



Berkeley Homes (East Thames) Ltd

# RAR, Blocks D & K

Desk Study and Ground Investigation Report





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## Desk Study and Ground Investigation Report

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EXECUTIVE SUMMARY

PRELIMINARY RISK ASSESSMENT (DESK STUDY AND SITE WALKOVER)	Client	Berkely Homes (East Thames) Ltd
	Site Details	The site is located off Beresford Road within the Royal Arsenal Riverside development, in the north of Woolwich. The site is roughly 2.18 hectares in size with the centre of the site located at approximate National Grid Reference 543650, 179150. The closest postcode to site is SE18 6NF.
	Site Objectives	The aim of these works is to provide information on land contamination risk and the ground engineering conditions and constraints associated with the site with regard to the proposed development; to ensure the site is suitable for redevelopment.
	Proposed Development	The proposed development is understood to comprise the construction of 8No. residential blocks (Blocks K3-K5 and D1-D5), varying in height from 9 – 18 storeys for residential purposes, with associated soft landscaping and hard infrastructure.
	Current Land Use and Description	The site currently comprises an area of public open space known as 'Maribor Park' within the northern part of the site, while temporary offices and adjacent hotel car parking are located in the southern section of the site.
	Geology	The published mapping indicates the site is underlain by superficial Head Deposits, which in turn are underlain by the Thanet Sand Formation and the White Chalk Subgroup.
	Hydrogeology	The superficial deposits are classified by the Environment Agency as a Secondary (undifferentiated) Aquifer. The Thanet Sand Formation is classified as a Secondary A Aquifer while the White Chalk Subgroup is classified as a Principal Aquifer.  The site is not situated within an Environment Agency Source Protection Zone. 1No groundwater abstraction and 1No discharge to groundwater is recorded within 1km of the site.
	Hydrology	A stream/drain is recorded approximately 15m northwest from the site, while the River Thames is recorded approximately 90m to the north. 2No. abstraction licences are recorded within 500m of the site.
	Unexploded Ordnance	A review of available UXO risk mapping indicates the site is located within a high-risk zone. UXO assessments undertaken in proximity to the site have made recommendations for the supervision of intrusive works by a suitably qualified EOD engineer. Therefore, similar recommendations are considered appropriate for this site and an EOD Engineer was present during this latest phase of intrusive investigation works.
	Site History	The site is situated within the Royal Arsenal Riverside development and has been subject to development since earliest available mapping (c.1869). The development on site has included residential properties, timber yard and a garage. The northern section of the site was developed as the current Maribor Park post 2016.
Environmental Sensitivity	4No pollution incidents have been identified within 500m of the site, 3 noted as minor incidents (1No 395m and 2No 475m northeast of the site) and 1 noted as a significant incident, which occurred 470m northeast of the site.  No current or historical landfills are recorded within 500m of the site and 1No licensed waste management facility is noted (household, commercial and industrial transfer stations between 1992 and 2009) 25m south of the site. No infilled land is recorded within 500m of the site.  27No active contemporary trade directories are noted within 500m of the site including cargo handling, cleaning services, petrol filling stations, garage services and car body repairs, dry cleaners, print finishers and electrical goods sales, manufacturers, and repairers.  8No Hazardous Substances (Authorisations, Consents, Incidents) are noted within 500m, with the closest being for authorised wastes at a registered waste transfer station 35m south of the site.  No elevated levels of background soil contaminants (heavy metals) or radon have been identified either on or in proximity to the site.	
Potential Radon/Ground Gases	Potential sources of ground gases identified during the preliminary risk assessment include made ground which is potentially present across the site (made ground has been identified during previous phases of investigation undertaken across the site). The underlying geology also includes chalk which can potentially give rise to elevated levels of carbon dioxide.  The site is located within a lower Probability Radon Area where less than 1% of homes are estimated to be at or above the action level, therefore radon protection is not required.	

	Initial Conceptual Site Model	<p><u>Potential On Site Sources</u> Potential for elevated contaminant concentrations and asbestos associated with any made ground which maybe present. There is also the potential for hydrocarbon impact associated with the former garage area and underground fuel storage which was present at the site.</p> <p><u>Potential off Site Sources</u> Potential contamination associated with nearby historic land uses including military site of Royal Arsenal, gas works, power station and railway land, together with previously recorded made ground associated with the historic off site land uses.</p> <p><u>Potential Receptors</u> Current and future site users, construction and maintenance workers, controlled waters and proposed development/structures proposed at the site.</p> <p><u>Potential Pathways</u> Human Health (dermal contact, ingestion of soil, dust and/or groundwater/leachate and inhalation of soil, dust, gases or vapours. Controlled waters (infiltration and percolation of contaminants and/or horizontal migration of leachate. Ground gases (vertical and horizontal migration of gaseous contaminants through the unsaturated zone and/or migration of hazardous gases to indoor air through soil, and building foundations. Buildings, structures and services on the site (aggressive attack and explosive risk).</p>
GENERIC QUANTITATIVE RISK ASSESSMENT - GROUND INVESTIGATION	Ground Investigation Rationale	The ground investigation has been undertaken to provide information on the ground conditions to aid with the design of the development and to further investigate the potential contaminant linkages identified as part of the Tier 1: Preliminary Risk Assessment.
	Scope of Works	4No window sample holes were undertaken to provide spatial coverage across the site and to assess the potential for contamination within near surface soils across the site. 2No rotary boreholes were positioned within the proposed building footprint (where possible) to characterise the deeper ground conditions, to collect geotechnical and environmental samples and to install groundwater monitoring wells.
	Ground Conditions	<p><u>Made Ground</u> Made ground has been identified to depths in excess of 3.0mbgl, generally comprising sandy gravelly clay with occasional ash. Within BH01 and BH02, a residual layer of tarmacadam believed to be associated with a relict car park was observed at a depth of approximately 1.0mbgl. This in turn was underlain by further made ground comprising clayey gravelly sand/sandy gravel with occasional ash.</p> <p><u>Superficial Deposits (KEMPTON PARK GRAVEL)</u> Superficial deposits of Kempton Park Gravel were encountered at depths of between 2.2m and 6.2mbgl, recorded to comprise dense orangish brown slightly clayey gravelly sand with gravel of flint.</p> <p><u>Solid Geology (THANET FORMATION)</u> Solid Geology comprises Thanet Formation (very dense pale greenish brown silty glauconitic sand) to depths of between 16.8 and 17.0mbgl.</p> <p><u>Solid Geology (WHITE CHALK SUBGROUP)</u> over the White Chalk subgroup comprising weak, becoming moderately strong, low to medium density white chalk with occasional bands of flint.</p>
	Assessment Criteria	The standard land use for the site, for use in this generic assessment, has been defined as 'residential with homegrown produce' based on the proposed development an in accordance with current guidance. TEC have referenced the Environment Agency SGV's, Defra Category 4 Screening Levels (C4SLs) and LQM/ClEH S4ULs for Human Health Risk Assessment
	Contaminant Characterisation	<p><u>Soil Contaminants</u> The following contaminants of potential concern (CoPC) have been identified within the made ground;</p> <ul style="list-style-type: none"> <li>• Heavy metals – arsenic and lead.</li> <li>• PAHs –Benzo(a)pyrene and dibenz(a,h)anthracene.</li> </ul> <p>Laboratory screening for asbestos during the current assessment recorded the presence of amosite and Chrysotile in 2No locations at depths of 0.6mbgl to 0.70mbgl. All remaining samples recorded asbestos as not-detected within the current assessment.</p> <p>Chrysotile and amosite asbestos fibres were recorded within 3No. samples of made ground within the far south of the redline boundary area in May 2016 and again in February 2018,</p>

	<p>while loose fibres and fibrous debris of amosite was recorded within a single location in proximity to D Block in February 2018.</p> <p><u>Leachate/groundwater Assessment</u> Leachate analysis has not been undertaken on the sampled made ground/ shallow soils and no groundwater samples have been collected as part of this site investigation, owing to the following;</p> <ul style="list-style-type: none"> <li>• No visual or olfactory evidence of contamination was noted during the site investigation;</li> <li>• No significant contaminants of potential concern were recorded within the sampled made ground/ shallow soils;</li> <li>• Groundwater was encountered at depths in excess of 7mbgl during the intrusive works; and</li> <li>• The site is not reported to be located within an Environment Agency Source Protection Zone.</li> </ul> <p>On this basis, no risk to controlled waters from migration of leachable contaminants within the made ground or migration of dissolved phase contaminants to the wider aquifer has been identified.</p> <p><u>Ground Gases</u> Made ground has been identified at the site to depths in excess of 3m bgl, however no significant organic matter has been observed and therefore the made ground is not considered to present a credible source of ground gases at the site. Although the site is underlain by chalk, which is a soil of high carbonate content, this is not expected to present a credible source of ground gases due to the slow rate of degradation and expected low volumes of gas generation associated with this strata. The site is not reported to lie within a radon affected area, as less than 1% of homes are reported to be above the Action Level. No radon protection measures are reported to be necessary within the construction of new dwellings or extensions.</p>
Updated Conceptual Site Model	<ul style="list-style-type: none"> <li>• Human Health (end users and construction/maintenance workers) – potential exposure to CoPCs and asbestos within shallow made ground, via ingestion, inhalation and dermal contact with soil and dust.</li> </ul>
Foundations	<p>Based on the proposed buildings, recorded ground conditions and the presence of Crossrail tunnels which run below the site, it is considered that a piled foundation solution is the most appropriate.</p> <p>It is considered likely that piling may be limited to the Thanet Sand Formation.</p> <p>Should piles be extended to the underlying chalk encountered below an approximate elevation of -6.52m AOD, it is suggested that moderately conservative design parameters of <math>c' = 20\text{kN/m}^2</math> and <math>\phi' = 39^\circ</math>, and worst credible parameters of <math>c' = 0</math> and <math>\phi' = 34^\circ</math> would be appropriate within the design.</p> <p>It is recommended that the presence of potential solution features within the chalk mass are considered within any pile design.</p> <p>Consideration will also need to be given to the presence of Crossrail tunnels and infrastructure to ensure that piles do not load these features. It is considered that in some circumstances, the piles may need to be sleeved to ensure they do not impart any load on these below ground features.</p> <p>The proximity of adjacent structures, the presence of significant below ground obstructions, and the environmental sensitivity of the site will need to be carefully considered when choosing the most appropriate pile type and methodology and it is suggested that a specialist piling contractor should be consulted regarding the piling options and detailed design of most appropriate option.</p>
Ground Floor Slabs	<p>Given the anticipated depth/type of foundations together with the recorded depth of made ground across the site area, the use of suspended floor slabs may be appropriate for the scheme, which should incorporate appropriate void dimensions as outlined in the NHBC Standards.</p>
Excavations	<p>Excavations at the site for conventional foundations may be achievable using conventional equipment.</p> <p>Groundwater ingress into excavations is considered unlikely to be significantly problematic, although some dewatering might be required, particularly where excavations are left open for any length of time. Formation levels should be protected to mitigate against softening associated with any such water ingress.</p>

		Appropriate shoring/temporary works should be used in accordance with current Health and Safety requirements where access for personnel is required into excavations.
	Buried Concrete	The results of testing indicates that the Thanet Formation would be considered to fall within ACEC Class AC-2 and Design Class DS-2, while the White Chalk Subgroup would be considered to fall within ACEC Class AC-1 and Design Class DS-1.
	Recommended further works	Based on the results of this assessment, no further works are considered necessary.

- 1 INTRODUCTION
- 1.1 Terms of Reference
- 1.1.1 TEC has been appointed by Berkeley Homes (East Thames) Ltd to undertake a Stage 1: Risk assessment, comprising a Geoenvironmental Desk Study including walkover survey and Ground Investigation of Royal Arsenal Riverside – Blocks D & K, Woolwich. All works were undertaken in accordance with our proposal letter dated 19 October 2022 and referenced CH.2208001.RevB.
- 1.2 Background
- 1.2.1 The site is located off Beresford Road within the Royal Arsenal Riverside development, in the north of Woolwich (Figure 1). The site is roughly 2.18 hectares in size with the centre of the site located at approximate National Grid Reference 543650, 179150. The closest postcode to site is SE18 6NF.
- 1.2.2 The majority of the site currently comprises the public open space of Maribor Park, along with an office building and associated car parking in the south of the site.
- 1.2.3 The proposed development is understood to comprise the construction of 8No. residential blocks (Blocks K3-K5 and D1-D5), varying in height from 9 – 18 storeys for residential purposes, including associated soft landscaping and hard infrastructure (Figure 2).
- 1.2.4 TEC have extensively investigated and undertaken multiple phases of investigation and assessment of the wider Royal Arsenal Woolwich development. A desk study and some intrusive investigations were completed within part of the site as part of the works completed for Phase 18 and 19, as well as the Linear Park area of the site. It is noted that investigation was limited at the time of these previous reports due to the presence of existing buildings, high voltage cables and access restriction due to construction work.
- 1.2.5 The following previous TEC reports were undertaken for areas within, or in close proximity to the current development site and should be referred to as part of these current works:
- ‘Royal Arsenal Riverside, Phase 8 – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkeley Homes (East Thames), dated January 2016 and referenced 1508005.001.01.
  - ‘Royal Arsenal Riverside, Phases 9-11 – Preliminary Geoenvironmental Assessment’. Prepare by TEC on behalf of Berkeley Homes (East Thames), dated April 2016 and referenced 1508005.002.01.
  - ‘Royal Arsenal Riverside, Phases 18-19 – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkeley Homes (East Thames), dated May 2016 and referenced 1508005.003.01.
  - ‘Royal Arsenal Riverside, Linear Park (Zone 1) – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkely Homes (East Thames), dated May 2016 and referenced 1508005.005.01.
  - ‘Royal Arsenal Riverside, Phase 9-11 (A Blocks) – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkely Homes (East Thames), dated July 2017 and referenced 1508005.013.01.
  - ‘Royal Arsenal Riverside - Linear Park – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkely Homes (East Thames), dated February 2018 and referenced 1508005.014.01.
- 1.2.6 Full reference should be made to the previous reporting although salient information is provided in Section 2.10 of this report.
- 1.2.7 The aim of these works is to provide information on land contamination risk and the ground engineering conditions and constraints associated with the site with regard to the proposed development; to ensure the site is suitable for redevelopment.



1.3 Site Objectives

1.3.1 The site objectives and subsequent scope of works undertaken as part of this report are presented below:

- Tier 1: Preliminary Risk Assessment: this phase of assessment involves development of an initial conceptual site model, based on desk study research and a site walkover/reconnaissance survey, to develop an initial conceptual site model, identify potential contaminant linkages and establish whether or not there are potentially unacceptable risks.
- Tier 2: Generic Quantitative Risk Assessment - Evaluation of the risks: This phase of assessment involves updating the initial site conceptual model developed as part of the Preliminary Risk Assessment based on the findings of a Geoenvironmental ground investigation. Generic assessment criteria taking account of different land uses and receptor sensitivities, are used to identify relevant contaminant linkages.
- Ground Engineering: general recommendations in relation to ground engineering for the proposed development are provided on the basis of the findings of the ground investigation.

1.3.2 The above scope of work has been undertaken in accordance with current guidance such as LCRM - Land contamination: risk management (Environment Agency, 2023), BS10175+A2:2017, BS5930:2015+A1:2020 and, where appropriate, Eurocode 7 and NHBC Standards/ LABC Technical Manual.

1.3.3 From the outset, sustainability and the potential impact of climate change have been considered, to assist in identification of options to minimise the environmental, social, and economic impacts of the risk assessment approach, with reference to Sustainable Management Practices (SMPs) from Sustainable Remediation Forum UK (SuRF-UK).

