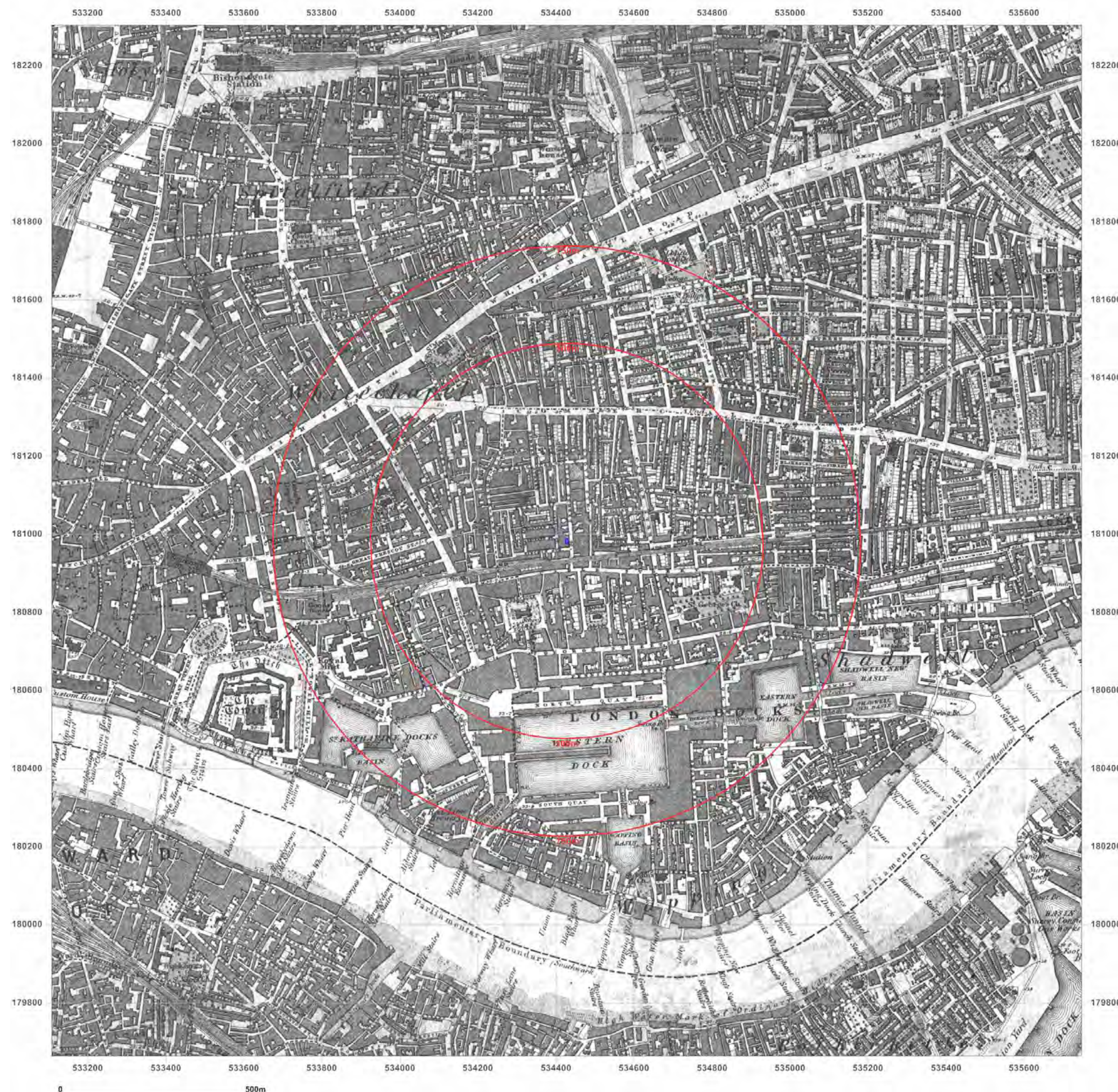


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**Client Ref:** 14025461  
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**Map Name:** County Series

**Map date:** 1894

**Scale:** 1:10,560

**Printed at:** 1:10,560



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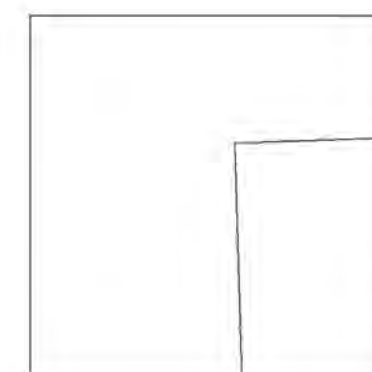
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**Map date:** 1894

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**Printed at:** 1:10,560



Surveyed 1866  
Revised 1894  
Edition N/A  
Copyright N/A  
Levelled N/A

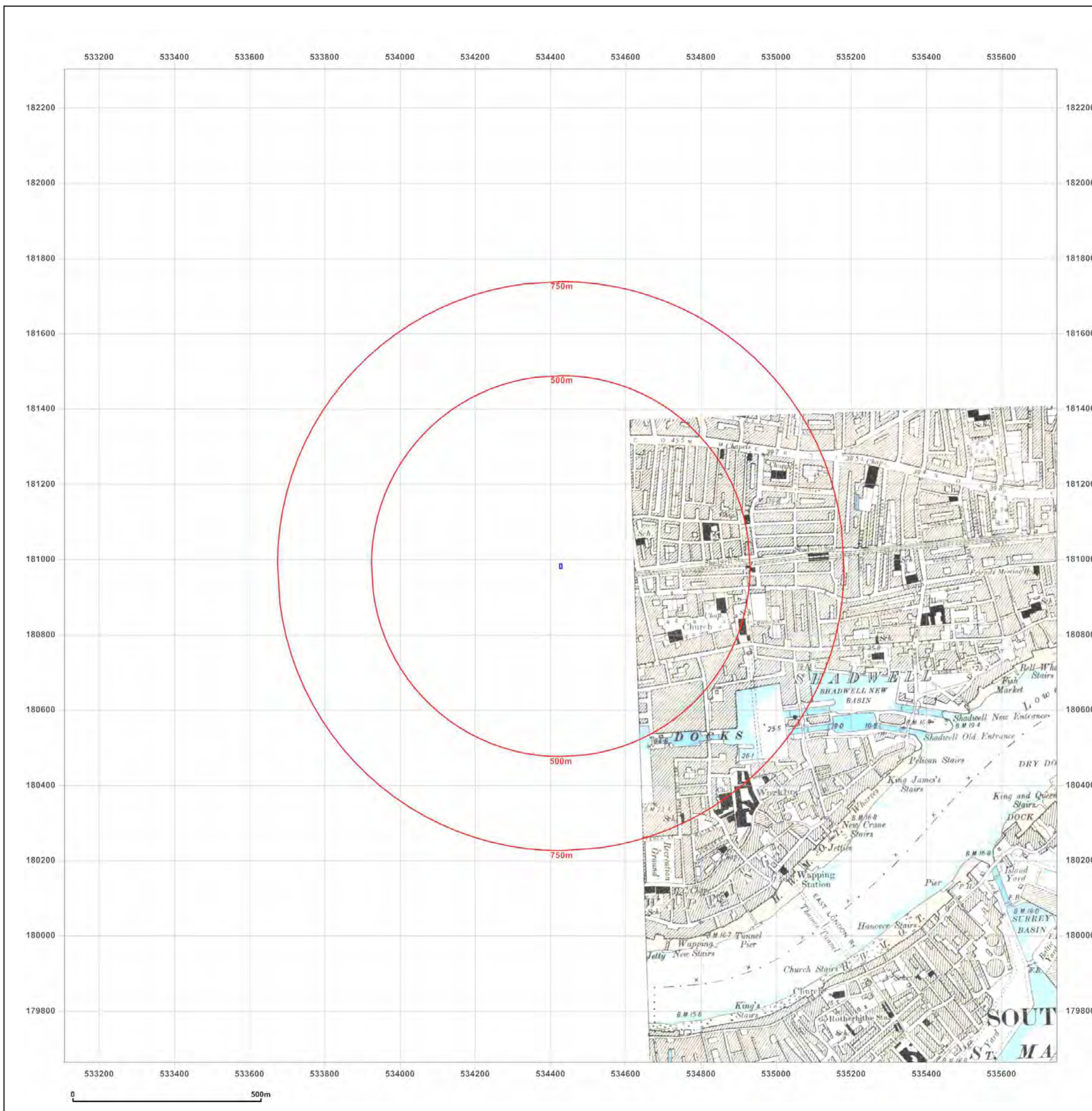


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**Map Name:** County Series

**Map date:** 1894-1895

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Surveyed 1873  
Revised 1895  
Edition N/A  
Copyright N/A  
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Surveyed 1894  
Revised 1894  
Edition N/A  
Copyright N/A  
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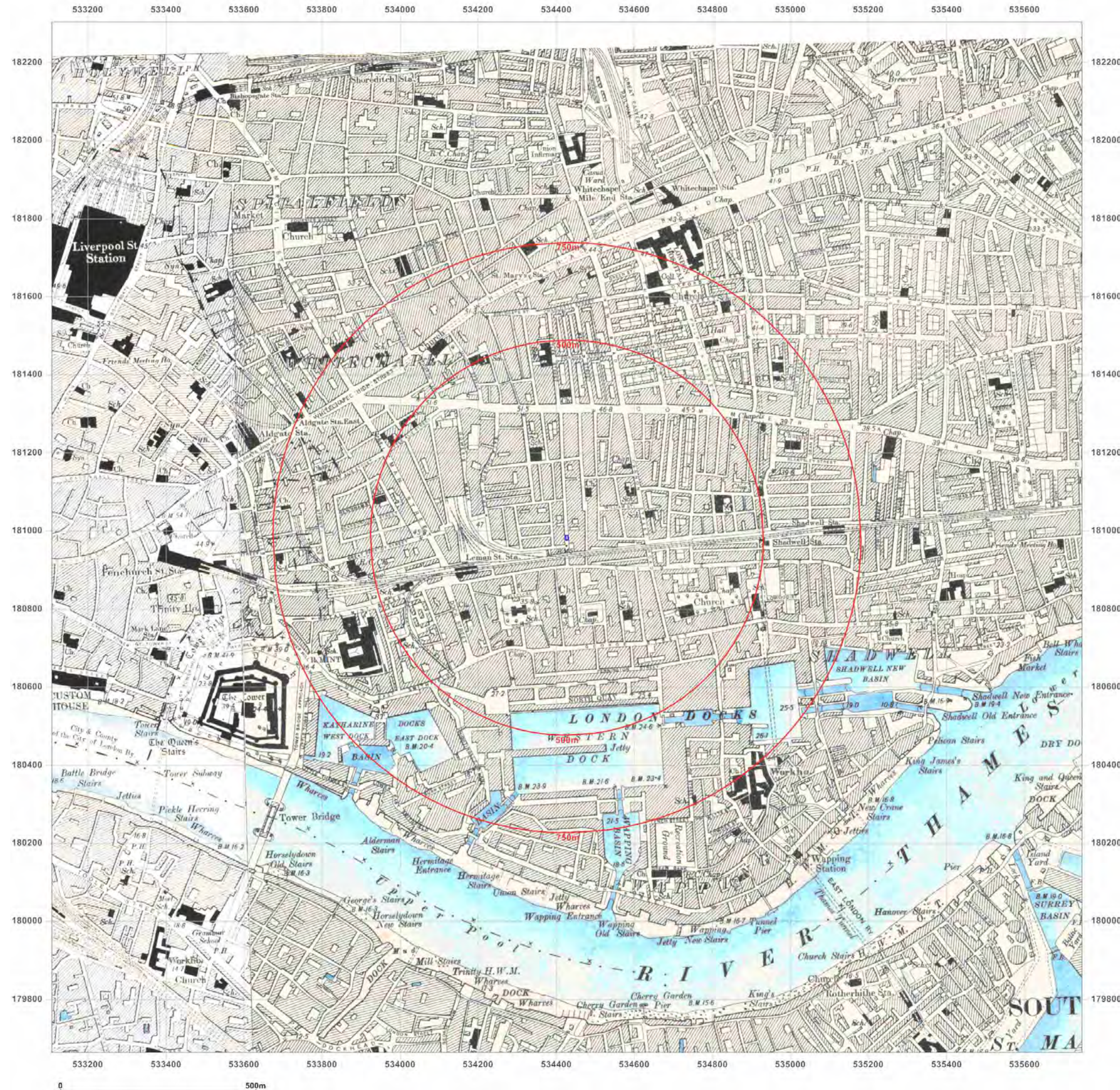


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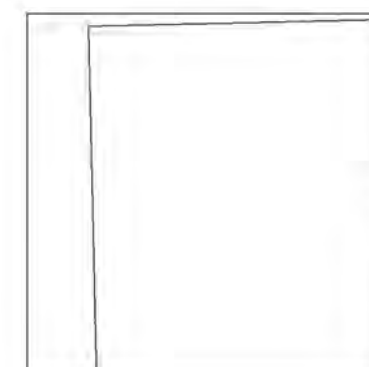
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Surveyed 1894  
Revised 1894  
Edition 1898  
Copyright N/A  
Levelled N/A

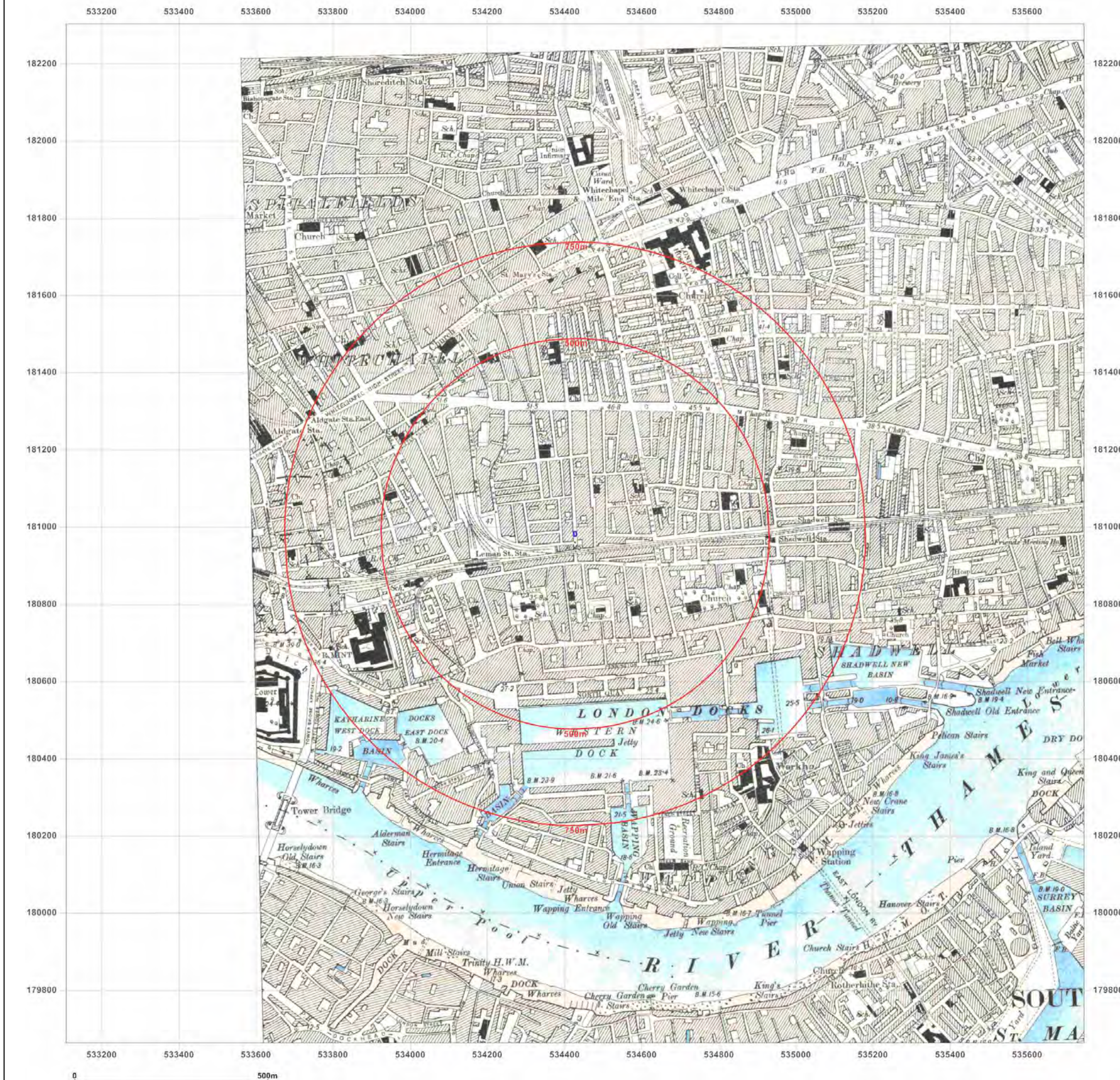


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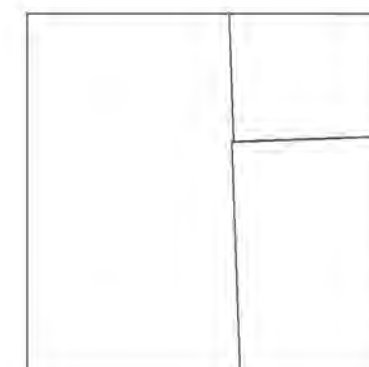
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**Printed at:** 1:10,560



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Revised 1894  
Edition N/A  
Copyright N/A  
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Surveyed 1866  
Revised 1894  
Edition 1899  
Copyright N/A  
Levelled N/A

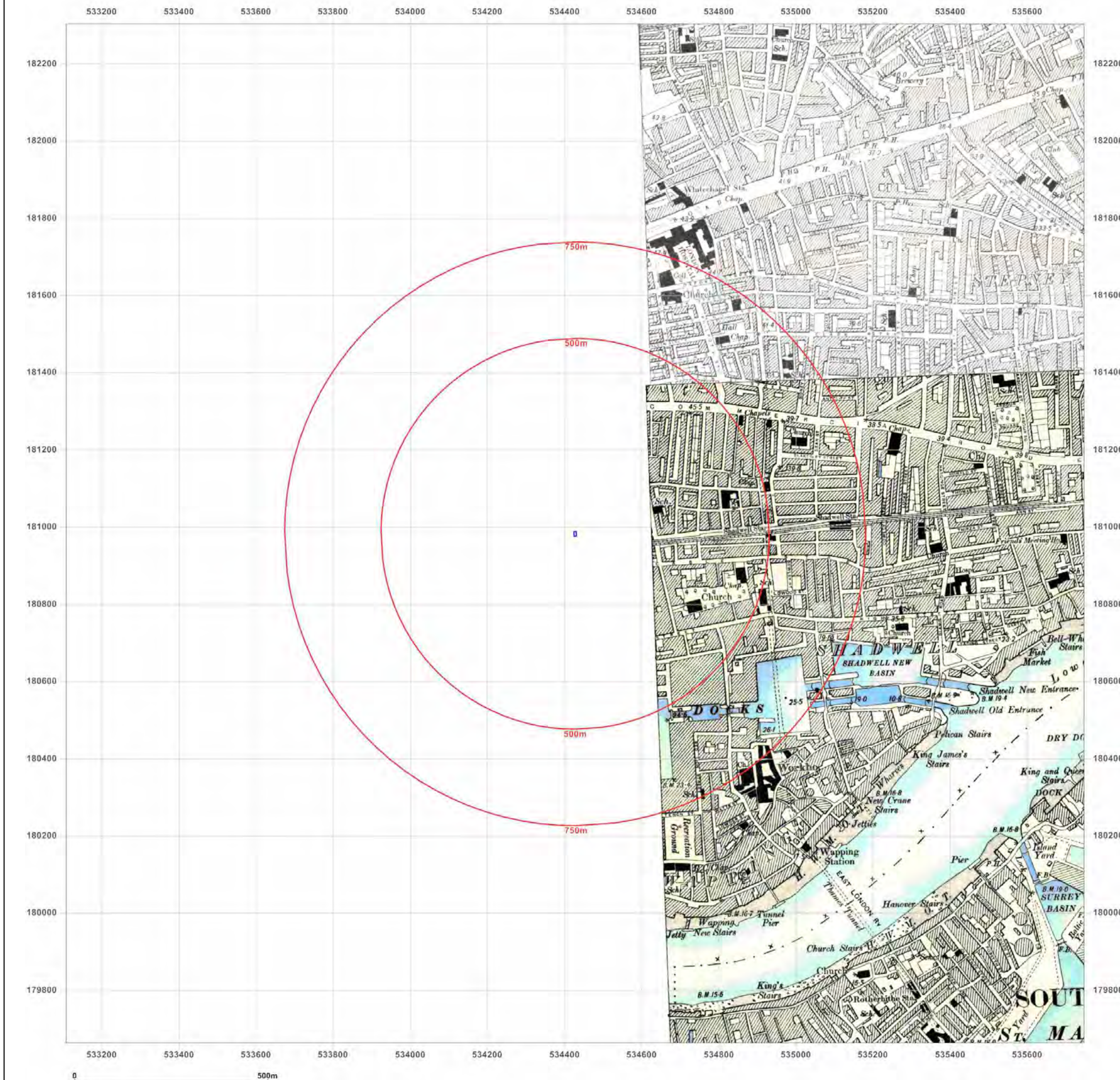


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**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** County Series

**Map date:** 1920

**Scale:** 1:10,560

**Printed at:** 1:10,560



Surveyed 1872  
Revised 1919  
Edition 1920  
Copyright N/A  
Levelled N/A

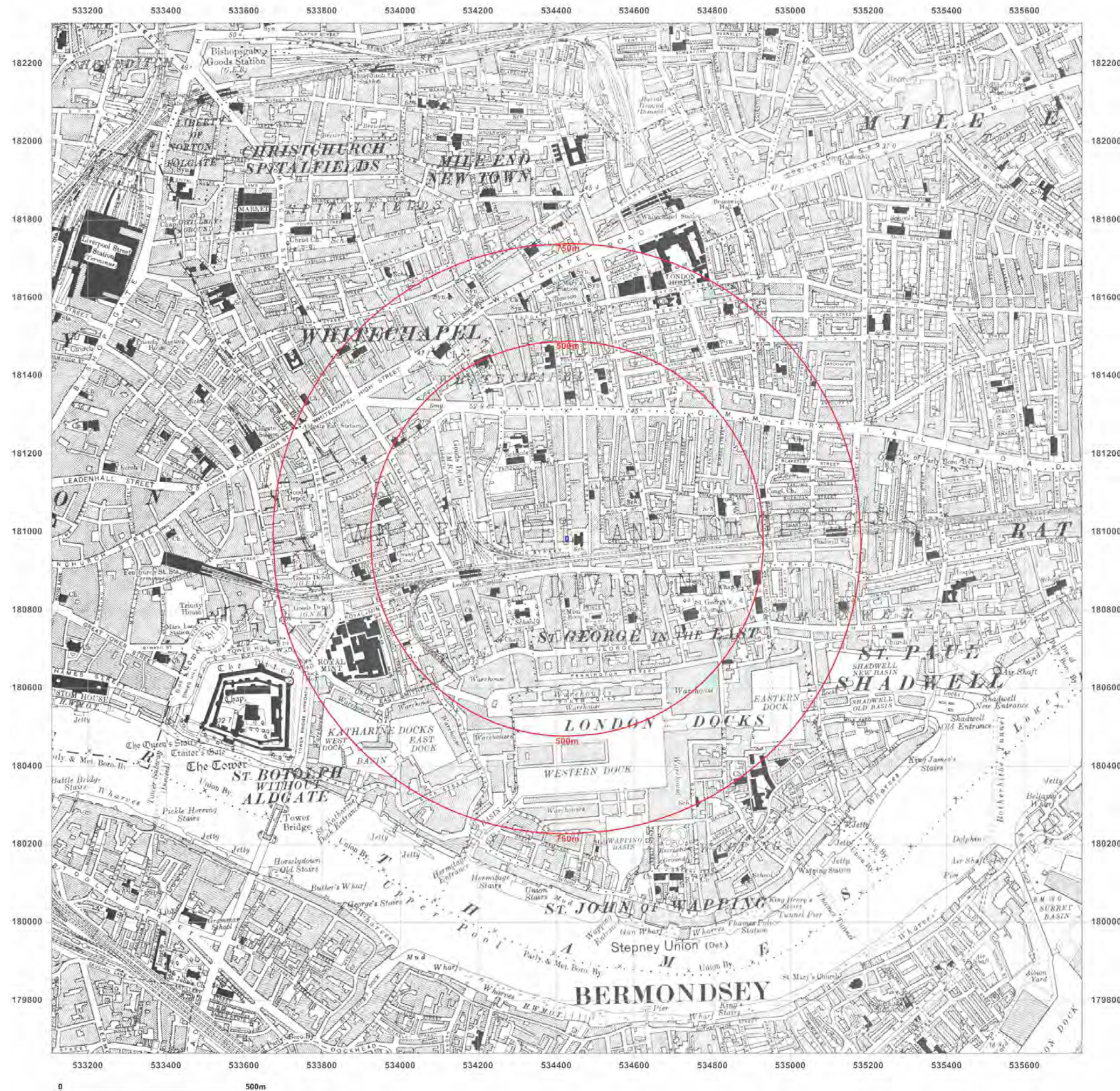


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**Map Name:** County Series

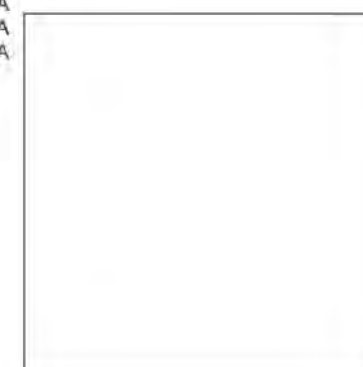
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**Printed at:** 1:10,560



Surveyed 1872  
Revised 1938  
Edition N/A  
Copyright N/A  
Levelled N/A

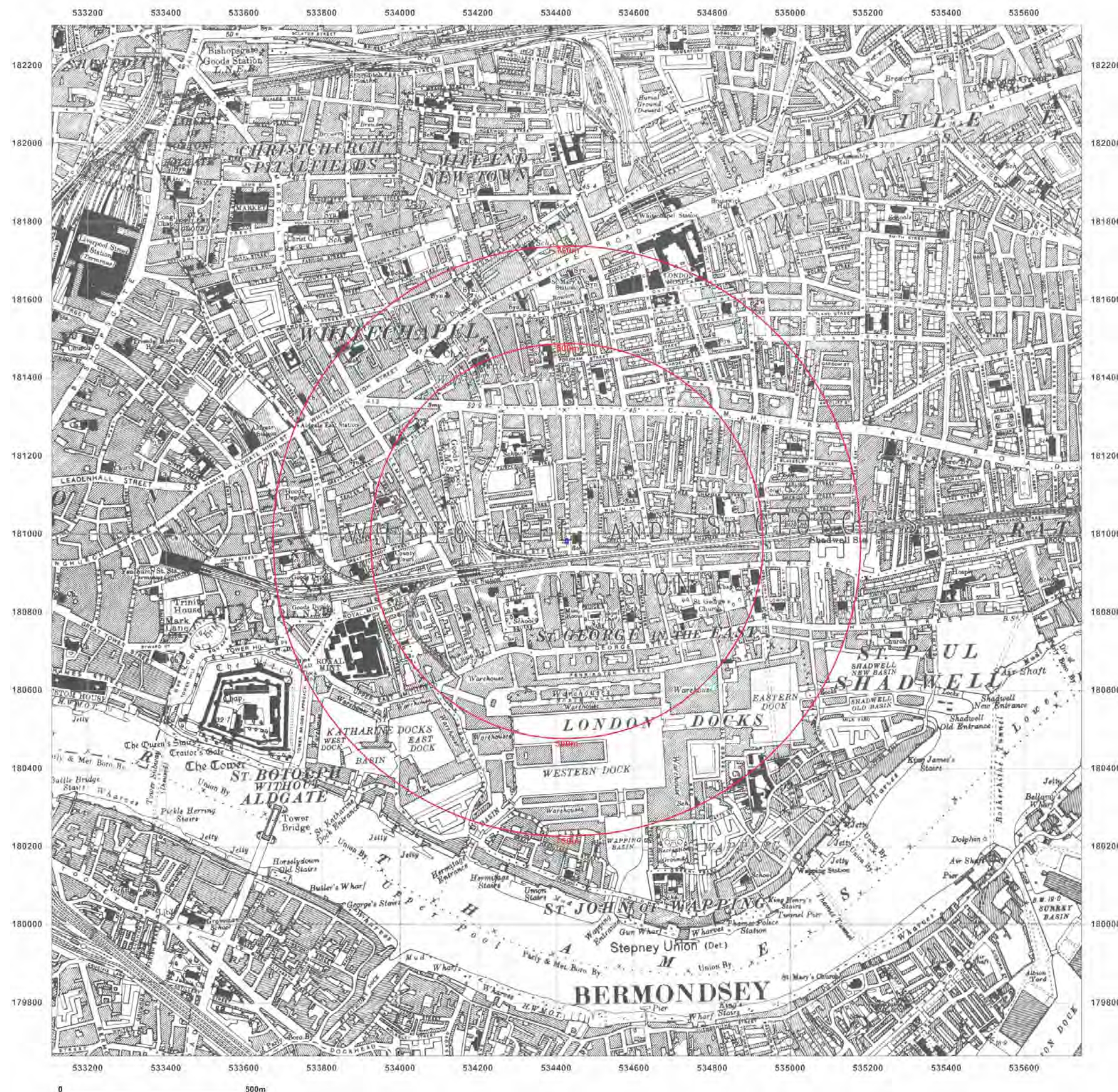


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E1 1AY

**Client Ref:** 14025461  
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**Map Name:** Provisional

**Map date:** 1948-1949

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**Printed at:** 1:10,560



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Revised 1948  
Edition N/A  
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Levelled N/A

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Revised 1949  
Edition N/A  
Copyright N/A  
Levelled 1934

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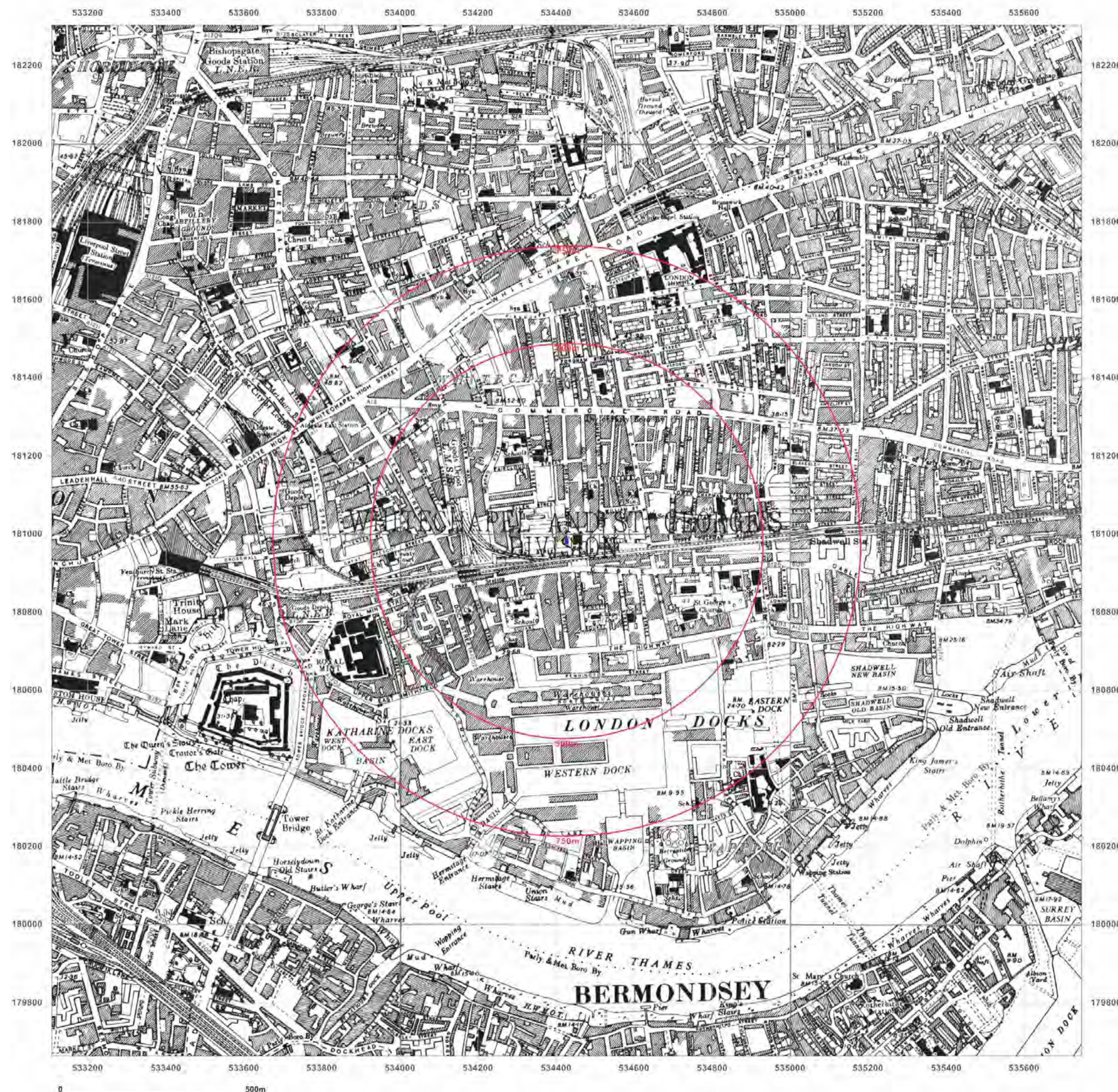


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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** Provisional

**Map date:** 1954-1957

**Scale:** 1:10,560

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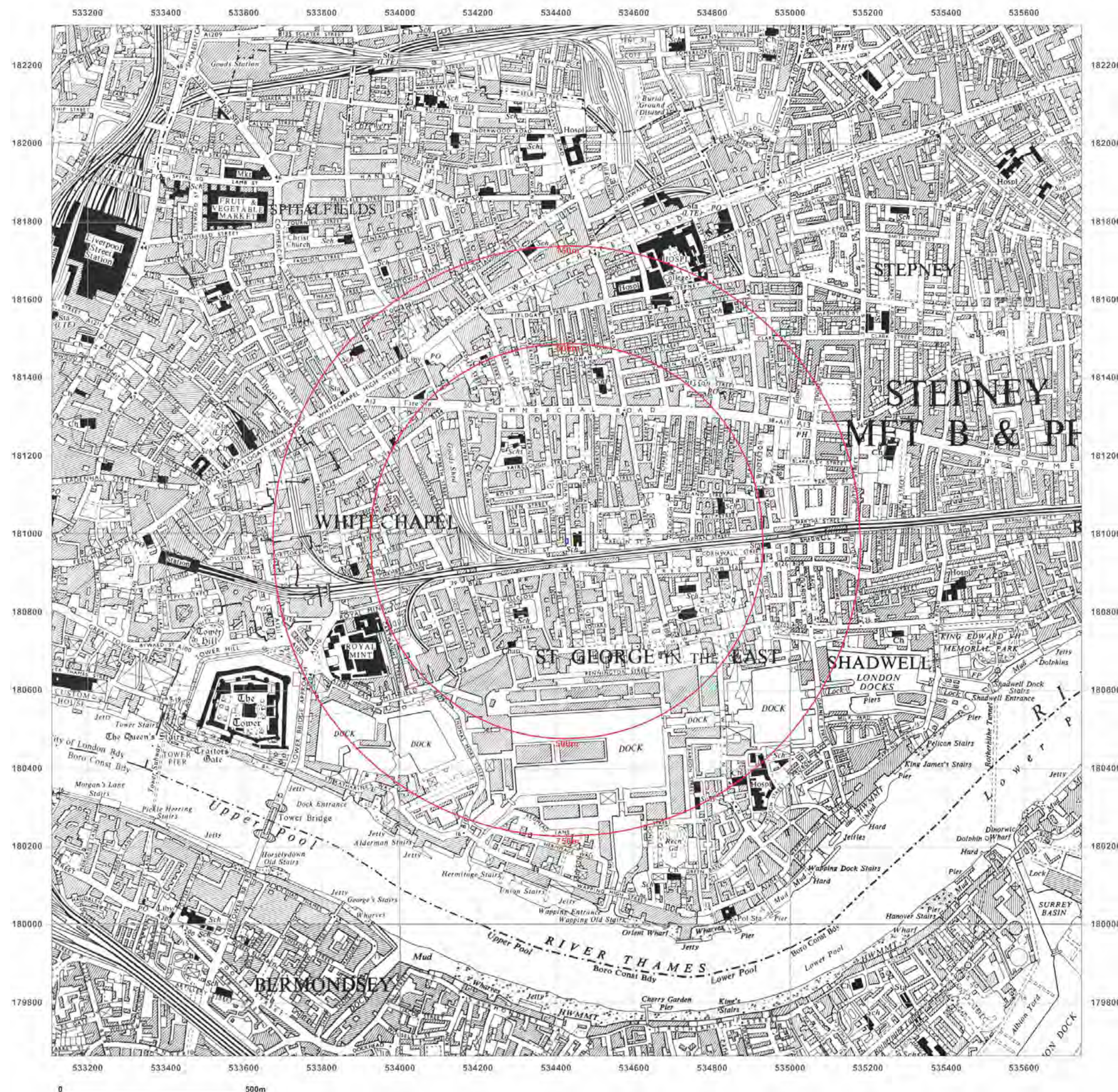


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**Scale:** 1:10,560

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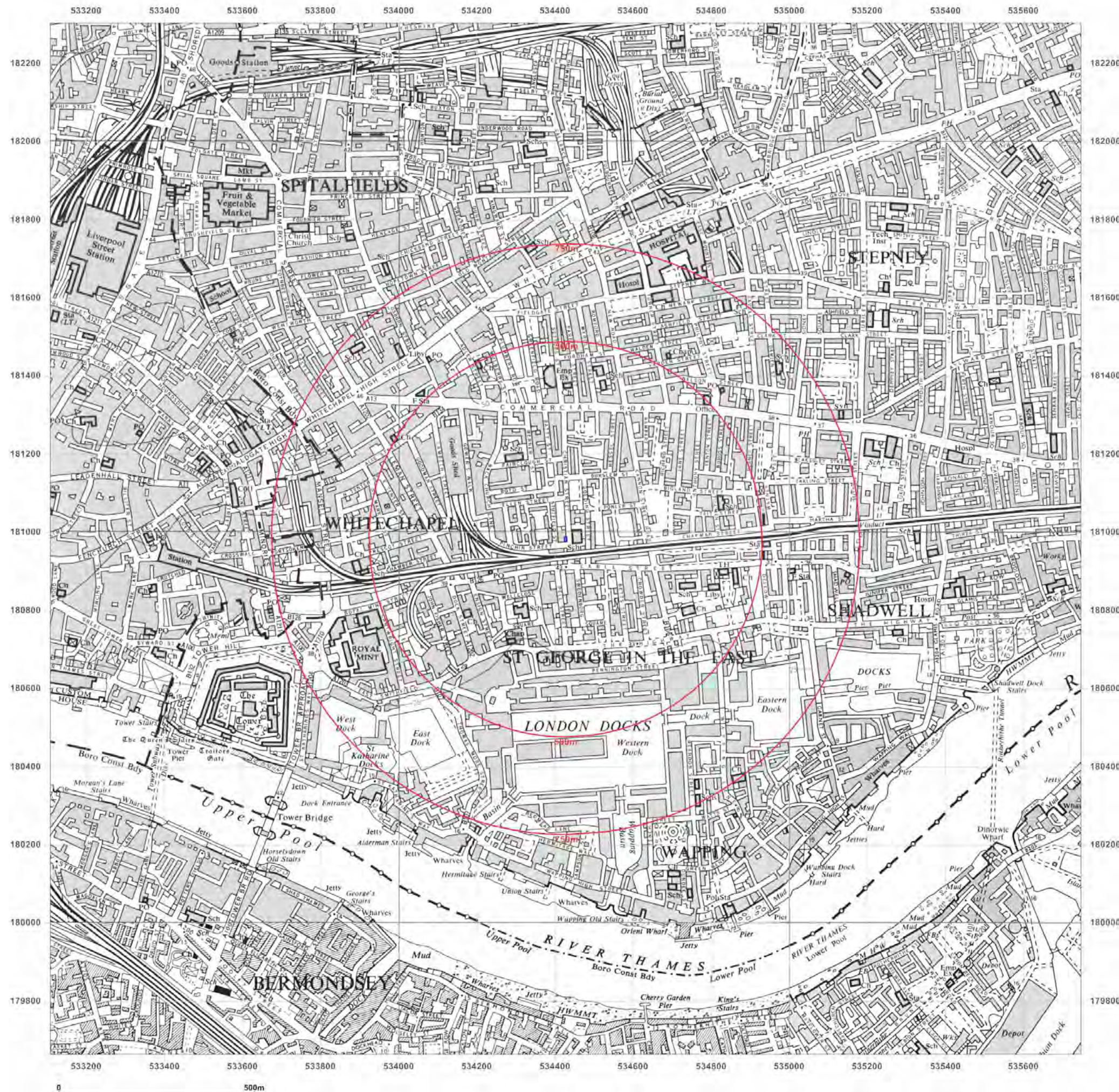


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**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1971-1973

**Scale:** 1:10,000

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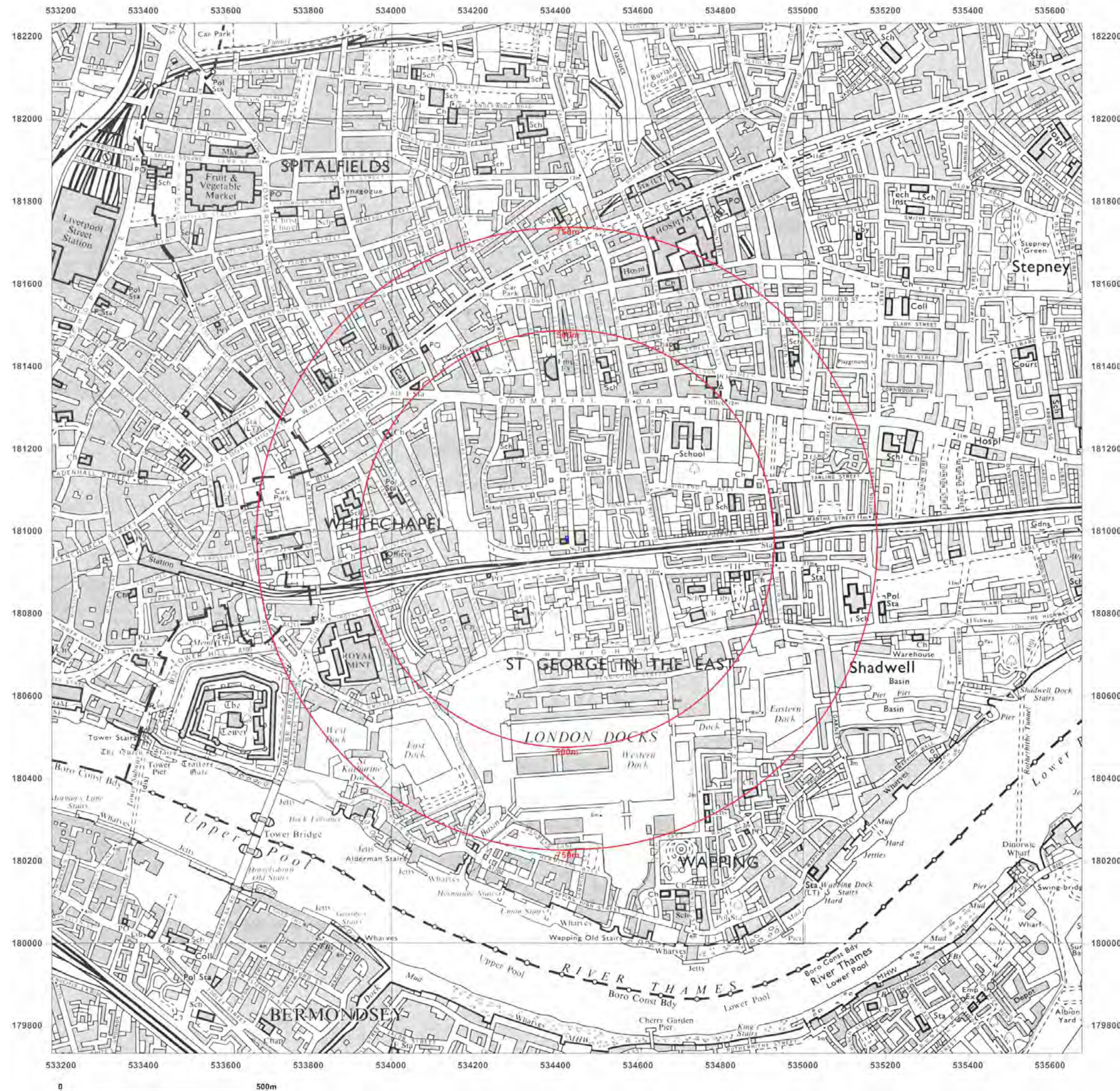


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**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1976-1981

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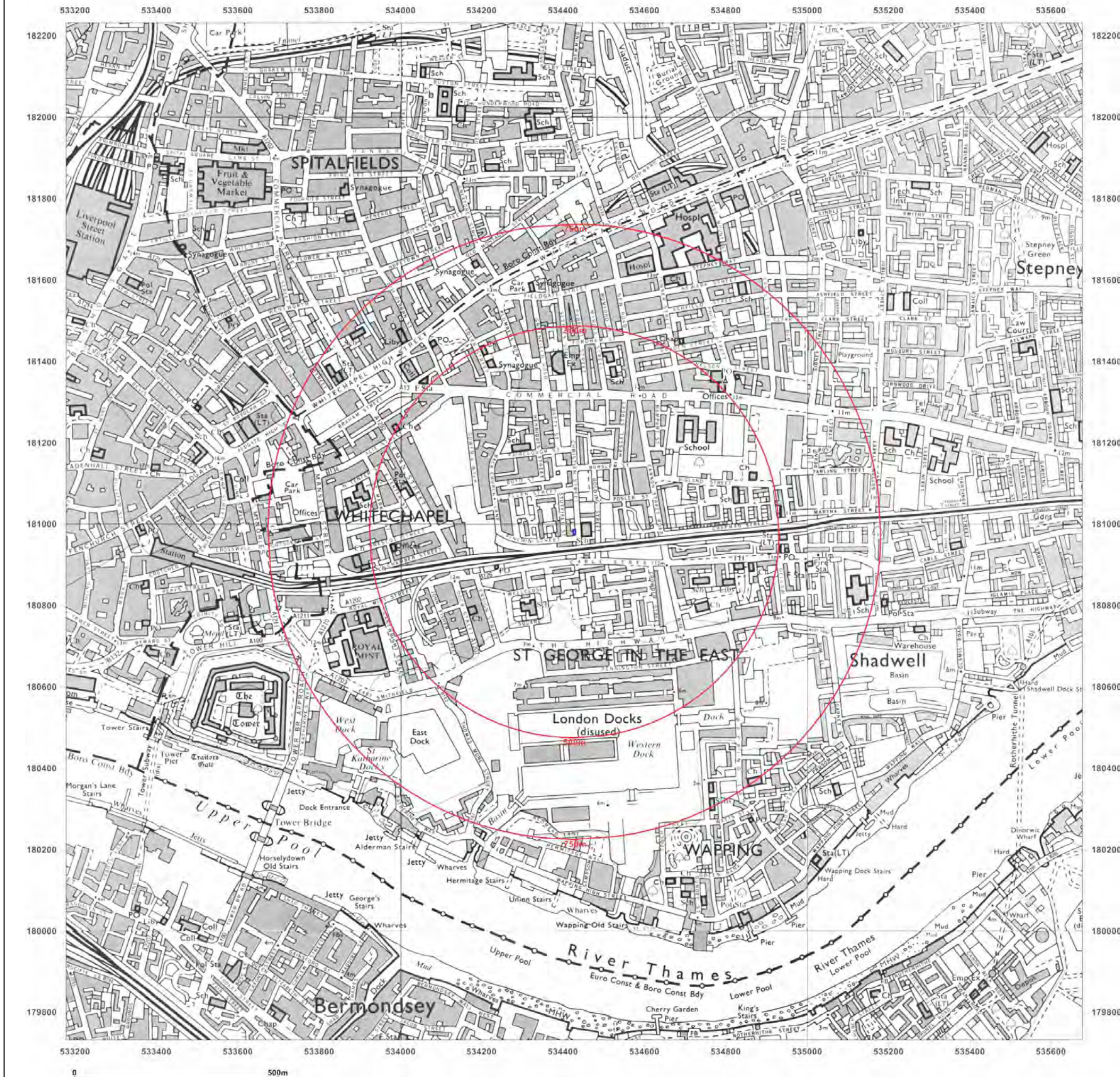


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**Map Name:** National Grid

**Map date:** 1987-1989

**Scale:** 1:10,000

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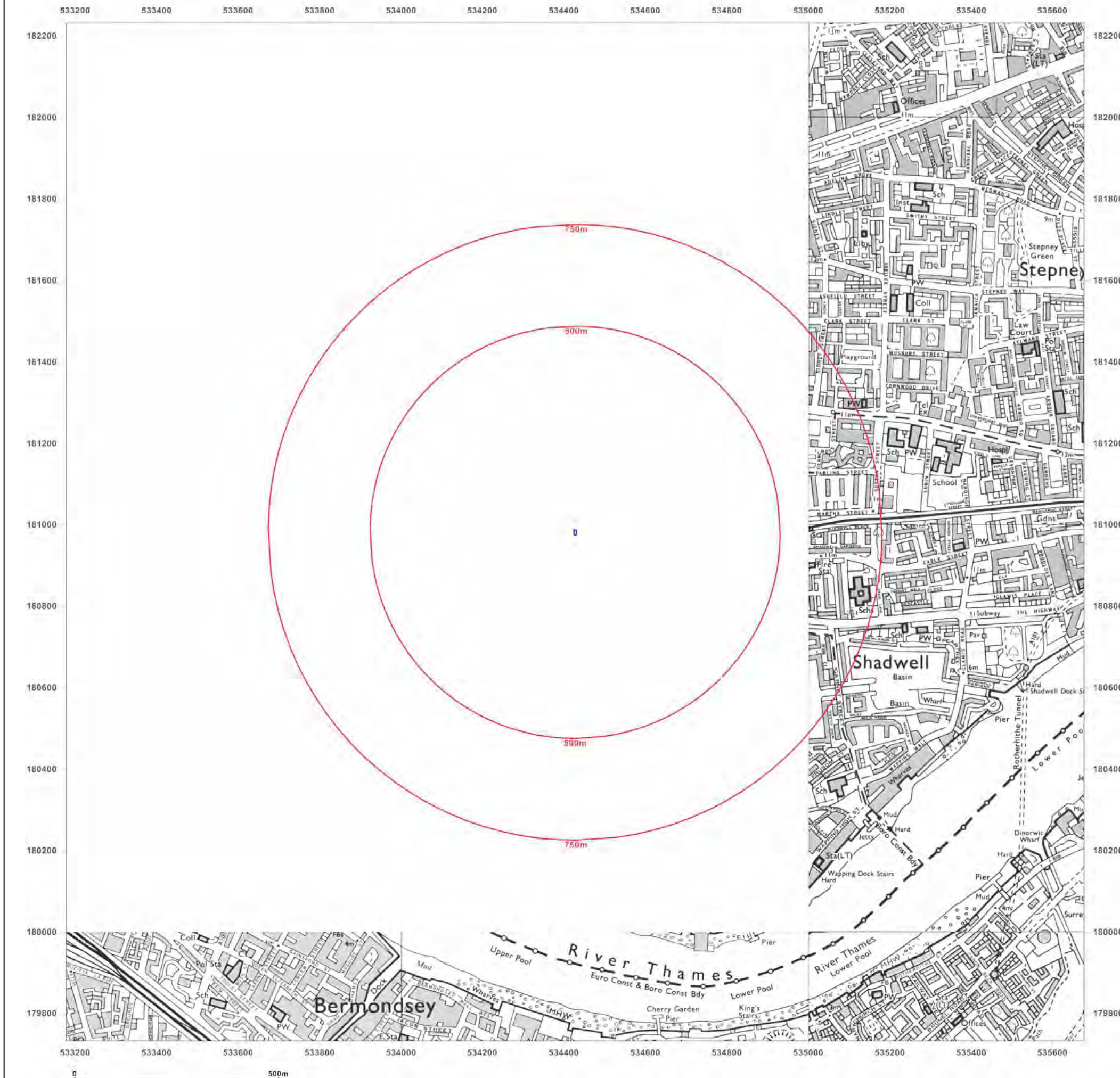


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**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 1993-1994

**Scale:** 1:10,000

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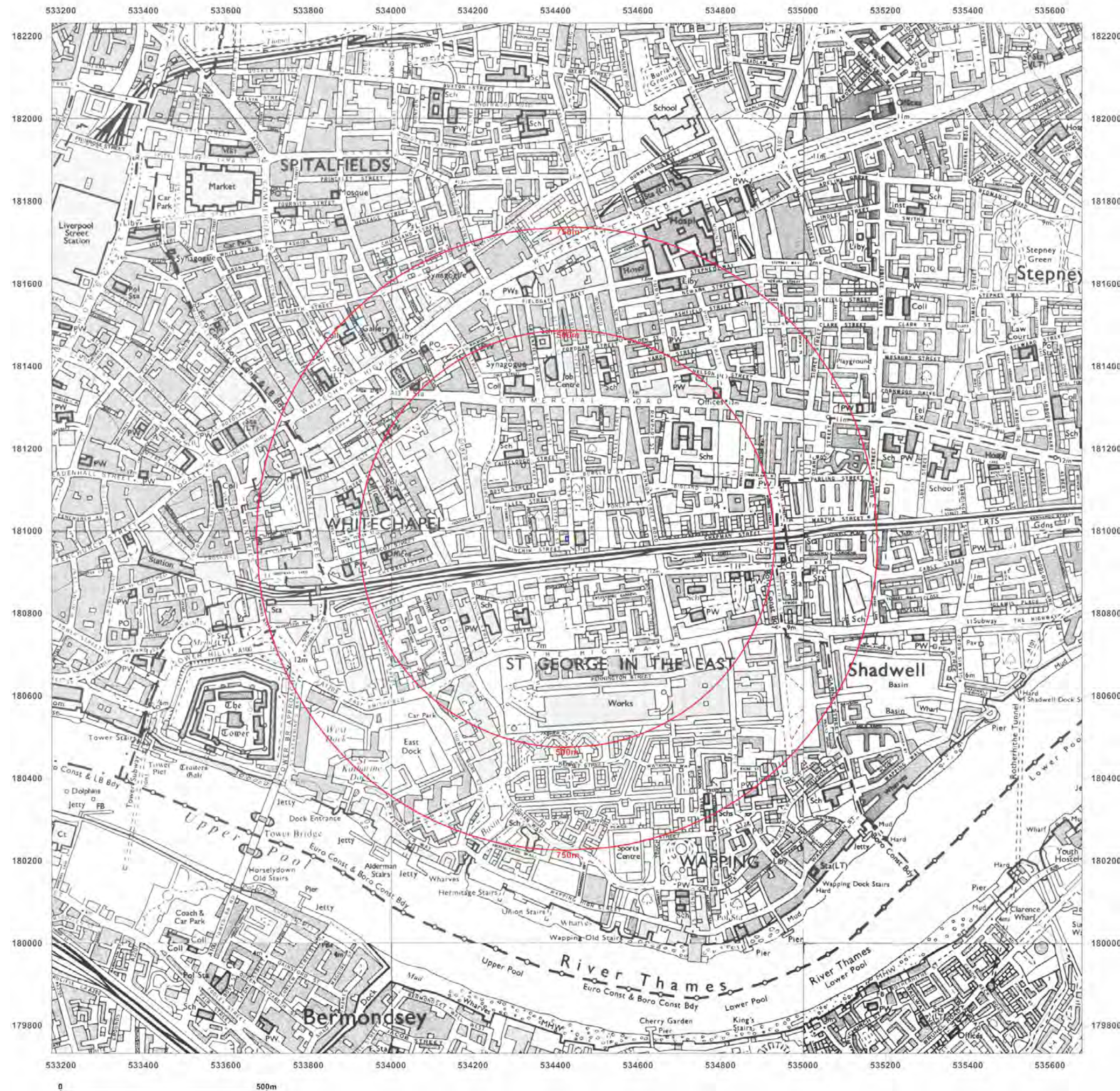


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Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000



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E1 1AY

Client Ref: 14025461  
Report Ref: GS-6007753  
Grid Ref: 534427, 180983

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



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E1 1AY

**Client Ref:** 14025461  
**Report Ref:** GS-6007753  
**Grid Ref:** 534427, 180983

**Map Name:** National Grid

**Map date:** 2014

**Scale:** 1:10,000

**Printed at:** 1:10,000

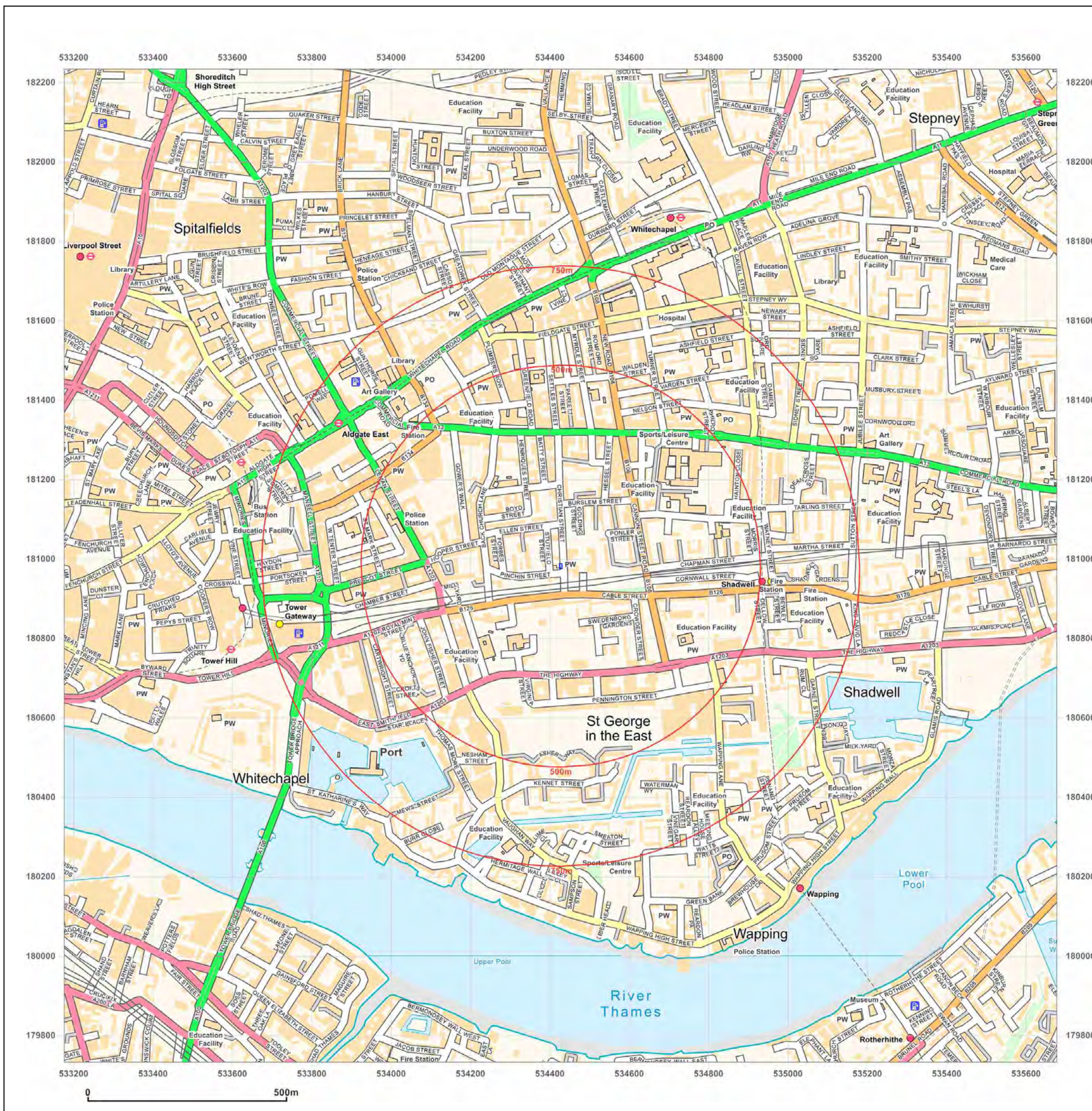


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## **APPENDIX B**

### **Groundsure Data Sheets and Site Sensitivity Maps**





Arcadis Consulting UK Ltd

Arcadis CONSULTING UK LTD, THE PITHAY,  
BRISTOL, BS1 2NL

Groundsure  
Reference:

GS-6007751

Your Reference: 14025461

Report Date 7 May 2019

Report Delivery Method: Email - pdf

## Enviro Insight

Address: 26 HODGESON HOUSE, CHRISTIAN STREET, LONDON, E1 1AY

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Yours faithfully,

Managing Director  
Groundsure Limited

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Groundsure Enviroinsight



Address: 26 HODGESON HOUSE, CHRISTIAN STREET, LONDON, E1 1AY  
Date: 7 May 2019  
Reference: GS-6007751  
Client: Arcadis Consulting UK Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 07-Jun-2015  
Grid Reference: 534427,180982  
Site Size: 0.0069ha

Report Reference: GS-6007751  
Client Reference: 14025461



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# Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	4	28	99
1.2 Additional Information – Historical Tank Database	0	1	13	16
1.3 Additional Information – Historical Energy Features Database	0	0	47	99
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	3	3	58
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	2	32
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	2	5
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	1
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	2
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0



Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	1	1	1
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	1	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	1	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	1

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	4	18	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	2	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology				0-500m		
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site				Identified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site				Identified		
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	1	5	92
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	1	3	54
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	0	0	1	0	Not searched	Not searched



## Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	0	4	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

## Section 7: Flooding

7.1 Environment Agency Zone 2 floodplains within 250m of the study site	None identified					
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified					
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low					
7.4 Flood Defences within 250m of the study site	None identified					
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified					
7.6 Areas used for Flood Storage within 250m of the study site	None identified					
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Not Prone					
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Not Applicable					

## Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	0
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	1
8.8 Records of World Heritage Sites	0	0	0	0	1	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0



Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards	
9.1 Maximum risk of natural ground subsidence	Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Negligible
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Coal mining areas within 75m of the study site	None identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified



# Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

## 1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

## 2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

## 3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

## 4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

## 5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

## 6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

## 7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

## 8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

## 9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

## 10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

## 11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

## Note: Maps

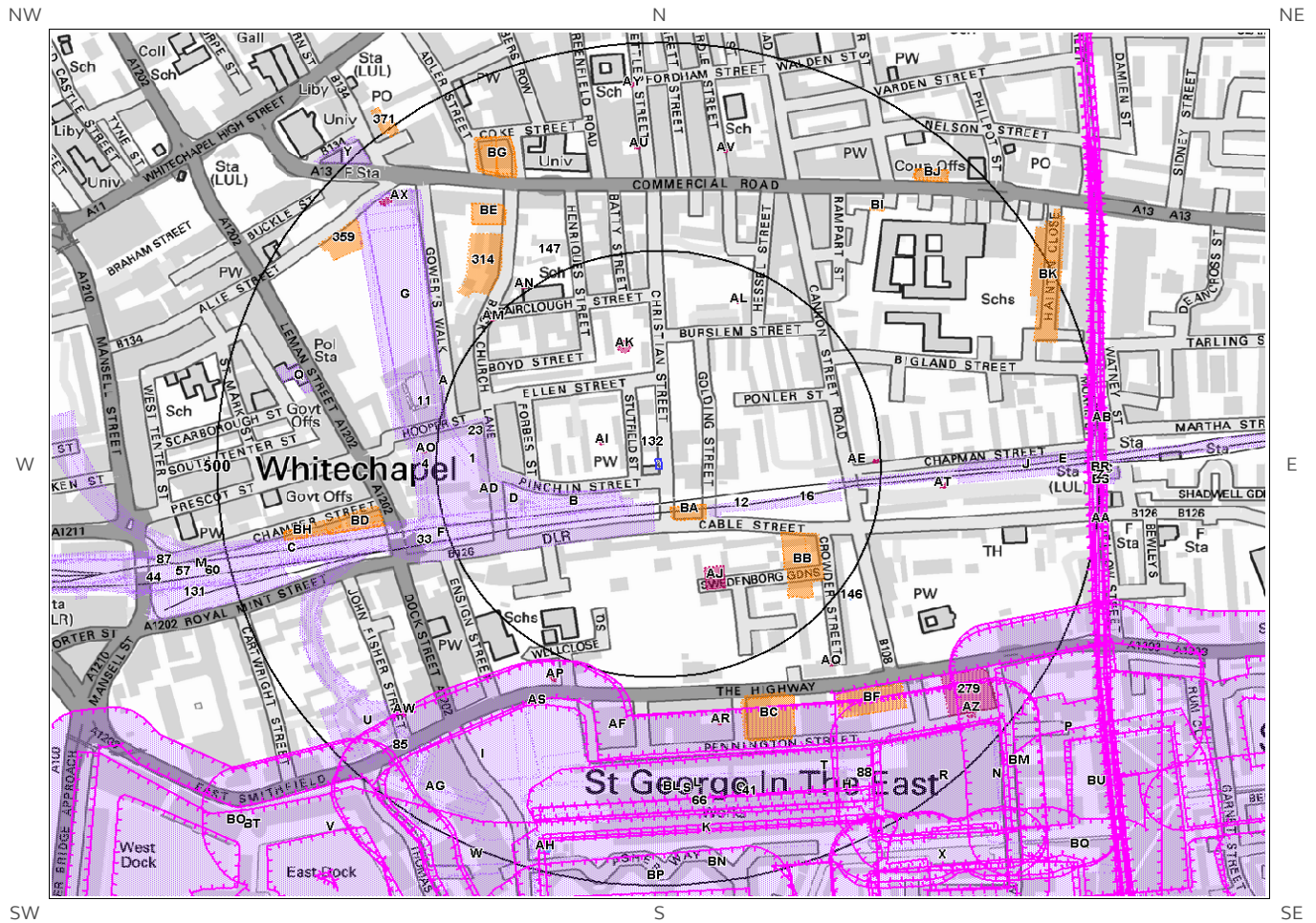
Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.