2 TIER 1: PRELIMINARY RISK ASSESSMENT

2.1 Introduction

2.1.1 Information for this Tier 1: Preliminary Risk Assessment (PRA) has been obtained from a site reconnaissance survey and a review of an Envirocheck® report obtained for the site (Appendix B and Appendix C), together with published available information where relevant.

2.2 Site Setting

2.2.1 A site reconnaissance survey was undertaken prior to commencement of the intrusive ground investigation, by a suitably experienced geoenvironmental consultant from TEC on 03 October 2023. A summary of the observations is presented in Table 2.1. Photographs taken during the site reconnaissance survey are presented in Appendix A.

Table 2.1: Site Details

Feature	Description	
Site Location	The site is situated off Beresford Road (A206) within the Royal Arsenal Riverside development, in the north of Woolwich, London, SE18 6NF.	
Current Site Use	The site currently comprises an area of public open space known as 'Maribor Park' within the northern part of the site, while temporary offices and adjacent hotel car parking are located in the southern section of the site.	
Site Context	The site is located with a mixed-use area.	
Site Boundary Features	North	Residential properties and the River Thames beyond.
	East	Residential properties
	South	Premier Inn, and Berkely Homes (East Thames) office
	West	Office buildings and residential properties
Site Topography	The site is noted to slope down from the south-east of the site to the north-west towards the River Thames. Available Ordnance mapping indicates the south-east corner of the site is situated at an approximate elevation of 10.6m Above Ordnance Datum (AOD), sloping down to an approximate elevation of 4.8mAOD in the north-west corner of the site. The park area is noted to be undulating throughout.	
Hard and Soft Landscaping	The site comprises a combination of hard and soft landscaping. The majority of the northern section comprises soft landscaping (grass) with some hardstanding pathways, and one roadway through the centre of site. The southern section of the site is generally laid to hardstanding comprising the temporary offices of Berkeley Homes (East Thames) Limited, a brick building and car parking associated with the adjacent hotel. Some small areas of soft landscaping are also present within the south of the site.	
Trees	Some trees and shrubs are present along the eastern and western boundaries of site.	
Fuel, Hazardous Chemicals and Waste Materials Storage	No evidence of potential underground or above ground storage tanks or the storage of hazardous chemicals or waste materials was recorded during the reconnaissance survey.	
Asbestos Containing Materials	No evidence of potential ACM was recorded during the reconnaissance survey.	
Site Drainage	Surface water drains were observed in the central area of site along the hard standing roadway. No areas of standing water were observed.	
Evidence of Potential Contamination	No visual or olfactory evidence of potentially gross contamination was recorded during the reconnaissance survey.	
Ground Stability Hazards	No visual evidence of ground subsidence or movement was observed.	

2.3 Site History

2.3.1 Details of the history of the site and surrounding area, relevant to this preliminary risk assessment, have been obtained through the review of historical Ordnance Survey (OS) mapping. A summary of potentially significant features is recorded in Table 2.2, which should be read in conjunction with the full map extracts contained within Appendix B.

Table 2.2: Historical Features Summary

On Site Features	OS Dates		
Multiple structures are depicted across the site area (assumed to be terraced residential housing), along Warren Lane, Canon Row and Rope Yard Rails (roads), with the exception of the far eastern area of the site in which no features are depicted (due to military sensitivity). 1908 mapping indicates the north eastern site area comprised a Planing Mill and Timber Store.	1869 – 1940		
The majority of structures on site have been cleared, with a car park recorded in the southern site area. Some of the smaller (assumed) residential structures still remain in the northern half of the site. Historic mapping identifies some of these structures as Alms houses, and another as a Salvation Army Hall. The roads of Warren Lane and Rope Yard Rails, remain present on site.	1957 – 1958		
By 1970, the smaller (assumed) residential structures are no longer present on site. Multiple buildings identified as works, builder's yards, factories and warehouses are recorded in the northern area of site, with an electricity sub-station recorded in the northwest corner and another at the northern site boundary by 1987. By 1970, a larger building, identified as a garage, is recorded in the southern half of the site. Warren Lane remains present but Rope Yard Rails (road) no longer runs the length of the site due to the presence of new buildings and area of hardstanding. By 1996, an additional road (Cornwallis Road) has been constructed in the northeastern site area (previously no features depicted).	1970 – 2009		
By 2013, no buildings are depicted on site. Warren Lane and Cornwallis Road remain present	2013 - 2016		
By 2023, The northern area of the site is depicted as Maribor Park and the orientation of Warren Lane has been adjusted and is present in the northern site area only. A newly constructed road is present across the central site area (New Warren Lane). A single building is depicted in the southern site area. Aerial photography from 2023, depicts Maribor Park as a grassed area with several footpaths crossing it. A large car park in depicted in the central site area and an office building and associated car park is depicted in the south of site (current site layout).	2023		
Surrounding Features	Distance	Direction	OS Dates
River Thames	~85m	North	1864 - 2023
Military Store Department (comprising multiple buildings, stores and timber yards). By 1896, large area of mapping devoid of features due to military sensitivity of the area – although Russian Mapping (1985) indicates the presence of a number of buildings in this area	From adjacent	East	1869 - 1996
Railway Line	~150m	Southwest	1869 - 2023
Gas Works	~40m	North	1869 - 1870
Timber Yard	~70m	North	1869 - 1896
Workshops	~65m	Northwest	1869 - 1899
Works, Power Station with multiple chimneys by 1970	~15m	Northwest	1958 - 1989
Royal Arsenal West comprising multiple buildings including Brass Foundry, Laboratories, Carriage Factory, electricity sub-stations, storage buildings. 1999 aerial photography indicates much demolition over this area,. By 2006, much of the building and road layout of this area has changed.	From adjacent	East	1996 - 2023

2.4 Potential for Unexploded Ordnance

2.4.1 A review of available UXO risk mapping indicates the site is located within a high-risk zone. UXO assessments undertaken in proximity to the site have made recommendations for the supervision of intrusive works by a suitably qualified EOD engineer. Therefore, similar recommendations are considered appropriate for this site and an EOD Engineer was present during this latest phase of intrusive investigation works.

2.5 Geology

2.5.1 A summary of available geological information for the area is provided in Table 2.3.

Table 2.3: Geological Setting

BGS Geological Mapping (Ref. Solid and Drift 1:50,000 map – Dartford, Sheet 271)			
Geological Unit	Thickness	BGS Description	
Made Ground	Unknown	Recorded on geological mapping as “Made Ground: mainly landfill, flood defences or road and railway embankments.	
Superficial Deposits: Head	Unknown	Head is poorly sorted and poorly stratified, angular rock debris and/or clayey hill wash and soil creep, mantling a hillslope and deposited by solifluction and gelifluction processes.	
Solid Geology: Thanet Formation	Up to 850m	Typically composed of homogeneous, bioturbated, glauconitic silty fine-grained sand, with sandy silt, silt, or sandy, silty clay especially in the lower part, forming a coarsening-upwards sequence. The deposits are generally pale yellow-brown in colour, typically with a 'peppering' of dark-coloured glauconite grains.	
Solid Geology: White Chalk Subgroup	Variable	Chalk with flints. With discrete marl seams, nodular chalk, sponge-rich and flint seams throughout.	
BGS Borehole Records			
BGS Reference	Distance/ Direction	Depth	Recorded Strata
TQ47NW1970 (2009)	On site (southern site area)	0.0-3.2m	Made Ground (gravel, sand and clay)
		3.2 – 4.0m	River Terrace Gravels: Orange brown slightly silty, very sandy gravel
		4.0 – 18.6m	Thanet Sand Formation: Light brown slightly silty fine to medium sand
		18.6 – 18.8m	Thanet Sand Formation: Soft dark green grey clay with gravel and cobbles of flint (Bullhead Beds)
		18.8 – 28.0m	White Chalk Subgroup: Very weak medium density cream chalk with frequent flint gravel and cobbles
28.0 – 35.0m	White Chalk Subgroup: Recovered as cream comminuted silt of chalk with flint gravel		
TQ47NW1851 (2005)	On site (southern site area)	0.0-3.0m	Made Ground (tarmac over sand and gravel)
		3.0 – 3.45m	Weathered Thanet Sand Formation: Very dense gravelly sand, with flint gravel
		3.45 – 17.42m	Thanet Sand Formation: light yellow brown fine to medium sand.
		17.42 – 24.90m	Probable Seaford Chalk of Upper Chalk Formation (Grade B2): Moderately weak high density chalk
		24.90 – 28.50m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk
		28.5 – 32.1m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk
		32.1 – 47.1m	Probable Seaford Chalk of Upper Chalk Formation (Grade B2): Moderately weak high density chalk
47.1 – 48.6m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk		

TQ47NW1850 (2006)	On site (central site area)	0.0-2.3m	Made Ground (tarmac over sand and cobbles)
		2.3 – 4.1m	River Terrace Deposits: Orange brown sand and gravel of flint
		4.1 – 5.75m	Upnor Formation of Lambeth Group: Yellow brown glauconitic slightly gravelly sand. Gravel of flint
		5.75 – 16.67m	Thanet Sand Formation: Greenish brown glauconitic fine to medium sand
		16.67 – 16.78m	Thanet Sand Formation: Dark greenish grey glauconitic clayey slightly fine to medium sand with gravel of flint (Bullhead Beds)
		16.78 – 16.89m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk
		16.89 – 17.8m	No Core Recovery
		17.8 – 18.2m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk
		18.2 – 19.3m	No Core Recovery
		19.3 – 20.35m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk
		20.35 – 20.86m	No Core Recovery
		20.86 – 26.5m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Moderately weak high density chalk
		26.5 – 26.9m	Top of Bedwells Columnar Flint
		26.9 – 40.0m	Probable Seaford Chalk of Upper Chalk Formation (Grade B3): Weak to moderately weak medium to high density chalk
40.0 – 49.0m	Probable Seaford Chalk of Upper Chalk Formation (Grade B2): Weak high density chalk		

TQ47NW1976 (2010)	On site (northern site area)	0.0-2.3m	Made Ground (tarmac, concrete, gravel)
		2.3 – 2.6m	Possible Made Ground: Red brown sandy gravel of flint
		2.6 – 3.4m	Possible Upnor Formation: Medium dense slightly sandy gravel of flint
		3.4 – 3.9m	Possible Upnor Formation: Dense gravelly sand. Gravel of flint
		3.9 – 6.1m	Thanet Sand Formation: Very dense slightly silty fine to medium sand
		6.1 – 6.9m	Assumed Zone of Core Loss
		6.9 – 8.25m	Thanet Sand Formation: Fine to medium sand with rare flint gravel
		8.25 – 8.75m	Thanet Sand Formation: Silty fine to medium sand with rare flint gravel
		8.75 – 9.3m	Thanet Sand Formation: Silty fine to medium sand
		9.3 – 12.0m	Thanet Sand Formation: Slightly silty fine sand
		12.0 – 16.45m	Thanet Sand Formation: Slightly silty fine sand
		16.45 – 16.65m	Thanet Sand Formation: Very sandy gravel of flint (Bullhead Beds)
		16.65 – 17.5m	Seaford Chalk Formation (Grade B2): Very weak to weak low density chalk
		17.5 – 18.63m	Assumed Zone of Core Loss
		18.63 – 19.8m	Seaford Chalk Formation (Grade B3): Very weak to weak low density chalk
		19.8 – 20.5m	Seaford Chalk Formation (Grade B3): Weak low density chalk
		20.5 – 21.15m	Assumed Zone of Core Loss
		21.15 – 25.0m	Seaford Chalk Formation (Grade B3): Weak medium density chalk
		25.0 – 25.50m	Assumed Zone of Core Loss
		25.50 – 26.50m	Seaford Chalk Formation (Grade A3): Weak high density chalk
		26.5 – 27.25m	Assumed Zone of Core Loss
		27.25 – 28m	Seaford Chalk Formation (Grade A2): Weak high density chalk
		28 – 28.50m	Top of Bedwells Columnar Flint
		28.5 – 28.65m	Assumed Zone of Core Loss
28.65 – 29.5m	Seaford Chalk Formation (Grade A3): Weak high density chalk		
29.5 – 30.1m	Assumed Zone of Core Loss		
30.1 – 31.0m	Seaford Chalk Formation (Grade B3): Weak medium density chalk		
31.0 – 31.5m	Assumed Zone of Core Loss		
31.5 – 50.5m	Seaford Chalk Formation (Grade A3): Weak high density chalk		
50.5 – 50.95m	Assumed Zone of Core Loss		
50.95 – 52.0m	Seaford Chalk Formation (Grade A3): Weak high density chalk		
52.0 – 52.45m	Assumed Zone of Core Loss		
52.45 – 65.50m	Seaford Chalk Formation (Grade A3): Weak high density chalk		
BGS Urban Soil Chemistry Analysis (Averages)			
Element		Estimated Concentration	
Arsenic		17mg/kg	
Cadmium		0.9mg/kg	
Chromium		79.0mg/kg	
Lead		280mg/kg	
Nickel		28mg/kg	
Radon			
Radon Potential		Radon Protection Requirement	
Lower Probability Radon Area (less than 1% of homes are estimated to be at or above the Action Level)		None reported to be required	

2.6 Hydrogeology

2.6.1 The Envirocheck® report and Environment Agency information records the following hydrogeological setting of the site.

Table 2.4: Hydrogeological Setting

Aquifer Status			
Geological Unit	Groundwater Vulnerability/ Aquifer Designation	Environment Agency Aquifer Classification	Potential Hydraulic Gradient Direction
White Chalk Subgroup	High Vulnerability/ Principal Aquifer	Layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifers.	Potentially north, towards the River Thames
Thanet Formation	High Vulnerability/ Secondary A Aquifer	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.	
Superficial Head Deposits	High Vulnerability / Secondary (Undifferentiated) Aquifer	Assigned in cases where it has not been possible to attribute either Category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.	
Source Protection Zones			
None recorded within 1km			
Groundwater Abstractions			
1No. recorded within 1km			
Details	Abstraction Use		Distance/ Direction
Woolwich Bath's	Domestic use only		~370m southwest
Discharge Consents to Groundwater			
1No. recorded within 1km			
Receiving Water	Effluent Type		Distance/ Direction from Site
Soakaway	Trade Discharges - Site Drainage (Contam Surface Water, Not Tips)		~900m north
	Trade Discharge - Process Water		~945m north
BGS Groundwater Flooding Susceptibility			
On site – Limited potential for groundwater flooding to occur.			
Groundwater Vulnerability – Soluble Rock Risk			
Significant Risk – Problems Unlikely			

2.7 Hydrology

2.7.1 The hydrological setting of the site is summarised in Table 2.5.

Table 2.5: Hydrological Setting

Nearest Surface Water Features		
Feature	River Quality (GQA Grade)	Distance/ Direction from Site
Stream/Drain	-	~15m northwest
River Thames	-	~90m north
Surface Water Abstractions		
None recorded within 500m		
Licensed Discharge Consents		
1No. recorded within 500m		
Receiving Water	Effluent Type	Distance/ Direction from Site
River Thames	Discharge Of Other Matter-Surface Water	~230m northwest
Pollution Incidents		
4No. recorded within 500m		
Receiving Water	Pollutant/ Incident	Distance/ Direction from Site
Not Given	Oils – Unknown / Category 3 – Minor Incident	~395m northeast, ~475m northeast
Not Given	Oils – Unknown / Category 2 – Significant Incident	~470m northeast
Not Given	Miscellaneous – Unknown / Category 3 – Minor incident	~475m northeast
Flooding from Rivers or Seas		
On Site Designation	Off Site Areas of Flooding	
Flood Zone 1	~40m northwest: flood defences ~45m north: Extent of extreme flooding from rivers or seas without defences ~45m northwest: area benefitting from flood defences ~60m north: Extent of flooding from rivers or seas without defences	