# 1. Historical Land Use



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# 1. Historical Industrial Sites

## 1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 131

ID	Distance [m]	Direction	Use	Date
1	39	S	Railway Sidings	1894
2B	44	SW	Railway Sidings	1898
3A	47	SW	Unspecified Commercial/Industrial	1894
4	47	SW	Railway Sidings	1894
5A	51	SW	Railway Sidings	1948
6A	51	SW	Railway Sidings	1966
7A	51	SW	Railway Sidings	1957
8A	54	SW	Railway Sidings	1920
9A	54	SW	Railway Sidings	1938
10B	56	SW	Railway Sidings	1882
11	64	SW	Railway Sidings	1898
12	68	SE	Railway Building	1957
13C	103	SW	Railway Sidings	1994
14C	103	SW	Railway Sidings	1976
15C	103	SW	Railway Sidings	1971
16	134	E	Railway Sidings	1957
17D	143	W	Railway Building	1966
18D	143	W	Railway Building	1957
19D	158	W	Railway Building	1882
20E	190	E	Railway Sidings	1898
21E	194	E	Railway Sidings	1899
22E	194	E	Railway Sidings	1899
23	198	W	Railway Building	1966
24F	203	W	Railway Station	1898
25F	227	W	Railway Station	1894
26F	230	W	Railway Station	1948
27F	230	W	Railway Building	1957
28F	233	W	Railway Station	1938
29F	233	W	Railway Station	1920
30F	237	W	Railway Station	1894
31T	247	S	Docks	1894
32S	250	S	Docks	1966
33	272	W	Railway Station	1882



34G	272	NW	Goods Shed	1920
35G	272	NW	Goods Shed	1938
36G	272	NW	Goods Shed	1966
37G	272	NW	Goods Depot	1948
38G	272	NW	Goods Shed	1957
39G	275	W	Railway Building	1894
40BL	292	S	Dock	1898
41	294	S	Unspecified Works	1994
42H	302	S	Docks	1938
43H	302	S	Docks	1920
44	305	W	Railway Sidings	1898
45O	305	S	Unspecified Docks	1898
46M	313	W	Railway Sidings	1882
47I	320	SW	Unspecified Warehouse	1948
48I	321	SW	Unspecified Warehouse	1920
49I	321	SW	Unspecified Warehouse	1938
50	330	W	Railway Sidings	1966
51BM	334	SE	Docks	1894
52J	338	E	Railway Sidings	1882
53J	345	E	Railway Sidings	1898
54K	351	S	Docks	1971
55K	351	S	Docks	1976
56R	357	SE	Dock	1957
57	364	W	Railway Sidings	1957
58L	369	S	Unspecified Warehouses	1920
59L	369	S	Unspecified Warehouses	1938
60	370	W	Railway Sidings	1898
61L	373	S	Unspecified Warehouses	1948
62M	378	W	Railway Sidings	1948
63N	391	SE	Unspecified Docks	1899
64N	391	SE	Unspecified Docks	1899
65O	397	S	Quay	1898
66	398	S	Quay	1948
67Q	398	W	Police Station	1971
68P	399	SE	Dock	1948
69P	399	SE	Dock	1957
70P	399	SE	Dock	1966
71Q	401	W	Police Station	1994
72Q	401	W	Police Station	1976
73O	405	S	Unspecified Quay	1898
74R	410	SE	Unspecified Warehouse	1920
75R	410	SE	Unspecified Warehouse	1938
76O	410	S	Unspecified Warehouse	1938
77O	410	S	Unspecified Warehouse	1920
78AX	411	NW	Railway Building	1894
79S	411	SE	Dock	1894



80O	412	S	Unspecified Warehouses	1948
81T	414	SE	Dock	1976
82T	414	SE	Dock	1971
83U	415	SW	Railway Building	1966
84U	416	SW	Railway Building	1957
85	421	SW	Railway Sidings	1957
86AG	429	SW	Railway Sidings	1882
87	431	W	Railway Sidings	1966
88	431	SE	Unspecified Tank	1994
89BN	435	S	Dock	1882
90M	441	W	Railway Sidings	1938
91M	441	W	Railway Sidings	1920
92BO	454	SW	Docks	1894
93V	458	SW	Dock	1966
94V	458	SW	Dock	1957
95BP	461	S	Dock	1948
96W	465	S	Unspecified Warehouses	1938
97W	465	S	Unspecified Warehouses	1920
98W	467	S	Unspecified Warehouses	1948
99AH	467	S	Unspecified Tank	1994
100X	477	SE	Dock	1966
101X	477	SE	Dock	1957
102Y	478	NW	Fire Station	1994
103Y	478	NW	Smithy	1948
104Y	478	NW	Fire Station	1976
105Y	478	NW	Fire Station	1971
106BQ	480	SE	Docks	1894
107Y	482	NW	Smithy	1938
108Y	482	NW	Smithy	1920
109Z	485	E	Railway Station	1898
110BR	485	E	Tunnel	1898
111Z	486	E	Railway Station	1894
112AA	486	E	Tunnel	1894
113Z	489	E	Railway Station	1899
114Z	489	E	Railway Station	1899
115AA	489	E	Tunnel	1899
116AA	489	E	Tunnel	1899
117BS	490	E	Tunnel	1894
118Z	490	E	Railway Station	1894
119AB	494	E	Railway Sidings	1966
120AB	494	E	Railway Sidings	1957
121Z	495	E	Unspecified Station	1966
122Z	495	E	London Transport Station	1994
123Z	495	E	London Transport Station	1976
124Z	495	E	Unspecified Station	1957
125Z	495	E	Unspecified Station	1971



126AC	495	E	Tunnel	1920
127AC	495	E	Tunnel	1938
128Z	496	E	Railway Station	1894
129BT	497	SW	Docks	1898
130BU	498	SE	Dock	1971
131	499	W	Railway Buildings	1948

## 1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

30

ID	Distance (m)	Direction	Use	Date
132	16	N	Unspecified Tank	1896
133AD	192	W	Unspecified Tank	1948
134AD	193	W	Unspecified Tank	1948
135AD	193	W	Unspecified Tank	1951
136AE	220	E	Unspecified Tank	1982
137AE	220	E	Unspecified Tank	1991
138AE	220	E	Unspecified Tank	1989
139AE	220	E	Unspecified Tank	1989
140AE	220	E	Unspecified Tank	1992
141AE	220	E	Unspecified Tank	1997
142AE	220	E	Unspecified Tank	1991
143AE	220	E	Unspecified Tank	1973
144AE	220	E	Unspecified Tank	1968
145AE	221	E	Unspecified Tank	1965
146	264	SE	Unspecified Tank	1957
147	275	NW	Unspecified Tank	1880
148AF	313	S	Unspecified Tank	1951
149AF	313	S	Unspecified Tank	1948
150AG	451	SW	Unspecified Tank	1991
151AG	452	SW	Unspecified Tank	1997
152AG	452	SW	Unspecified Tank	1992
153AH	467	S	Unspecified Tank	1982
154AH	467	S	Unspecified Tank	1991
155AH	467	S	Unspecified Tank	1989
156AH	467	S	Unspecified Tank	1991
157AH	467	S	Unspecified Tank	1989
158AH	468	S	Unspecified Tank	1997
159AH	468	S	Unspecified Tank	1992
160AH	468	S	Unspecified Tank	1991



161AH	468	S	Unspecified Tank	1991
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### 1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

146

ID	Distance (m)	Direction	Use	Date
162AI	63	W	Electricity Substation	1992
163AI	63	W	Electricity Substation	1994
164AI	63	W	Electricity Substation	1996
165AI	63	W	Electricity Substation	1991
166AI	63	W	Electricity Substation	1951
167AI	64	W	Electricity Substation	1981
168AI	64	W	Electricity Substation	1990
169AI	64	W	Electricity Substation	1991
170AJ	128	S	Electricity Substation	1948
171AJ	128	S	Electricity Substation	1951
172AJ	128	S	Electricity Substation	1948
173AK	133	N	Electricity Substation	1969
174AJ	135	SE	Electricity Substation	1948
175AJ	135	SE	Electricity Substation	1951
176AK	138	N	Electricity Substation	1994
177AK	138	N	Electricity Substation	1992
178AK	138	N	Electricity Substation	1996
179AK	138	N	Electricity Substation	1991
180AK	140	N	Electricity Substation	1981
181AK	140	N	Electricity Substation	1990
182AK	140	N	Electricity Substation	1991
183AK	141	N	Electricity Substation	1951
184AL	205	NE	Electricity Substation	1981
185AL	206	NE	Electricity Substation	1991
186AL	206	NE	Electricity Substation	1987
187AL	207	NE	Electricity Substation	1994
188AL	207	NE	Electricity Substation	1997
189AL	207	NE	Electricity Substation	1991
190AL	207	NE	Electricity Substation	1991
191AE	241	E	Electricity Substation	1982
192AE	241	E	Electricity Substation	1989
193AE	241	E	Electricity Substation	1991
194AE	241	E	Electricity Substation	1989
195AE	242	E	Electricity Substation	1997



196AE	242	E	Electricity Substation	1992
197AE	242	E	Electricity Substation	1991
198AE	242	E	Electricity Substation	1965
199AE	242	E	Electricity Substation	1973
200AE	242	E	Electricity Substation	1968
201AM	247	NW	Electricity Substation	1992
202AM	247	NW	Electricity Substation	1994
203AM	247	NW	Electricity Substation	1996
204AM	247	NW	Electricity Substation	1991
205AM	249	NW	Electricity Substation	1969
206AM	250	NW	Electricity Substation	1981
207AM	250	NW	Electricity Substation	1990
208AM	250	NW	Electricity Substation	1991
209AN	253	NW	Electricity Substation	1992
210AN	253	NW	Electricity Substation	1994
211AN	253	NW	Electricity Substation	1996
212AN	253	NW	Electricity Substation	1991
213AN	256	NW	Electricity Substation	1981
214AN	256	NW	Electricity Substation	1990
215AN	256	NW	Electricity Substation	1991
216AO	258	W	Electricity Substation	1991
217AO	259	W	Electricity Substation	1997
218AO	259	W	Electricity Substation	1992
219AO	259	W	Electricity Substation	1991
220AP	274	SW	Electricity Substation	1997
221AP	274	SW	Electricity Substation	1992
222AP	275	SW	Electricity Substation	1991
223AP	275	SW	Electricity Substation	1991
224AP	276	SW	Electricity Substation	1989
225AP	276	SW	Electricity Substation	1982
226AP	276	SW	Electricity Substation	1991
227AP	276	SW	Electricity Substation	1991
228AP	276	SW	Electricity Substation	1973
229AQ	299	SE	Electricity Substation	1989
230AQ	299	SE	Electricity Substation	1982
231AQ	299	SE	Electricity Substation	1989
232AQ	299	SE	Electricity Substation	1991
233AQ	300	SE	Electricity Substation	1997
234AQ	300	SE	Electricity Substation	1992
235AQ	300	SE	Electricity Substation	1991
236AQ	300	SE	Electricity Substation	1965
237AQ	300	SE	Electricity Substation	1973
238AQ	300	SE	Electricity Substation	1968
239AR	309	S	Electricity Substation	1989
240AR	309	S	Electricity Substation	1989
241AR	309	S	Electricity Substation	1991



242AR	309	S	Electricity Substation	1991
243AS	310	SW	Electricity Substation	1991
244AS	310	SW	Electricity Substation	1989
245AS	310	SW	Electricity Substation	1989
246AS	310	SW	Electricity Substation	1982
247AS	310	SW	Electricity Substation	1991
248AR	310	S	Electricity Substation	1991
249AR	310	S	Electricity Substation	1991
250AR	310	S	Electricity Substation	1997
251AR	310	S	Electricity Substation	1992
252AS	310	SW	Electricity Substation	1973
253AS	310	SW	Electricity Substation	1951
254AS	311	SW	Electricity Substation	1991
255AS	311	SW	Electricity Substation	1991
256AT	318	E	Electricity Substation	1982
257AT	318	E	Electricity Substation	1989
258AT	318	E	Electricity Substation	1991
259AT	318	E	Electricity Substation	1989
260AT	319	E	Electricity Substation	1997
261AT	319	E	Electricity Substation	1992
262AT	319	E	Electricity Substation	1991
263AT	319	E	Electricity Substation	1968
264AT	319	E	Electricity Substation	1973
265AT	319	E	Electricity Substation	1965
266AU	373	N	Electricity Substation	1994
267AU	373	N	Electricity Substation	1992
268AU	373	N	Electricity Substation	1991
269AU	373	N	Electricity Substation	1996
270AU	374	N	Electricity Substation	1991
271AU	374	N	Electricity Substation	1990
272AV	375	N	Electricity Substation	1981
273AV	375	N	Electricity Substation	1991
274AV	375	N	Electricity Substation	1987
275AV	376	N	Electricity Substation	1994
276AV	376	N	Electricity Substation	1997
277AV	376	N	Electricity Substation	1991
278AV	376	N	Electricity Substation	1991
279	404	SE	Electricity Substation	1991
280AW	407	SW	Electricity Substation	1997
281AW	407	SW	Electricity Substation	1992
282AW	407	SW	Electricity Substation	1991
283AW	407	SW	Electricity Substation	1991
284AW	407	SW	Electricity Substation	1991
285AW	407	SW	Electricity Substation	1989
286AW	407	SW	Electricity Substation	1991
287AW	407	SW	Electricity Substation	1989



288AX	431	NW	Electricity Substation	1992
289AX	431	NW	Electricity Substation	1994
290AX	431	NW	Electricity Substation	1996
291AX	431	NW	Electricity Substation	1991
292AX	434	NW	Electricity Substation	1981
293AX	434	NW	Electricity Substation	1991
294AX	434	NW	Electricity Substation	1990
295AY	448	N	Electricity Substation	1992
296AY	448	N	Electricity Substation	1994
297AY	448	N	Electricity Substation	1991
298AY	448	N	Electricity Substation	1996
299AY	450	N	Electricity Substation	1981
300AY	450	N	Electricity Substation	1990
301AY	450	N	Electricity Substation	1991
302AY	450	N	Electricity Substation	1969
303AZ	454	SE	Electricity Substation	1982
304AZ	455	SE	Electricity Substation	1973
305AZ	455	SE	Electricity Substation	1951
306AZ	456	SE	Electricity Substation	1992
307AZ	464	SE	Electricity Substation	1991

## 1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

## 1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 64

ID	Distance (m)	Direction	Use	Date
308BA	47	S	Garage	1965
309BA	47	S	Garage	1973
310BA	47	S	Garage	1963
311BB	155	SE	Coach Building Works	1948
312BB	156	SE	Coach Building Works	1948
313BB	156	SE	Coach Building Works	1951



314	274	NW	Garage	1951
315BC	288	S	Garage	1989
316BC	288	S	Garage	1991
317BC	288	S	Garage	1989
318BC	294	S	Garage	1992
319BC	294	S	Garage	1997
320BC	294	S	Garage	1991
321BD	317	W	Garage	1963
322BD	317	W	Garage	1973
323BD	317	W	Garage	1965
324BD	317	W	Garage	1991
325BD	318	W	Garage	1982
326BD	318	W	Garage	1991
327BD	318	W	Garage	1991
328BD	318	W	Garage	1989
329BE	330	NW	Garage	1991
330BE	330	NW	Garage	1992
331BD	331	W	Garage	1991
332BE	332	NW	Garage	1990
333BE	332	NW	Garage	1991
334BE	332	NW	Garage	1981
335BF	336	SE	Garage	1965
336BF	336	SE	Garage	1982
337BF	336	SE	Garage	1973
338BF	336	SE	Garage	1968
339BG	374	NW	Garage	1966
340BG	375	NW	Garage	1981
341BG	377	NW	Garage	1951
342BG	378	NW	Garage	1948
343BH	379	W	Garage	1991
344BH	379	W	Garage	1991
345BH	381	W	Garage	1982
346BI	382	NE	Garage	1948
347BI	383	NE	Garage	1957
348BG	386	NW	Garage	1981
349BG	388	NW	Garage	1951
350BG	388	NW	Garage	1948
351BG	388	NW	Garage	1969
352BG	388	NW	Garage	1962
353BH	403	W	Garage	1948
354BH	403	W	Garage	1951
355BH	406	W	Garage	1991
356BH	406	W	Garage	1991
357BH	406	W	Garage	1992
358BH	406	W	Garage	1997
359	419	NW	Garage	1969



360BJ	442	NE	Garage	1966
361BJ	442	NE	Garage	1987
362BJ	442	NE	Garage	1991
363BJ	444	NE	Garage	1994
364BJ	444	NE	Garage	1997
365BJ	444	NE	Garage	1991
366BJ	444	NE	Garage	1991
367BJ	445	NE	Garage	1966
368BJ	445	NE	Garage	1981
369BK	447	E	Garage	1966
370BK	487	NE	Garage	1966
371	489	NW	Garage	1951

## 1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

## 1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 34

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
372T	247	S	Docks	1894
373S	250	S	Docks	1966
374BL	292	S	Dock	1898
375H	302	S	Docks	1920
376H	302	S	Docks	1938
377BM	334	SE	Docks	1894
378K	351	S	Docks	1976
379K	351	S	Docks	1971
380R	357	SE	Dock	1957
381O	397	S	Quay	1898
382O	398	S	Quay	1948
383P	399	SE	Dock	1966
384P	399	SE	Dock	1948
385P	399	SE	Dock	1957
386S	411	SE	Dock	1894



387T	414	SE	Dock	1971
388T	414	SE	Dock	1976
389BN	435	S	Dock	1882
390BO	454	SW	Docks	1894
391V	458	SW	Dock	1966
392V	458	SW	Dock	1957
393BP	461	S	Dock	1948
394X	477	SE	Dock	1966
395X	477	SE	Dock	1957
396BQ	480	SE	Docks	1894
397BR	485	E	Tunnel	1898
398AA	486	E	Tunnel	1894
399AA	489	E	Tunnel	1899
400AA	489	E	Tunnel	1899
401BS	490	E	Tunnel	1894
402AC	495	E	Tunnel	1938
403AC	495	E	Tunnel	1920
404BT	497	SW	Docks	1898
405BU	498	SE	Dock	1971



## 2. Environmental Permits, Incidents and Registers Map



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- |  |                    |  |                               |  |  |
|--|--------------------|--|-------------------------------|--|--|
|  | Site Outline       |  | Recorded Pollution Incident   |  | RAS 3 & 4 Authorisations                                       |
|  | Search Buffers (m) |  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |
|  | 250                |  | Dangerous Substances (List 2) |  | Part A(2) and Part B Authorised Processes                      |
|  | 500                |  | Water Industry Referrals      |  | COMAH / NIHHS Sites  |
|  |                    |  | Licensed Discharge Consents   |  | Sites Determined as Contaminated Land                          |
|  |                    |  | Red List Discharge Consents   |  | Hazardous Substance Consents and Enforcements                  |



## 2. Environmental Permits, Incidents and Registers

### 2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

#### 2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

---

#### 2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

---

#### 2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

#### 2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

---

#### 2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

---



## 2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

7

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
3	202	E	534631 180953	Address: E1 Dry Cleaners Ltd, Railway Arch 111, Cannon Street Road, London, E1 2LY Process: Dry Cleaning Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
4	249	S	534467 180731	Address: Star Service Stations Ltd, 77-101 The Highway, London, E1 9BN Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
5	252	S	534486 180731	Address: Co-op St Katherines (Formerly Star Service Stations Ltd), 77-101 The Highway, London, E1 9BN Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
6	285	S	534499 180700	Address: Texaco(2), The Highway, E1 Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
7	324	SE	534599 180700	Address: Texaco(1), The Highway, E1 Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
8	364	SE	534662 180697	Address: Tower Connect, The Highway, 102-106 The Highway, London, E1 9BU Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified
9	375	SE	534691 180708	Address: Star Service Stations Ltd, 102-106 The Highway, London, E1 9BU Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B Enforcement: Enforcement Transfer Date of Enforcement: 15/07/2009 Comment: No Enforcement Notified

## 2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.



### 2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

0

Database searched and no data found.

### 2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

### 2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

1

The following records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Application Reference Number	NGR	Application Status	Application Date	Address	Details	Details of Enforcement Action
11A	390	NW	No Details	534192 181302	Approved	No Details	The Gunmakers Company, Proof House, 48, Commercial Road, London, Greater London, England, E1 1LP	No Details	Enforcement: No Enforcement Notified Date of Enforcement: No Details Comment: No Details

## 2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.



## 2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

### 2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

2

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
1	304	SW	534144.0 180859.0	Incident Date: 04-Jan-2002 Incident Identification: 50416.0 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2	338	N	534366.0 181321.0	Incident Date: 25-Oct-2003 Incident Identification: 198168.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

### 2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

Database searched and no data found.

## 2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site

0

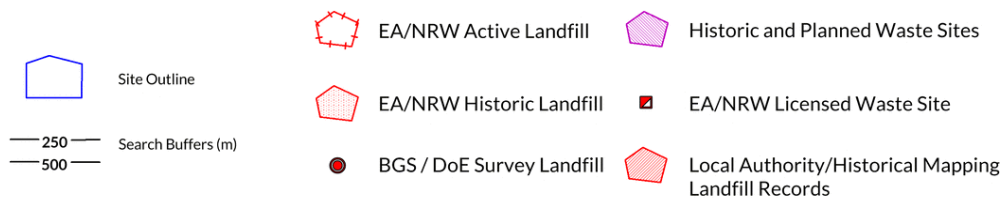
Database searched and no data found.



# 3. Landfill and Other Waste Sites Map



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# 3. Landfill and Other Waste Sites

## 3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

3

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
2	454	S		Site Address: Wapping Basin, St. George in the East, Tower Hamlets, London Waste Licence: - Site Reference: 8TH003, TOW003 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
3	603	SE		Site Address: Shadwell Basin, Eastern Dock, E1, London Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1378	SE		Site Address: Island Dock, Rotherhithe, Bermondsey, London Waste Licence: - Site Reference: 8SO004, SOU004 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: 31-Dec-1975



### 3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

1

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	888	E	535300.0 180800.0	Address: Shadwell Basin, E1, Eastern Dock, E1, London BGS Number: 2095.0 Risk: No risk to aquifer Waste Type: N/A

### 3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

1

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
6	453	S	534586 180426	Wapping Basin	Tower Hamlets London Borough Council	Polygon

## 3.2 Other Waste Sites

### 3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

### 3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

1

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

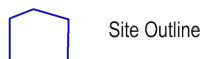
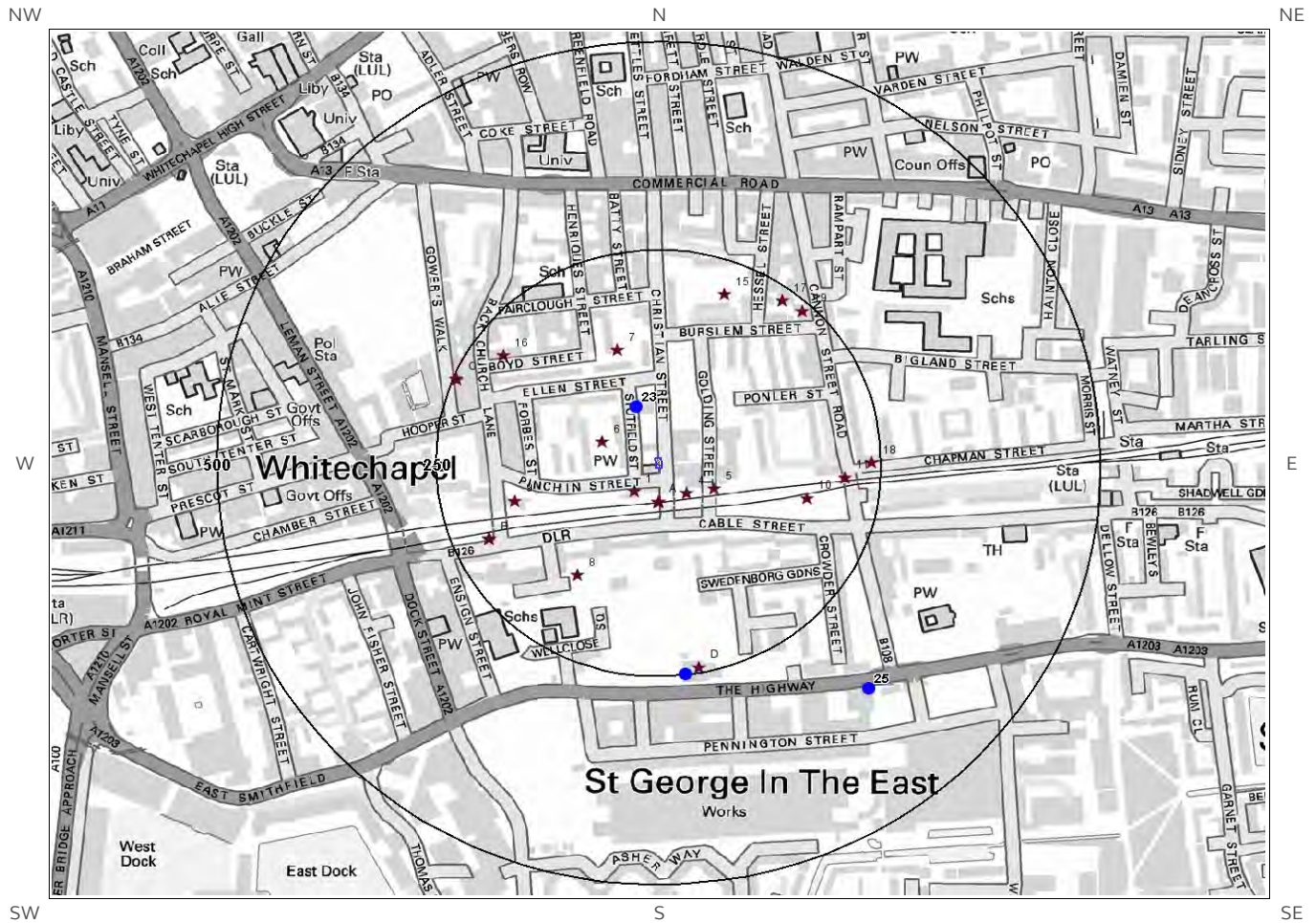
ID	Distance (m)	Direction	NGR	Details
Not shown	1154	W	533300 181252	Site Address: - Type: Mobile Plant for remediation of land Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMA001 EPR reference: EA/EPR/BB3708FZ/A001 Operator: Environmental Resources Management Limited Waste Management licence No: 401554 Issue Date: 25/06/2014 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Mobile Plant Sr2008 No.27 Correspondence Address: -



ID	Distance (m)	Direction	NGR	Details
Annual Tonnage: 0.0				



## 4. Current Land Use Map



Site Outline

★ Current Industrial Sites

— Electricity Transmission Cables

— 250 — Search Buffers (m)  
— 500 —

● Petrol & Fuel Sites

— Gas Transmission Pipelines



## 4. Current Land Uses

### 4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

22

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	37	SW	Skyrose Ltd	534398 180949	10, Pinchin & Johnsons Yard, London, Greater London, E1 1SD	Textiles, Fabrics, Silk and Machinery	Industrial Products
2A	40	S	City Matters	534426 180937	12, Pinchin & Johnsons Yard, London, Greater London, E1 1SD	Published Goods	Industrial Products
3A	40	S	Social Enterprise Printing	534426 180936	12, Pinchin & Johnsons Yard, London, Greater London, E1 1SD	Published Goods	Industrial Products
4	41	SE	London M O T Training	534458 180947	Unit 1-4, 8 Christian Street, London, Greater London, E1 1SE	Vehicle Repair, Testing and Servicing	Repair and Servicing
5	64	E	Ec1 Taxis	534488 180952	Railway Arch 102, Golding Street, London, Greater London, E1 1QH	Vehicle Repair, Testing and Servicing	Repair and Servicing
6	65	W	Electricity Sub Station	534362 181009	Greater London, E1	Electrical Features	Infrastructure and Facilities
7	138	N	Electricity Sub Station	534379 181119	Greater London, E1	Electrical Features	Infrastructure and Facilities
8	156	SW	Electricity Sub Station	534334 180849	Greater London, E1	Electrical Features	Infrastructure and Facilities
9	166	W	Artzone Co-operative Ltd	534262 180938	10, Back Church Lane, London, Greater London, E1 1LX	Published Goods	Industrial Products
10	169	E	J M G Cargo	534595 180941	107 Railway Arches, Cannon Street Road, London, Greater London, E1 2LY	Distribution and Haulage	Transport, Storage and Delivery
11	208	E	Fabians Haberdashery & Trimmings	534638 180966	110 Railway Arches, Cannon Street Road, London, Greater London, E1 2LY	Ropes, Nets and Cordage	Industrial Products
12B	209	SW	T T S the Tint Shop	534233 180892	25, Cable Street, London, Greater London, E1 8NT	Industrial Coatings and Finishings	Industrial Products
13B	209	SW	Tower Tyres	534233 180892	25, Cable Street, London, Greater London, E1 8NT	Vehicle Parts and Accessories	Motoring
14B	209	SW	Silk Motors UK Ltd	534233 180892	25, Cable Street, London, Greater London, E1 8NT	Secondhand Vehicles	Motoring
15	210	N	Electricity Sub Station	534501 181186	Greater London, E1	Electrical Features	Infrastructure and Facilities
16	214	NW	GAP Group	534249	Back Church Lane, London,	Construction and Tool	Hire Services



ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
			Ltd	181112	Greater London, E1 1LX	Hire	
17	234	NE	Mansell Street Garage	534567 181178	145-147, Cannon Street Road, London, Greater London, E1 2LX	Vehicle Repair, Testing and Servicing	Repair and Servicing
18	239	E	Electricity Sub Station	534669 180984	Greater London, E1	Electrical Features	Infrastructure and Facilities
19	240	NE	Tech O Phone	534590 181166	143, Cannon Street Road, London, Greater London, E1 2LX	Electronic Equipment	Industrial Products
20D	243	S	Co-operative Filling Station	534472 180738	77-101, The Highway, London, Greater London, E1W 2BN	Petrol and Fuel Stations	Road and Rail
21C	247	NW	Maersk Broker UK Ltd	534196 181084	New Loom House, 101 Back Church Lane, London, Greater London, E1 1PY	Distribution and Haulage	Transport, Storage and Delivery
22C	248	NW	Hog Furnishing	534195 181085	New Loom House 101, Back Church Lane, London, Greater London, E1 1LU	Office and Shop Equipment	Industrial Products

## 4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

3

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
23	66	N	534401 181050	OBSOLETE	Back Church Lane, Whitechapel, London, Inner London, E1 1LX	Not Applicable	Obsolete
24D	250	S	534457 180729	TEXACO	77-101, The Highway, Shadwell, London, Inner London, E1W 2BN	No	Open
25	354	SE	534666 180712	BP	102-106, The Highway, Shadwell, London, Inner London, E1W 2BU	No	Open



### 4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

---

### 4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.

---



# 5. Geology

## 5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

---

## 5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT

---

## 5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
LC-XCZS	LONDON CLAY FORMATION	CLAY, SILT AND SAND

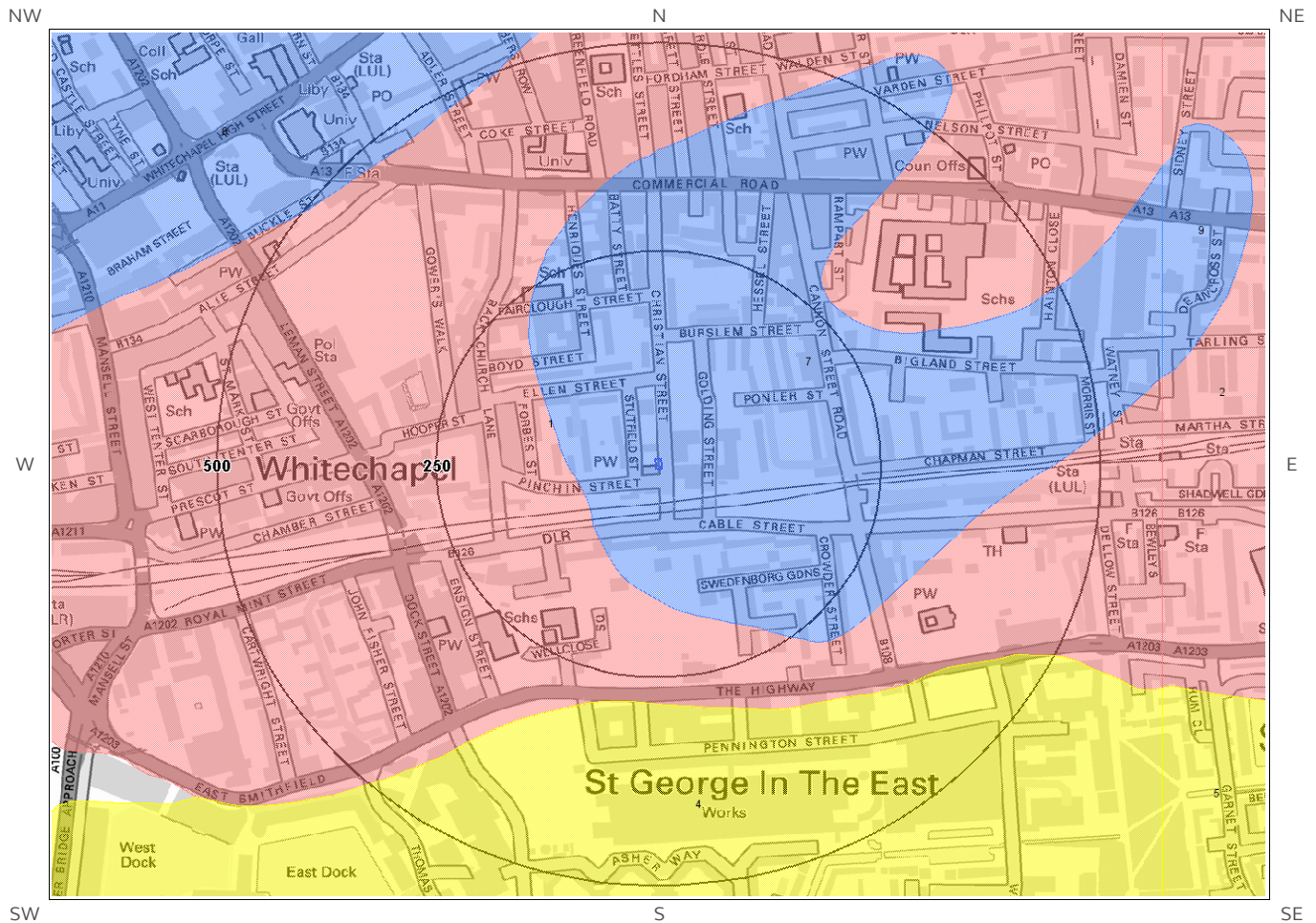
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

---

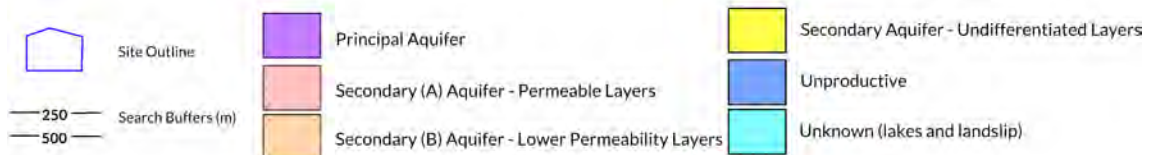


# 6 Hydrogeology and Hydrology

## 6a. Aquifer Within Superficial Geology

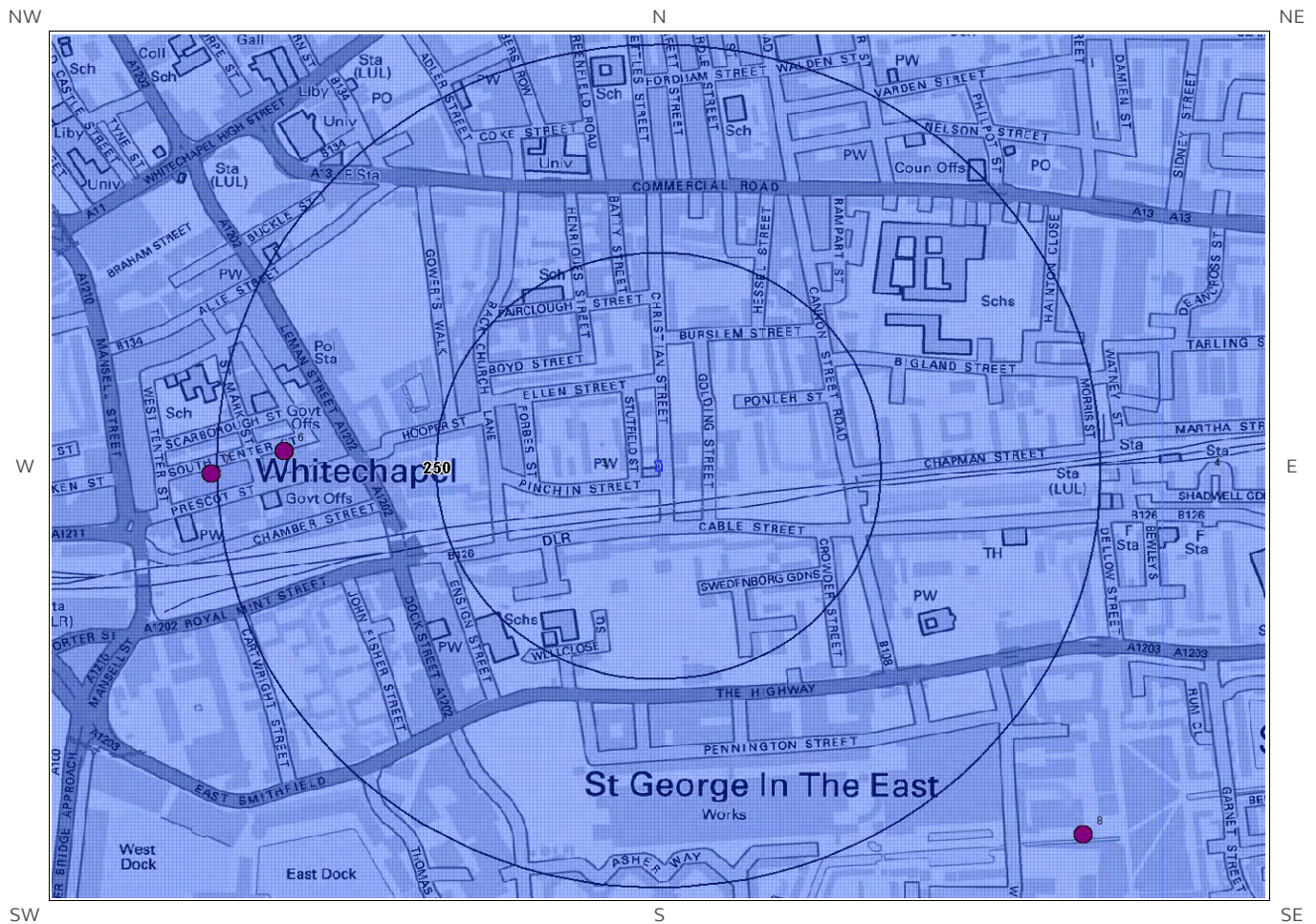


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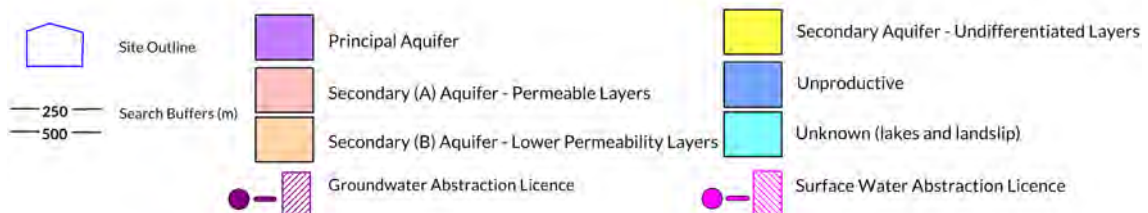




# 6b. Aquifer Within Bedrock Geology and Abstraction Licences

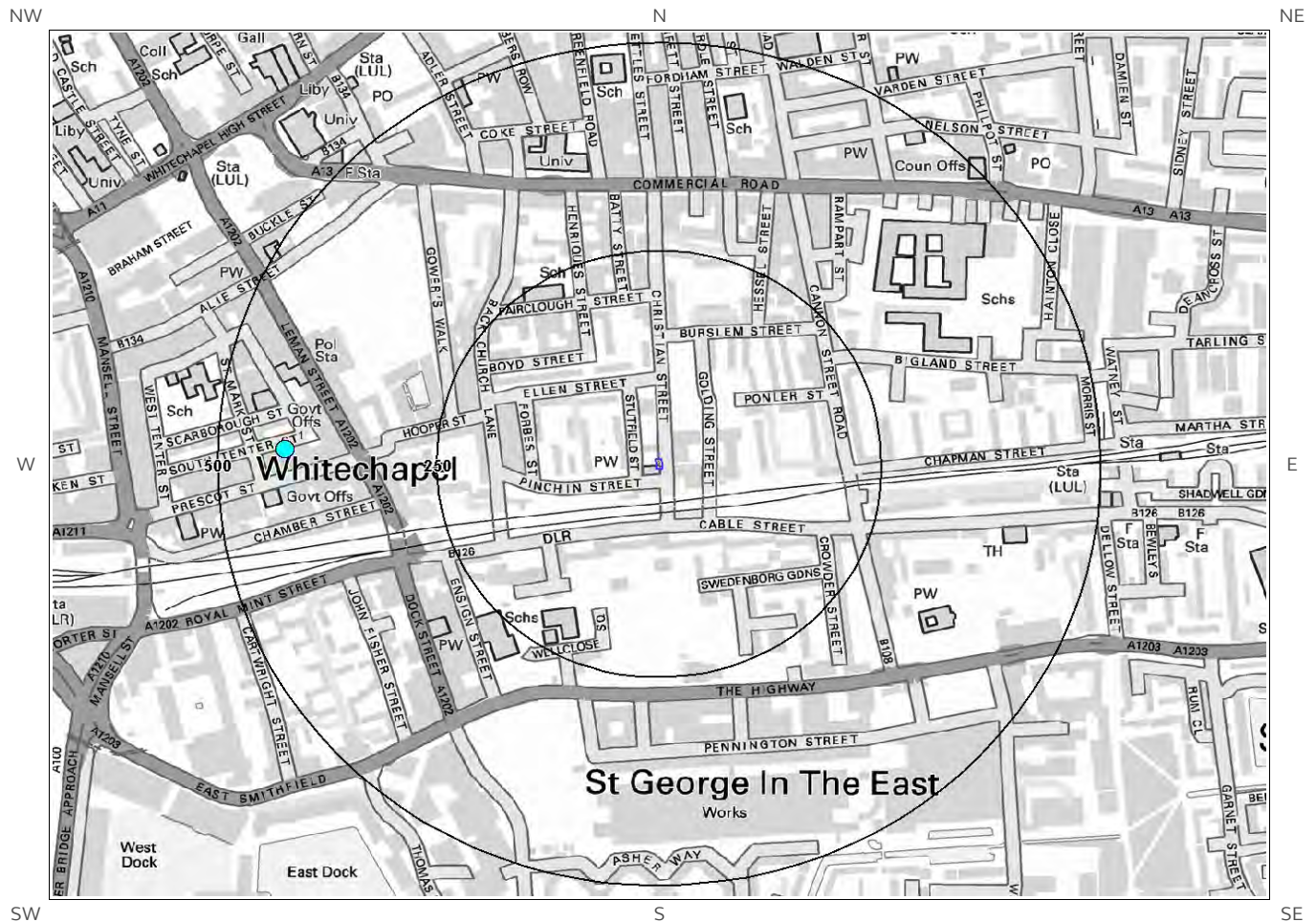


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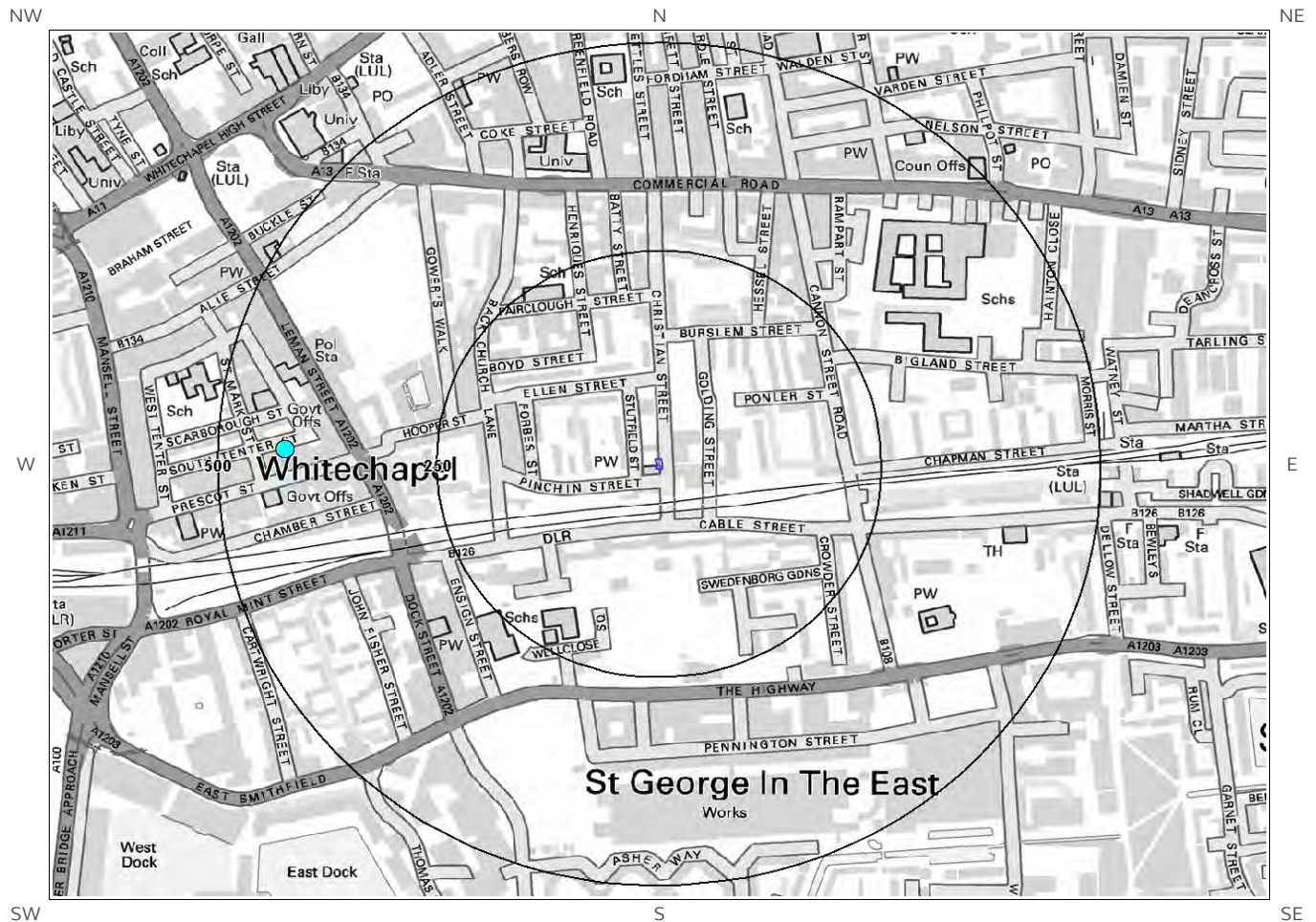
# 6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



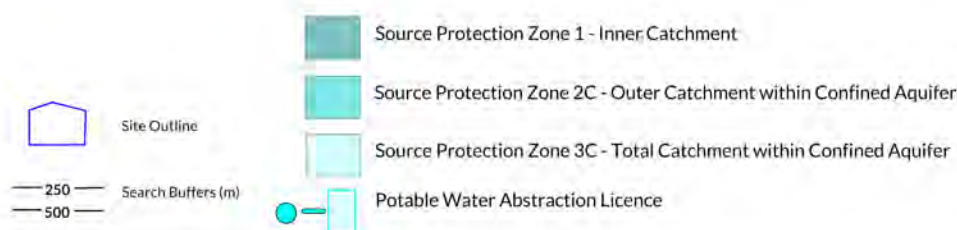
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# 6d. Hydrogeology – Source Protection Zones within confined aquifer

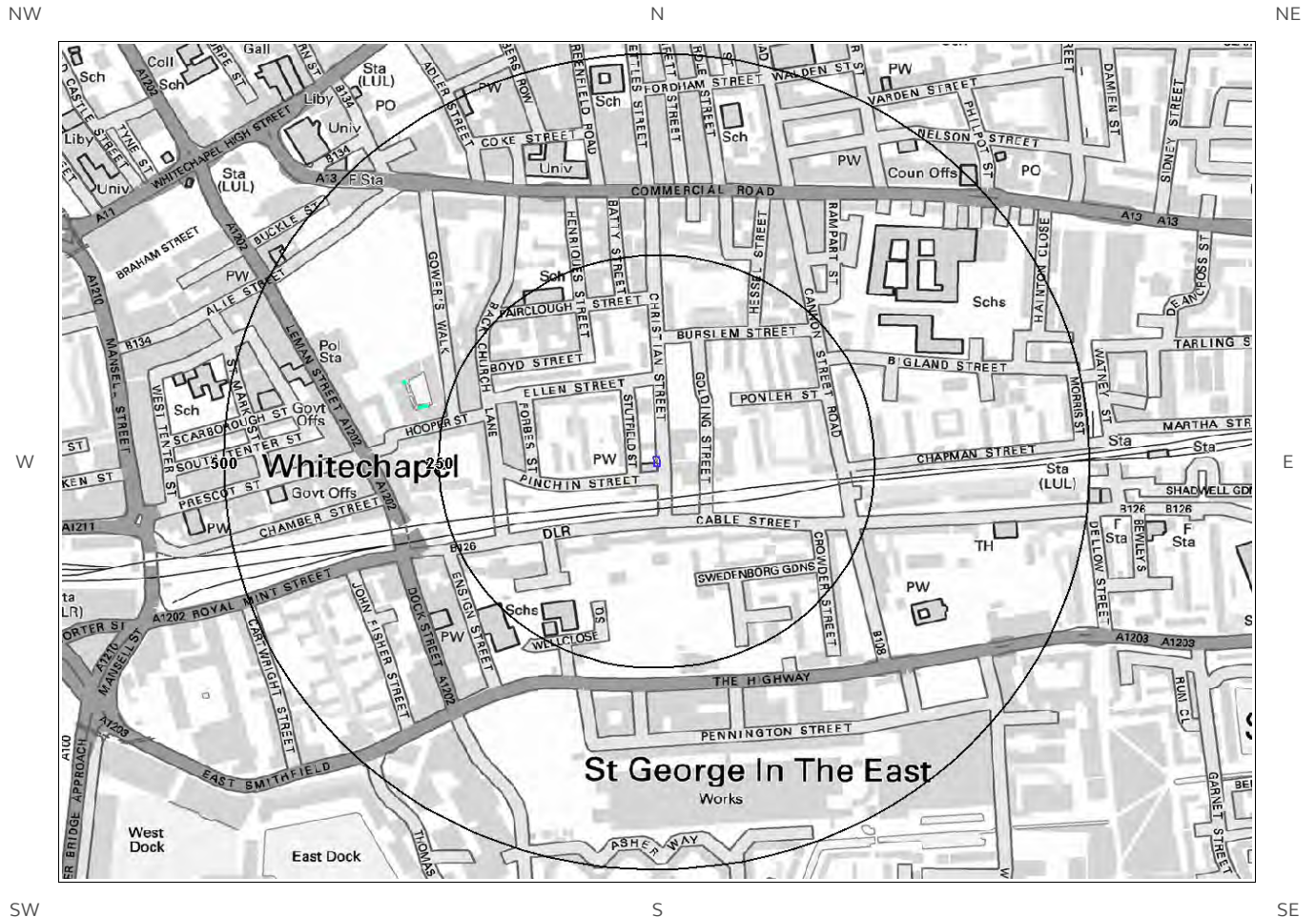


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# 6e. Hydrology – Watercourse Network and River Quality



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# 6. Hydrogeology and Hydrology

## 6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
7	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
1	87	W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	280	S	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	475	NW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

## 6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
3	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow



## 6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
6	423	W	534000 181000	<p>Status: Historical Licence No: 28/39/39/0048 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT EASTGATE, 73 LEMAN STREET, LONDON E1 Data Type: Point Name: NATIONAL WESTMINSTER BANK LIMITED</p> <p>Annual Volume (m³): 28217 Max Daily Volume (m³): 148.2 Original Application No: - Original Start Date: 09/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 06/08/1981 Version End Date:</p>
7	507	W	533917 180973	<p>Status: Active Licence No: TH/039/0039/017 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: GRANGE TOWER HOTEL BOREHOLE Data Type: Point Name: GLOBAL GRANGE LIMITED</p> <p>Annual Volume (m³): 63875 Max Daily Volume (m³): 175 Original Application No: - Original Start Date: 05/11/2009 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 30/09/2010 Version End Date:</p>
8	649	SE	534910 180540	<p>Status: Historical Licence No: 28/39/39/0184 Details: Supply to a Canal for Throughflow Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT WAPPING WOOD CANAL, JOHN RENNIE WALK, LONDON Data Type: Point Name: LONDON BOROUGH OF TOWER HAMLETS</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/02/1998 Expiry Date: 31/12/2004 Issue No: 100 Version Start Date: 01/04/1999 Version End Date:</p>
Not shown	724	W	533700 180970	<p>Status: Active Licence No: 28/39/39/0002 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: IBEX HOUSE, THE MINORIES, LONDON. EC3 Data Type: Point Name: Ibex London Limited</p> <p>Annual Volume (m³): 28185 Max Daily Volume (m³): 90.9 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 102 Version Start Date: 17/02/2016 Version End Date:</p>
Not shown	728	W	533700 180900	<p>Status: Historical Licence No: 28/39/39/0002 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: IBEX HOUSE, THE MINORIES, LONDON. EC3 Data Type: Point Name: MARS PENSION TRUSTEES LIMITED</p> <p>Annual Volume (m³): 28185 Max Daily Volume (m³): 90.9 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	728	W	533700 180900	<p>Status: Historical Licence No: 28/39/39/0002 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT IBEX HOUSE, THE MINORIES, LONDON. EC3 Data Type: Point Name: MARS PENSION TRUSTEES LIMITED</p> <p>Annual Volume (m³): 28185 Max Daily Volume (m³): 90.9 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1029	W	533400 181100	<p>Status: Historical Licence No: 28/39/39/0066 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: FOUR BOREHOLES AT FURNACE HOUSE, 101/106 FENCHURCH STREET Data Type: Point Name: PRUDENTIAL ASSURANCE CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/12/1970 Version End Date:</p>
Not shown	1036	W	533390 181060	<p>Status: Historical Licence No: 28/39/39/0066 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: FURNACE HOUSE, 101/106 FENCHURCH STREET-BOREHOLE A Data Type: Point Name: DB6 LIMITED</p> <p>Annual Volume (m³): 24821 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1057	NE	534890 181940	<p>Status: Historical Licence No: 28/39/39/0195 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT ALBION YARD, LONDON E1 Data Type: Point Name: PENINSULA WATER LIMITED</p> <p>Annual Volume (m³): 274500 Max Daily Volume (m³): 750 Original Application No: - Original Start Date: 01/12/2000 Expiry Date: 31/12/2009 Issue No: 3 Version Start Date: 01/07/2003 Version End Date:</p>
Not shown	1163	W	533280 181200	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT BANKSIDE HOUSE, 107/112 LEADENHALL STREET Data Type: Point Name: PRUDENTIAL ASSURANCE CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/03/1966 Version End Date:</p>
Not shown	1163	W	533280 181200	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BANKSIDE HOUSE, 107/112 LEADENHALL STREET - BOREHOLE B Data Type: Point Name: SHIATZU HOLDINGS LIMITED</p> <p>Annual Volume (m³): 12574 Max Daily Volume (m³): 50 Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1169	W	533270 181180	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BANKSIDE HOUSE, 107/112 LEADENHALL STREET- BOREHOLE A Data Type: Point Name: SHIATZU HOLDINGS LIMITED</p> <p>Annual Volume (m³): 12574 Max Daily Volume (m³): 50 Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1169	W	533270 181180	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT BANKSIDE HOUSE, 107/112 LEADENHALL STREET Data Type: Point Name: PRUDENTIAL ASSURANCE CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 14/03/1966 Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Active Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Historical Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Active Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Historical Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1207	W	533220 180890	<p>Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LNDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Active Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details	
Not shown	1237	W	533200 180800	Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED	Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:
Not shown	1237	W	533200 180800	Status: Historical Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED	Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:
Not shown	1237	W	533200 180800	Status: Historical Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED	Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:
Not shown	1237	W	533200 180800	Status: Historical Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED	Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:
Not shown	1237	W	533200 180800	Status: Historical Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED	Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 04/06/2001 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT GLA BUILDING, TOOLEY STREET, LONDON SE1 Data Type: Point Name: LONDON BRIDGE HOLDINGS LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/12/2013 Issue No: 2 Version Start Date: 13/01/2003 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT GLA BUILDING, TOOLEY STREET, LONDON SE1 Data Type: Point Name: LONDON BRIDGE HOLDINGS LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/12/2013 Issue No: 2 Version Start Date: 13/01/2003 Version End Date:



ID	Distance (m)	Direction	NGR	Details	
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED	Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED	Annual Volume (m³): 300000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 5 Version Start Date: 17/05/2007 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED	Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED	Annual Volume (m³): 300000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 5 Version Start Date: 17/05/2007 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED	Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:
Not shown	1277	SW	533450 180150	Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED	Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:



ID	Distance (m)	Direction	NGR	Details	
Not shown	1277	SW	533450 180150	Status: Active Licence No: TH/039/0042/022 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: MLFH Limited	Annual Volume (m³): 400000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 05/06/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 30/01/2014 Version End Date:
Not shown	1277	SW	533450 180150	Status: Active Licence No: TH/039/0042/022 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: MLFH Limited	Annual Volume (m³): 400000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 05/06/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 30/01/2014 Version End Date:
Not shown	1290	W	533140 180850	Status: Active Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST	Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:
Not shown	1290	W	533140 180850	Status: Active Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST	Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:
Not shown	1290	W	533140 180850	Status: Historical Licence No: 28/39/39/0011 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST	Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:
Not shown	1290	W	533140 180850	Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST	Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:
Not shown	1290	W	533140 180850	Status: Historical Licence No: 28/39/39/0011 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST	Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:



ID	Distance (m)	Direction	NGR	Details
Not shown	1290	W	533140 180850	<p>Status: Active Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: 14/11/2006 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT GLA BUILDING, TOOLEY STREET, LONDON SE1 Data Type: Point Name: LONDON BRIDGE HOLDINGS LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/12/2013 Issue No: 2 Version Start Date: 13/01/2003 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 300000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 5 Version Start Date: 17/05/2007 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT GLA BUILDING, TOOLEY STREET, LONDON SE1 Data Type: Point Name: LONDON BRIDGE HOLDINGS LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/12/2013 Issue No: 2 Version Start Date: 13/01/2003 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: 13/12/2005 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 300000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 5 Version Start Date: 17/05/2007 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Active Licence No: TH/039/0042/022 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: MLFH Limited</p> <p>Annual Volume (m³): 400000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 05/06/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 30/01/2014 Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Active Licence No: TH/039/0042/022 Details: Non-Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: MLFH Limited</p> <p>Annual Volume (m³): 400000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 05/06/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 30/01/2014 Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: LEADENHALL STREET, LONDON EC3 - BOREHOLE B Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: LEADENHALL STREET, LONDON EC3 - BOREHOLE A Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: LEADENHALL STREET, LONDON EC3 - BOREHOLE C Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'E' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'C' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Active Licence No: TH/039/0039/029 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: THE BATHHOUSE, CHESHIRE STREET, LONDON E2-BOREHOLE A Data Type: Point Name: Magee</p> <p>Annual Volume (m³): 40000 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 13/08/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 13/08/2010 Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Historical Licence No: 28/39/39/0193 Details: General use relating to Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT THE BATHHOUSE, CHESHIRE STREET, LONDON E2 Data Type: Point Name: METROPOLITAN WATER CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: 31/12/2009 Issue No: 1 Version Start Date: 01/10/2000 Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Historical Licence No: 28/39/39/0193 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: THAMES GROUNDWATER Point: THE BATHHOUSE, CHESHIRE STREET, LONDON E2-BOREHOLE A Data Type: Point Name: PENINSULA WATER LIMITED</p> <p>Annual Volume (m³): 80000 Max Daily Volume (m³): 360 Original Application No: - Original Start Date: 02/08/2000 Expiry Date: 31/12/2009 Issue No: 5 Version Start Date: 01/01/2007 Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Historical Licence No: 28/39/39/0193 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT THE BATHHOUSE, CHESHIRE STREET, LONDON E2 Data Type: Point Name: METROPOLITAN WATER CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/08/2000 Expiry Date: 31/12/2009 Issue No: 3 Version Start Date: 08/08/2002 Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Historical Licence No: 28/39/39/0193 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: THE BATHHOUSE, CHESHIRE STREET, LONDON E2-BOREHOLE A Data Type: Point Name: PENINSULA WATER LIMITED</p> <p>Annual Volume (m³): 80000 Max Daily Volume (m³): 360 Original Application No: - Original Start Date: 02/08/2000 Expiry Date: 31/12/2009 Issue No: 5 Version Start Date: 03/08/2003 Version End Date:</p>
Not shown	1492	NW	533138 181746	<p>Status: Active Licence No: TH/039/0039/038 Details: Evaporative Cooling Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT 5 BROADGATE LONDON Data Type: Point Name: UBS AG</p> <p>Annual Volume (m³): 73000 Max Daily Volume (m³): 200 Original Application No: - Original Start Date: 19/11/2012 Expiry Date: 31/03/2025 Issue No: 3 Version Start Date: 22/09/2015 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1523	W	532900 181000	<p>Status: Historical Licence No: 28/39/39/0056 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: THREE BOREHOLES AT 9 GRACECHURCH STREET, LONDON EC3 Data Type: Point Name: J.P.I.T. (Pte) LIMITED</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 09/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/01/1997 Version End Date:</p>
Not shown	1617	W	532810 181100	<p>Status: Active Licence No: 28/39/39/0166 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 71 LOMBARD STREET- BOREHOLE A Data Type: Point Name: Ashton Global Investments Ltd</p> <p>Annual Volume (m³): 6819 Max Daily Volume (m³): 250.94 Original Application No: - Original Start Date: 25/03/1982 Expiry Date: - Issue No: 102 Version Start Date: 24/06/2009 Version End Date:</p>
Not shown	1617	W	532810 181100	<p>Status: Active Licence No: 28/39/39/0166 Details: Hydraulic Testing Direct Source: THAMES GROUNDWATER Point: 71 LOMBARD STREET- BOREHOLE A Data Type: Point Name: Ashton Global Investments Ltd</p> <p>Annual Volume (m³): 6819 Max Daily Volume (m³): 250.94 Original Application No: - Original Start Date: 25/03/1982 Expiry Date: - Issue No: 102 Version Start Date: 24/06/2009 Version End Date:</p>
Not shown	1627	W	532800 181100	<p>Status: Historical Licence No: 28/39/39/0166 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 71 LOMBARD STREET, LONDON - BOREHOLE Data Type: Point Name: LLOYDS TSB BANK PLC</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 25/03/1982 Expiry Date: - Issue No: 100 Version Start Date: 06/04/2000 Version End Date:</p>
Not shown	1627	W	532800 181100	<p>Status: Historical Licence No: 28/39/39/0166 Details: Hydraulic Testing Direct Source: THAMES GROUNDWATER Point: 71 LOMBARD STREET, LONDON - BOREHOLE Data Type: Point Name: LLOYDS TSB BANK PLC</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 25/03/1982 Expiry Date: - Issue No: 100 Version Start Date: 06/04/2000 Version End Date:</p>
Not shown	1654	NW	533544 182389	<p>Status: Active Licence No: TH/039/0039/006 Details: Heat Pump Direct Source: THAMES GROUNDWATER Point: BOUNDARY STREET - ABSTRACTION BOREHOLE Data Type: Point Name: 2 - 4 Boundary Street Limited</p> <p>Annual Volume (m³): 157680 Max Daily Volume (m³): 432 Original Application No: - Original Start Date: 29/10/2009 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: 20/02/2017 Version End Date:</p>
Not shown	1733	W	532700 180800	<p>Status: Historical Licence No: 28/39/39/0094 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT 98/106 CANNON STREET, LONDON EC4 Data Type: Point Name: ASGARD ESTATES LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/02/1990 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1735	W	532800 181600	<p>Status: Active Licence No: 28/39/39/0129 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: SALISBURY HOUSE, LONDON WALL, LONDON EC2 - THREE BOREHOLES Data Type: Point Name: MREF II Salisbury Property Limited</p> <p>Annual Volume (m³): 25457 Max Daily Volume (m³): 81.8 Original Application No: - Original Start Date: 12/06/1967 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date:</p>
Not shown	1735	W	532800 181600	<p>Status: Historical Licence No: 28/39/39/0129 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: THREE BOREHOLES AT SALISBURY HOUSE, LONDON WALL, LONDON EC2 Data Type: Point Name: MREF II Salisbury Property Limited</p> <p>Annual Volume (m³): 25457 Max Daily Volume (m³): 81.8 Original Application No: - Original Start Date: 12/06/1967 Expiry Date: - Issue No: 101 Version Start Date: 05/04/2012 Version End Date:</p>
Not shown	1736	W	532700 181200	<p>Status: Active Licence No: 28/39/39/0024 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BANK OF ENGLAND, THREADNEEDLE STREET - NINE BOREHOLES Data Type: Point Name: BANK OF ENGLAND</p> <p>Annual Volume (m³): 36368 Max Daily Volume (m³): 127 Original Application No: - Original Start Date: 10/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 09/11/1993 Version End Date:</p>
Not shown	1736	W	532700 181200	<p>Status: Historical Licence No: 28/39/39/0024 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: NINE BOREHOLES AT THE BANK OF ENGLAND, THREADNEEDLE STREET Data Type: Point Name: BANK OF ENGLAND</p> <p>Annual Volume (m³): 36368 Max Daily Volume (m³): 127 Original Application No: - Original Start Date: 10/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 09/11/1993 Version End Date:</p>
Not shown	1836	W	532600 181200	<p>Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc</p> <p>Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/04/2000 Version End Date:</p>
Not shown	1836	W	532600 181200	<p>Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc</p> <p>Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/04/2000 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details	
Not shown	1836	W	532600 181200	Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'C' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc	Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/04/2000 Version End Date:
Not shown	1836	W	532600 181200	Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc	Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/04/2000 Version End Date:
Not shown	1857	NW	532900 182050	Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TRITON COURT, FINSBURY SQUARE-BOREHOLE D Data Type: Point Name: THE TRITON COURT LIMITED PARTNERSHIP	Annual Volume (m³): 36368 Max Daily Volume (m³): 118 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 104 Version Start Date: 11/01/2007 Version End Date:
Not shown	1865	NW	532890 182050	Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TRITON COURT, FINSBURY SQUARE-BOREHOLE C Data Type: Point Name: THE TRITON COURT LIMITED PARTNERSHIP	Annual Volume (m³): 36368 Max Daily Volume (m³): 118 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 104 Version Start Date: 11/01/2007 Version End Date:
Not shown	1872	SE	535540 179470	Status: Historical Licence No: 28/39/42/0048 Details: Make-Up Or Top Up Water Direct Source: THAMES GROUNDWATER Point: CANADA WATER, SURREY QUAYS ROAD,LONDON - BOREHOLE 'B' Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK	Annual Volume (m³): 67500 Max Daily Volume (m³): 229 Original Application No: - Original Start Date: 13/08/1991 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2005 Version End Date:
Not shown	1872	SE	535540 179470	Status: Historical Licence No: 28/39/42/0048 Details: Supply to a Canal for Throughflow Direct Source: THAMES GROUNDWATER Point: CANADA WATER, SURREY QUAYS ROAD, BOREHOLE 'B' Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/08/1991 Expiry Date: - Issue No: 100 Version Start Date: 22/04/1998 Version End Date:



ID	Distance (m)	Direction	NGR	Details
Not shown	1880	SE	535533 179454	<p>Status: Active Licence No: 28/39/42/0048 Details: Make-Up Or Top Up Water Direct Source: THAMES GROUNDWATER Point: BOREHOLE B AT CANADA WATER, SURREY QUAYS Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK</p> <p>Annual Volume (m³): 67500 Max Daily Volume (m³): 229 Original Application No: - Original Start Date: 13/08/1991 Expiry Date: 31/03/2028 Issue No: 102 Version Start Date: 15/10/2013 Version End Date:</p>
Not shown	1881	NW	532870 182050	<p>Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TRITON COURT, FINSBURY SQUARE-BOREHOLE B Data Type: Point Name: THE TRITON COURT LIMITED PARTNERSHIP</p> <p>Annual Volume (m³): 36368 Max Daily Volume (m³): 118 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 104 Version Start Date: 11/01/2007 Version End Date:</p>
Not shown	1913	NW	532800 182000	<p>Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'C' AT ROYAL LONDON HOUSE, FINSBURY SQUARE, LONDON Data Type: Point Name: ROYAL LONDON MUTUAL INS SOC LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/11/1995 Version End Date:</p>
Not shown	1913	NW	532800 182000	<p>Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT ROYAL LONDON HOUSE, FINSBURY SQUARE, LONDON Data Type: Point Name: ROYAL LONDON MUTUAL INS SOC LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/11/1995 Version End Date:</p>
Not shown	1913	NW	532800 182000	<p>Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT ROYAL HOUSE, FINSBURY SQUARE, LONDON Data Type: Point Name: ROYAL LONDON MUTUAL INS SOC LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 17/11/1995 Version End Date:</p>
Not shown	1952	S	535101 179144	<p>Status: Active Licence No: TH/039/0042/021 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: POINT 'A' AT SOUTHWARK PARK Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK</p> <p>Annual Volume (m³): 2100 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 27/02/2017 Version End Date:</p>
Not shown	1952	S	535101 179144	<p>Status: Active Licence No: TH/039/0042/021 Details: Make-Up Or Top Up Water Direct Source: THAMES GROUNDWATER Point: POINT 'A' AT SOUTHWARK PARK Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK</p> <p>Annual Volume (m³): 2100 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 27/02/2017 Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1952	S	535101 179144	Status: Active Licence No: TH/039/0042/021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: POINT 'A' AT SOUTHWARK PARK Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK Annual Volume (m³): 2100 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 27/02/2017 Version End Date:
Not shown	1989	SE	536154 179986	Status: Active Licence No: TH/039/0042/045 Details: Lake & Pond Throughflow Direct Source: THAMES GROUNDWATER Point: STAVE HILL ECOLOGY PARK BOREHOLE Data Type: Point Name: Southwark Council Annual Volume (m³): 10000 Max Daily Volume (m³): 30 Original Application No: - Original Start Date: 13/08/2018 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 13/08/2018 Version End Date:
Not shown	1996	S	535110 179100	Status: Historical Licence No: TH/039/0042/001 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT SOUTHWARK PARK, SOUTHWARK LONDON Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK Annual Volume (m³): 25000 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 18/05/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 18/05/2009 Version End Date:
Not shown	1996	S	535110 179100	Status: Historical Licence No: TH/039/0042/001 Details: Make-Up Or Top Up Water Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT SOUTHWARK PARK, SOUTHWARK LONDON Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK Annual Volume (m³): 25000 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 18/05/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 18/05/2009 Version End Date:

## 6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

## 6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details
1	423	W	534000 181000	Status: Historical Licence No: 28/39/39/0048 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Annual Volume (m³): 28217 Max Daily Volume (m³): 148.2 Original Application No: - Original Start Date: 09/05/1966 Expiry Date: -



ID	Distance (m)	Direction	NGR	Details
				<p>Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT EASTGATE, 73 LEMAN STREET, LONDON E1 Data Type: Point Name: NATIONAL WESTMINSTER BANK LIMITED</p> <p>Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	724	W	533700 180970	<p>Status: Active Licence No: 28/39/39/0002 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: IBEX HOUSE, THE MINORIES, LONDON. EC3 Data Type: Point Name: Ibex London Limited</p> <p>Annual Volume (m³): 28185 Max Daily Volume (m³): 90.9 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:</p>
Not shown	728	W	533700 180900	<p>Status: Historical Licence No: 28/39/39/0002 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: IBEX HOUSE, THE MINORIES, LONDON. EC3 Data Type: Point Name: MARS PENSION TRUSTEES LIMITED</p> <p>Annual Volume (m³): 28185 Max Daily Volume (m³): 90.9 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:</p>
Not shown	728	W	533700 180900	<p>Status: Historical Licence No: 28/39/39/0002 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT IBEX HOUSE, THE MINORIES, LONDON. EC3 Data Type: Point Name: MARS PENSION TRUSTEES LIMITED</p> <p>Annual Volume (m³): 28185 Max Daily Volume (m³): 90.9 Original Application No: - Original Start Date: 11/10/1965 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:</p>
Not shown	1029	W	533400 181100	<p>Status: Historical Licence No: 28/39/39/0066 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: FOUR BOREHOLES AT FURNACE HOUSE, 101/106 FENCHURCH STREET Data Type: Point Name: PRUDENTIAL ASSURANCE CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1036	W	533390 181060	<p>Status: Historical Licence No: 28/39/39/0066 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: FURNACE HOUSE, 101/106 FENCHURCH STREET-BOREHOLE A Data Type: Point Name: DB6 LIMITED</p> <p>Annual Volume (m³): 24821 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:</p>
Not shown	1163	W	533280 181200	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BANKSIDE HOUSE, 107/112 LEADENHALL STREET - BOREHOLE B Data Type: Point</p> <p>Annual Volume (m³): 12574 Max Daily Volume (m³): 50 Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Name: SHIATZU HOLDINGS LIMITED				
Not shown	1163	W	533280 181200	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT BANKSIDE HOUSE, 107/112 LEADENHALL STREET Data Type: Point Name: PRUDENTIAL ASSURANCE CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1169	W	533270 181180	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BANKSIDE HOUSE, 107/112 LEADENHALL STREET- BOREHOLE A Data Type: Point Name: SHIATZU HOLDINGS LIMITED</p> <p>Annual Volume (m³): 12574 Max Daily Volume (m³): 50 Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:</p>
Not shown	1169	W	533270 181180	<p>Status: Historical Licence No: 28/39/39/0031 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT BANKSIDE HOUSE, 107/112 LEADENHALL STREET Data Type: Point Name: PRUDENTIAL ASSURANCE CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 14/03/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:</p>
Not shown	1207	W	533220 180890	<p>Status: Active Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE B Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON Data Type: Point Name: BLCT LIMITED</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 208 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical Licence No: 28/39/39/0011</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 208</p>



ID	Distance (m)	Direction	NGR	Details
				<p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: BOREHOLE 'D' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON</p> <p>Data Type: Point</p> <p>Name: BLCT LIMITED</p> <p>Original Application No: -</p> <p>Original Start Date: 08/11/1965</p> <p>Expiry Date: -</p> <p>Issue No: 101</p> <p>Version Start Date:</p> <p>Version End Date:</p>
Not shown	1237	W	533200 180800	<p>Status: Historical</p> <p>Licence No: 28/39/39/0011</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: BOREHOLE 'B' AT PLANTATION HOUSE, 4/7 MINCING LANE, LONDON</p> <p>Data Type: Point</p> <p>Name: BLCT LIMITED</p> <p>Annual Volume (m³): 71074</p> <p>Max Daily Volume (m³): 208</p> <p>Original Application No: -</p> <p>Original Start Date: 08/11/1965</p> <p>Expiry Date: -</p> <p>Issue No: 101</p> <p>Version Start Date:</p> <p>Version End Date:</p>
Not shown	1277	SW	533450 180150	<p>Status: Historical</p> <p>Licence No: 28/39/42/0062</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: CITY HALL, THE QUEENS WALK, LONDON SE1- BOREHOLE 'A'</p> <p>Data Type: Point</p> <p>Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 300000</p> <p>Max Daily Volume (m³): 1850</p> <p>Original Application No: -</p> <p>Original Start Date: 15/11/2001</p> <p>Expiry Date: 31/03/2013</p> <p>Issue No: 5</p> <p>Version Start Date:</p> <p>Version End Date:</p>
Not shown	1277	SW	533450 180150	<p>Status: Historical</p> <p>Licence No: 28/39/42/0062</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: GLA BUILDING, TOOLEY STREET, LONDON SE1- BOREHOLE 'A'</p> <p>Data Type: Point</p> <p>Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400</p> <p>Max Daily Volume (m³): 4320</p> <p>Original Application No: -</p> <p>Original Start Date: 15/11/2001</p> <p>Expiry Date: 31/03/2013</p> <p>Issue No: 4</p> <p>Version Start Date:</p> <p>Version End Date:</p>
Not shown	1277	SW	533450 180150	<p>Status: Historical</p> <p>Licence No: 28/39/42/0062</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: GLA BUILDING, TOOLEY STREET, LONDON SE1- BOREHOLE 'A'</p> <p>Data Type: Point</p> <p>Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400</p> <p>Max Daily Volume (m³): 4320</p> <p>Original Application No: -</p> <p>Original Start Date: 15/11/2001</p> <p>Expiry Date: 31/03/2013</p> <p>Issue No: 4</p> <p>Version Start Date:</p> <p>Version End Date:</p>
Not shown	1277	SW	533450 180150	<p>Status: Historical</p> <p>Licence No: 28/39/42/0062</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER</p> <p>Point: BOREHOLE 'A' AT GLA BUILDING, TOOLEY STREET, LONDON SE1</p> <p>Data Type: Point</p> <p>Name: LONDON BRIDGE HOLDINGS LTD</p> <p>Annual Volume (m³): -</p> <p>Max Daily Volume (m³): -</p> <p>Original Application No: -</p> <p>Original Start Date: 15/11/2001</p> <p>Expiry Date: 31/12/2013</p> <p>Issue No: 2</p> <p>Version Start Date:</p> <p>Version End Date:</p>
Not shown	1277	SW	533450 180150	<p>Status: Active</p> <p>Licence No: TH/039/0042/022</p> <p>Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public</p> <p>Annual Volume (m³): 400000</p> <p>Max Daily Volume (m³): 1850</p> <p>Original Application No: -</p> <p>Original Start Date: 05/06/2013</p>



ID	Distance (m)	Direction	NGR	Details
				<p>Services</p> <p>Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1- BOREHOLE 'A' Data Type: Point Name: MLFH Limited</p> <p>Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: Version End Date:</p>
Not shown	1290	W	533140 180850	<p>Status: Historical Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LNDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:</p>
Not shown	1290	W	533140 180850	<p>Status: Active Licence No: 28/39/39/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER Point: 1 PLANTATION PLACE, 30 FENCHURCH ST, LONDON EC3 - BOREHOLE A Data Type: Point Name: THE ONE PLANTATION PLACE UNIT TRUST</p> <p>Annual Volume (m³): 71074 Max Daily Volume (m³): 624 Original Application No: - Original Start Date: 08/11/1965 Expiry Date: - Issue No: 103 Version Start Date: Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT GLA BUILDING, TOOLEY STREET, LONDON SE1 Data Type: Point Name: LONDON BRIDGE HOLDINGS LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/12/2013 Issue No: 2 Version Start Date: Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 300000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 5 Version Start Date: Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013 Issue No: 4 Version Start Date: Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Historical Licence No: 28/39/42/0062 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services</p> <p>Annual Volume (m³): 610400 Max Daily Volume (m³): 4320 Original Application No: - Original Start Date: 15/11/2001 Expiry Date: 31/03/2013</p>



ID	Distance (m)	Direction	NGR	Details
				<p>Direct Source: THAMES GROUNDWATER Point: GLA BUILDING, TOOLEY STREET, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: LONDON BRIDGE DEVELOPMENT LIMITED</p> <p>Issue No: 4 Version Start Date: Version End Date:</p>
Not shown	1305	SW	533390 180180	<p>Status: Active Licence No: TH/039/0042/022 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: CITY HALL, THE QUEENS WALK, LONDON SE1 -BOREHOLE 'B' Data Type: Point Name: MLFH Limited</p> <p>Annual Volume (m³): 400000 Max Daily Volume (m³): 1850 Original Application No: - Original Start Date: 05/06/2013 Expiry Date: 31/03/2019 Issue No: 2 Version Start Date: Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: LEADENHALL STREET, LONDON EC3 - BOREHOLE B Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: LEADENHALL STREET, LONDON EC3 - BOREHOLE A Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1328	W	533100 181100	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'C' AT LEADENHALL STREET, LONDON EC3 Data Type: Point</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Name: TOKIO MARINE PROPERTIES LIMITED				
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'E' AT LEADENHALL STREET, LONDON EC3 Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1340	W	533100 181200	<p>Status: Historical Licence No: 28/39/39/0151 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: LEADENHALL STREET, LONDON EC3 - BOREHOLE C Data Type: Point Name: TOKIO MARINE PROPERTIES LIMITED</p> <p>Annual Volume (m³): 2240 Max Daily Volume (m³): 70.46 Original Application No: - Original Start Date: 12/05/1976 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Historical Licence No: 28/39/39/0193 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: THE BATHHOUSE, CHESHIRE STREET, LONDON E2-BOREHOLE A Data Type: Point Name: PENINSULA WATER LIMITED</p> <p>Annual Volume (m³): 80000 Max Daily Volume (m³): 360 Original Application No: - Original Start Date: 02/08/2000 Expiry Date: 31/12/2009 Issue No: 5 Version Start Date: Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Historical Licence No: 28/39/39/0193 Details: Potable Water Supply - Direct Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT THE BATHHOUSE, CHESHIRE STREET, LONDON E2 Data Type: Point Name: METROPOLITAN WATER CO LTD</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 02/08/2000 Expiry Date: 31/12/2009 Issue No: 3 Version Start Date: Version End Date:</p>
Not shown	1396	N	534310 182380	<p>Status: Active Licence No: TH/039/0039/029 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: THE BATHHOUSE, CHESHIRE STREET, LONDON E2-BOREHOLE A Data Type: Point Name: Magee</p> <p>Annual Volume (m³): 40000 Max Daily Volume (m³): 100 Original Application No: - Original Start Date: 13/08/2010 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: Version End Date:</p>
Not shown	1523	W	532900 181000	<p>Status: Historical Licence No: 28/39/39/0056 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: THREE BOREHOLES AT 9 GRACECHURCH STREET, LONDON EC3</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 09/05/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
				Data Type: Point Name: J.P.I.T. (Pte) LIMITED
Not shown	1617	W	532810 181100	Status: Active Licence No: 28/39/39/0166 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 71 LOMBARD STREET- BOREHOLE A Data Type: Point Name: Ashton Global Investments Ltd Annual Volume (m³): 6819 Max Daily Volume (m³): 250.94 Original Application No: - Original Start Date: 25/03/1982 Expiry Date: - Issue No: 102 Version Start Date: Version End Date:
Not shown	1627	W	532800 181100	Status: Historical Licence No: 28/39/39/0166 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: 71 LOMBARD STREET, LONDON - BOREHOLE Data Type: Point Name: LLOYDS TSB BANK PLC Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 25/03/1982 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1733	W	532700 180800	Status: Historical Licence No: 28/39/39/0094 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT 98/106 CANNON STREET, LONDON EC4 Data Type: Point Name: ASGARD ESTATES LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1735	W	532800 181600	Status: Historical Licence No: 28/39/39/0129 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: THREE BOREHOLES AT SALISBURY HOUSE, LONDON WALL, LONDON EC2 Data Type: Point Name: MREF II Salisbury Property Limited Annual Volume (m³): 25457 Max Daily Volume (m³): 81.8 Original Application No: - Original Start Date: 12/06/1967 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1735	W	532800 181600	Status: Active Licence No: 28/39/39/0129 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: SALISBURY HOUSE, LONDON WALL, LONDON EC2 - THREE BOREHOLES Data Type: Point Name: MREF II Salisbury Property Limited Annual Volume (m³): 25457 Max Daily Volume (m³): 81.8 Original Application No: - Original Start Date: 12/06/1967 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1736	W	532700 181200	Status: Historical Licence No: 28/39/39/0024 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: NINE BOREHOLES AT THE BANK OF ENGLAND, THREADNEEDLE STREET Data Type: Point Name: BANK OF ENGLAND Annual Volume (m³): 36368 Max Daily Volume (m³): 127 Original Application No: - Original Start Date: 10/01/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1736	W	532700 181200	Status: Active Licence No: 28/39/39/0024 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Annual Volume (m³): 36368 Max Daily Volume (m³): 127 Original Application No: - Original Start Date: 10/01/1966



ID	Distance (m)	Direction	NGR	Details
				<p>Services</p> <p>Direct Source: THAMES GROUNDWATER Point: BANK OF ENGLAND, THREADNEEDLE STREET - NINE BOREHOLES Data Type: Point Name: BANK OF ENGLAND</p> <p>Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1836	W	532600 181200	<p>Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc</p> <p>Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1836	W	532600 181200	<p>Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc</p> <p>Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1836	W	532600 181200	<p>Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'C' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc</p> <p>Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1836	W	532600 181200	<p>Status: Historical Licence No: 28/39/39/0098 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'A' AT POULTRY, LONDON EC2 Data Type: Point Name: HSBC BANK plc</p> <p>Annual Volume (m³): 33317.6 Max Daily Volume (m³): 90.92 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>
Not shown	1857	NW	532900 182050	<p>Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TRITON COURT, FINSBURY SQUARE-BOREHOLE D Data Type: Point Name: THE TRITON COURT LIMITED PARTNERSHIP</p> <p>Annual Volume (m³): 36368 Max Daily Volume (m³): 118 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 104 Version Start Date: Version End Date:</p>
Not shown	1865	NW	532890 182050	<p>Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TRITON COURT, FINSBURY SQUARE-BOREHOLE C</p> <p>Annual Volume (m³): 36368 Max Daily Volume (m³): 118 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 104 Version Start Date: Version End Date:</p>



ID	Distance (m)	Direction	NGR	Details
Not shown	1881	NW	532870 182050	Data Type: Point Name: THE TRITON COURT LIMITED PARTNERSHIP
				Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: TRITON COURT, FINSBURY SQUARE-BOREHOLE B Data Type: Point Name: THE TRITON COURT LIMITED PARTNERSHIP
				Annual Volume (m³): 36368 Max Daily Volume (m³): 118 Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 104 Version Start Date: Version End Date:
Not shown	1913	NW	532800 182000	Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'C' AT ROYAL LONDON HOUSE, FINSBURY SQUARE, LONDON Data Type: Point Name: ROYAL LONDON MUTUAL INS SOC LTD
				Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1913	NW	532800 182000	Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'B' AT ROYAL LONDON HOUSE, FINSBURY SQUARE, LONDON Data Type: Point Name: ROYAL LONDON MUTUAL INS SOC LTD
				Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1913	NW	532800 182000	Status: Historical Licence No: 28/39/39/0069 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE 'D' AT ROYAL HOUSE, FINSBURY SQUARE, LONDON Data Type: Point Name: ROYAL LONDON MUTUAL INS SOC LTD
				Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 13/06/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1952	S	535101 179144	Status: Active Licence No: TH/039/0042/021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: POINT 'A' AT SOUTHWARK PARK Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK
				Annual Volume (m³): 2100 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: Version End Date:
Not shown	1996	S	535110 179100	Status: Historical Licence No: TH/039/0042/001 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT SOUTHWARK PARK, SOUTHWARK LONDON Data Type: Point Name: LONDON BOROUGH OF SOUTHWARK
				Annual Volume (m³): 25000 Max Daily Volume (m³): 800 Original Application No: - Original Start Date: 18/05/2009 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: Version End Date:



## 6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

## 6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

## 6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
120	W	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

## 6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site

None identified

### 6.9.1 Biological Quality:

Database searched and no data found.



## 6.9.2 Chemical Quality:

Database searched and no data found.

## 6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	270 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
65	270 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
2	303 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.5
66	303 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Thames Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.5

## 6.11 Surface Water Features

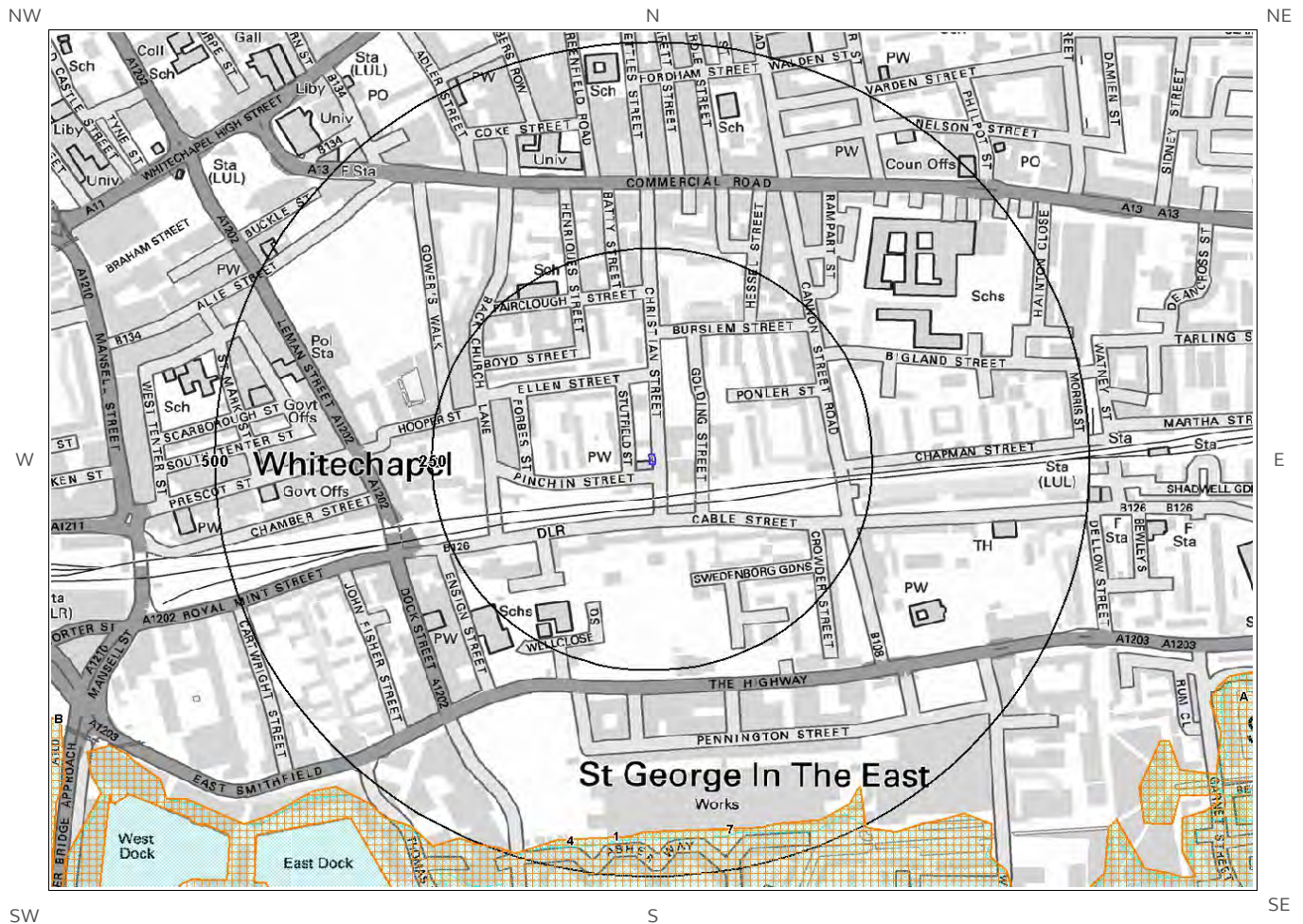
Surface water features within 250m of the study site

None identified

Database searched and no data found.