2.8 Environmental Data

2.8.1 Additional relevant environmental data from the Envirocheck® report for the site is summarised in Table 2.6.

Table 2.6: Additional Environmental Data Summary

Landfill Sites			
No current or historical landfills recorded within 500m			
Licensed Waste Management Facilities			
1No. recorded within 500m			
Name/location	Site Category	Input Dates	Distance/ Direction from site
6-14 Beresford Street, Woolwich	Household, Commercial And Industrial Transfer Stations	16 <sup>th</sup> April 1992 – 28 <sup>th</sup> February 2009	~25m south
Potentially Infilled Land (Water)			
None recorded within 500m			



Potentially Infilled Land (Non-Water)		
None recorded within 500m		
Commercial/ Industrial Land Use (Active Contemporary Trade Directories)		
27No. recorded within 500m		
Classification	No. within 500m	Distance/ Direction from Site
Cargo Handling Services	1	-90m southeast
Perfume Suppliers	1	-90m south
Cleaning Services - Domestic	3	-125m southeast, -275m south, -295m southeast
Garage Services	3	2no. -220m southeast, -275m west
Printers	3	-220m west, -490m east, -495m east
Car Body Repairs	1	-235m west
Domestic Appliances - Servicing, Repairs & Parts	1	-250m southeast
Electrolysis	1	-265m west
Commercial Cleaning Services	1	-270m south
Dry Cleaners	2	-290m south, -365m south
Airfreight Services	1	-280m south
Petrol Filling Stations	1	-340m south
Photographic Equipment & Supplies - Manufacturers	1	-335m east
Hardware	1	-365m east
Car Dealers	3	3no. -455m east
Electrical Goods Sales, Manufacturers & Wholesalers	2	-480m east, -490m south
Print Finishers	1	-495m east
Hazardous Substances (Authorisations, Consents, Incidents)		
8No. recorded within 500m		
Category	Details	Distance/ Direction from Site
Local Authority Pollution Prevention and Controls	PG1/14 Petrol filling station	-235m west
	PG6/46 Dry cleaning	-290m south, -365m south
Registered Radioactive Substances	Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)	-2no. 270m south, -275m south
Registered Waste Transfer Site	Authorised Waste Includes: calcium carb/sulphate (gypsum), cardboard/fibreboard, cement, cork, decontam. Containers, leather, metals, paper, wood	2No at -35m south
Sensitive Land Uses		
None recorded within 500m		

2.9 Engineering Considerations

2.9.1 Engineering considerations identified from the Envirocheck® report for the site are summarised in Table 2.7.

Table 2.7: Engineering Considerations

Ground Stability Hazards						
Hazard	Hazard Potential					
	No Hazard	Negligible	Very Low	Low	Moderate	High
Collapsible ground			x			
Compressible ground			x			
Ground dissolution	x					
Landslide			x			
Running sand			x			
Shrink/swell clays			x			
Coal mining	x					
Non-coal mining		x				
BGS Recorded Mineral Sites						
1No. recorded within 1km						
Site Name	Type/Commodity		Status	Distance/ Direction from Site		
Arthur Street Brick Field	Opencast / Common Clay and Shale (Lambeth Group)		Ceased	~645m southeast		
Man-made Mining Cavities						
1No. recorded within 1km						
Location	Type/Commodity		Distance / Direction			
NGR: 544200, 178600	Historical brick works – potential chalk mining / Chalk		~615m southeast			

2.10 Previous Site Reports Summary

2.10.1 Information for the site has also been obtained through a review of the following reports undertaken for adjacent sites within the wider RAR redevelopment. The following previous reports undertaken by TEC are as follows:

- ‘Royal Arsenal Riverside, Phase 8 – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepare by TEC on behalf of Berkeley Homes (East Thames), dated January 2016 and referenced 1508005.001.01. (Phase 8 site located immediately north/northeast of current RAR Blocks D & K site).
- ‘Royal Arsenal Riverside, Phases 9-11 – Preliminary Geoenvironmental Assessment’. Prepare by TEC on behalf of Berkeley Homes (East Thames), dated April 2016 and referenced 1508005.002.01. (Phases 9-11 site located immediately northwest of current RAR Blocks D & K site).
- ‘Royal Arsenal Riverside, Phases 18-19 – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkeley Homes (East Thames), dated May 2016 and referenced 1508005.003.01. (Phases 18-19 site is located within the southern section of the current RAR Blocks D & K site).
- ‘Royal Arsenal Riverside, Linear Park (Zone 1) – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkeley Homes (East Thames), dated May 2016 and referenced 1508005.005.01. (Zone 1 of the Linear Park area is located immediately north of the current RAR Blocks D & K site).
- ‘Royal Arsenal Riverside, Phase 9-11 (A Blocks) – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkeley Homes (East Thames), dated July 2017 and referenced 1508005.013.01. (Phases 9-11 site located immediately northwest of current RAR Blocks D & K site); and
- ‘Royal Arsenal Riverside - Linear Park – Preliminary Geoenvironmental and Geotechnical Assessment’. Prepared by TEC on behalf of Berkeley Homes (East Thames), dated February 2018 and referenced 1508005.014.01. (Zone 1 of the Linear Park area is located immediately north of the current RAR Blocks D & K site, while Zone 2 to 4 of the Linear Park area comprises part of the northwestern, central and southern sections of the current RAR Blocks D & K site).

2.10.2 A summary of relevant information from these previous reports, in relation to this assessment, is summarised in Table 2.8. Reference should be made to these previous reports for full information.

Table 2.8: Previous Ground Investigations Summary

Royal Arsenal Riverside, Phase 8 – Preliminary Geoenvironmental and Geotechnical Assessment (January 2016) (Phase 8 site located immediately north/northeast of current RAR Blocks D & K site)	
Site History	<p>Earliest historical mapping (1870) recorded assumed terraced housing on site. Third party information indicates that the area was heavily bombed during WWII. Limited historic information was available for the site between 1940 and 1962 due to the site's close proximity to the Royal Arsenal, a military sensitive area (~30m to the east). Between 1962 and 2015 the majority of the site area was recorded to be open, with a number of buildings depicted along the southern boundary of site until 2006. From 2006 to 2015 a skate park was noted in the centre of the site.</p> <p>Third party reporting notes the Woolwich Equitable Gas Works (including gas holders, retort house) at an adjacent sit to the east between 1837 and 1887. Third party reporting also indicates the presence of gross contamination associated with these historic features at the adjacent site to the east.</p> <p>TEC note that during the site investigation, the condition of the site changed constantly due to the construction activities taking place. It was understood that ~5m depth of material was excavated from site for off site disposal.</p>
Environmental Setting	<p>BGS geology records report superficial head deposits (Secondary (Undifferentiated) Aquifer), underlain by the Thanet Formation (Secondary A Aquifer) and White Chalk Subgroup (Principal Aquifer). Third party borehole logs for the adjacent site indicates made ground up to 7.1m thick.</p> <p>The River Thames is reported ~5m north of the site. 2No. Waste Management sites were recorded within 250m (nearest ~230m, accepting household, commercial and industrial waste). Local Authority searches reports records of petroleum storage ~150m south and ~250m south-west of the Phase 8 site (i.e. potentially on the current RAR Blocks D&amp;K site).</p>
Encountered Ground Conditions	<p>TEC encountered ground conditions at the Phase 8 site comprised made ground to a maximum depth of 7.5mbgl, generally observed as clayey silty sandy gravel / gravelly sand, with localised areas of slightly silty, slightly sandy gravelly ashy clay were observed. Gravel comprised brick, concrete, chert, mudstone, clinker, charcoal, glass, plastic and ash.</p> <p>Reworked natural ground was observed in 5No. locations comprising slightly gravelly fine sand.</p> <p>The Thanet Sand Formation was encountered at depths of between 1.1m and 7.5mbgl, comprising medium dense becoming dense and very dense yellowish brown, pale brown, light brown and grey, fine grained glauconitic sand.</p> <p>The White Chalk Subgroup was encountered from a minimum depth of 13.0mbgl. Structureless chalk (Dm/Dc) was encountered between 13.0mbgl and 18.0mbgl recovered as cream locally speckled black slightly sandy silty sub-angular to sub-rounded medium to coarse gravel. From depths of between 14.9m and 18.0mgl weak to moderately weak, white locally speckled black chalk with localised staining was recorded to a maximum observed depth of 30.0mbgl; observed to be underlain by moderately weak to moderately strong white chalk with moderate gravel of and cobbles of flint to the base to a maximum observed depth of 42.0mbgl.</p> <p>An isolated potential dissolution feature was recorded within BH03 at a depth of between 12.0m and 13.0mbgl.</p>
Groundwater	<p>The groundwater table was considered to be potentially within the Thanet Sand Formation, with resting water levels recorded between 5.25mbgl and 6.92mbgl.</p> <p>A localised pocket of perched water was encountered within the granular made ground (TP05 at 0.9mbgl)</p>
Contamination	<p>No visual or olfactory evidence of contamination was recorded during the ground investigation works, although potential ACM fragments were noted within the made ground. Blue stained material was noted by third party archaeologists during their works on site and this material was understood to have been disposed of off site.</p> <p>The GQRA completed for the site recorded elevated concentrations of some heavy metals within the sampled made ground, in relation to SSVs for a "residential without homegrown produce" site end use. Chrysotile (hard/cement type, fibres and insulation lagging) and amosite (loose fibres) asbestos was recorded within the made ground on site.</p> <p>Elevated leachable concentrations of heavy metals were recorded within the sampled made ground (4No. samples), in relation to selected EQS values.</p>

	Groundwater samples were taken from the Thanet Sand Formation (in 2No. locations), reported a single exceedance of Selenium in relation to the selected SSV (in BH03).
Ground Gas/ Radon	<p>4No. rounds of ground gas monitoring were undertaken within boreholes installed within the Thanet Sand Formation (3No.) and made ground (2No.). Based on this, the proposed development was characterised as having a maximum Gas Screening Value of 0.0l/hr for methane and 0.018l/hr for carbon dioxide. However, elevated carbon dioxide levels (max 6.0% v/v) were recorded during monitoring and so it was considered that the site may be categorised as a Characteristic Situation 2.</p> <p>The site was not reported to lie within a radon affected area, as less than 1% of homes were reported above the Action Level. No radon protective measures were reported necessary within the construction of new dwellings or extensions.</p>
Relevant Contaminant Linkages	<p>The relevant contaminant linkages identified for the site were limited to:</p> <ul style="list-style-type: none"> <li>Human health (future site users and construction workers) – exposure to contaminants of potential concern (heavy metals and asbestos) through ingestion, inhalation and dermal contact.</li> <li>Human health (future site users and on site structures) – migration, ingress and inhalation of potential bulk gases.</li> </ul>
Ground Engineering	<p>TEC reported that it was considered that a piled foundation solution would be the most appropriate solution for the proposed development, founding within the underlying chalk.</p> <p>A potential dissolution feature was recorded within BH03 in the northern site area recorded as a void ~1.0m in thickness. It was reported that consideration should be given within the pile design for potential voids at the interface of the Thanet Sand Formation and underlying chalk, as well as consideration to the presence of the Principal Aquifer (chalk).</p> <p>Testing of the made ground sampled yielded an Aggressive Chemical Environment (ACEC) of AC-3 requiring a Design Sulphate Class of DS-3.</p> <p>Testing of the natural soils yielded an Aggressive Chemical Environment (ACEC) of AC-2 requiring a Design Sulphate Class of DS-2</p>
Royal Arsenal Riverside, Phases 9-11 – Preliminary Geoenvironmental Assessment (April 2016) (Phases 9-11 site located immediately northwest of current RAR Blocks D & K site).	
Site History	<p>Earliest mapping (1869) indicates a workshop across the northern site area and (assumed) residential properties in the southern site area. 1895-1896 mapping records a disused dry dock in much of the western section of the warehouse/workshop building and a Electric Light Works depicted in the eastern section of the building.</p> <p>From 1970, the site building has been extended (i.e. residential properties no longer present) and the entire building as recorded as a Power Station. By 1991, the site is depicted as a car park.</p> <p>At the time of the TEC site works (2015), the site was being used as a car park for an adjacent leisure centre, with the southern site area used as the project offices of Berkeley Homes, including storage and welfare facilities.</p>
Encountered Ground Conditions	<p>Made ground was encountered in all locations to a maximum recorded depth of 4.2mbgl. Multiple underground brick and concrete obstructions were noted on site. Made ground generally comprised tarmacadam with underlying sub-base gravel, in turn underlain by gravelly sand/sandy gravel/gravelly clay, locally black silty clay. Gravel of brick, concrete, clinker, chert, plastic, metal and glass were noted, along with potential ACM. Crushed demolition material was also recorded on site.</p> <p>No natural ground was encountered during this phase of works.</p>
Groundwater	<p>Minor perched water ingress was noted within WS10 at 3.6mbgl. Ground gas/groundwater monitoring boreholes placed within the made ground were recorded as dry during the monitoring events.</p>
Contamination	<p>No visual or olfactory evidence of gross contamination was noted during the works.</p> <p>The GQRA completed for the site recorded elevated concentrations of some heavy metals and PAHs within the sampled made ground, in relation to SSVs for a “residential without homegrown produce” site end use. Chrysotile (hard/cement type, fibres and insulation lagging), amosite (loose fibres) and crocidolite (insulation lagging and loose fibres) asbestos was recorded within the made ground on site, with asbestos quantification of 9No. samples recorded between &lt;0.001% and 0.522%.</p> <p>Elevated leachable concentrations of heavy metals and sulphate were recorded within the sampled made ground (3No. samples), in relation to selected EQS values.</p>

Ground Gas	3No. rounds of ground gas monitoring were undertaken of boreholes installed within the made ground. Based on this, the proposed development was characterised as having a maximum Gas Screening Value of 0.0l/hr for methane and 0.0043l/hr for carbon dioxide. It was reported that the site may be categorised as a Characteristic Situation 1.
Relevant Contaminant Linkages	<ul style="list-style-type: none"> <li>Human health (future site users and construction workers) – exposure to contaminants of potential concern (heavy metals, PAHS and asbestos) through ingestion, inhalation and dermal contact.</li> <li>Controlled Waters (underlying aquifers and River Thames) – leachable heavy metals and sulphate via vertical and horizontal migration.</li> </ul>
Royal Arsenal Riverside, Phases 18-19 – Preliminary Geoenvironmental and Geotechnical Assessment (May 2016) (Phases 18-19 site is located within the southern section of the current RAR Blocks D & K site).	
Site History	<p>Earliest available historical mapping (1869) indicated the site to contained (assumed) residential properties along Rope Yard (road), orientated northwest/southeast. Trinity church was depicted in the southeast of site. Between 1940 and 1958 the area to the east of Rope Yard was depicted as a car park. By 1970, buildings including a garage are noted in the north/northwestern area of the site. Between 1991 and 1996 Rope Yard and Trinity Church were no longer recorded on site, and although the garage still remains a number of building are no longer recorded in the north/northwestern area of site.</p> <p>At the time of the TEC site works (2016) the site was used by subcontractors for the wider RAR development site, with the central site area used as Berley Homes project offices and the northern area used as a car park.</p>
Environmental Setting	<p>The geology for the site was reported to comprise superficial Kempton Park Gravels (Secondary (Undifferentiated) Aquifer), underlain by the Thanet Formation (Secondary A Aquifer) and White Chalk Subgroup (Principal Aquifer). The River Thames is located ~250m north.</p> <p>3No. waste management facilities were recorded within 250m of site (nearest at ~25m south - household, commercial and industrial transfer station). A former printers, precision engineers and car body repairs businesses have been recorded on site.</p> <p>Local Authority information indicates that a verification report was produced in 2012 for the former garage on site involving testing of ground material at the base and side of excavations following removal of fuel tanks associated with the garage. It is reported that elevated TPH concentrations were recorded within 23No. of 26No. samples taken. In addition, VOC concentrations (max. 8.5ppm) were recorded within monitoring wells at the adjacent hotel site to the west.</p>
Encountered Ground Conditions	<p>Made ground was encountered to a maximum depth of 2.8mbgl, generally comprising tarmacadam underlain by clayey silty gravelly sand/sandy gravel, with gravel of brick concrete, black carbonaceous material, chert, sandstone, ceramic, and glass.</p> <p>The Kempton Park Gravels were recorded between 1.5mbgl and 3.6mbgl generally observed to comprise medium dense to very dense orangish brown gravelly fine to medium sand, with gravel of sub-angular to sub-rounded chert.</p> <p>The Thanet Sand Formation was encountered between 27.0mbgl and 15.0mbgl generally recorded to comprise medium dense to very dense fine grained glauconitic sand. A band of light brown sandy gravel of rounded chert was recorded at the base of the Thanet (Bullhead Beds), recorded between 15.0mbgl and 16.2mbgl.</p> <p>The White Chalk Subgroup was encountered between depths of 16.2mbgl and &gt;21.5mbgl observed as weak low to medium density chalk with gravel and cobbles of flint.</p>
Groundwater	A groundwater strike was recorded at 10.4mbgl within Thanet Sand (BH01), with subsequent standing water depths of between 10.15 and 10.32mbgl (within Thanet Sand).
Contamination	<p>Olfactory evidence of contamination was recorded within the northern site area (WS04 from 0.8mbgl - in proximity of the former garage). VOCs concentrations of up to 68.2ppm were recorded within the photo-ionisation detector (PID) within this material.</p> <p>The GQRA completed for the site recorded no elevated contaminant concentrations within the sampled made ground (8No. samples) in relation to SSVs for a “residential without homegrown produce” site end use. It is noted that concentrations of organic contaminants (PAH and TPH) were recorded to be below the laboratory limit of detection.</p> <p>Chrysotile and amosite asbestos fibres were recorded within 3No. samples of made ground.</p> <p>Elevated leachable concentrations of heavy metals were recorded within the sampled made ground (3No. samples), in relation to selected EQS values.</p>

	A groundwater sample taken from the Thanet Sand Formation (in 1No. location), reported a no elevated contaminant concentrations in relation to the selected SSVs.
Ground Gas/ Radon	3No. rounds of ground gas monitoring were undertaken of boreholes installed within the Thanet Sand. Based on this, the proposed development was characterised as having a maximum Gas Screening Value of 0.0l/hr for methane and 0.0504l/hr for carbon dioxide. It was reported that the site may be categorised as a Characteristic Situation 1.  The site was not reported to lie within a radon affected aera, as less than 1% of homes were reported above the Action Level. No radon protective measures were reported necessary within the construction of new dwellings or extensions.
Relevant Contaminant Linkages	<ul style="list-style-type: none"> <li>Human health (future site users and construction workers) – exposure to contaminants of potential concern (asbestos) through inhalation.</li> <li>Controlled Waters (Aquifers and River Thames) – potential leaching of TPH recorded in a third party report of the former garage (2007); and</li> <li>Human health and proposed structures – exposure to potential vapours associated with TPH concentrations recorded on former garage site by a third party (2007).</li> </ul>
Ground Engineering	A piled foundation solution was suggested for the proposed K1 building, founding within the underlying Thanet Sand. Further, a suspended floor slab was recommended. Additional investigation was recommended to determine appropriate foundation solution for proposed building K2.  Testing of the made ground yielded an Aggressive Chemical Environment (ACEC) of AC-2 requiring a Design Sulphate Class of DS-2.  Testing of the natural soils yielded an Aggressive Chemical Environment (ACEC) of AC-2 requiring a Design Sulphate Class of DS-2.
Royal Arsenal Riverside, Linear Park (Zone 1) – Preliminary Geoenvironmental and Geotechnical Assessment (May 2016) (Zone 1 of the Linear Park area is located immediately north of the current RAR Blocks D & K site).	
Site History	Earliest historical mapping (1869) records the presence of (assumed) terraced housing in the central and southern sections of site, and a wharf/buildings associated with adjacent workshops in the north. Between 1957 and 1989 the western section of site was depicted as comprising part of works (later described as a power station), while the central and eastern sections of site are shown to comprise buildings, likely associated with the adjacent power station. 3No. of the buildings are depicted as chimneys from 1970. The site was described as vacant land between 1991 and 2015.  At the time of the TEC works (2016), the site was observed to comprise a park with grass, shrubs, trees and paving.
Encountered Ground Conditions	The TEC trial pit investigation encountered made ground to a maximum depth of >4.9mbgl, reported to have a variable composition comprising slightly clayey slightly silty sandy gravel of red brick concrete chert black carbonaceous material ceramic clay smoking pipe fragments and bone fragment, underlain by light brown to greyish brown and orange sand with occasional gravel of chert and red brick.  Numerous below ground brick and concrete structures were encountered within the trial pits, considered to be associated with the former terraced housing.  The Thanet Sand Formation was encountered in 2No. locations only, between 2.6mbgl and >4.9mbgl generally comprising pale brown locally orange fine to glauconitic sand.
Groundwater	No groundwater was encountered within the exploratory holes during the ground investigation.
Contamination	No visual or olfactory evidence of contamination was recorded during the ground investigation works.  The GQRA completed for the site recorded no elevated contaminant concentrations within the sampled made ground, in relation to SSVs for a “Public Open Space 1” site end use. Chrysotile (fibres and insulation lagging) and amosite (loose fibres and insulation lagging) asbestos was recorded within 6No. out of 16No. sampled of made ground on site.  Elevated leachable concentrations of heavy metals were recorded within the sampled made ground (3No. samples), in relation to selected EQS values.
Ground Gas/ Radon	The site was not reported to lie within a radon affected aera, as less than 1% of homes were reported above the Action Level. No radon protective measures were reported necessary within the construction of new dwellings or extensions.  No further source of ground gas was identified on site as part of the desk study or ground investigation works, although it is noted that Local Authority information indicates that monitoring

	undertaken in relation to the Crossrail development works (within the chalk) measured carbon dioxide as Characteristic Situation 3.
Relevant Contaminant Linkages	<ul style="list-style-type: none"> <li>Human health (future site users and construction workers) – exposure to contaminants of potential (asbestos) concern through inhalation pathways.</li> </ul>
Ground Engineering	<p>Details regarding the proposed development were not available at the time of the 2016 reporting and it was recommended that additional investigation would likely be required to confirm founding requirements at the site.</p> <p>Testing of the made ground yielded an Aggressive Chemical Environment (ACEC) of AC-2 requiring a Design Sulphate Class of DS-2.</p> <p>Testing of the natural soils yielded an Aggressive Chemical Environment (ACEC) of AC-1 requiring a Design Sulphate Class of DS-1.</p>
Royal Arsenal Riverside, Phase 9-11 (A Blocks) – Preliminary Geoenvironmental and Geotechnical Assessment (July 2017 (Phases 9-11 site located immediately northwest of current RAR Blocks D & K site)	
Encountered Ground Conditions	<p>Additional intrusive works were undertaken by TEC in 2017, following on from the original site works undertaken in 2016 (see April 2016 report above).</p> <p>Made ground was encountered across the site to a maximum depth in excess of 9.0mbgl and was generally observed to comprise tarmacadam or concrete hardstanding underlain by locally clayey gravelly sand, with gravel comprising of red brick, concrete, sandstone, chert, plastic and metal.</p> <p>A significant number of concrete and brick below ground obstructions were noted within the made ground (up to 6.0m thick). In addition, a significant amount of steel was also encountered within the made ground in a number of locations. Voids were encountered in 2No. locations immediately beneath concrete obstructions.</p> <p>Superficial head deposits were encountered in 1no. location (BH01) between 6.8mbgl and 7.8mbgl, comprising dense to very dense slightly gravelly slightly clayey silty fine to medium sand, with the gravel comprising sandstone and occasionally chert. Localised dark grey to black staining and hydrocarbon odour was noted throughout.</p> <p>The Thanet Formation was encountered at depths of between 6.4mbgl and 15.2mbgl, observed to comprise dense to very dense slightly silty to silty fine to medium glauconitic sand, with a slight hydrocarbon odour noted between 7.8mbgl and 8.4mbgl within BH01.</p> <p>The White Chalk Subgroup was encountered from 9.2mbgl to the base of all boreholes and was generally observed to comprise very weak to weak, low to medium density cream chalk with occasional orangish brown, orange and grey staining (Grade A-C2-4).</p>
Dissolution Features	Potential dissolution features were recorded at the Thanet/Chalk interface within BH01 (9.2-9.8mbgl), BH02 (10.05-10.8mbgl) and BH07 (11.5-12.4mbgl). In addition, potential dissolution features were noted within the chalk mass in BH07.
Groundwater	Groundwater monitoring of installed boreholes recorded standing water depths of between 4.48mbgl and 7.5mbgl (i.e. at the boundary of the made ground and Thanet Formation).
Contamination	<p>Visual and olfactory evidence of hydrocarbon contamination was recorded within BH01 at depths of between 6.8mbgl and 8.4mbgl.</p> <p>The GORA completed for the site recorded a single PAH elevated contaminant concentrations within the sampled made ground (1No. out of 8No. samples), in relation to SSVs for a “residential without homegrown produce” site end use. Chrysotile (loose fibres) and amosite (loose fibres) asbestos was recorded within 7No. out of 8No. sampled of made ground on site, with asbestos quantification of between &lt;0.001% and 0.066% reported. These are in addition to the previously recorded contaminant concentrations in 2016.</p> <p>No elevated contaminant concentrations were recorded within the sampled natural ground (3No. samples).</p>
Relevant Contaminant Linkages	<ul style="list-style-type: none"> <li>Human health (future site users and construction workers) – exposure to contaminants of potential concern (heavy metals, PAHs and asbestos) through ingestion, inhalation and dermal contact.</li> <li>Controlled waters (Aquifers and River Thames) – leachable heavy metal and sulphate concentrations via vertical and horizontal migration.</li> </ul>
Ground Engineering	Based on the field observations, ground conditions and potential loads associated with proposed development, it was considered that a piled foundation solution would be the most appropriate solution, founding within the underlying chalk. However, appropriate consideration to potential

	<p>dissolution features would be required. Conventional construction measures for the proposed basement is considered appropriate.</p> <p>Testing of the natural soils yielded an Aggressive Chemical Environment (ACEC) of AC-1 requiring a Design Sulphate Class of DS-1. However, testing of the made ground materials yielded a an ACEC of between AC-1 and AC-4, therefore it was recommended that a Design Sulphate Class of DS-4 was utilised for the development.</p>
<p>Royal Arsenal Riverside, Linear Park – Preliminary Geoenvironmental Assessment and Geotechnical Assessment (February 2018) (Zone 1 of the Linear Park area is located immediately north of the current RAR Blocks D &amp; K site, while Zone 2 to 4 of the Linear Park area comprises part of the northwestern, central and southern sections of the current RAR Blocks D &amp; K site).</p>	
Site Observations	<p>Observations made by TEC in 2017 indicate the northern section of the site (Zone 1 and 2) comprises open recreation land (soft landscaping and hardstanding pathways). The southern site area (Zone 3 and 4) comprises a car park and construction site.</p>
Encountered Ground Conditions	<p>During different phases of works on the Linear Park Site (between 2015 and 2017), the following ground conditions summary is reported.</p> <p>Made ground of variable composition was encountered to &gt; 4.9mbgl, generally comprising slightly clayey, slightly silty sandy gravel/gravelly sand. Gravel of brick, concrete, chert, black carbonaceous material, ceramic, clay smoking pipe fragments and bone fragments underlain by light brown to greyish brown and orange fine to medium sand with occasional gravel of chert and red brick.</p> <p>Multiple below ground brick obstructions were recorded within Zone 4. PFA was observed within Zone 1 and Zone 4.</p> <p>Superficial Kempton Park Gravel was encountered between 1.3mbgl to 3.6mbgl (in Zone 3 and 4 only), generally comprising medium dense to very dense gravelly sand / sandy gravel of chert.</p> <p>The Thanet Sand Formation was encountered between 2.6amd and 15.0mbgl recorded to comprise medium dense to very dense fine grained glauconitic sand.</p> <p>The Bullhead Bed was encountered in Zone 3 only, between 15.0mbgl and 16.2mbgl recorded to comprise sandy gravel of chert.</p> <p>The White Chalk Subgroup was encountered between 16.2mbgl and &gt;21.5mbgl comprising weak low to medium density chalk with gravel of cobbles of flint.</p>
Groundwater	<p>Minor groundwater ingress was encountered at 2.5mbgl in 1no. location (in Zone 3), however the main groundwater body was encountered at a depth of 10.4mbgl.</p> <p>Groundwater monitoring recorded standing depths of between 10.15mbgl and 10.32mbgl, within the Thanet Sand Formation.</p>
Contamination	<p>Olfactory evidence of contamination was recorded within WS04 (noted to be in proximity of the former garage located within the northern section of site) from a depth of 0.8mbg (max. VOC of 68.2ppm recorded using a PID within this material).</p> <p>Visual evidence of potential ACM was observed in the southern area of site.</p> <p>A combined 26No. sampled of made ground were subject to geochemical analysis for the Linear Park site. The GQRA recorded no elevated contaminant concentrations within the sampled materials, in relation to SSVs for a “Public Open Space 1” site end use. Asbestos was recorded within the made ground sampled from all 4 Zones of Linear Park.</p> <p>Elevated leachable concentrations of heavy metals were recorded within the sampled made ground (6No. samples), in relation to selected EQS values.</p> <p>A groundwater sample was taken from a single location (BH01a). No exceedances of the relevant screening values were recorded within the groundwater sampled.</p>
Relevant Contaminant Linkages	<ul style="list-style-type: none"> <li>Human health (future site users and construction workers) – exposure to contaminants of potential concern (asbestos) through inhalation pathway.</li> </ul>

## 2.11 Comment on Previous Reports

2.11.1 Extensive investigation and multiple phases of assessment have been undertaken in areas of the current site and within the wider Royal Arsenal Riverside redevelopment project. Contaminants of Potential Concern (heavy metals, PAH and asbestos) have been widely recorded across the wider Royal Arsenal Riverside development, although only asbestos has been recorded within the current site area (as detailed within reports prepared for Phases 18-19 (May 2016) and Linear Park (February 2018)).



2.11.2 A Remediation Strategy and Verification Plan was prepared by TEC for the Linear Park site (which encompasses the current assessment area) in March 2018 (report reference 1508005.016.01). The strategy, which is understood to have been approved by the Royal Borough of Greenwich Council, identified 3No relevant pollutant linkages (RPL's) in relation to ground contamination and identified receptors, as detailed below:

- RPL1 Risk to site end users via exposure to Contaminants of Potential Concern within the made ground materials through the inhalation pathway in areas of proposed soft landscaping, where made ground remains;
- RPL2 Risk to brownfield site construction workers and future site maintenance workers via exposure to Contaminants of Potential Concern within the made ground materials through the inhalation pathway; and
- RPL3 Potential risk of statutory nuisance and human health risk via disturbance of in-situ ground materials during development works resulting in the generation of dust, including fine particulate matter.

2.11.3 As a result, remediation measures were recommended in order to mitigate the identified risks in relation to the proposed site end use. While reference should be made to the report for full details, a summary of the required remediation measures is detailed below:

RPL1

- It is considered that hardstanding, where present, would remove the identified contaminant pathways in relation to site end users.
- Where soft landscaping is proposed, an engineered cover system would be considered appropriate given the presence of asbestos within the underlying made ground across the site. The cover system would need to comprise the placement of a visual marker/break layer, overlain by a suitable cover thickness comprising topsoil and subsoil in accordance with the requirements of BS3662:2015 and BS8601:2013.