# 7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)

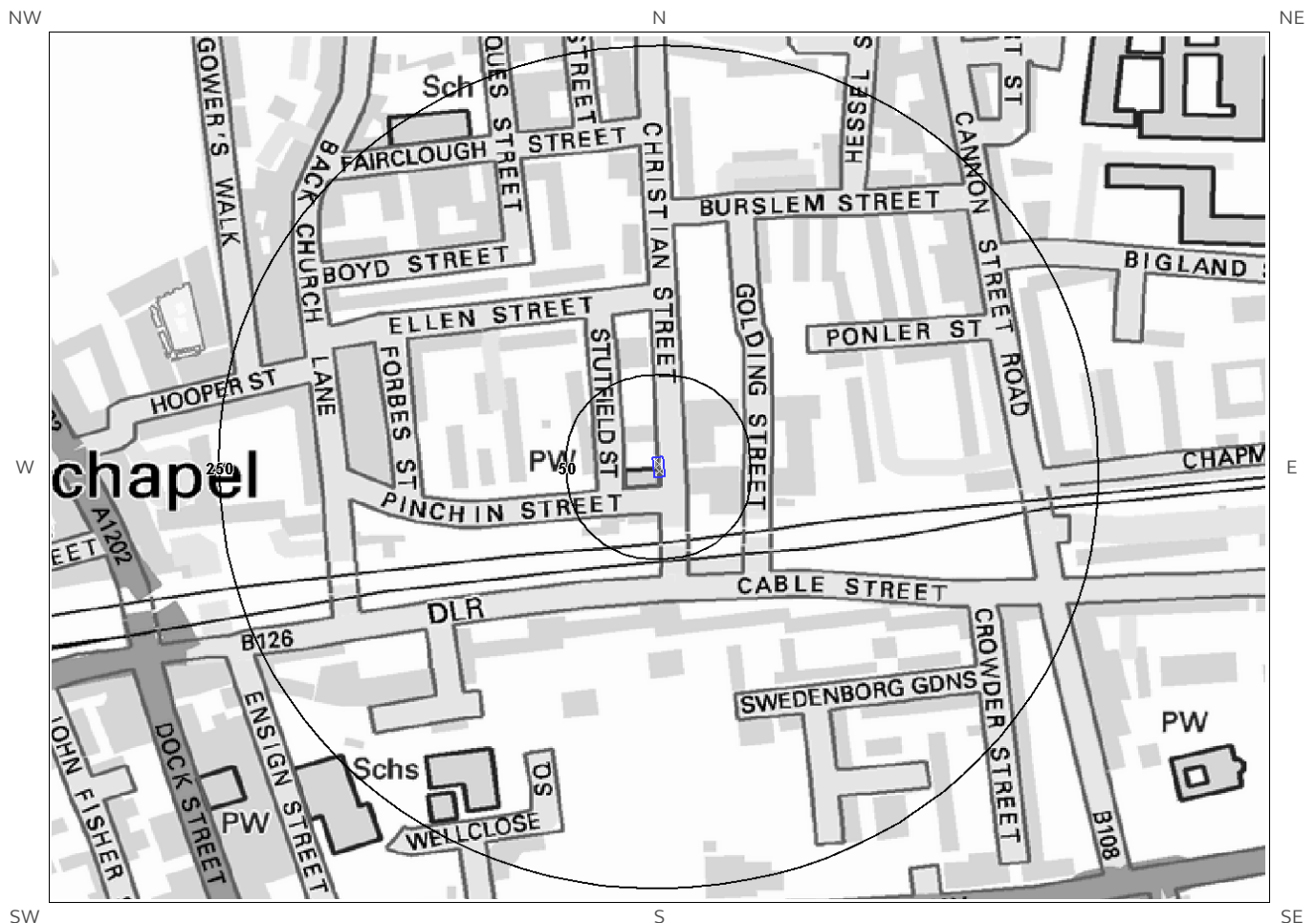


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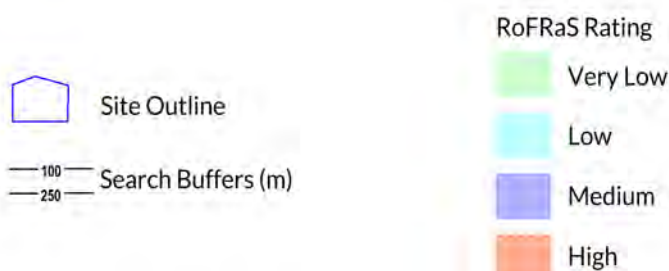




# 7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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# 7 Flooding

## 7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

---

## 7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

---

## 7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

---

## 7.4 Flood Defences

Flood Defences within 250m of the study site None identified  
Database searched and no data found.

---

## 7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site None identified

---



## 7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

---

## 7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site

None identified

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

---

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Not Prone

The area is not considered to be prone to groundwater flooding based on rock type.

---

## 7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result

Not Applicable

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

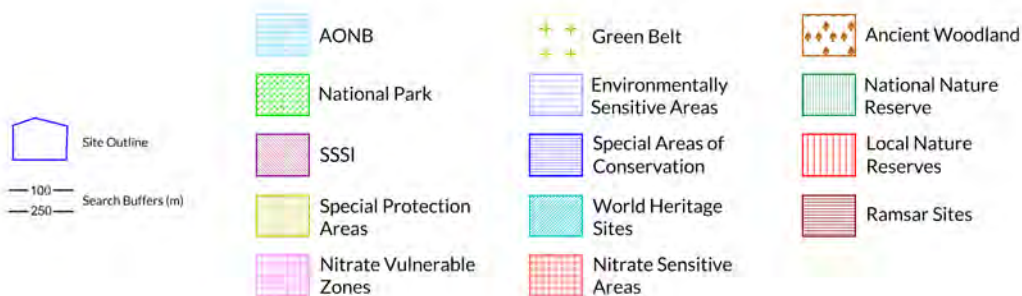
The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.



# 8. Designated Environmentally Sensitive Sites Map



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# 8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site	Identified
---	------------

---

## 8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

---

## 8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

---

## 8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

---

## 8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

---

## 8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

---



## 8.6 Records of Ancient Woodland within 2000m of the study site:

0

Database searched and no data found.

## 8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

1

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
Not shown	1921	E	Lavender Pond	Natural England

## 8.8 Records of World Heritage Sites within 2000m of the study site:

1

The following World Heritage Site records provided by English Heritage and Cadw are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	World Heritage Site Name	Data Source
2	728	SW	Tower of London	Historic England

## 8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

## 8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.



#### 8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

---

#### 8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

---

#### 8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

---

#### 8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

---



# 9. Natural Hazards Findings

## 9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure Geo Insight**, available from our **website**. The following information has been found:

### 9.1.1 Shrink Swell

Maximum Shrink-Swell\*\* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

### 9.1.2 Landslides

Maximum Landslide\* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

### 9.1.3 Soluble Rocks

Maximum Soluble Rocks\* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

\* This indicates an automatically generated 50m buffer and site.



#### 9.1.4 Compressible Ground

Maximum Compressible Ground\* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

#### 9.1.5 Collapsible Rocks

Maximum Collapsible Rocks\* hazard rating identified on the study site

Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

#### 9.1.6 Running Sand

Maximum Running Sand\*\* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

\* This indicates an automatically generated 50m buffer and site.



## 9.2 Radon

### 9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

---

### 9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.



# 10. Mining

## 10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

---

## 10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

---

## 10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

---



# Contact Details

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Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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<https://www.groundsure.com/terms-and-conditions-feb11-2019>

Arcadis Consulting UK Ltd

Arcadis CONSULTING UK LTD, THE PITHAY,  
BRISTOL, BS1 2NL

Groundsure  
Reference:

GS-6007752

Your Reference: 14025461

Report Date 7 May 2019

Report Delivery Method: Email - pdf

## Geo Insight

Address: 26 HODGESON HOUSE, CHRISTIAN STREET, LONDON, E1 1AY

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director  
Groundsure Limited

Enc.  
Groundsure Geo Insight

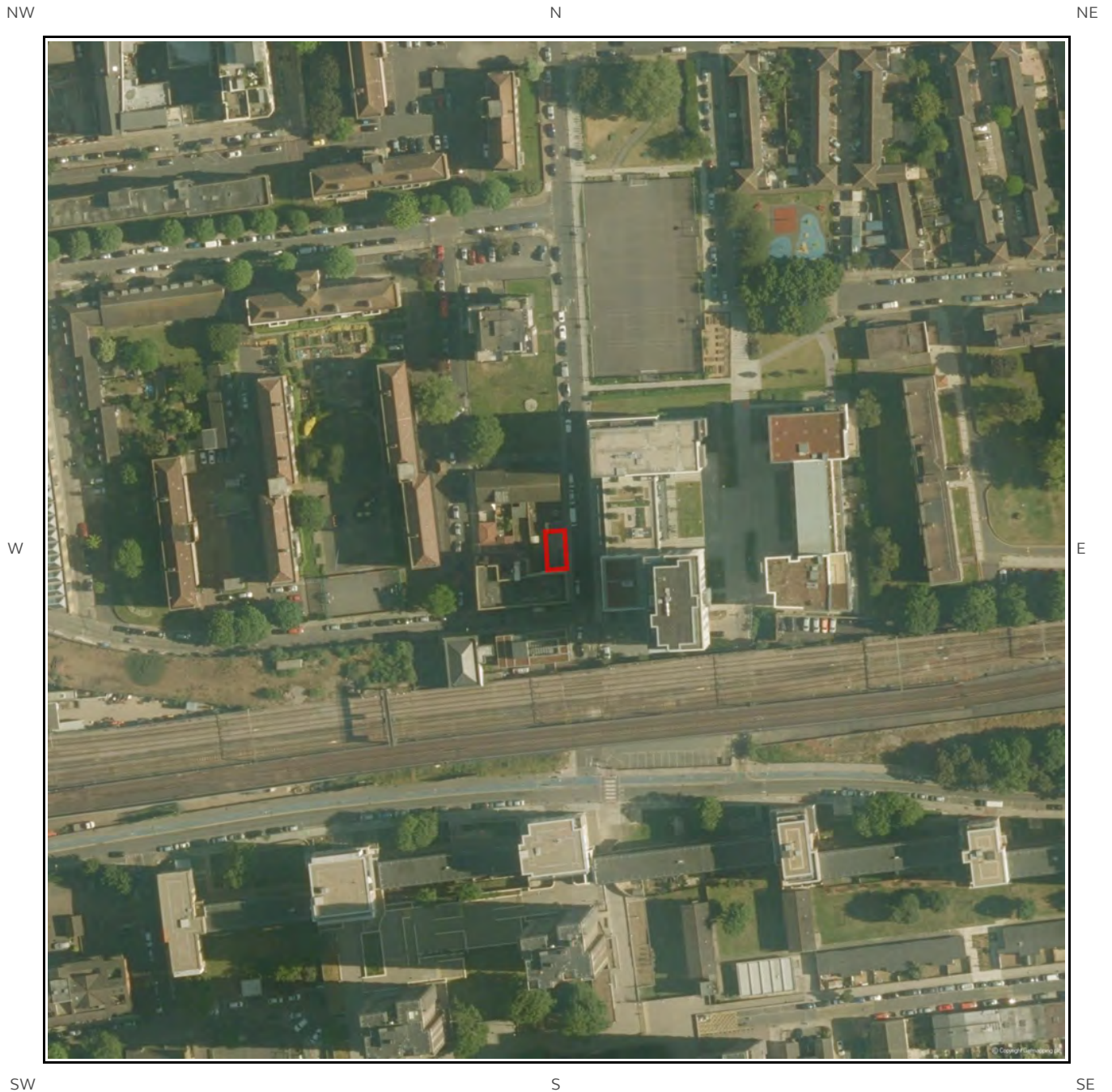


**Address:** 26 HODGESON HOUSE, CHRISTIAN STREET, LONDON, E1 1AY

**Date:** 7 May 2019

**Reference:** GS-6007752

**Client:** Arcadis Consulting UK Ltd



Aerial Photograph Capture date: 07-Jun-2015

Grid Reference: 534427,180982

Site Size: 0.0069ha

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# Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

## Section 1: Geology 1:10,000 Scale

1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	Yes
	1.2.2 Are there any records of landslide within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	No

## Section 2: Geology 1:50,000 Scale

2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	2.2.3 Are there any records of landslide within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No



## Section 2: Geology 1:50,000 Scale

### 2.3 Bedrock, Solid Geology and linear features

2.3.1 For records of Bedrock and Solid Geology beneath the study site\* see the detailed findings section.

2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?

Yes

2.3.3 Are there any records of linear features within 500m of the study site boundary?

No

## Section 3: Radon

### 3. Radon

3.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

3.2 Radon Protection

No radon protective measures are necessary.

## Section 4: Ground Workings

	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	1	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	4	19
4.3 Current Ground Workings	0	0	0	0	0

## Section 5: Mining, Extraction & Natural Cavities

	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	0
5.2 Coal Mining	0	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	1	1	0	2	3
5.4 Non-Coal Mining*	0	0	0	0	0
5.5 Non-Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Tin Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-site				
6.1 Shrink-Swell Clay	Very Low				
6.2 Landslides	Very Low				
6.3 Ground Dissolution of Soluble Rocks	Negligible				
6.4 Compressible Deposits	Negligible				
6.5 Collapsible Deposits	Low				
6.5 Running Sand	Negligible				
Section 7: Borehole Records	On-site	0-50m	51-250		
7 BGS Recorded Boreholes	0	12	93		
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
8 Records of Background Soil Chemistry	1	2	0		
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	1	Not Searched	
9.2 Historical Railway and Tunnel Features	0	12	44	Not Searched	
9.3 Historical Railways	0	0	0	Not Searched	
9.4 Active Railways	0	10	12	Not Searched	
9.5 Railway Projects	0	0	0	0	

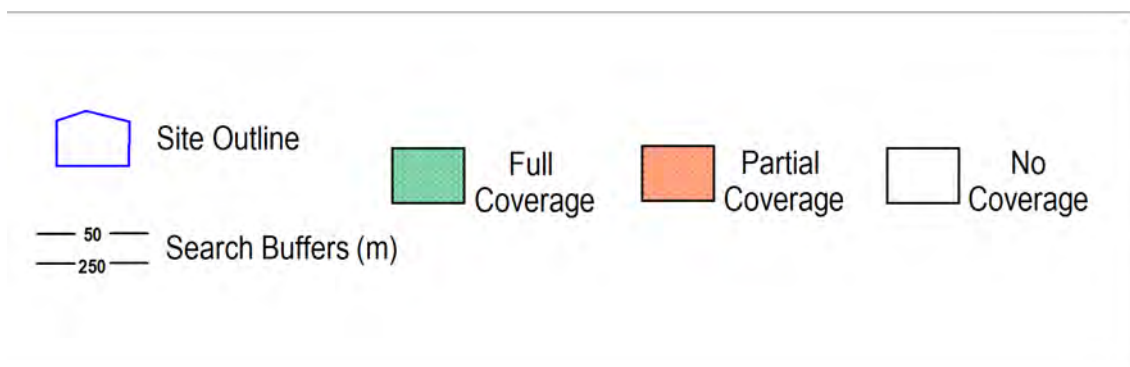


# 1:10,000 Scale Availability



1\_10,000 Availability Legend

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# Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	No coverage
2	570.0	Some deposits are mapped	Full	Full	No coverage
3	977.0	Some deposits are mapped	Full	Full	No coverage
4	1131.0	Some deposits are mapped	Full	Full	No coverage

Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

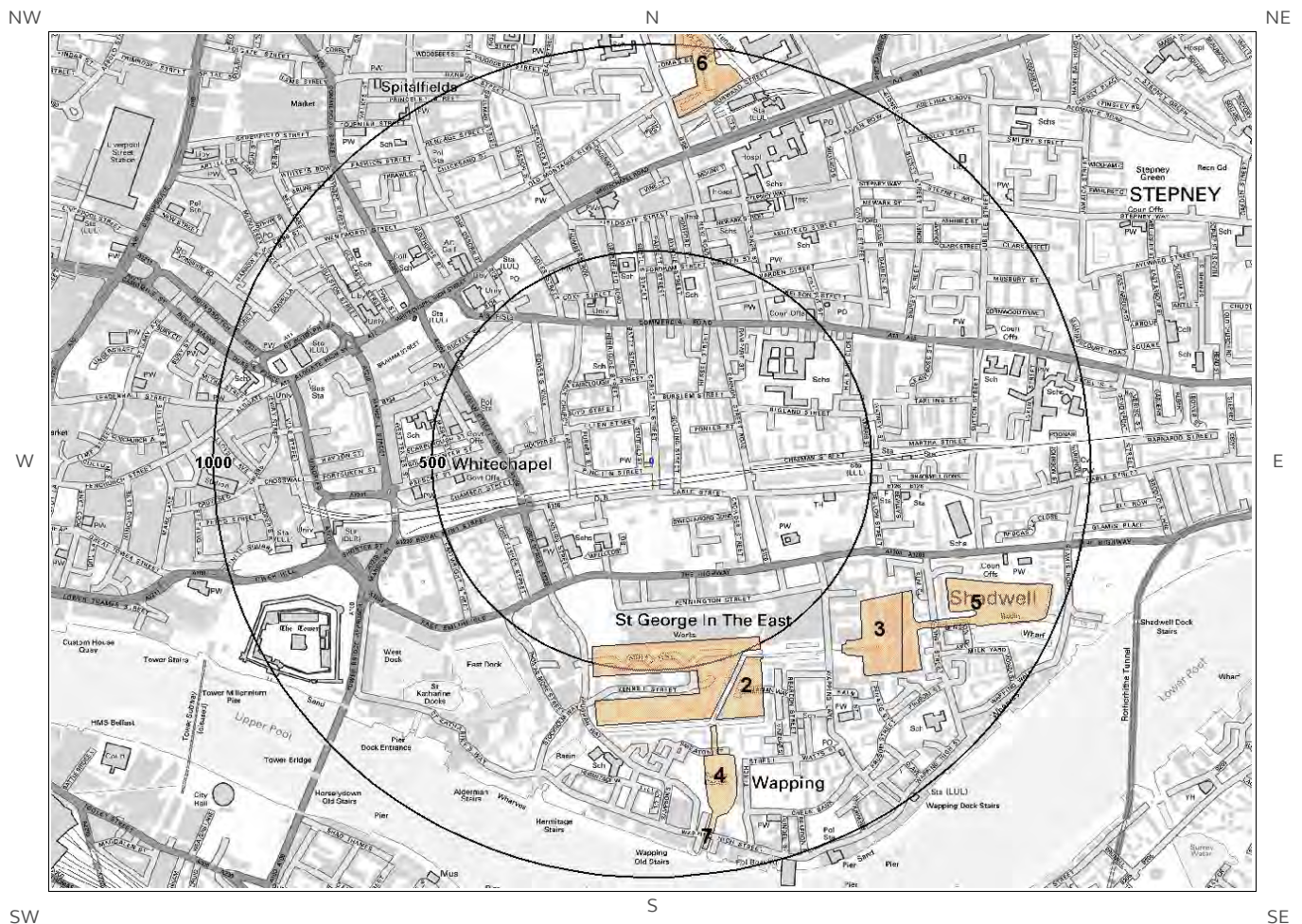
The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage



# 1 Geology (1:10,000 scale).

## 1.1 Artificial Ground map (1:10,000 scale)



**Artificial Ground Legend**

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# 1. Geology 1:10,000 scale

## 1.1 Artificial Ground

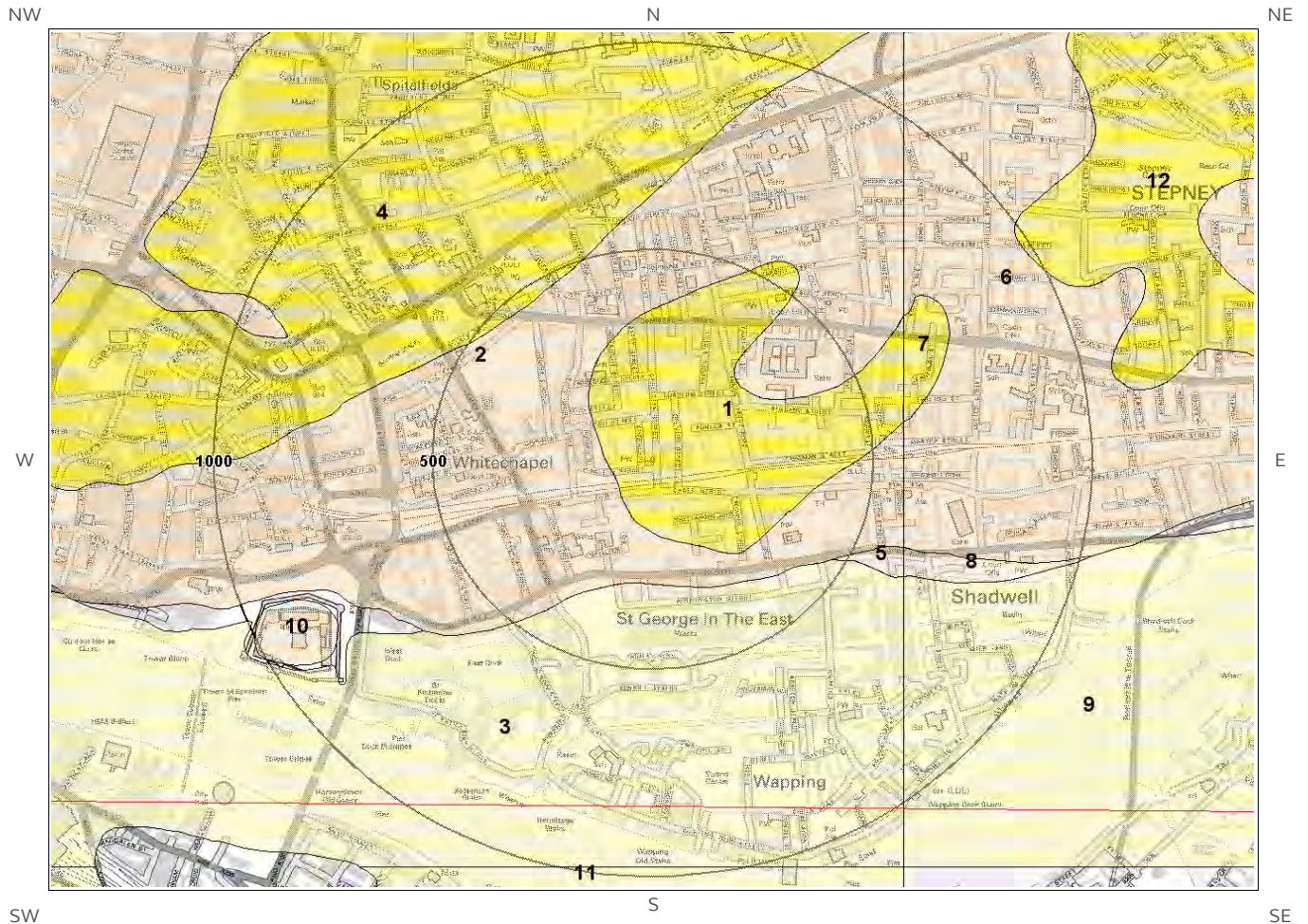
The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	433.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

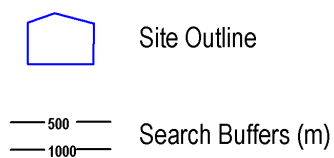


# 1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

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# 1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

## 1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	LASI-Z	Langley Silt Member - Silt (unlithified Deposits Coding Scheme)	Silt
2	91.0	SW	TPGR-XSV	Taplow Gravel Formation - Sand And Gravel	Sand And Gravel
3	293.0	S	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
4	464.0	NW	LASI-Z	Langley Silt Member - Silt (unlithified Deposits Coding Scheme)	Silt
5	467.0	SE	KPGR-XSV	Kempton Park Gravel Formation - Sand And Gravel	Sand And Gravel

## 1.2.2 Landslip

Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale?

No

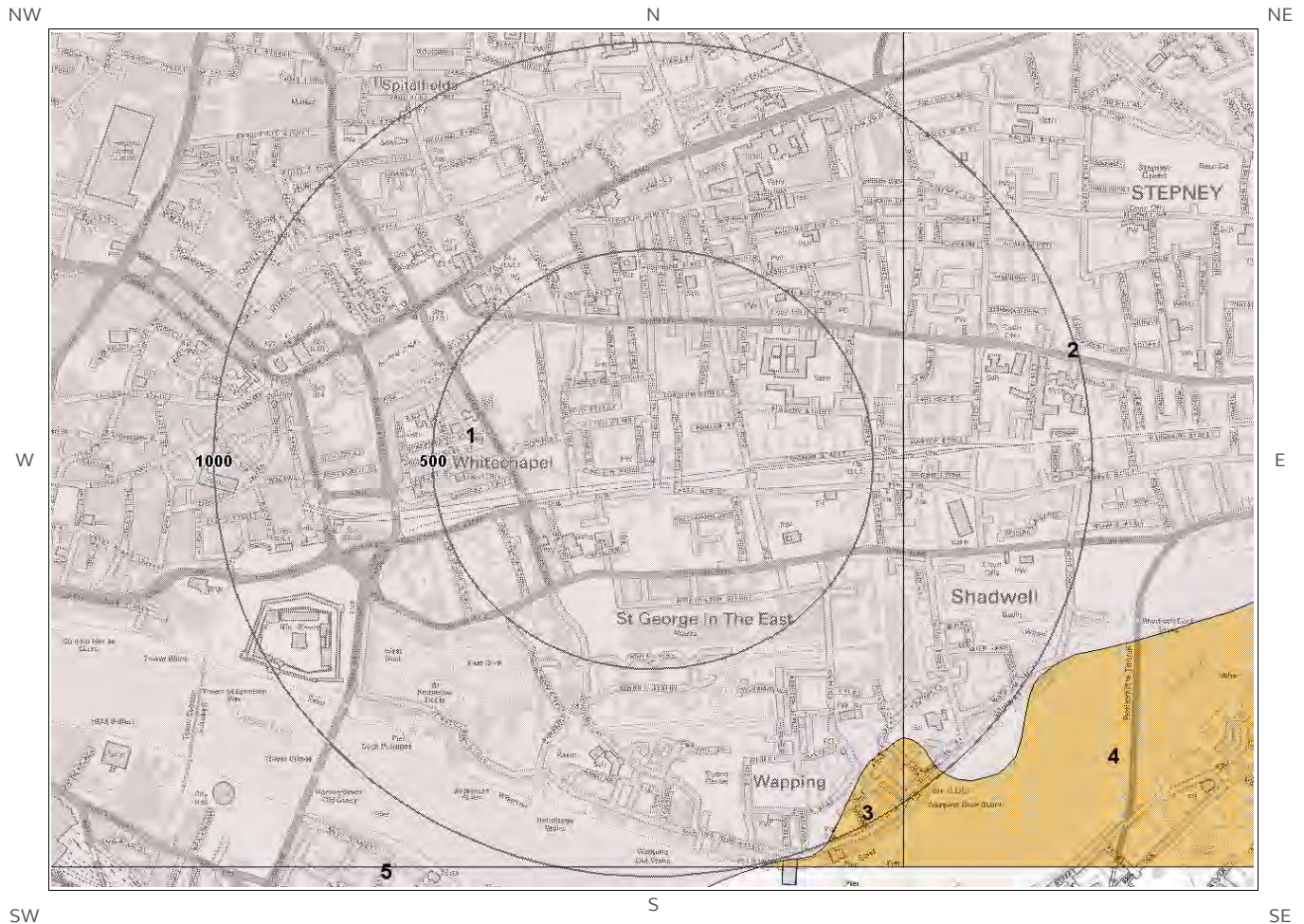
Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

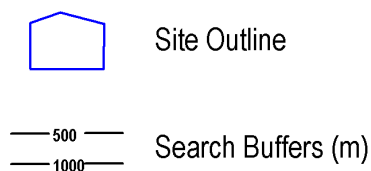


# 1.3 Bedrock and linear features map (1:10,000 scale)



**Bedrock and linear features Legend**

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## 1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

### 1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	LC-CLAY	London Clay Formation - Clay	Eocene Epoch

---

### 1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found at this scale.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

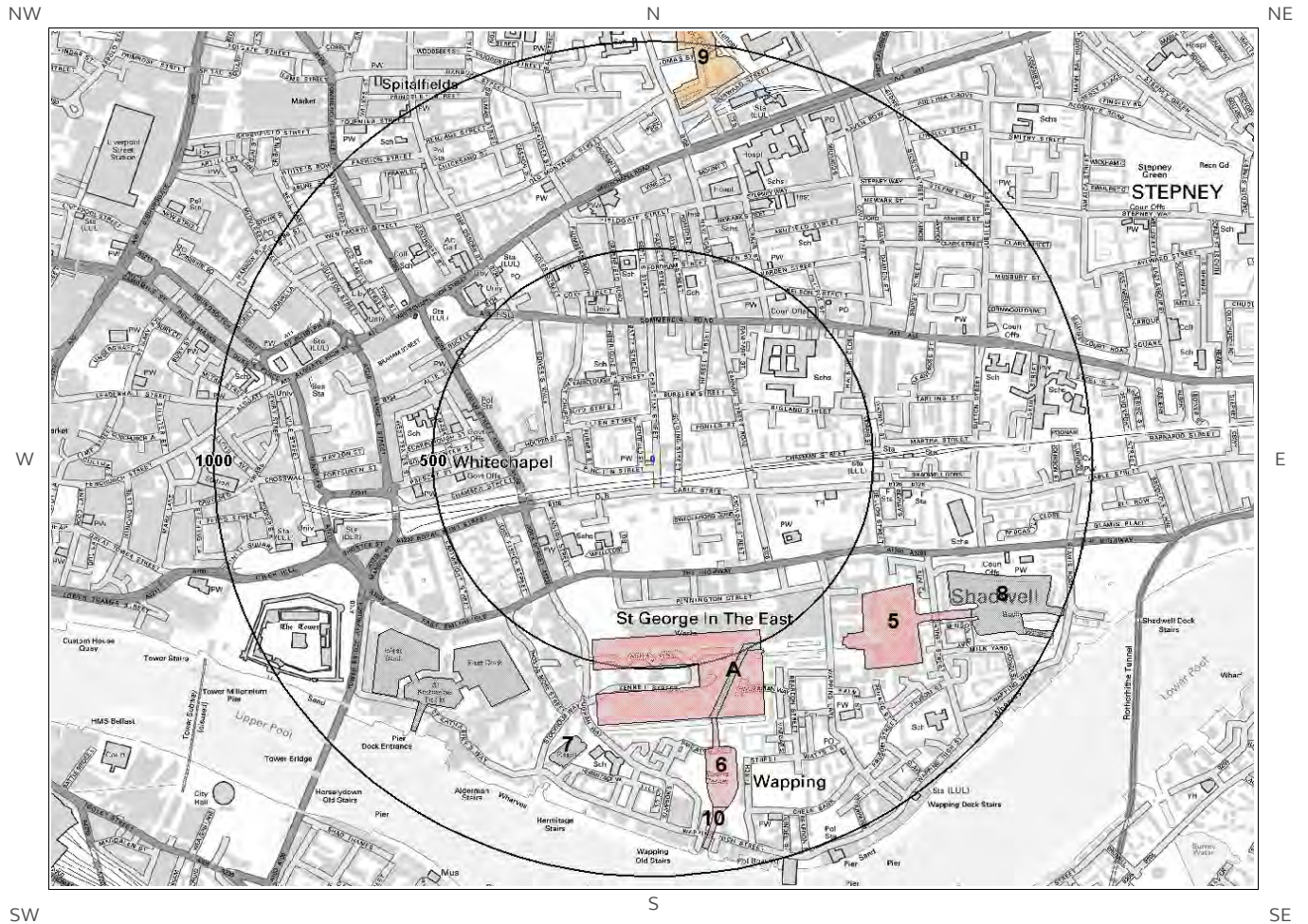
This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