RPL2

- Given the brownfield nature of the site, the adoption of good brownfield working practices, including good site welfare and hygiene facilities and the provision of appropriate Personal Protective Equipment (PPE) should be implemented.
- In addition, given the presence of asbestos fibres within the underlying made ground, All groundworks should be undertaken in accordance current legislation and guidance for dealing with those soils contaminated with asbestos fibres.

RPL3

- It is considered that the development works will provide a long-term betterment with respect to dust generation as all potentially contaminated materials remaining on site will be effectively capped.
- In addition, the mitigation measures required for RPL2, implemented to mitigate against potential airborne asbestos fibre release during groundworks, would also mitigate against potential risk from dust generation.

2.12 Regulatory Consultations

2.12.1 Regulatory consultations were undertaken with the relevant departments at Royal Borough of Greenwich Council with respect to possible environmental issues and ground conditions on-site and in the surrounding area. A summary of the response is provided below in Table 2.9. The full response is presented in Appendix I.

Table 2.9: Regulatory Consultations Summary

Environmental Health/ Contaminated Land – Royal Borough of Greenwich Council	<ul style="list-style-type: none"> <li>• The Council is unaware of any pre-licensed landfill sites, pollution incidents or private water suppliers within 500m.</li> <li>• The Council are aware of the following Storage of Petroleum Hydrocarbons: Former Petrol Filling Station (closed) – 128 Woolwich High St (Tanks may still be in place); Former Petrol Filling station (closed) – Bereford St (Tanks may still be in place).</li> <li>• The Council confirm the general area was subject to heavy bombing during WWII, as the site is next to the Royal Arsenal Munitions Site, and associated ordnance development in the general area has been undertaken historically.</li> <li>• The Council is not aware of any specific issues related to ground gas. However as the site is near the River Thames and underlying alluvium beds methane levels can sometimes be elevated.</li> <li>• The Council has not identified the site as contaminated land under Part 2A of the Environment Protection Act 1990; however, as they are yet to prioritise sites the council cannot confirm whether action will be taken in the future.</li> <li>• General information about the sites history from the Council is as follows: The site is near to the Royal Arsenal Complex, a former MOD site (covering a large area of land from Woolwich to Thamesmead), with a history of ordnance production, testing and associated industries and engineering works – with a resultant legacy of widespread contamination. It closed in 1967 and ceased to be a military establishment in 1994. A widespread site investigation was carried out on behalf of the London Development Agency. On a sitewide basis, the investigation identified varying levels of heavy metals in the made ground. No groundwater impacts were identified.</li> </ul>
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2.13 Initial Conceptual Model

2.13.1 In accordance with the Environment Agency Land Contamination: Risk Management Guidance (LCRM), potential source-pathway-receptor contaminant linkages identified from the preliminary risk assessment phase are summarised in the following sections.

2.14 Potential Sources

2.14.1 The source is defined as a contaminant or pollutant that is in, on or under the land and that has the potential to cause harm or pollution. The source can potentially be present on the site or within influence of the site in the case of an offsite source.

2.14.2 Potential sources of contamination identified on and within the vicinity of the site are summarised below:

Potential On Site Sources

- Previously recorded made ground and associated elevated contaminant concentrations and asbestos;
- Previously recorded hydrocarbon impact (odour and VOC concentrations) associated with the former garage area of the site (and historic underground fuel storage);

Potential off Site Sources

- Current and historic nearby industrial land uses (including military site of Royal Arsenal, gas works, power station, railway land)
- Previously recorded thickness of made ground (off site)

2.14.3 No landfills or areas of infilled ground or water are identified within 250m of the site.

2.15 Potential Receptors

2.15.1 Receptors are defined as the entity (e.g. human, animal, water, vegetation, building services etc) which has the potential to experience adverse effects from direct or indirect exposure to potentially hazardous contaminants.

- 2.15.2 Potential receptors identified in relation to the proposed development as part of this preliminary risk assessment are:
- Current/future site users (most sensitive receptor being a 0-6 year old child);
  - Construction and maintenance workers;
  - Controlled waters (Secondary (Undifferentiated) Aquifer (superficial deposits), Secondary A Aquifer (Thanet Formation) and Principal Aquifer (Chalk) and River Thames);
  - Proposed development/ structures (below ground structures, services and concrete, proposed buildings on site).

## 2.16 Potential Pathways

2.16.1 Pathways are defined as the route contaminants take from a source to an exposed receptor. The exposure pathways can be direct or indirect transport from one medium to another.

2.16.2 Potential contaminant pathways relevant to the anticipated contaminants, ground conditions and proposed end use (receptors) include:

### Human Health

- Dermal contact – Direct skin contact with contaminated soil, dust, or water. Certain contaminants can also be absorbed into the body through skin, or enter directly through open cuts or abrasions;
- Ingestion – Ingestion of soil by consumption of un-washed produce grown on site or eating with unwashed hands causing cross contamination, or ingestion of fugitive dust from surfaces etc., or indirect ingestion of fruit and vegetables grown in contaminated soil; and
- Ingestion of contaminated drinking water; and
- Inhalation – inhalation of soil, dust, gases, or vapours which have migrated through the unsaturated zone which may result in short term acute risks of asphyxiation or toxicity, and/or long term chronic risks to human health.

### Controlled Waters

- Infiltration and percolation of contaminants resulting in migration through permeable strata such as the unsaturated zone to the underlying groundwater.
- Horizontal migration of leachate causing a potential impact on surface water quality in nearby watercourses, or below the ground along preferential pathways such as drainage pipe bedding or discontinuities and fractures within the underlying strata.

### Ground Gases

- Vertical migration of gaseous contaminants through the unsaturated zone within permeable strata or vertical and horizontal migration through fractures and discontinuities within the underlying solid geology.
- Migration of hazardous gases to indoor air through soil and building foundations.

### Building Materials/Services

- Aggressive attack: Building materials can be damaged by direct contact with aggressive/contaminated ground, especially if mobile groundwater is present, for example sulphate attack on concrete or the aggressive contaminants coming into direct contact with membranes used within the structures;
- Explosive risk: Potential risk of fire and/or explosion within structures (both existing and proposed) caused by hazardous gases (for example – methane).

## 2.17 Hazard Assessment and Risk Estimation

2.17.1 As part of the risk assessment process, it is necessary to establish the potential risk from the probability and consequence of the event. Firstly, the magnitude of the probability is considered, and then the extent of

the probability is considered. The combination of the consequence and probability is the resulting level of risk.

- 2.17.2 Potential contaminant linkages identified as part of this preliminary risk assessment are summarised in the Initial Site Conceptual Model presented in Table 2.10. References to risk estimations are made in accordance with the methodology presented in CIRIA publication C552 (2001) titled 'Contaminated Land Risk Assessment: A Guide to Good Practice' and summarised in Appendix D.

Table 2.10: Initial Conceptual Model

Potential Source Location	Potential Hazard/ Source	Potential Receptor	Potential Pathway to Receptors	Potential Consequence of Contaminant Linkage	Potential Probability of Contaminant Linkage	Risk Classification (Risk = Probability x Consequence)
On site	Made ground and potentially contaminative processes (including historic garage and associated fuel storage)	Current and future site users and construction workers	Exposure to potential contaminants through ingestion, inhalation and dermal contact.	Medium	Likely: Made ground (up to >4.9mbgl) has previously been recorded on site and in the surrounding area during the previous phases of investigation works undertaken by TEC. Evidence of hydrocarbon impact was previously recorded by a third party in the location of the former garage. In addition, asbestos containing material has been recorded within the made ground on site. Given this, the potential for additional made ground of unknown thickness and chemical composition, or shallow contaminants on site cannot be discounted at this stage.	Moderate Risk
		Controlled waters (Principal/ Secondary Aquifers, and River Thames.); and ecological receptors	Leaching of potential contaminants from made ground and vertical and lateral migration through the saturated zone to controlled waters.	Medium	Low Likelihood to Likely: elevated leachable concentrations of heavy metal have previously been recorded within the made ground on site and in the surrounding area. Given this, and given the recorded aquifer status of the underlying strata (Secondary/Principal Aquifers), a potential risk to controlled waters, whilst likely to be low, cannot be fully discounted. Notwithstanding this, the presence of hardstanding across much of the proposed development area may limit the potential for infiltration and subsequent contaminant migration.	Low to Moderate Risk
		Current and future site users, construction workers and proposed development	Migration, ingress and accumulation of ground gasses and hydrocarbon vapours.	Severe	Unlikely to Low Likelihood: Made ground, if present, may act as a potential source of ground gas, subject to thickness and chemical composition. In addition, visual and olfactory evidence of hydrocarbon impact has previously been recorded on site, with elevated VOC concentrations noted by a third party. Notwithstanding this, previous gas monitoring of the made ground in the area suggests it is unlikely to comprise a significant source of ground gas.	Moderate Risk
Off site	Nearby current and historic industry (including wider military site of Royal Arsenal, gas works, power station, railway land)	Current and future site users, construction workers, controlled waters and proposed development.	Potential on-site contaminant / ground gas migration from off-site sources. Exposure to potential contaminants through ingestion, inhalation and dermal contact.	Medium to Severe	Unlikely to Low Likelihood: Potentially contaminative current and historic processes have been identified in proximity to the site, associated with the former Royal Arsenal. Therefore, potential on site migration of contaminants from these potential off-site sources cannot be fully discounted at this stage.	Low to Moderate Risk

### 3 GROUND INVESTIGATION METHODOLOGY

#### 3.1 Background

3.1.1 The ground investigation undertaken was designed to provide information on the ground conditions to aid with the design of the development; and to further investigate the potential contaminant linkages identified as part of the Tier 1: Preliminary Risk Assessment (Tier 2 Assessment).

3.1.2 All site works were undertaken, following completion of the desk-based review and site reconnaissance survey. Where potential on site hazards were identified during the site reconnaissance survey, the proposed exploratory hole locations were adjusted, using a targeted investigation approach to evaluate the risks. Tier 2 and geotechnical assessment works were undertaken in accordance with BS5930:2015+A1:2020, BS10175+A2:2017 and, where appropriate, Eurocode 7. Works were supervised by a suitably experienced geoenvironmental consultant from TEC.

#### 3.2 Methodology

3.2.1 A summary of the ground investigation works undertaken and the rationale for each location is provided in in Table 3.1, as follows:

Table 3.1: Summary of Ground Investigation Works

Investigation Method	Location	Date(s)	Location Rationale	Purpose
Window Sample Borehole (Dando Terrier)	WS01 – WS04	17/10/2023	Positioned to provide spatial coverage of site.	Assess for potential contamination across the site.
Rotary Borehole (Comacchio 305)	BH01 BH02	03/10/2023-11/10/2023 16/10/2023-20/10/2023	Positioned within footprint of proposed building where possible.	Characterisation of deeper ground conditions for piled foundation information Collection of geochemical and geotechnical samples for analysis Installation of groundwater monitoring well

3.2.2 Exploratory hole locations are presented on Figure 3, and detailed descriptions of encountered ground conditions are shown on exploratory hole logs presented in Appendix E.

#### 3.3 Limitations

3.3.1 The intrusive works were undertaken in proximity to Block D only at this stage. Previous intrusive works were undertaken in proximity to Block K in May 2016 and reference to TEC report No. 1508005.003.01 should be made for full details.

3.3.2 Two Transport for London (TfL) tunnels associated with Crossrail are present below much of the site area. As a result, the positioning of exploratory locations was restricted due to the infrastructure and associated easements.

3.3.3 All exploratory hole locations were agreed in advance by a representative of both Berkeley Homes (East Thames) Limited and TfL.

#### 3.4 Field Testing

3.4.1 A summary of in situ field testing undertaken as part of these ground investigation works is provided in Table 3.2.

Table 3.2: Summary of Field Testing

Field Test	Purpose
Standard Penetration Test (SPT)	Provision of strength profile of underlying ground conditions Provision of in situ densities of granular deposits
Photo-Ionisation Detector (PID)	Indication of the presence/concentrations of volatile organic compounds (VOCs)

### 3.5 Chemical Testing

3.5.1 Laboratory testing was scheduled on the basis of the potential contaminants identified within the Tier 1: Preliminary Risk Assessment and field observations.

3.5.2 Representative soil samples were collected and chemically tested at i2 Analytical Ltd, a UKAS/MCERTS accredited laboratory, for a selection of the following parameters:

#### Soils (Totals)

- Heavy metals and metalloids;
- Total Organic Carbon (TOC);
- Phenols (monohydric);
- Total Cyanide;
- Sulphate, sulphide, elemental sulphur and pH;
- Speciated Polyaromatic Hydrocarbons (PAH);
- Total Petroleum Hydrocarbons (TPH-CWG), including BTEX and MTBE; and
- Asbestos Screen.

3.5.3 Geochemical certificates of analysis are presented within Appendix F.

### 3.6 Geotechnical Testing

3.6.1 Selected soil samples were submitted for geotechnical analysis at K4 Soils Ltd and The Environmental Laboratory Ltd (ELab). Laboratory testing was scheduled upon the basis of field observations for a selection of the following:

- Saturated moisture content of chalk;
- Particle size distribution (PSD) tests;
- Shear Box testing; and
- BRE SD1 Suite D – Water soluble and acid soluble sulphates, total sulphur and pH.

3.6.2 Soil geotechnical certificates of analysis are presented in Appendix G.

### 3.7 General Sampling

3.7.1 Samples were collected in accordance with the following guidance;

- BS5930:2015+A1:2020 – Code of practice for ground investigations;
- BS-EN 1997-2:2007 - Eurocode 7 – Geotechnical design – Part 2: Ground investigation and testing
- BS ISO 10175:2011+A2:2017 - Investigation of potentially contaminated sites – Code of practice;
- BS ISO 18400-105:2017 Soil quality – Sampling - Packaging, transport, storage and preservation of samples; and
- BS ISO 18400-106:2017 Soil quality – Sampling - Quality control and quality assurance.

## 4 GROUND INVESTIGATION FINDINGS

### 4.1 Introduction

4.1.1 A summary of encountered ground conditions for the site is provided below, while detailed descriptions of the current assessment area (Block D) are shown on exploratory hole logs presented in Appendix E. Photographs of the materials encountered within Block D during the current phase of investigation are presented within Appendix A. For further information relating to the encountered ground conditions within Block K, please refer to TEC report reference 1508005.003.01, dated May 2016, while reference to TEC report reference 1508005.014.01, dated February 2018 should be made for information associated with earlier investigations associated with Block D.

### 4.2 Block D and K (October 2023)

#### Made Ground

4.2.1 Made ground was encountered to depths in excess of 3.0mbgl (WS02) and was generally recorded to comprise brown sandy gravelly clay with occasional ash. The gravel was recorded to comprise flint, brick and locally slate and clinker together with the occasional cobble of concrete.

4.2.2 Within BH01 and BH02, tarmacadam (approximately 100mm in thickness) was recorded at depths of 1.0mbgl and it is considered this is associated with the relict car park feature situated across the norther part of the site c.2010. Dynamic sample borehole locations WS01, WS03 and WS04 all terminated at depths of 1.0mbgl due to the presence of the tarmacadam.

4.2.3 This in turn was recorded to be underlain by further made ground comprising clayey gravelly sand / sandy gravel with occasional ash. The gravel component was recorded to comprise flint, brick and clinker.

#### Superficial Deposits (Kempton Park Gravel?)

4.2.4 Superficial Deposits, considered to be associated with the Kempton Park Gravel, were encountered within the rotary boreholes at depths of between 2.2mbgl and 6.2mbgl. The encountered material was recorded to generally comprise dense orangish brown slightly clayey gravelly sand, with gravel of flint.

#### Solid Geology (Thanet Formation)

4.2.5 The Thanet Formation was encountered from depths of 3.4mbgl and 6.2mbgl to between 16.8mbgl and 17.0mbgl. The encountered material was recorded to generally comprise very dense pale greenish brown silty glauconitic sand.

#### Solid Geology (White Chalk Subgroup)

4.2.6 The White Chalk Subgroup was recorded from depths of 16.8mbgl to depths in excess of 36.0mbgl. The encountered material was reported to comprise weak becoming moderately strong, low to medium density white chalk with occasional bands of flint.

4.2.7 Fractures were generally closely spaced and clean or infilled with white comminuted chalk, with variable discontinuities. A CIRIA grading of between C/B4/3 and C/B3/2 were recorded within the encountered materials.

4.2.8 Intrusive works undertaken in the far south of the redline boundary area in 2016 recorded a band of light brown sandy gravel of rounded chert at the base of the Thanet, considered to be associated with the Bullhead Beds at a depth of 15.0-16.2mbgl. This was not encountered during the current phase of investigation.

#### Dissolution Features

4.2.9 Evidence of potential dissolution at the Thanet Formation and Chalk interface was recorded within BH02, with poor recovery recorded during drilling of this location between 16.5mbgl and 18.0mbgl.

4.2.10 While not encountered during the intrusive investigation undertaken during the current phase of assessment, possible jointing within the chalk mass, has been recorded within the wider Royal Arsenal



Riverside development, including the adjacent A Blocks and B Blocks. Therefore, consideration to such features will be required within the construction of the proposed development.

#### 4.3 Block D (February 2018)

##### Made Ground

4.3.1 Intrusive works undertaken in proximity to Block D in 2018 (exploratory locations TH01 – TH04) recorded the presence of made ground to depths of between >1.8mbgl and 3.1bgl. The encountered material was observed to comprise slightly clayey gravelly sand. The gravel, and occasional cobble, was recorded to comprise brick and concrete. Occasional ceramic, wood and plastic was also observed.

##### Natural Ground

4.3.2 The natural ground was recorded within a single location between 3.1mbgl and 3.2mbgl and was observed to comprise greenish grey fine sand (Thanet Formation).

4.3.3 The general ground profile encountered at the site is summarised in Table 4.1 below.

Table 4.1: Generalised Ground Profile

Depth (mbgl)	Elevation (mAOD)	Encountered Material
<b>MADE GROUND</b>		
0.0 to >1.0 / >3.0	-	Sandy gravelly clay underlain by tarmacadam hardstanding and clayey gravelly sand / sandy gravel.
<b>SUPERFICIAL DEPOSITS – KEMPTON PARK GRAVEL</b>		
1.5 / 2.6 to 3.4 / 6.2	6.64 / 7.68 to 4.08 / 5.44	Dense to very dense brown, greenish brown and orangish brown, slightly clayey, slightly silty, gravelly sand. Gravel of fine to medium, angular to subrounded flint.
<b>SOLID GEOLOGY – THANET SAND FORMATION</b>		
3.4 / 6.2 – 16.2 / 17.0	+4.08 / 5.44 to -6.52 to -8.16	Very dense pale greenish brown silty glauconitic sand.
<b>SOLID GEOLOGY – BULLHEAD BEDS (SOUTHERN REDLINE BOUNDARY AREA ONLY)</b>		
15.0 – 16.2	-	Light brown sandy gravel of rounded chert
<b>SOLID GEOLOGY – WHITE CHALK SUBGROUP</b>		
16.2 / 17.0 - >36.0	-6.52 to -8.16 to <-25.72 / <-25.86	Weak becoming moderately strong to medium strong, low to medium density, white chalk with occasional flint. Fractures were generally closely spaced and clean or infilled with white comminuted chalk, with variable discontinuities.

#### 4.4 Groundwater

4.4.1 Groundwater was encountered within the far south of the red line boundary (2016) at a depth of 10.4mbgl. While groundwater levels were not discernible during the advancement of boreholes during the current phase of investigation due to the drilling method utilised, static groundwater levels of 7.6mbgl (BH01) and 8.3mbgl (BH02) were recorded following completion of the works.

4.4.2 It should be noted that groundwater conditions recorded during the investigation may not be representative of long term conditions and that groundwater levels may vary in response to meteorological/ seasonal changes.

#### 4.5 Contamination Observations

4.5.1 No visual or olfactory evidence of contamination was observed during the current ground investigation. Screening of soil samples with a PID recorded concentrations of volatile organic compounds (VOCs) to be less than the instrument level of detection (i.e. 0.0ppm).

4.5.2 The previous intrusive works undertaken within the far end of the red line boundary in 2016 recorded olfactory evidence of potential hydrocarbon contamination within a single location positioned in proximity to the former garage from a depth of 0.8mbgl. Field screening of total Volatile Organic Compounds (VOC's)

using a photo-ionisation detector (PID) within this location recorded concentrations of up to 68.2ppm within this material. Notwithstanding this, laboratory analysis of this material reported the lower banded TPH concentrations considered to be associated with petroleum (i.e. C5 – C10) as below laboratory limit of detection, while elevated concentrations of heavier ended TPH (i.e. C12 – C35) were all reported below the current screening values considered appropriate for the proposed site end use.

- 4.5.3 No further significant visual or olfactory evidence of contamination was recorded during the intrusive investigation. All further field screening of total VOCs using the PID recorded concentrations of 0.0ppm within screened soil samples, i.e. below the limit of detection of the instrument.

- 5 TIER 2: GENERIC QUANTITATIVE RISK ASSESSMENT
- 5.1.1 The generic quantitative risk assessment comprises a screening of potential contaminants identified within the Tier 1: Preliminary Risk Assessment against carefully selected generic assessment criteria (GAC) that are appropriate to the site setting and the receptors concerned.
- 5.1.2 GAC's are screening criteria which are derived using a standard set of generic assumptions. They are designed to be broadly applicable to a wide range of site conditions and exposure scenarios. For this site GAC's relevant to Human Health have been selected, as detailed in section 5.2 below.
- 5.2 Human Health
- Methodology
- 5.2.1 Detailed information on the background legislation and selection of the GAC used within this assessment for human health is presented in Appendix H.
- 5.2.2 TEC have referenced the Environment Agency SGV's, Defra Category 4 Screening Levels (C4SLs) and LQM/CIEH S4ULs for Human Health Risk Assessment 'Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3126. All rights reserved.'.
- 5.2.3 The standard land use for the site, for use in this generic assessment, has been defined as "residential without homegrown produce" based on the proposed development and in accordance with current guidance.
- 5.2.4 As the site investigation methodology involved targeted sampling, statistical analysis has not been undertaken and the results have been directly compared to the GAC.
- 5.2.5 No visual or olfactory evidence of contamination was identified within the natural ground during the site investigation. Therefore, 12No. soil samples have been collected from the made ground, at depths that end users may encounter potential contaminants, via the dermal contact, ingestion and inhalation pathways. Certificates of analysis for samples are contained within Appendix F.
- Summary of Results
- 5.2.6 The full human health generic quantitative risk assessment is presented in Appendix H. To provide an updated assessment for the site area as a whole, data obtained from the previous investigations undertaken on site (TEC report reference 1508005.003.01, dated May 2016 and 1508005.014.01 dated February 2018) has also been included.
- Made Ground
- 5.2.7 The results of the assessment recorded (localised) exceedances of the GAC and therefore the following contaminants of potential concern (CoPC) have been identified within the made ground;
- Heavy metals – arsenic and lead (October 2023 and February 2018).
  - PAHs –Benzo(a)pyrene and dibenz(a,h)anthracene (D Block – February 2018)
- 5.2.8 The laboratory screening for asbestos during the current assessment recorded the presence of amosite (described as loose fibrous debris) in WS03 at 0.7mbgl and Chrysotile (described as loose fibres) at WS04 at 0.6mbgl. All remaining samples recorded asbestos as not-detected within the current assessment.
- 5.2.9 In addition, Chrysotile and amosite asbestos fibres were recorded within 3No. samples of made ground within the southern extent of the redline boundary area of the site in May 2016 and again in February 2018, while loose fibres and fibrous debris of amosite was recorded within a single location in proximity to D Block in February 2018.
- 5.3 Controlled Waters
- 5.3.1 Leachate analysis has not been undertaken on the sampled made ground/ shallow soils and no groundwater samples have been collected as part of this site investigation, owing to the following;
- No visual or olfactory evidence of contamination was noted during the site investigation;

- No significant contaminants of potential concern were recorded within the sampled made ground/shallow soils;
- Groundwater was encountered at depths in excess of 7mbgl during the intrusive works; and
- The site is not reported to be located within an Environment Agency Source Protection Zone.

5.3.2 In addition, while marginally elevated leachable contaminant concentrations of a number of heavy metals was recorded with the made ground during the previous works undertaken on site in 2016 and 2018, given the absence of gross contamination within the shallow made ground, and the depth to groundwater, the risk to controlled waters was considered to be low.

5.3.3 On this basis, no risk to controlled waters from migration of leachable contaminants within the made ground or migration of dissolved phase contaminants to the wider aquifer has been identified. Therefore, these potential contaminant linkages have not been considered further within this assessment.

#### 5.4 Ground Gas

5.4.1 Toxic, asphyxiating and flammable potentially explosive ground gas can enter buildings and other structures on and below the ground. These gases can potentially pose risks to occupants and other site end users, and to the structures themselves.

5.4.2 In accordance with BS8485:2019, NHBC Foundation report NF94: Hazardous Ground Gas – an essential guide for housebuilders, and CL:AIRE RB17, an assessment of the risk posed by ground gases at the site has been undertaken, based on the findings of the desk study, ground investigation and the development of the initial conceptual site model (Table 2.10) and, as a result, the site has been classified as ‘low risk’ with respect to ground gases. The following site-specific information has been considered as part of the lines of evidence based assessment;

- Natural soils with a high carbonate content (e.g. Chalk) can give rise to elevated concentrations of bulk gas from pockets of trapped gas, and have been identified underlying the site; however, the volumes of gas likely to be generated are expected to be low due to the slow rate of degradation in all normal circumstances, and associated low flow rates associated with these deposits;
- No landfills, areas of potentially significant infilled ground or coal mine entries/ workings have been identified within proximity to the site; and
- While made ground was recorded to depths in excess of 3m across the site area, no significant organic material was observed within these soils; and
- The site is not located within a radon affected area.

5.4.3 No credible source or pathway for ground gas has been identified at the site as part of these works which is consistent with the assessments undertaken across the site in 2016 and 2018.

5.4.4 Therefore, no ground gas monitoring or further assessment is considered to be required and no specific ground gas protection measures are considered necessary for the proposed development.

#### 5.5 Updated Conceptual Model

5.5.1 The findings of the site investigation and the GQRA have been used to update the conceptual model and confirm the relevant contaminant linkages associated with the proposed development.

#### 5.6 Identified Sources

5.6.1 Sources of contamination/ ground gas identified on and within the vicinity of the site are summarised below:

##### Identified On Site Sources

- Made ground across the development area (including elevated heavy metal concentrations and asbestos)

#### Identified Off Site Sources

- Current and historic nearby industrial land uses (including military site of Royal Arsenal, gas works, power station, railway land)
- Previously recorded thickness of made ground (off site)

#### 5.7 Identified Receptors

5.7.1 Receptors identified as part of this updated conceptual model are:

- Current/future site users (most sensitive receptor being a 0-6 year old child);
- Construction and maintenance workers;
- Controlled waters (Secondary (Undifferentiated) Aquifer (superficial deposits), Secondary A Aquifer (Thanet Formation) and Principal Aquifer (Chalk) and River Thames);
- Proposed development/ structures (below ground structures, services and concrete, proposed buildings on site).

#### 5.8 Identified Pathways

5.8.1 Identified contaminant pathways relating to the identified receptors and contaminants of concern include:

##### Human Health

- Dermal contact – Direct skin contact with contaminated soil, dust, or water. Certain contaminants can also be absorbed into the body through skin, or enter directly through open cuts or abrasions;
- Ingestion – Ingestion of soil by consumption of un-washed produce grown on site or eating with unwashed hands causing cross contamination, or ingestion of fugitive dust from surfaces etc., or indirect ingestion of fruit and vegetables grown in contaminated soil; and
- Inhalation – inhalation of soil and/or dust within the made ground, which may result in short term acute risks of toxicity, and/or long term chronic risks to human health.

##### Building Materials/Services

- Aggressive attack: Building materials can be damaged by direct contact with aggressive/contaminated ground, especially if mobile groundwater is present, for example sulphate attack on concrete or the aggressive contaminants coming into direct contact with membranes used within the structures;

5.8.2 The updated conceptual model is presented in Table 5.1. References to risk estimations are made in accordance with the methodology presented in CIRIA publication C552 (2001) titled 'Contaminated Land Risk Assessment: A Guide to Good Practice' and summarised in Appendix D.

Table 5.1: Updated Conceptual Model (Hazard Assessment and Risk Estimation)

Potential Source Location	Identified Hazard/ Source	Identified Receptor	Identified Pathway	Potential Consequence of Contaminant Linkage	Potential Probability for Contaminant Linkage	Risk Classification (Risk = Probability x Consequence)
On site	Made ground	Current and future site users and construction workers	Exposure to potential contaminants through ingestion, inhalation and dermal contact.	Medium	Low likelihood to likely: Made ground has been recorded across the site to depths in excess of 4.9mbgl. Laboratory analysis of made ground has recorded elevated concentrations of heavy metals and PAHs, in excess of the assessment criteria for a residential site end use. In addition, asbestos has been recorded across the site. Therefore, where made ground remains in areas of proposed soft landscaping, exposure to potential contaminants cannot be discounted.	Moderate Risk
		Controlled waters	Leaching of potential contaminants from made ground and vertical and lateral migration through the saturated zone to controlled waters.	Medium	Unlikely: Given the absence of gross contamination within the encountered made ground materials and depth to groundwater, the risk to controlled waters is considered to be low.	Low Risk
		Current and future site users, construction workers and proposed development	Migration, ingress and accumulation of ground gasses.	Severe	Unlikely: The encountered made ground is considered unlikely to be a potential source of significant ground gas based on its limited thickness and observed composition (with no visual evidence of degradable/ putrescible materials noted).	Moderate/Low risk
Off site	Nearby current and historic industry etc.	Current and future site users, construction workers, controlled waters and proposed development.	Potential on-site contaminant / ground gas migration from off-site sources. Exposure to potential contaminants through ingestion, inhalation and dermal contact.	Medium to Severe	Unlikely: No evidence of significant migration of contamination from off-site sources was observed during the site works and the neighbouring areas have been redeveloped over time, which will have resulted in betterment of soil and groundwater contaminant quality.	Low Risk

- 6 LAND CONTAMINATION - CONCLUSIONS AND RECOMMENDATIONS
- 6.1 Introduction
- 6.1.1 No visual or olfactory evidence of significant contamination was noted during the current phase of ground investigation, although olfactory evidence of potential hydrocarbon contamination within a single location positioned in proximity to the former garage at the far south of the red line boundary was recorded during the intrusive works undertaken in 2016. Notwithstanding this, laboratory analysis of this material reported the lower banded light TPH fraction concentrations considered to be associated with petroleum (i.e. C5 – C10) as below laboratory limit of detection, while elevated concentrations of heavier ended TPH (i.e. C12 – C35) were all reported below the current screening values considered appropriate for the proposed site end use.
- 6.1.2 Laboratory analytical results of the encountered made ground elsewhere on site has recorded elevated heavy metal and PAH concentrations in excess of the relevant screening values for a residential site end use during the ground investigations undertaken to date (2016, 2018 and 2023). In addition, asbestos has been recorded across the development area.
- 6.1.3 Based on our conceptual understanding, the site is considered to be representative of Characteristic Situation 1. In addition, the site is not situated within a radon affected area. Therefore, no radon or bulk gas protection measures are considered necessary within the proposed development.
- 6.2 Preliminary Remediation Options Appraisal
- 6.2.1 The current phase of investigation has recorded the presence of similar contaminants of potential concern recorded during previous phases of investigation (i.e. heavy metals, PAH's and asbestos). As a result, it is considered that the remediation mitigation measures detailed within the TEC Remediation Strategy and Verification Plan prepared for the Royal Arsenal Riverside - Linear Park, which encompasses the current development area (TEC report reference 1508005.016.01, dated March 2018), would be considered appropriate. It is understood that this document has gained regulatory approval from the Royal Borough of Greenwich Council and therefore no further assessment is considered necessary.
- 6.2.2 Reference to this document should be made for full information pertaining to the required remediation measures and the verification process required to validate following completion of the required mitigation measures.
- 6.3 General Considerations
- 6.3.1 Given the presence of general made ground, which includes asbestos, good brownfield site working practices should be adopted by construction workers to mitigate against potential risks.
- 6.3.2 Should water supply pipes be placed within the made ground encountered at the site, due consideration would need to be given to the UK Water Industry Research Ltd (UKWIR) guidance.
- 6.3.3 Based on our conceptual understanding of the site to-date, it would be anticipated that similar ground conditions to those encountered as part of this assessment exist across the site areas where access has been possible. However, should significant thicknesses of made ground be encountered, or visual or olfactory evidence of potentially significant contamination be identified during the development works, further investigation and assessment may be required.