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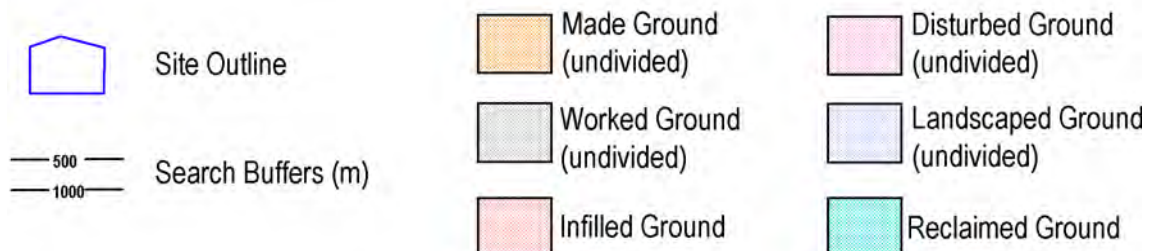


# 2 Geology 1:50,000 Scale

## 2.1 Artificial Ground map



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## 2. Geology 1:50,000 scale

### 2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 256

#### 2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	420.0	S	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
2A	485.0	SE	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

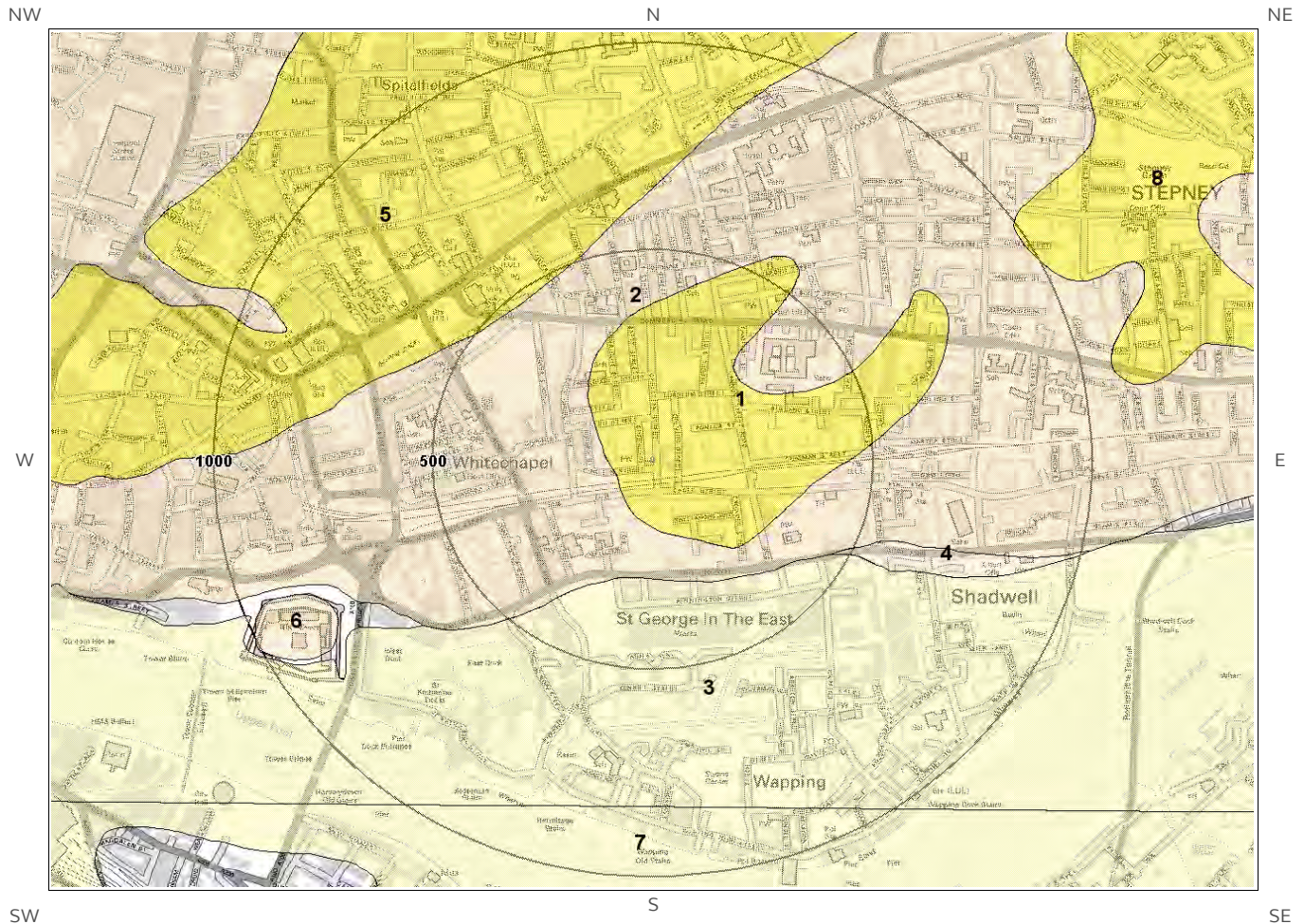
#### 2.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

Database searched and no data found.



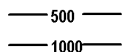
## 2.2 Superficial Deposits and Landslips map (1:50,000 scale)



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Site Outline



Search Buffers (m)

## 2.2 Superficial Deposits and Landslips

### 2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT
2	87.0	W	TPGR-XSV	TAPLOW GRAVEL MEMBER	SAND AND GRAVEL
3	280.0	S	ALV-XCZSP	ALLUVIUM	CLAY, SILT, SAND AND PEAT
4	460.0	SE	KPGR-XSV	KEMPTON PARK GRAVEL MEMBER	SAND AND GRAVEL
5	475.0	NW	LASI-XCZ	LANGLEY SILT MEMBER	CLAY AND SILT

### 2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Low	Very Low

### 2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

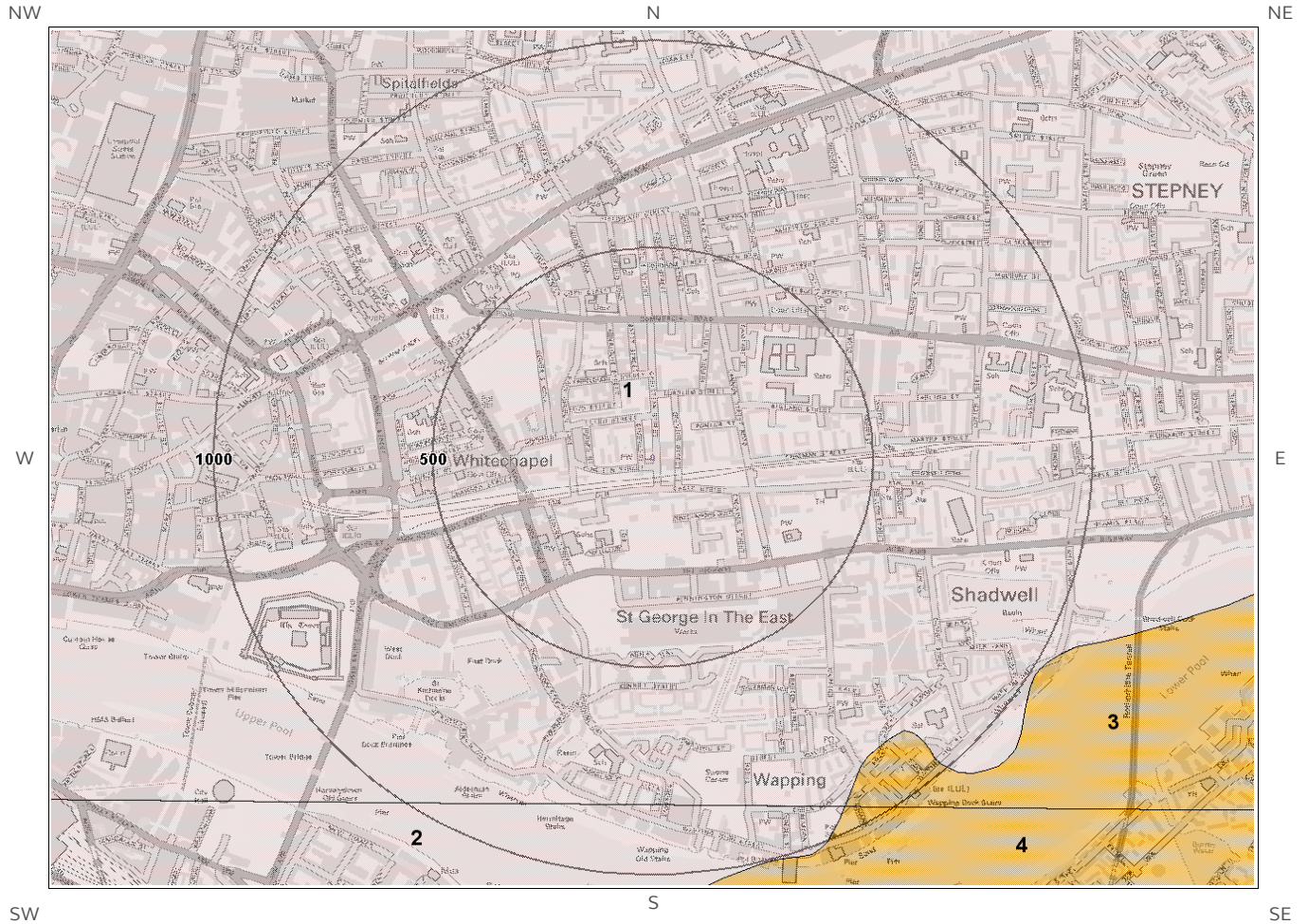
### 2.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site boundary? No

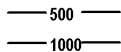
Database searched and no data found.



## 2.3 Bedrock and linear features map (1:50,000 scale)



Site Outline



Search Buffers (m)

## 2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 256

### 2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	LC-XCZS	LONDON CLAY FORMATION - CLAY, SILT AND SAND	YPRESIAN

### 2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Moderate	Very Low

### 2.3.3 Linear features

Are there any records of linear features within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.



# 3 Radon Data

## 3.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?      The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

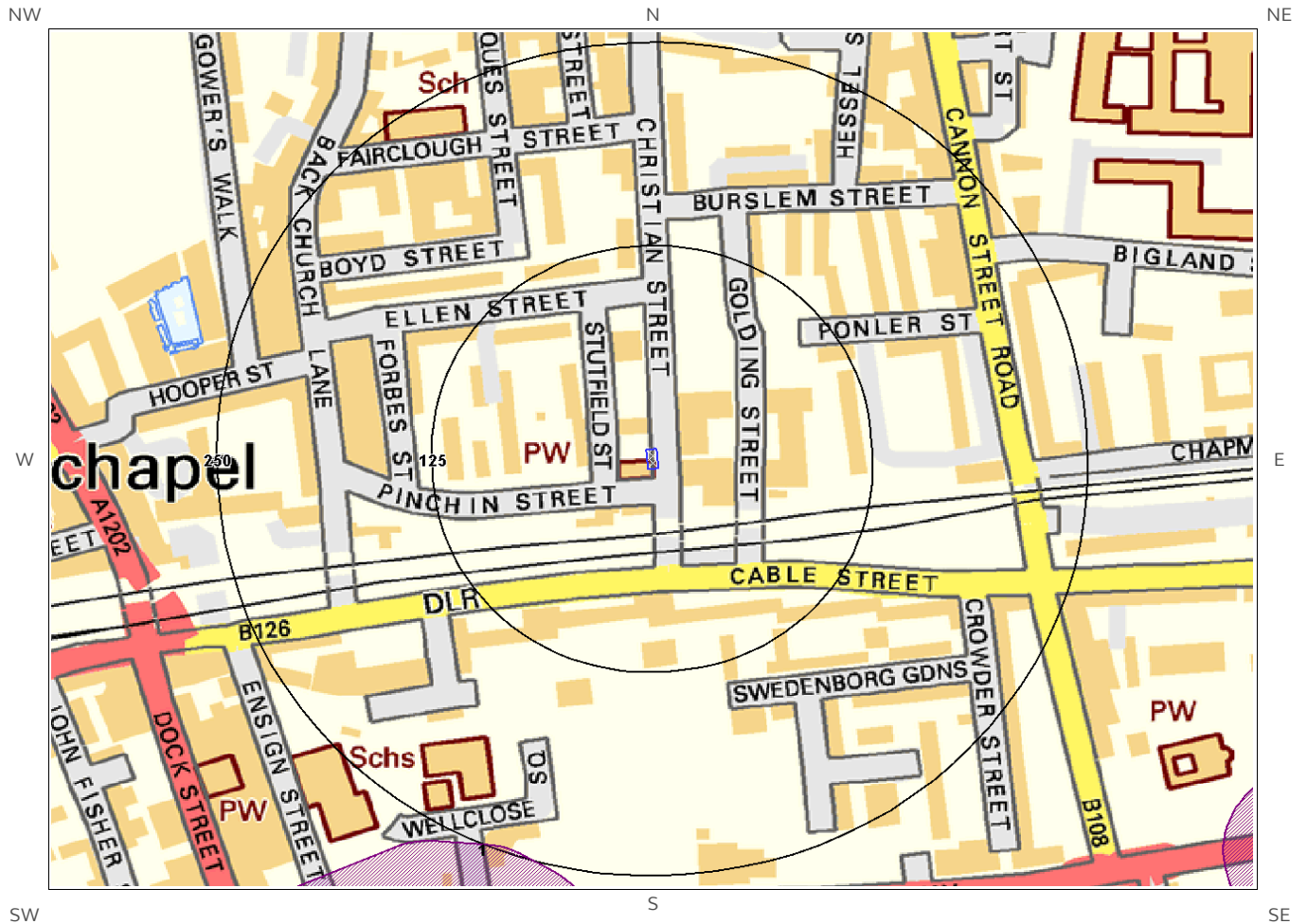
The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

---

## 3.2 Radon Protection



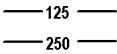


Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?      No radon protective measures are necessary.

# 4 Ground Workings map



Ground Workings Legend

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-  Site Outline
-  Historic Surface Ground Workings
-  Historic Underground Workings
-  Current Ground Workings
-  Search Buffers (m)  
125  
250



# 4 Ground Workings

## 4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1	247.0	S	534230 180488	Docks	1894

## 4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	486.0	E	534980 180260	Tunnel	1894
Not shown	490.0	E	534932 180739	Tunnel	1894
Not shown	495.0	E	534958 180481	Tunnel	1914
Not shown	495.0	E	534958 180481	Tunnel	1938
Not shown	596.0	NW	534103 181501	Tunnel	1894
Not shown	636.0	NE	534917 181549	Tunnel	1894
Not shown	700.0	N	534467 181725	Tunnel	1894
Not shown	752.0	NW	533634 181276	Tunnel	1894
Not shown	774.0	W	533643 180956	Tunnel	1894
Not shown	792.0	N	534629 181773	Tunnel	1894
Not shown	829.0	NE	534782 181772	Tunnel	1894

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	852.0	NE	534768 181795	Tunnel	1940
Not shown	892.0	W	532977 180815	Tunnel	1895
Not shown	932.0	SE	535005 180206	Tunnel	1873
Not shown	932.0	SE	535005 180206	Tunnel	1873
Not shown	941.0	W	533532 181350	Tunnel	1895
Not shown	944.0	SE	535066 180110	Tunnel	1940
Not shown	979.0	N	534569 181986	Tunnel	1894
Not shown	979.0	N	534579 181988	Tunnel	1940
Not shown	980.0	N	534576 181991	Tunnel	1914
Not shown	980.0	N	534576 181991	Tunnel	1938
Not shown	994.0	SE	535135 180028	Tunnel	1873
Not shown	994.0	SE	535135 180028	Tunnel	1873

### 4.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? No

Database searched and no data found.

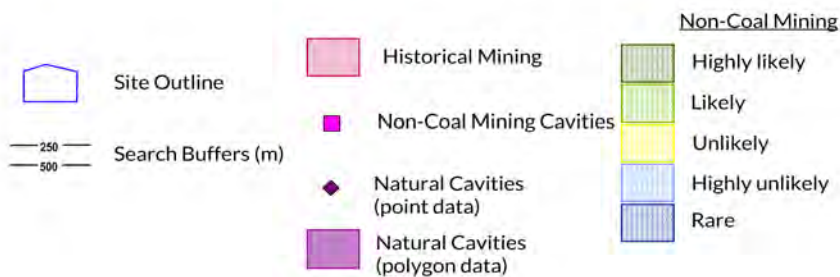


# 5 Mining, Extraction & Natural Cavities map



Mining, Extraction and  
Natural Cavities Legend

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# 5 Mining, Extraction & Natural Cavities

## 5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? Yes

The following information provided by JPB is not represented on mapping: Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property. Further details and a quote for services can be obtained by emailing this report to [enquiries.gs@jpb.co.uk](mailto:enquiries.gs@jpb.co.uk).

---

## 5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---



## 5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level..

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

## 5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

No

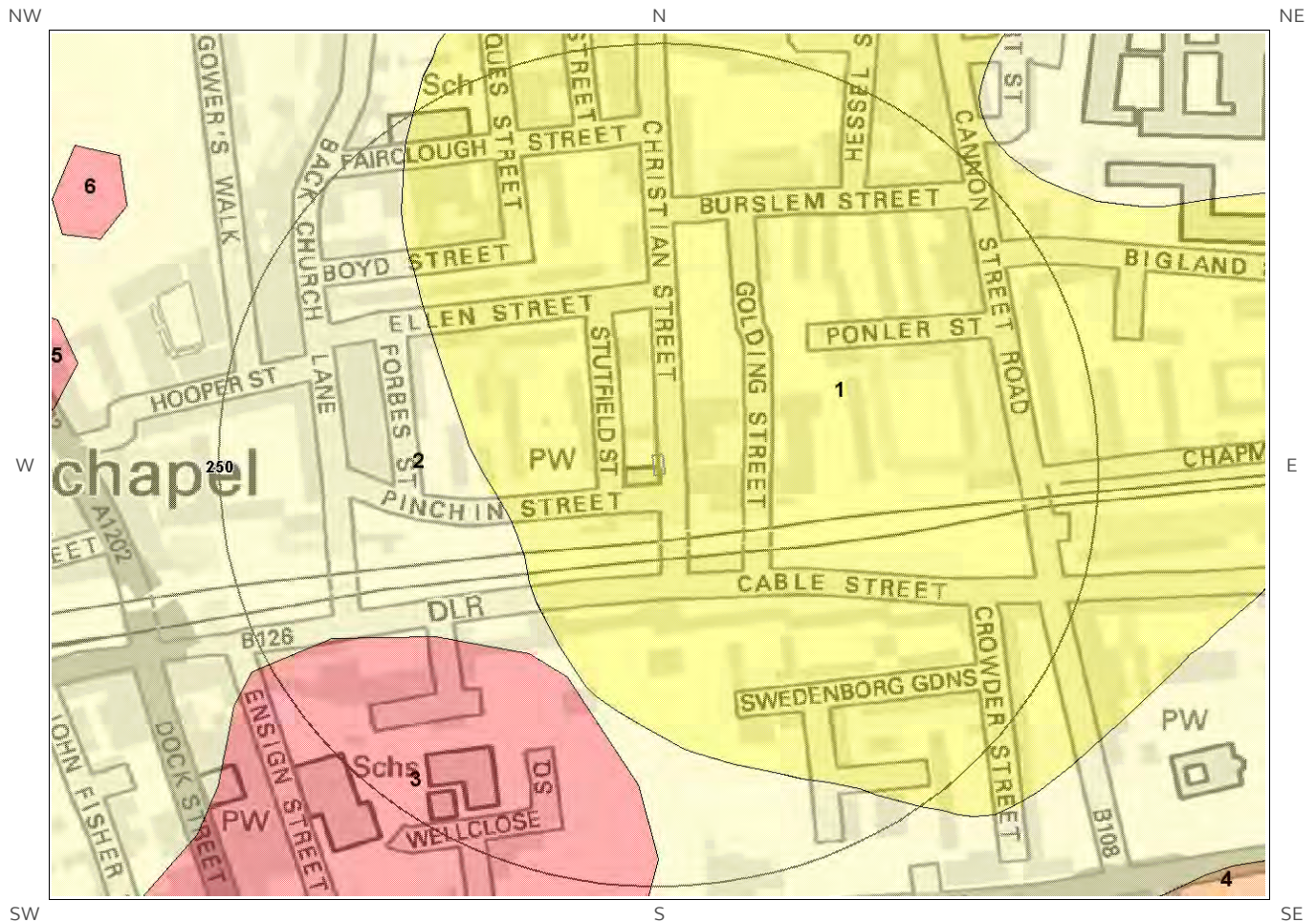
Database searched and no data found.

---



# 6 Natural Ground Subsidence

## 6.1 Shrink-Swell Clay map



Shrink Swell Clay Legend

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## 6.2 Landslides map



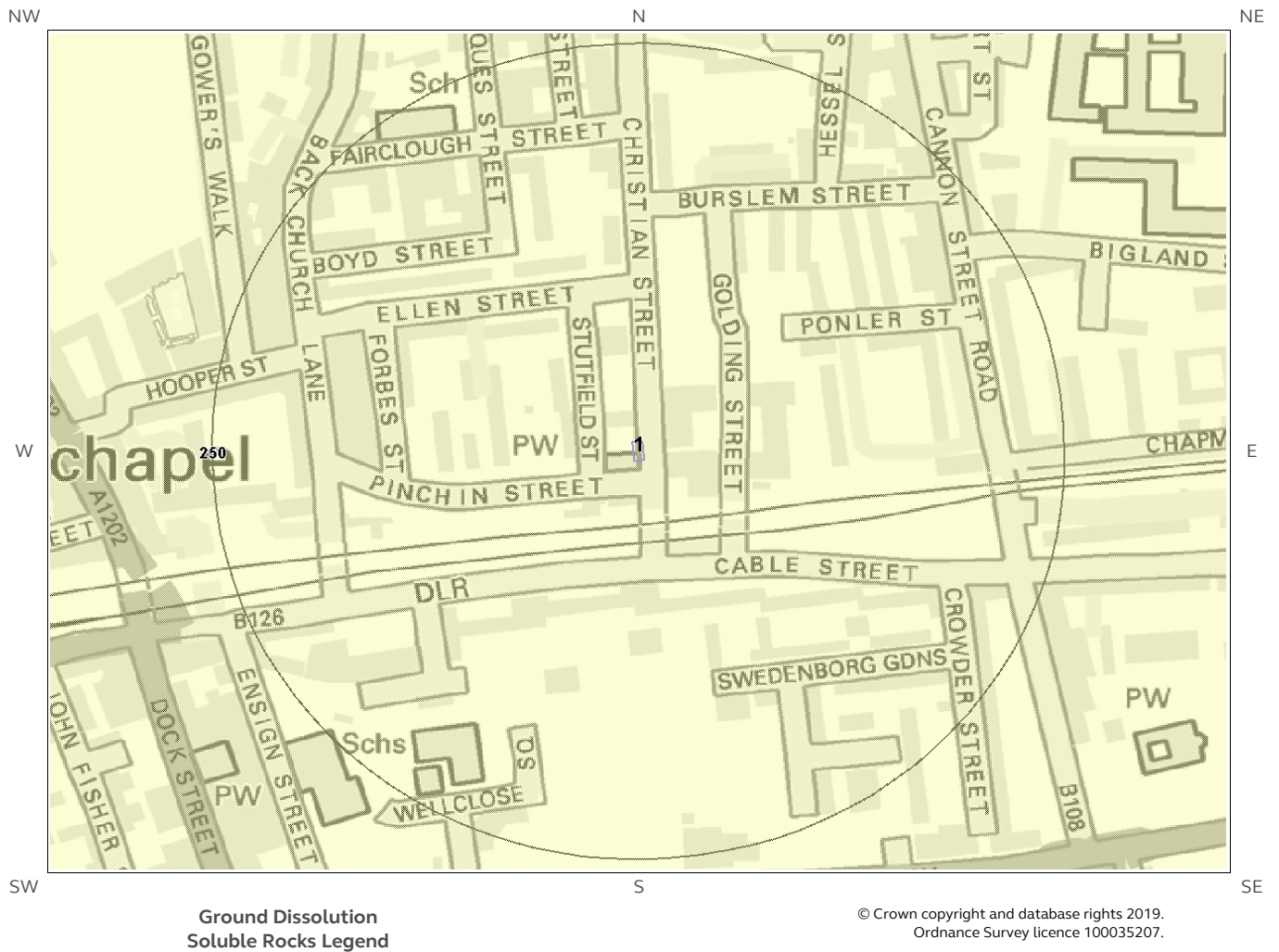
Landslides Legend

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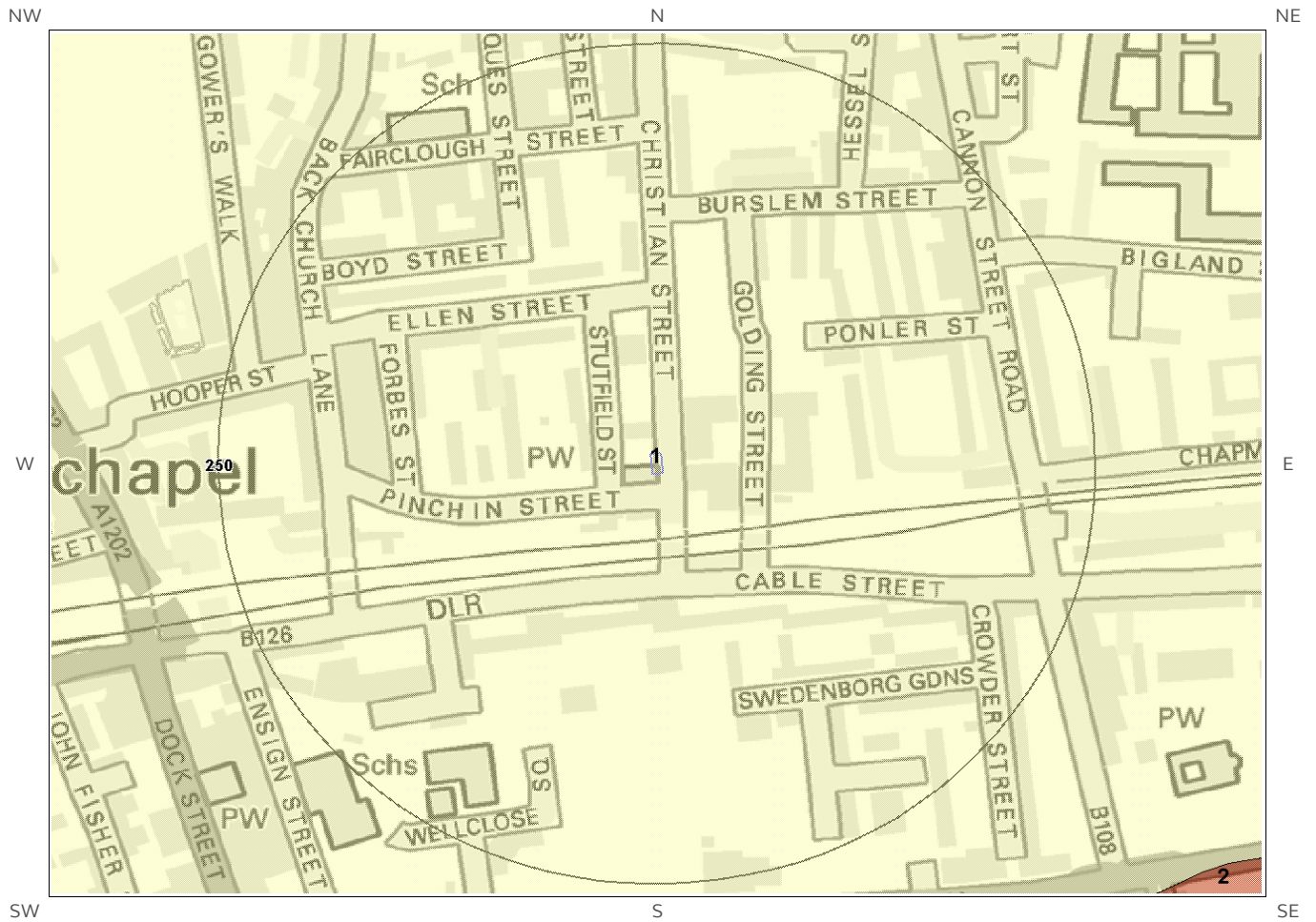




## 6.3 Ground Dissolution of Soluble Rocks map



## 6.4 Compressible Deposits map



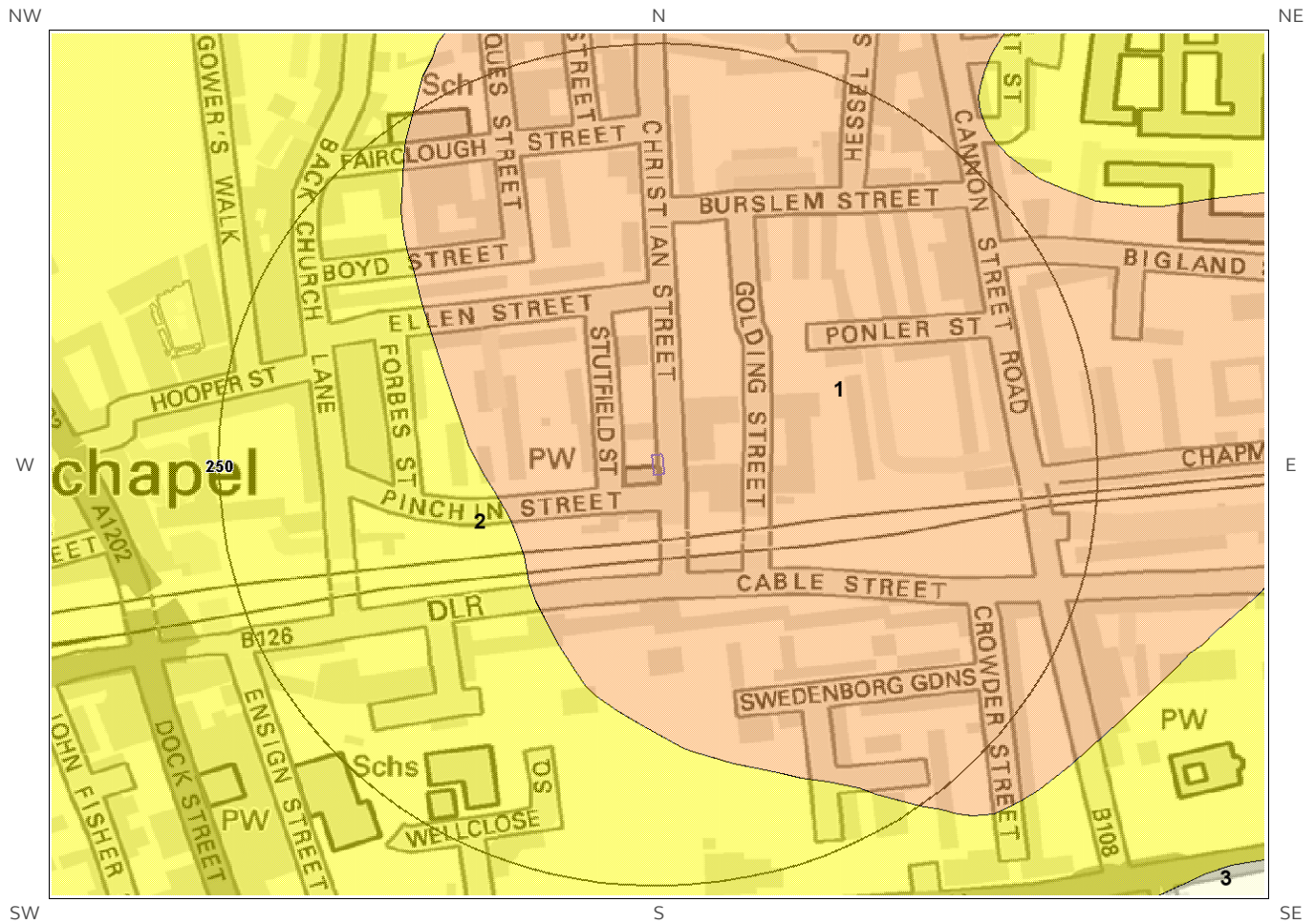
Compressible Deposits Legend

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## 6.5 Collapsible Deposits map