- 7 GROUND ENGINEERING
- 7.1 Proposed Development
- 7.1.1 The site currently comprises an area of public open space known as ‘Maribor Park’, along with an office building and associated car parking in the south of the site.
- 7.1.2 The proposed development is understood to comprise the construction of 8No. residential blocks (Blocks K3-K5 and D1-D5), varying in height from 9 – 18 stories for residential purposes and includes associated soft landscaping and hard infrastructure.
- 7.1.3 While no details have been provided to TEC regarding likely column loads, for the purpose of this assessment it is assumed that column loads of up to 5000kN may be appropriate for the proposed development.
- 7.2 Site Preparation
- 7.2.1 Below ground obstructions related primarily to the former car park within the development area have been recorded across the site. Consideration of these features will be required during the enabling and construction works and in order to construct piles for the proposed structure, it will be necessary to either bore through them, or remove them prior to the piling works. In addition, depending upon their depth, it may be necessary to remove some of the obstructions to a suitable depth to ensure they do not provide a ‘hard spot’ below any floor slab.
- 7.2.2 2No Crossrail tunnels are situated below the majority of the development area, and due consideration to these features will be required within the construction of the development.
- 7.2.3 In addition, a number of utility services exist within the proposed development area. Due consideration should be given to the removal / re-routing of these features prior to construction.
- 7.2.4 Evidence of potential dissolution was recorded at the Thanet Sand / Chalk interface during the advancement of BH02. While not encountered during the intrusive investigation undertaken during the current phase of assessment, evidence of possible jointing within the chalk mass has also been recorded within the wider Royal Arsenal Riverside development. Therefore, consideration to such features will be required within the construction of the proposed development.
- 7.3 Geotechnical Test Data Summary
- 7.3.1 Laboratory test data are presented in Appendix G while in situ test results are presented on the engineering logs Appendix E.

Table 7.1 : Summary of Test Results - Natural Strata

Test		Number of Tests	Range of Results	
Particle Size Distribution	Kempton Park Gravel	1	See Below	
	Thanet Formation	5		
Saturated Moisture Content (%)	Chalk	10	29 - 35	
Dry Density (mg/m <sup>3</sup> )			1.39 – 1.52	
Shear Strength	$\phi'$ (degrees)	Kempton Park Gravel	1	32.5 0
	$c'$ (kN/m <sup>2</sup> )	Thanet Formation	1	33 3.5
SPT ‘N’ Value	Made Ground	2	21 and 48	
	Kempton Park Gravel	4	6 - >50	
	Thanet Formation	16	46 - >50	
	Chalk	15	>50	



Particle Size Distribution

7.3.2 6No. Particle Size Distribution (PSD) tests were undertaken on the underlying granular materials, with 1No from the superficial Kempton Park Gravel and 5No from the Thanet Formation. The results are summarised in Table 7.2 and Table 7.3 below:

Table 7.2: Summary of Laboratory Test Results – Classification (Kempton Park Gravel)

Very Coarse (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
0.0	74.44	22.23	0.8	2.5

Table 7.3: Summary of Laboratory Test Results – Classification (Thanet Sand Formation)

Very Coarse (%)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)
0.0	0.0	76.73 – 89.1	4.8 – 14.4	5.4 – 8.9

7.4 Foundations

Design Parameters

7.4.1 The Standard Penetration Testing (SPT) undertaken on the made ground, recorded to depths in excess of 3.0mbgl recorded uncorrected ‘N’ values of 21 and 48.

7.4.2 The Kempton Park Gravel, recorded below the Made Ground to an elevation of 4.08/5.44mAOD, were recorded as being granular in nature. The Standard Penetration Test (SPT) ‘N’ results undertaken within the superficial Kempton Park Gravel ranged between 6 and >50, in agreement with data from elsewhere across the site. A single direct shear strength test undertaken on this material recorded a shear strength parameter of  $\phi' = 32.5^\circ$  and  $c' = 0\text{kN/m}^2$ . However, based on data obtained from elsewhere at the site a typical design values for  $\phi'$  of  $35^\circ$  and  $c' = 0\text{kN/m}^2$  are considered appropriate.

7.4.3 The Thanet Formation materials were recorded as being granular in nature with ‘N’ values of between 46 and >50 being recorded during the current intrusive works, which suggests a friction values ( $\phi'$ ) in excess of  $45^\circ$  (Schmertmann, 1975). However, a shear box test undertaken on recompacted material gave a lower value of  $\phi' = 33^\circ$ , similar to those recorded during the investigations for Blocks A and B (ranging between  $32^\circ$  and  $36^\circ$ ). While it is recognised that previous reports provided by Ground Engineering indicate characteristic values of around  $38^\circ$  for pile design purposes and while Hill Piling in their design for Phase 8 utilised a friction value of  $36.8^\circ$  for the Thanet Sands, on the basis of current test data and information obtained for the wider site area, a friction value ( $\phi'$ ) of  $37.5^\circ$  would be considered appropriate for design purposes.

7.4.4 Testing undertaken on samples of recovered intact chalk indicate the underlying materials to have a dry density of between  $1.39\text{Mg/m}^3$  and  $1.52\text{Mg/m}^3$  and a saturated moisture content of between 29% and 35%, similar to the results from Block A, and suggesting the underlying material to be of generally low density. CIRIA C574 indicates that for low density Upper Chalk, friction values ( $\phi'$ ) of between  $33^\circ$  and  $40^\circ$  with a cohesion intercept of  $20\text{kN/m}^2$  are typical. Consequently, it is suggested that moderately conservative design parameters of  $c' = 20\text{kN/m}^2$  and  $\phi' = 39^\circ$  and worst credible parameters of  $c' = 0$  and  $\phi' = 34^\circ$  would be appropriate within the design.

7.4.5 While not measured directly as part of the current investigation, based on the recommendations provided in BS8002:2015, it is suggested that a bulk density of  $18\text{kN/m}^3$  may be appropriate for the granular made ground materials. Further, a bulk density of  $19.0\text{kN/m}^3$  due is considered appropriate for both the Kempton Park Gravel and the Thanet Sands Formation. The measured bulk densities of the chalk recorded a range of  $18.34\text{kN/m}^3$  to  $19.32\text{kN/m}^3$  (average  $18.9\text{kN/m}^3$ ).

7.4.6 A summary of design parameters is provided below:

Table 7.4: Summary of Suggested Design Parameters

Parameter	Made Ground	Kempton Park Gravels	Thanet Sands Formation	Upper Chalk
Depth (mbgl)	0.0 to >1.0 / >3.0	1.5 / 2.6 to 3.4 / 6.2	3.4 / 6.2 to 16.8 / 17.0	16.2 / 17.0 to >36.0

Parameter	Made Ground	Kempton Park Gravels	Thanet Sands Formation	Upper Chalk
Elevation (mAOD)	-	6.64 / 7.68 to 4.08 / 5.44	+4.08 / 5.44 to -6.52 to -8.16	-6.52 to -8.16 to <-25.72 / <-25.86
Assumed Bulk Density (kN/m <sup>3</sup> )	18.0 <sup>(1)</sup>	19.0 <sup>(1)</sup>	19.0 <sup>(1)</sup>	18.9
Uncorrected SPT 'N' Value	21 and 48	6 - >50	46 - >50	>50
$\phi'$ (degrees)	-	35°	37.5°	34°
$c'$ (kN/m <sup>2</sup> )	-	0	0	0

Notes: 1. BS8002:2015

### Pile Design Recommendations

7.4.7 Details relating to the proposed development have not been provided as part of the current assessment; however, it is assumed that pile loads up to 5000kN would be appropriate for the proposed development.

7.4.8 At this preliminary stage and bearing in mind the presence of the Crossrail tunnels that run below the site, it is considered likely that piling may be limited to within the Thanet Sand Formation.

7.4.9 Should piles be extended to the underlying Chalk encountered below an approximate elevation of -6.52 mAOD (16.2m/17.0mbgl), CIRIA C574 recommends that for low density Upper Chalk, as encountered at the site, friction values ( $\phi'$ ) of between 33° and 40° with a cohesion intercept of 20kN/m<sup>2</sup> are typical. Consequently, it is suggested that moderately conservative design parameters of  $c' = 20\text{kN/m}^2$  and  $\phi' = 39^\circ$  and worst credible parameters of  $c' = 0$  and  $\phi' = 34^\circ$  would be appropriate within the design.

7.4.10 CIRIA Report C574 recommends that the following empirical relationship should be adopted for estimating the ultimate average shaft resistance,  $T_{sf}$ , of bored piles in low and medium density chalk.

$$T_{sf} = 0.8 \times \sigma_v'$$

where  $\sigma_v'$  is the average effective stress (based on the final ground level).

7.4.11 Further, should CFA piles be considered appropriate, the CIRIA report recommends the ultimate average shaft resistance should be estimated from

$$T_{sf} = 0.45 \times \sigma_v'$$

where  $\sigma_v'$  is the average effective stress (based on the final ground level).

7.4.12 However, the CIRIA report indicates this relationship to be proven where the ultimate average shaft resistance,  $T_{sf}$ , is below 110kN/m<sup>2</sup> and the average effective stress,  $\sigma_v'$ , is below 200kN/m<sup>2</sup>.

7.4.13 CIRIA Report C574 recognises that SPT 'N' value is an imprecise method of measuring the strength of chalk at the base of a pile. However, it also indicates that until a better, more economical method has been found, it is likely to persist. The report recommends that, subject to the limitation of the crushing strength of concrete, the following ultimate base stresses be adopted for both bored and CFA piles:

$$\text{Ultimate base stress, } q_u = 200 \times \text{'N' kN/m}^2$$

7.4.14 The proximity of adjacent structures, the presence of significant below ground obstructions, and the environmental sensitivity of the site will need to be carefully considered when choosing the most appropriate pile type and methodology and it is suggested that a specialist piling contractor should be consulted regarding the piling options and detailed design of most appropriate option.

7.4.15 While a potential dissolution feature has been recorded at the Thanet Sand / Chalk interface within BH02, it should be noted that no evidence of solution features has been recorded within the chalk mass during the current investigation. Further it should be noted that previous intrusive works undertaken across the wider site area have recorded the localised presence of such features within the chalk mass and, therefore, it is recommended that the presence of solution features within the chalk mass is considered within any pile design.

### Typical Pile Resistances

7.4.16 As indicated above, the current investigation recorded the potential presence of solution features at the Thanet Sand / Chalk interface (BH02) and therefore an allowance in the form of a reduction in friction at the base of the Thanet Sand Formation and upper part of the chalk has been included in the estimated pile resistances given below.

7.4.17 For budgetary and indicative purposes only, again when using partial Factors of Safety for shaft resistance of 1.5 and bearing resistance of 3, with a global Factor of safety of 2.5, in accordance with BS 8004:2015+A1:2020 and based on the design parameters and ground model given above, the estimated pile resistance for a single CFA/bored pile founding within the Thanet sand Formation is presented in Table 7.5 below.

Table 7.5: Estimated Single Pile Resistances

Pile Diameter	Approximate Pile Resistance (kN)		
	Toe at 10.0mbgl	Toe at 12.5mbgl	Toe at 15.0mbgl*
600mm	1000	1250	1450
750mm	1475	1850	2100
900mm	2000	2550	2900
1200mm	3350	4225	4850

\* Note toe of pile close to weakened strata as a result of potential solution features at the Thanet Sand / Chalk interface

7.4.18 For budgetary and indicative purposes only, again when using partial Factors of Safety for shaft resistance of 1.5 and bearing resistance of 3, with a global Factor of safety of 2.5 (presented in brackets), in accordance with BS 8004:2015+A1:2020 and based on the design parameters and ground model given above, the estimated pile resistance for a single bored pile founding within the chalk is presented in Table 7.6 below.

Table 7.6: Estimated Single Pile Resistances

Pile Diameter	Approximate Pile Resistance (kN)	
	Toe at 20.0mbgl	Toe at 25.0mbgl
450mm	1575 (1250)	-
600mm	2325 (1950)	3650 (2750)
750mm	3200 (2800)	4900 (3800)
900mm	4200 (3800)	6200 (5000)
1200mm		9225 (7800)

7.4.19 In addition, consideration will need to be given to the presence of Crossrail tunnels and infrastructure to ensure the piles do not load these features. It is considered that in some circumstance the piles may need to be sleeved to ensure they do not impart any load on these below ground features.

### 7.5 Basement Walls (D Blocks)

7.5.1 It is understood that a basement is proposed for the D Blocks and that it is to be constructed within a contiguous sheet pile wall which is to be incorporated into the final design and it is considered likely that a cantilevered wall solution would be most suitable owing to the granular nature of the superficial deposits / Thanet Formation and the depth of the underlying chalk.

7.5.2 Based on our current understanding of the design, it is understood that the proposed basement would be formed within Made Ground/Kempton Park Gravel. While no shear box testing has been undertaken on the made ground materials encountered at the site, based on the PSD data together with the SPT results, it is suggested that a characteristic friction value ( $\phi'$ ) of 22° is appropriate for these materials. The Kempton Park Gravel materials were recorded as being granular in nature and the test data suggest a characteristic friction value ( $\phi'$ ) of around 35° to be appropriate of retaining wall design.