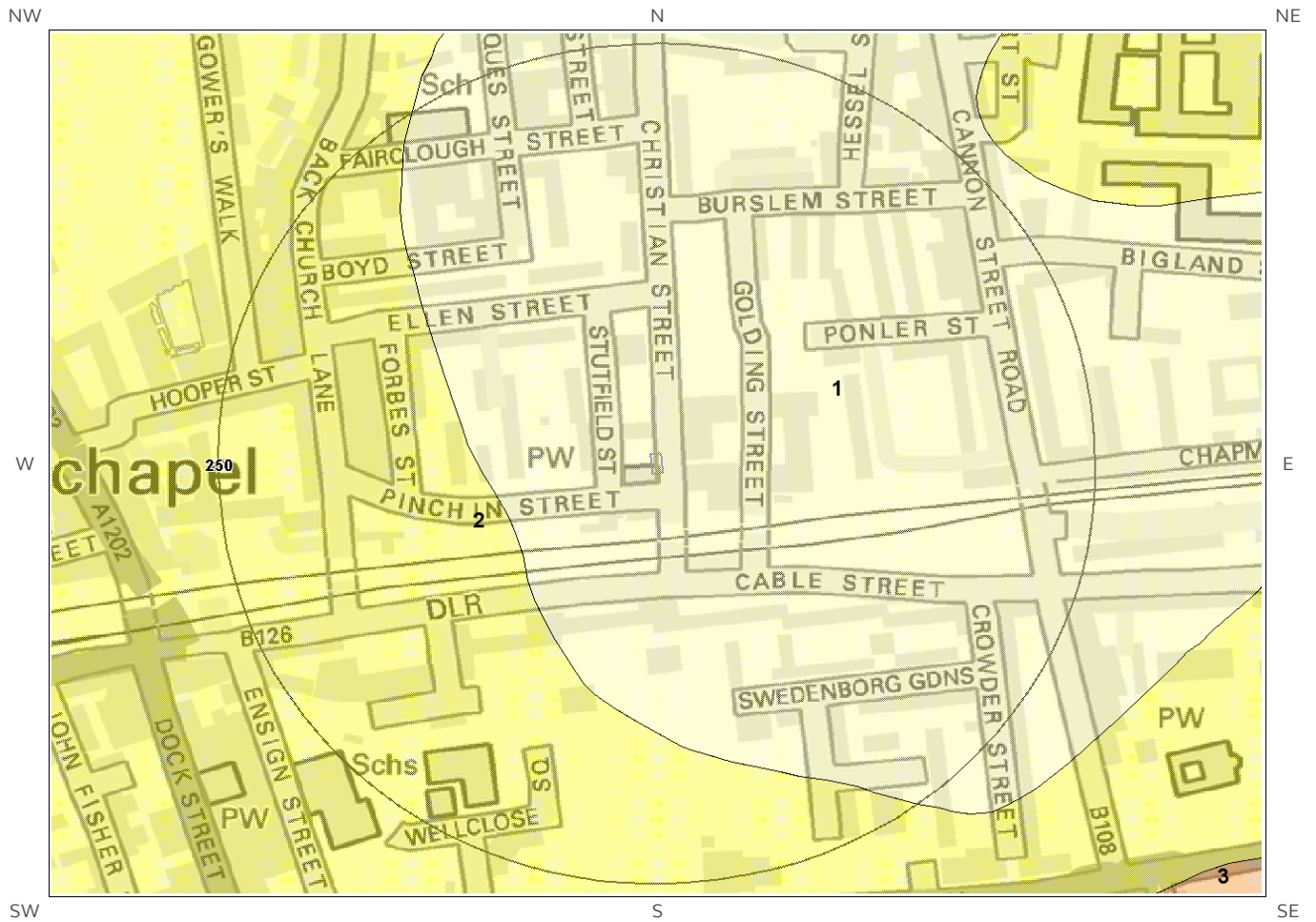


Collapsible Deposits Legend

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## 6.6 Running Sand map



Running Sand Legend

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## 6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site\*\* boundary? Low

### 6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

### 6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

### 6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

\* This includes an automatically generated 50m buffer zone around the site

## 6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

## 6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Low	Slight possibility for collapsible deposit problems after major changes in loading or groundwater conditions. Normal maintenance to avoid large amounts of water entering the ground through pipe leakage or soak-aways should reduce the likelihood of problems due to collapsible deposits. For new build, assess the possibility of collapsible (loessic) deposits in ground investigation. For existing property, no significant increase in insurance risk from collapsible deposits is likely.

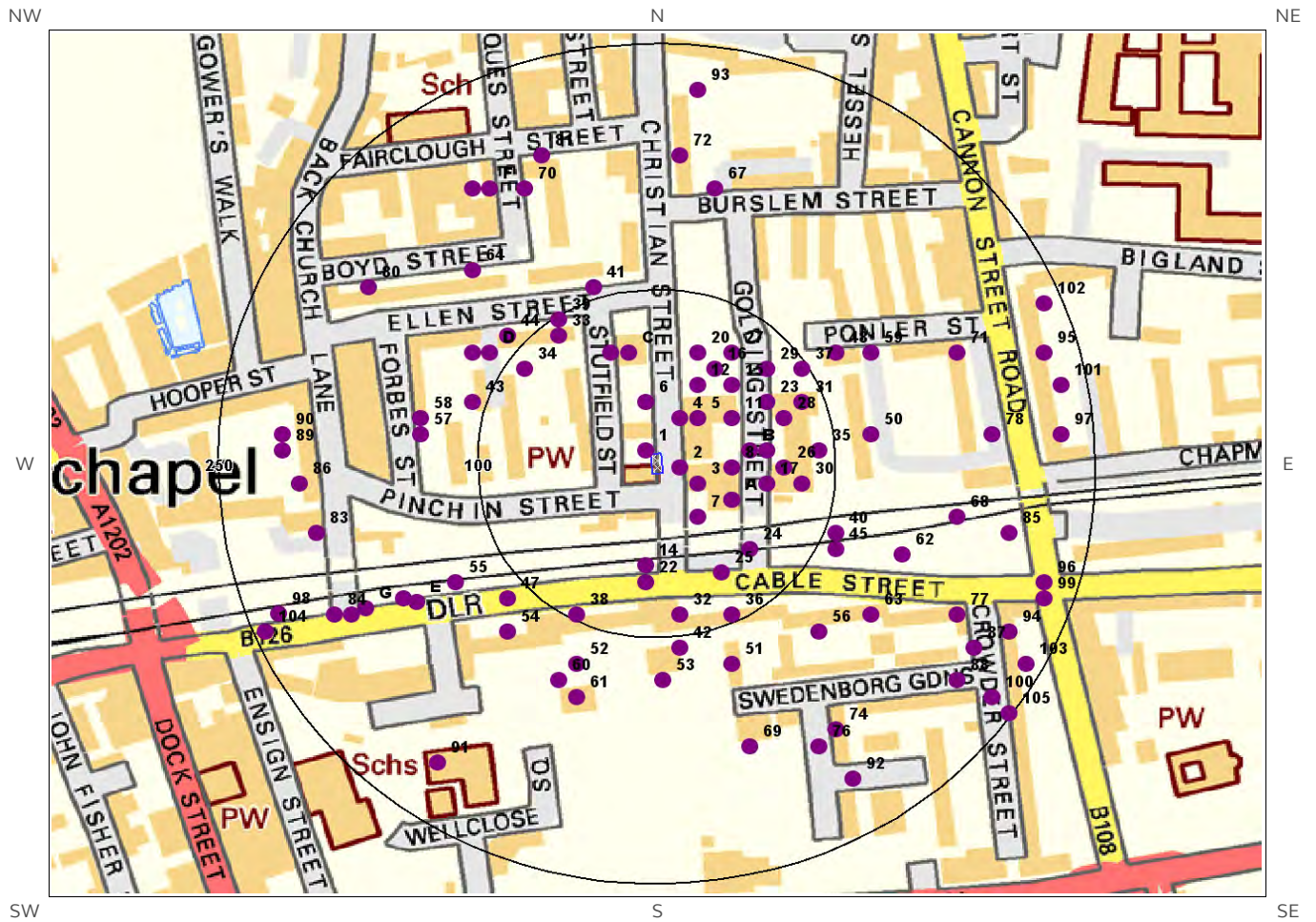
## 6.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

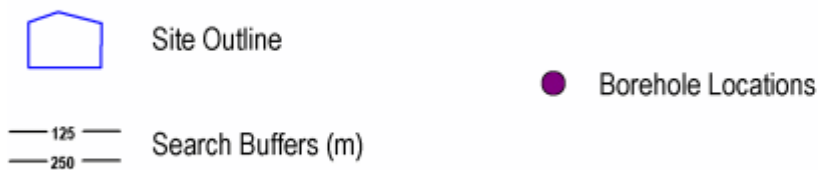


# 7 Borehole Records map



Borehole Records Legend

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# 7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

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ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	4.0	NW	534420 180990	TQ38SW1168	10	HESSEL STREET (GLC) 6
2	10.0	E	534440 180980	TQ38SW4824	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS14
3	21.0	E	534450 180970	TQ38SW4823	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS13
4	24.0	NE	534440 181010	TQ38SW4821	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS11
5	30.0	NE	534450 181010	TQ38SW4800	20	CHRISTIAN STREET BETHNAL GREEN LONDON E1 1/1A
6	32.0	N	534420 181020	TQ38SW1167	15	HESSEL STREET (GLC) 5
7	34.0	SE	534450 180950	TQ38SW4809	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP6
8	40.0	E	534470 180980	TQ38SW4822	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS12
9A	44.0	SE	534470 180960	TQ38SW4801	30	CHRISTIAN STREET BETHNAL GREEN LONDON E1 2
10A	44.0	SE	534470 180960	TQ38SW4810	2	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP7
11	46.0	NE	534470 181010	TQ38SW4820	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS10
12	46.0	NE	534450 181030	TQ38SW4805	2	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP2
13B	51.0	E	534480 180990	TQ38SW4819	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS9
14	57.0	S	534420 180920	TQ38SW3799	2	LONDON DOCKLANDS RAILWAY TP 6
15	58.0	NE	534470 181030	TQ38SW4808	2	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP5
16	60.0	NE	534460 181040	TQ38SW4806	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP3



ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
17	60.0	E	534490 180970	TQ38SW4816	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS6
18B	61.0	E	534490 180990	TQ38SW4814	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS4
19C	63.0	N	534410 181050	TQ38SW638/A	14	CHRISTIAN ST, STEPNEY 1
20	65.0	N	534450 181050	TQ38SW4804	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP1
21C	66.0	N	534400 181050	TQ38SW638	Not available	L.C.C. CHRISTIAN ST STEPNEY
22	67.0	S	534420 180910	TQ38SW3811	30	LONDON DOCKLANDS RAILWAY 408
23	68.0	NE	534490 181020	TQ38SW4802	20	CHRISTIAN STREET BETHNAL GREEN LONDON E1 3/3A
24	69.0	SE	534480 180930	TQ38SW3801	2	LONDON DOCKLANDS RAILWAY TP 8
25	70.0	SE	534464 180916	TQ38SW2208	30	DOCKLANDS RAILWAY 407
26	70.0	E	534500 180980	TQ38SW4815	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS5
27	74.0	NE	534470 181050	TQ38SW4807	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 TP4
28	74.0	E	534500 181010	TQ38SW4813	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS3
29	80.0	NE	534490 181040	TQ38SW4811	3	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS1
30	80.0	E	534510 180970	TQ38SW4817	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS7
31	87.0	E	534510 181020	TQ38SW4812	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS2
32	88.0	S	534440 180890	TQ38SW773/G	12	SWEDENBORG SQ. STAGE 2 L
33	89.0	NW	534370 181060	TQ38SW4912	15	HADFIELD HOUSE ELLEN STREET LONDON E1 1
34	90.0	NW	534350 181040	TQ38SW1410	6	CHRISTIAN STREET AREAS STEPNEY 3
35	91.0	E	534520 180990	TQ38SW4818	4	CHRISTIAN STREET BETHNAL GREEN LONDON E1 WS8
36	96.0	SE	534470 180890	TQ38SW758/A	10	SWEDENBORG SQ, STEPNEY A
37	96.0	NE	534510 181040	TQ38SW4803	33	CHRISTIAN STREET BETHNAL GREEN LONDON E1 4/4A
38	97.0	SW	534380 180890	TQ38SW773/K	9	SWEDENBORG SQ. STAGE 2 V
39	98.0	NW	534370 181070	TQ38SW4913	3	HADFIELD HOUSE ELLEN STREET LONDON E1 TP1
40	107.0	E	534530 180940	TQ38SW3802	2	LONDON DOCKLANDS RAILWAY TP 9

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
41	107.0	N	534390 181090	TQ38SW1411	5	CHRISTIAN STREET AREAS STEPNEY 2
42	107.0	S	534440 180870	TQ38SW773/C	15	SWEDENBORG SQ. STAGE 2 O
43	108.0	W	534320 181020	TQ38SW1166	10	HESSEL STREET (GLC) 4
44	110.0	NW	534340 181060	TQ38SW4914	2	HADFIELD HOUSE ELLEN STREET LONDON E1 TP2
45	111.0	SE	534530 180930	TQ38SW3812	30	LONDON DOCKLANDS RAILWAY 409
46D	112.0	NW	534330 181050	TQ38SW4915	2	HADFIELD HOUSE ELLEN STREET LONDON E1 TP3
47	114.0	SW	534340 180900	TQ38SW3810	30	LONDON DOCKLANDS RAILWAY 407
48	118.0	NE	534530 181050	TQ38SW1408	3	BERNER ESTATE STEPNEY 1949 TP.A
49D	120.0	NW	534320 181050	TQ38SW1164	10	HESSEL STREET (GLC) 2
50	121.0	E	534550 181000	TQ38SW1407	6	BERNER ESTATE STEPNEY 1949 BH4
51	124.0	S	534470 180860	TQ38SW758/D	9	SWEDENBORG SQ, STEPNEY D
52	125.0	S	534380 180860	TQ38SW773	9	SWEDENBORG SQ STAGE 2 STEPNEY
53	127.0	S	534430 180850	TQ38SW773/D	24	SWEDENBORG SQ. STAGE 2 P
54	128.0	SW	534340 180880	TQ38SW773/J	15	SWEDENBORG SQ. STAGE 2 T
55	132.0	SW	534310 180910	TQ38SW3800	3	LONDON DOCKLANDS RAILWAY TP 7
56	132.0	SE	534520 180880	TQ38SW758/B	9	SWEDENBORG SQ, STEPNEY B
57	134.0	W	534290 181000	TQ38SW1409	7	CHRISTIAN STREET AREAS STEPNEY 4
58	135.0	W	534290 181010	TQ38SW1165	15	HESSEL STREET (GLC) 3
59	136.0	NE	534550 181050	TQ38SW1404	6	BERNER ESTATE STEPNEY 1949 BH1
60	138.0	SW	534370 180850	TQ38SW773/F	24	SWEDENBORG SQ. STAGE 2 R
61	143.0	S	534380 180840	TQ38SW773/E	15	SWEDENBORG SQ. STAGE 2 Q
62	147.0	E	534568 180927	TQ38SW2209	30	DOCKLANDS RAILWAY 408
63	148.0	SE	534550 180890	TQ38SW758/C	9	SWEDENBORG SQ, STEPNEY C
64	152.0	NW	534320 181100	TQ38SW1403	4	ELLEN ST AREA STEPNEY TH2
65E	157.0	SW	534288 180898	TQ38SW2206	30	DOCKLANDS RAILWAY 405
66E	163.0	SW	534280 180900	TQ38SW3798	2	LONDON DOCKLANDS RAILWAY TP 5
67	164.0	N	534460 181150	TQ38SW1415	9	UMBERSTON STREET AREA 1952 TB.C
68	172.0	E	534600 180950	TQ38SW3803	2	LONDON DOCKLANDS RAILWAY TP 10
69	174.0	S	534480 180810	TQ38SW758/G	24	SWEDENBORG SQ, STEPNEY G



ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
70	178.0	NW	534350 181150	TQ38SW364	7	10A FAIRCLOUGH ST E 1 STEPNEY
71	182.0	E	534600 181050	TQ38SW1405	6	BERNER ESTATE STEPNEY 1949 BH2
72	182.0	N	534440 181170	TQ38SW1416	3	UMBERSTON STREET AREA 1952 TP.G
73G	185.0	SW	534258 180894	TQ38SW2207	30	DOCKLANDS RAILWAY 406
74	186.0	SE	534530 180820	TQ38SW758/H	7	SWEDENBORG SQ, STEPNEY H
75F	187.0	NW	534330 181150	TQ38SW2856	153	BERNER STREET
76	190.0	SE	534520 180810	TQ38SW758	24	TRIAL BORINGS A-K STEPNEY
77	191.0	SE	534600 180890	TQ38SW852	12	SWEDENBORG SQUARE W
78	191.0	E	534620 181000	TQ38SW1406	6	BERNER ESTATE STEPNEY 1949 BH3
79F	192.0	NW	534320 181150	TQ38SW3113	153	BERNER STREET, WHITECHAPEL
80	192.0	NW	534260 181090	TQ38SW1402	5	ELLEN ST AREA STEPNEY TH1
81	192.0	N	534360 181170	TQ38SW1412	7	CHRISTIAN STREET AREAS STEPNEY 4
82G	194.0	SW	534250 180890	TQ38SW3809	30	LONDON DOCKLANDS RAILWAY 406
83	197.0	W	534230 180940	TQ38SW1765/D	10	HOOPER ST, TOWER HAMLETS 6
84	203.0	SW	534240 180890	TQ38SW3797	Not available	LONDON DOCKLANDS RAILWAY TP 4
85	203.0	E	534630 180940	TQ38SW3813	30	LONDON DOCKLANDS RAILWAY 410
86	204.0	W	534220 180970	TQ38SW1765/C	10	HOOPER ST, TOWER HAMLETS 4
87	209.0	SE	534610 180870	TQ38SW853	12	SWEDENBORG SQUARE X
88	212.0	SE	534600 180850	TQ38SW758/K	6	SWEDENBORG SQ, STEPNEY K
89	213.0	W	534210 180990	TQ38SW1765/B	10	HOOPER ST, TOWER HAMLETS 3
90	214.0	W	534210 181000	TQ38SW1765	10	HOOPER ST TOWER HAMLETS BH1-6
91	216.0	SW	534300 180800	TQ38SW452	123	WELLCLOSE SQUARE, STEPNEY
92	217.0	SE	534540 180790	TQ38SW758/J	6	SWEDENBORG SQ, STEPNEY J
93	222.0	N	534450 181210	TQ38SW1417	3	UMBERSTON STREET AREA 1952 TP.H
94	222.0	SE	534630 180880	TQ38SW1424	9	CROWDER STREET STEPNEY A
95	229.0	E	534650 181050	TQ38SW583/C	9	BIGLAND ST, STEPNEY 3
96	230.0	E	534650 180910	TQ38SW3910	16	LONDON DOCKS GS 9
97	231.0	E	534660 181000	TQ38SW583/A	9	BIGLAND ST, STEPNEY 1
98	232.0	W	534208 180891	TQ38SW2205	30	DOCKLANDS RAILWAY 404

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
99	233.0	E	534650 180900	TQ38SW60	17	CANNON STREET/CABLE STREET
100	234.0	SE	534620 180840	TQ38SW854	12	SWEDENBORG SQUARE Y
101	234.0	E	534660 181030	TQ38SW583/B	9	BIGLAND ST, STEPNEY 2
102	239.0	E	534650 181080	TQ38SW583/D	9	BIGLAND ST, STEPNEY 4
103	240.0	SE	534640 180860	TQ38SW1425	15	CROWDER STREET STEPNEY B
104	244.0	SW	534200 180880	TQ38SW3808	30	LONDON DOCKLANDS RAILWAY 405
105	248.0	SE	534630 180830	TQ38SW1427	9	CROWDER STREET STEPNEY D



The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: scans.bgs.ac.uk/sobi\_scans/boreholes/1064922  
#2: scans.bgs.ac.uk/sobi\_scans/boreholes/18376016  
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#7: scans.bgs.ac.uk/sobi\_scans/boreholes/18376000  
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#103: scans.bgs.ac.uk/sobi\_scans/boreholes/1065302  
#104: scans.bgs.ac.uk/sobi\_scans/boreholes/13600944  
#105: scans.bgs.ac.uk/sobi\_scans/boreholes/1065304

# 8 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

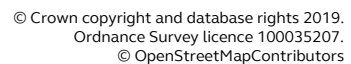
3

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	London	No data	No data	No data	No data	No data
11.0	N	London	No data	No data	No data	No data	No data
11.0	N	London	No data	No data	No data	No data	No data

\*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.





# 9 Railways and Tunnels

## 9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Detail
52	S	London Underground - Docklands Light Railway

The approximate depth value for the nearest London Underground line given in this dataset has been extrapolated from published depths of tube lines at station platforms, and assume a constant gradient between stations. Using this method, topographical variation has resulted in some parts of the line having associated depth values either shallower or deeper than the real-world situation. Depth values are for indication only and should not be relied upon for any calculation or technical purpose and are in no way a substitute for a professional survey.

Line
London Underground Line: Docklands Light Railway Depth: 0mbgl Track Type: Surface Track

*Any records that have been identified are represented on the Railways and Tunnels map.*

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

*Any records that have been identified are represented on the Railways and Tunnels map.*



## 9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? No

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
18E	35	S	n/a	Railway	1916
19E	35	S	n/a	Railway	1897
20E	35	S	n/a	Railway	1880
21	35	S	533791 180933	Railway Sidings	1896
22	36	S	n/a	Railway	1873
23	36	S	n/a	Railway	1896
1	39	S	534177 180956	Railway Sidings	1894
2	44	SW	534333 180933	Railway Sidings	1872
24	46	SW	534197 180962	Railway Sidings	1948
3	47	SW	534204 180961	Railway Sidings	1894
25	47	SW	n/a	Railway	1916
26	50	W	534169 181015	Railway Sidings	1916
4A	51	SW	534148 181106	Railway Sidings	1948
5A	51	SW	534148 181106	Railway Sidings	1957
6A	51	SW	534148 181106	Railway Sidings	1966
27	51	SW	n/a	Railway	1896
28F	52	SW	534356 180941	Railway Sidings	1948
29F	52	SW	534356 180941	Railway Sidings	1963
30F	52	SW	534356 180941	Railway Sidings	1951
31G	53	SW	534324 180921	Railway Sidings	1880
7B	54	SW	534147 181116	Railway Sidings	1938
8B	54	SW	534147 181116	Railway Sidings	1920
9G	56	SW	534328 180920	Railway Sidings	1882
10	64	SW	534135 181077	Railway Sidings	1898
32H	77	SE	534543 180945	Railway Sidings	1991
33H	77	SE	534543 180945	Railway Sidings	1989

ID	Distance (m)	Direction	NGR	Details	Date
34H	77	SE	534543 180945	Railway Sidings	1989
11C	103	SW	533966 180864	Railway Sidings	1994
12	103	SW	534035 180813	Railway Sidings	1971
13C	103	SW	533966 180864	Railway Sidings	1976
35I	105	E	n/a	Railway	1911
36I	105	E	n/a	Railway	1930
37	123	W	n/a	Railway	1930
38	123	W	n/a	Railway	1911
39	133	E	n/a	Railways	1916
14J	134	E	534597 180939	Railway Sidings	1957
40J	135	E	534601 180942	Railway Sidings	1948
41J	137	E	534601 180942	Railway Sidings	1951
42J	137	E	534601 180942	Railway Sidings	1957
43J	137	E	534601 180942	Railway Sidings	1948
44	139	E	n/a	Railway	1930
45	140	E	n/a	Railway	1896
46	146	E	n/a	Railway	1875
47K	188	W	534197 180962	Railway Sidings	1963
48K	188	W	534197 180962	Railway Sidings	1948
49K	188	W	534197 180962	Railway Sidings	1951
15D	190	E	535257 181017	Railway Sidings	1898
16D	194	E	535261 181019	Railway Sidings	1899
17D	194	E	535261 181019	Railway Sidings	1899
50L	215	W	534159 181147	Railway Sidings	1951
51L	215	W	534159 181147	Railway Sidings	1948
52L	215	W	534159 181147	Railway Sidings	1969
53L	215	W	534159 181147	Railway Sidings	1962
54L	216	W	534158 181148	Railway Sidings	1966
55L	216	W	534158 181148	Railway Sidings	1948
56	227	W	n/a	Railway	1930

*Any records that have been identified are represented on the Railways and Tunnels map.*



## 9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Status
51	SW	Razed
51	SW	Abandoned

Multiple sections of the same track may be listed in the detail above  
Any records that have been identified are represented on the Railways and Tunnels map.

## 9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
36	S	London, Tilbury & Southend Railway	rail
36	S	London, Tilbury & Southend Railway	rail
39	S	London, Tilbury & Southend Railway	rail
39	S	London, Tilbury & Southend Railway	rail
40	S	Not given	Multi Track
40	S	Not given	Multi Track
43	S	London, Tilbury & Southend Railway	rail
43	S	London, Tilbury & Southend Railway	rail
46	S	London, Tilbury & Southend Railway	rail
46	S	London, Tilbury & Southend Railway	rail
60	SE	London, Tilbury & Southend Railway	rail
60	SE	London, Tilbury & Southend Railway	rail
123	E	London, Tilbury & Southend Railway	rail
123	E	London, Tilbury & Southend Railway	rail
170	E	London, Tilbury & Southend Railway	rail
170	E	London, Tilbury & Southend Railway	rail
184	E	London, Tilbury & Southend Railway	rail
184	E	London, Tilbury & Southend Railway	rail
222	W	Not given	light rail
222	W	Not given	light rail
245	W	London, Tilbury & Southend Railway	rail
245	W	London, Tilbury & Southend Railway	rail

Multiple sections of the same track may be listed in the detail above  
Any records that have been identified are represented on the Railways and Tunnels map.

## 9.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

*Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a **Groundsure HS2 and Crossrail 1 Report**.*

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The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.



# Contact Details

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BGS Geological Hazards Reports and general geological enquiries

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# Standard Terms and Conditions

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<https://www.groundsure.com/terms-and-conditions-feb11-2019>

## **APPENDIX C**

### **Zetica UXO Map**

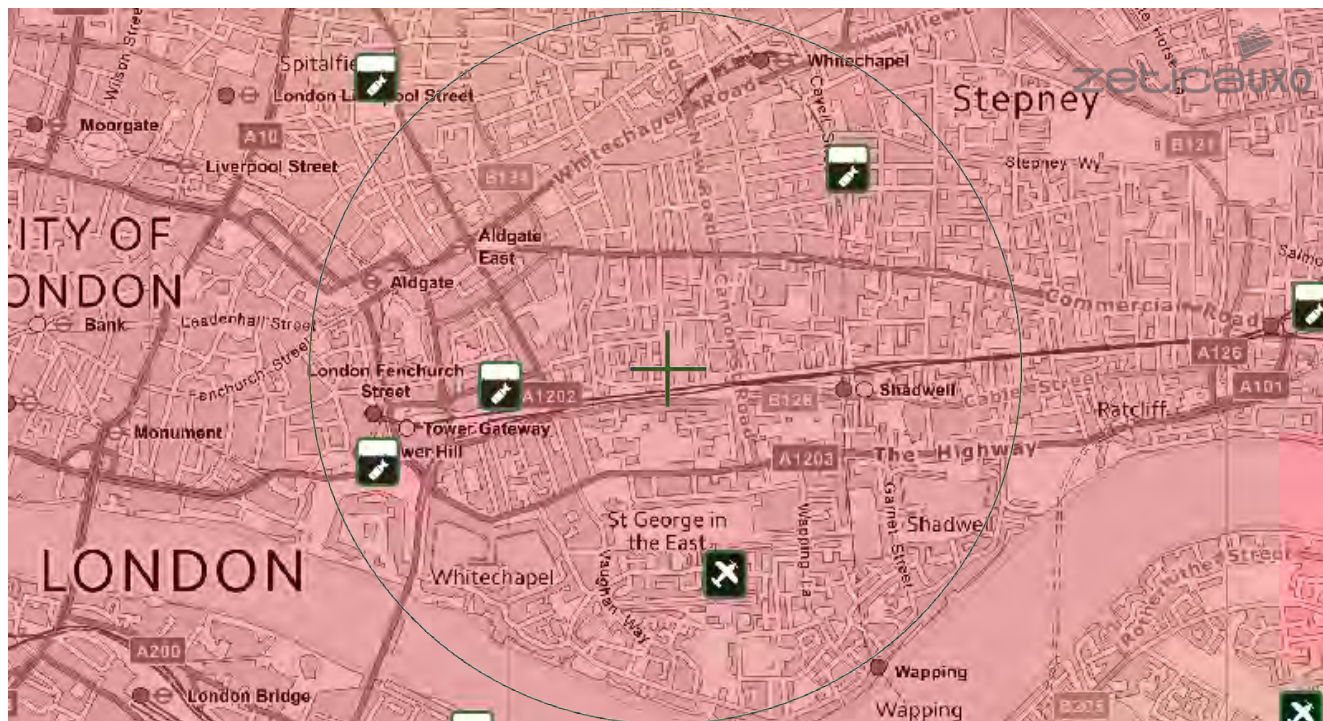


# UNEXPLODED BOMB RISK MAP



## SITE LOCATION

Location: E1 1AY,  
Map Centre: 534450,181005



## LEGEND

### London Bomb Risk



### How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment\* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment\* is necessary.

### Relative UXB risk across London

The relative risk for the London area is established by plotting the recorded bombing densities.

These are represented as counts of high explosive bombs in km2 area. The areas coloured green represent a record of less than 10 bombs per km2.

Compared to other areas of the UK, this still represents a significant density. However, this is much lower than parts of Central London, where the red colouration indicates in excess of 150 bombs falling per km2, representing a very significant bombing density.

### What do I do if my site is in a moderate or high density area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites with a moderate or high bombing density.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

**Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.**

### If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

### If I have any questions, who do I contact?

tel: +44 (0) 1993 886682

email: [uxo@zetica.com](mailto:uxo@zetica.com)

web: [www.zeticauxo.com](http://www.zeticauxo.com)

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

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It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

\*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

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