- 7.5.3 It is understood that the basement floor is to be formed within the Kempton Park Gravel and therefore as a result of the granular nature of these materials, ground heave is unlikely to significantly affect the ground floor slab.
- 7.6 Ground Floor Slabs
- 7.6.1 Given the anticipated depth/type of foundations together with the recorded depth of made ground across the site area, the use of suspended floor slabs may be appropriate for the scheme, which should incorporate appropriate void dimensions as outlined in the NHBC Standards.
- 7.7 Excavations
- 7.7.1 Excavations at the site for conventional foundations may be achievable using conventional equipment.
- 7.7.2 No groundwater was recorded during the current phase of investigation, although subsequent monitoring recorded static groundwater levels of between 7.6mbgl and 8.3mbgl. Based on observations made during the ground investigations, groundwater ingress into excavations is considered unlikely to be significantly problematic although some dewatering may be required, particularly where excavations are left open for any length of time. It would be recommended that formation levels are protected to mitigate against softening associated with any such water ingress.
- 7.7.3 It should be noted that groundwater levels might fluctuate according to the season and from year to year. This may have implications on recommendations, including those for foundations and excavations. Accordingly, a careful watch should be maintained during any future groundworks and the recommendations presented in this report may be subject to amendment should additional information becoming available.
- 7.7.4 It is recommended that appropriate shoring/temporary works are used in accordance with current Health and Safety requirements where access for personnel is required into excavations.
- 7.8 Protection of Buried Concrete
- 7.8.1 The desk study and observations of the encountered ground materials during the intrusive works indicate the site would be categorised as 'brownfield locations', including potential aggressive materials or leachates, except those containing pyrite'.
- 7.8.2 At this stage, there is insufficient data to confirm the mobility of groundwater at the site (and potential changes that may result during construction) and therefore a mobile groundwater has been assumed.
- 7.8.3 It should be noted that groundwater samples have not been collected as part of this scope of work.
- 7.8.4 The results of the testing of the soil samples, together with the resulting Aggressive Chemical Environment for Concrete (ACEC) Class and Design Sulphate (DS) Class, as derived in accordance with BRE Special Digest 1, are presented in Table 7.7. The full laboratory results are presented in Appendix G.

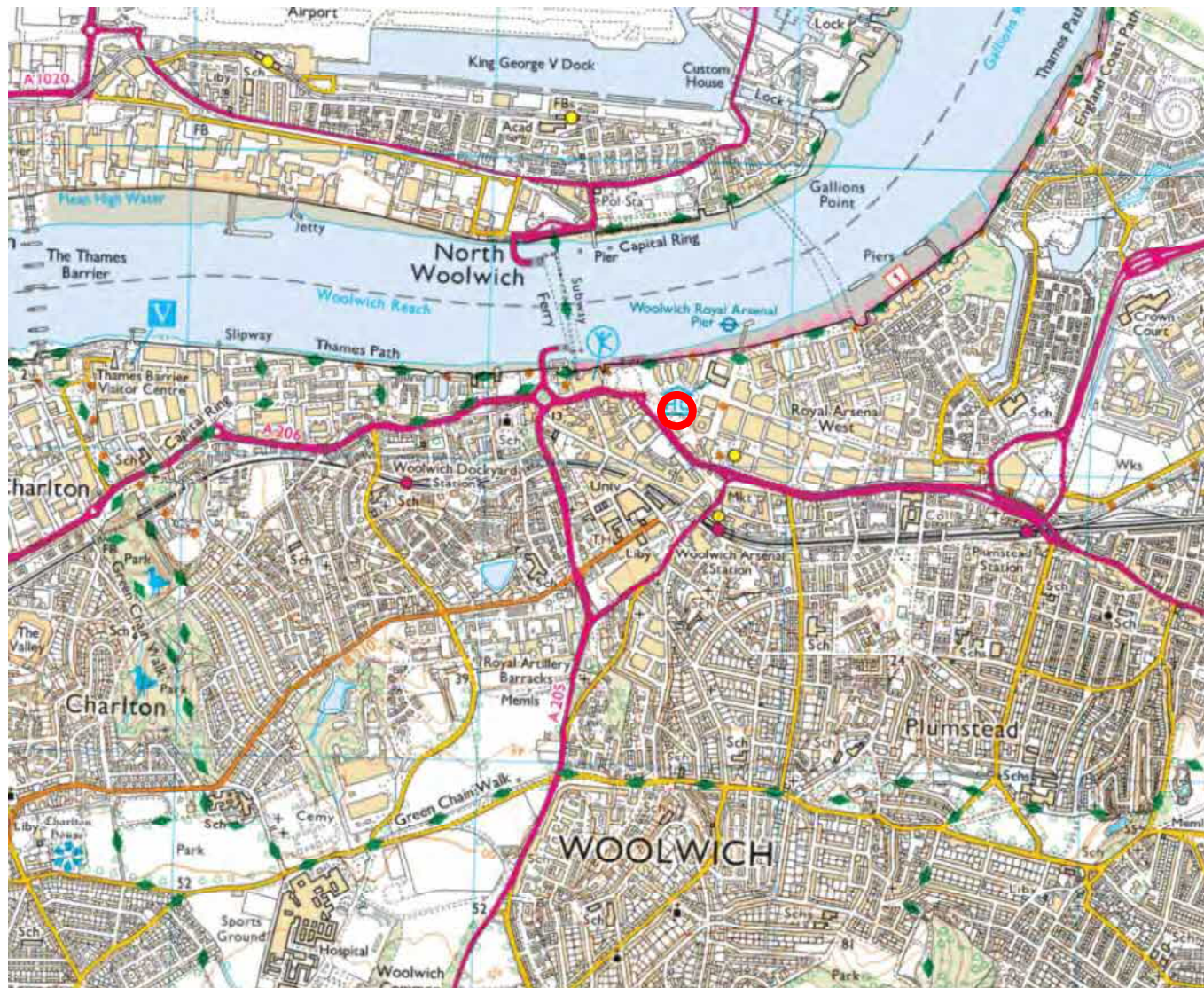
Table 7.7: Summary of ACEC

Stratum	No. of tests	pH	Water Soluble Sulphate (mg/l)	ACEC <sup>(1)</sup>	DS Class <sup>(1)</sup>
Thanet Formation	3	8.1 – 8.6	63 – 92	AC-2	DS-2
White Chalk Subgroup	3	8.6 – 8.8	31 – 61	AC-1	DS-1

Note 1: Based on a characteristic value derived for a data set of <5 samples per stratum (maximum water soluble sulphate concentration/ lowest pH) as per BRE SD1

TEC

## Figures and Drawings



Approximate Site Location:



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Licence number 100043301



The Old Chase  
Engineering Company  
PLC

100043301

100043301

100043301

100043301

Site Location Plan

Client Name:

100043301

100043301

Figure No:

1

Date:

100043301

Scale:

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Extract of PRP drawing titled 'Proposed Basement Road Overlay Plan' drawing no. Z429-PRP01-STW-B1-DR-A-005-072, dated 11-12-2023 provided to TEC by client

Extract of PRP drawing titled 'Proposed Ground Floor Road Overlay Plan' drawing no. Z429-PRP01-STW-00-DR-A-005-073 REV P02, dated 11-12-2023 provided to TEC by client



Extract of PRP drawing titled 'Proposed Block K Overall Ground Level Floor Plan' drawing no. Z429-PRP01-KZ-00-B1-DR-A-005-020 REV P06, dated 10-11-2023, provided to TEC by client



The Old Chapel Estate  
B&S 2/11

Project Name  
The Old Chapel Estate

Project No.  
Z429-PRP01-KZ-00-B1-DR-A-005-020

Project Title  
Proposed Block K Overall Ground Level Floor Plan

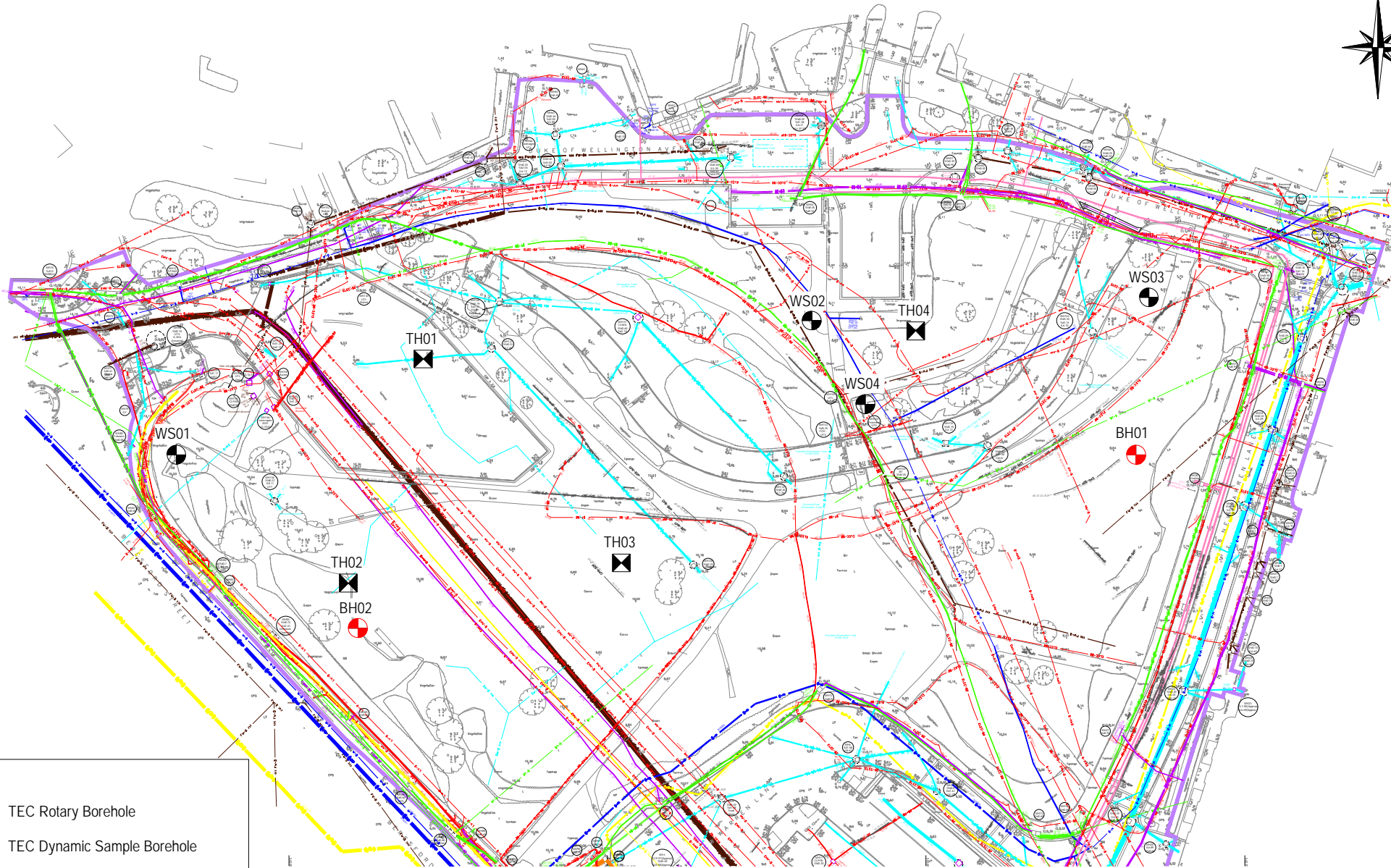
Project Location  
The Old Chapel Estate

Project No.  
Z429-PRP01-KZ-00-B1-DR-A-005-020




Page No.  
2

Date:  
11/12/2023

Scale:  
N/A



**K.v**

-  TEC Rotary Borehole
-  TEC Dynamic Sample Borehole
-  TEC Trial Hole (February 2018)

\*All locations are approximate



Appendix A  
Site Photographs



Photograph 1: BH01 encountered ground from 16.2mbgl to 23.7mbgl



Photograph 2: BH01 encountered ground from 16.2mbgl to 25.2mbgl



Photograph 3: BH01 encountered ground from 17.7mbgl to 28.2mbgl



Photograph 4: BH01 encountered ground from 29.7mbgl to 34.2mbgl



Photograph 5: BH01 encountered ground from 29.7mbgl to 35.7mbgl



Photograph 6: BH02 encountered ground conditions 18.0mbgl to 21.0mbgl



Photograph 7: BH02 encountered ground conditions 21.0mbgl to 24.0mbgl



Photograph 8: BH02 encountered ground conditions 21.0mbgl to 25.5mbgl



Photograph 9: BH02 encountered ground conditions 24.0mbgl to 27.0mbgl



Photograph 10: BH02 encountered ground conditions 31.5mbgl to 33.0mbgl



Photograph 11: BH02 encountered ground conditions 34.5mbgl to 36.0mbgl



Photograph 12: Overall view of site facing northeast.



Photograph 13: Overall view of site facing southwest.



Appendix B  
Historical Maps



Kent

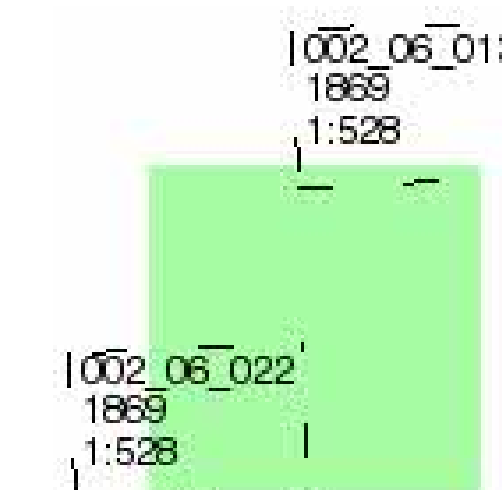
Published 1869

Source map scale - 1:528

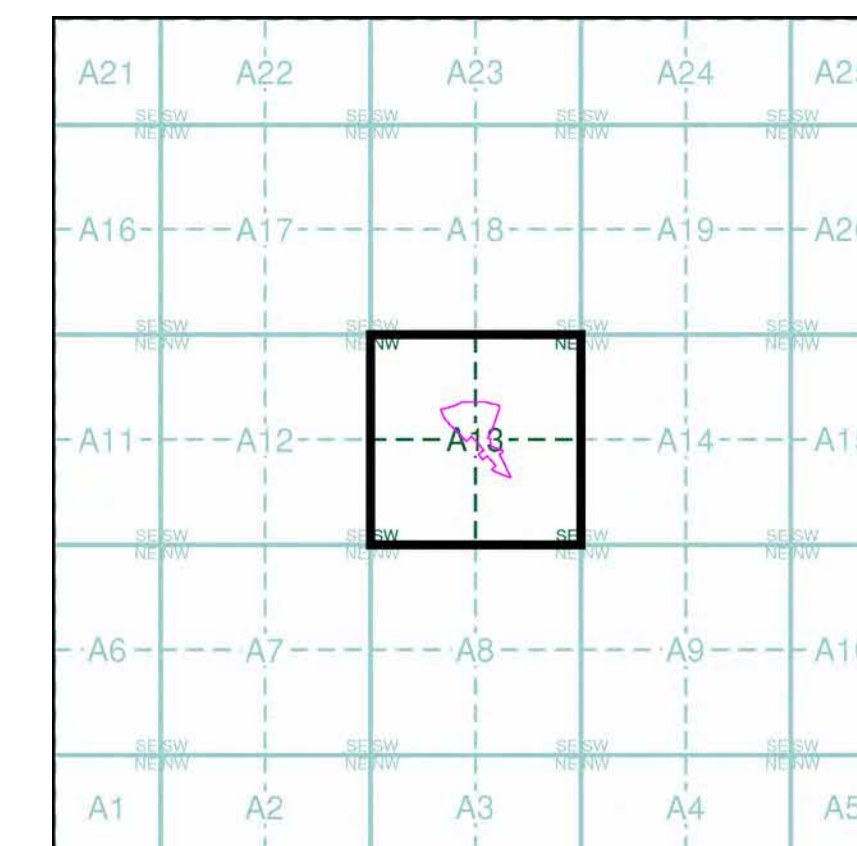
The 1:528 scale Ordnance Survey mapping was adopted in 1850 as an alternative to the 1:1056 scale, that had been deemed to be inadequate for sanitary planning, which had come very much to the fore following the passing of the Public Health Act of 1948. Around 29 towns in England and Wales were surveyed at this scale, the bulk of which were undertaken between 1850 and 1855. These were predominantly towns that were outside the areas being surveyed at 1:10,560 or 1:2500 scale. As well as showing the details characteristic of the later 1:500 plans, they show features of sanitary interest such as privies, taps, cow houses, cess pits, brew and bake houses and cart sheds and stables.

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

### Map Name(s) and Date(s)



### Historical Town Plan - Segment A13



### Order Details

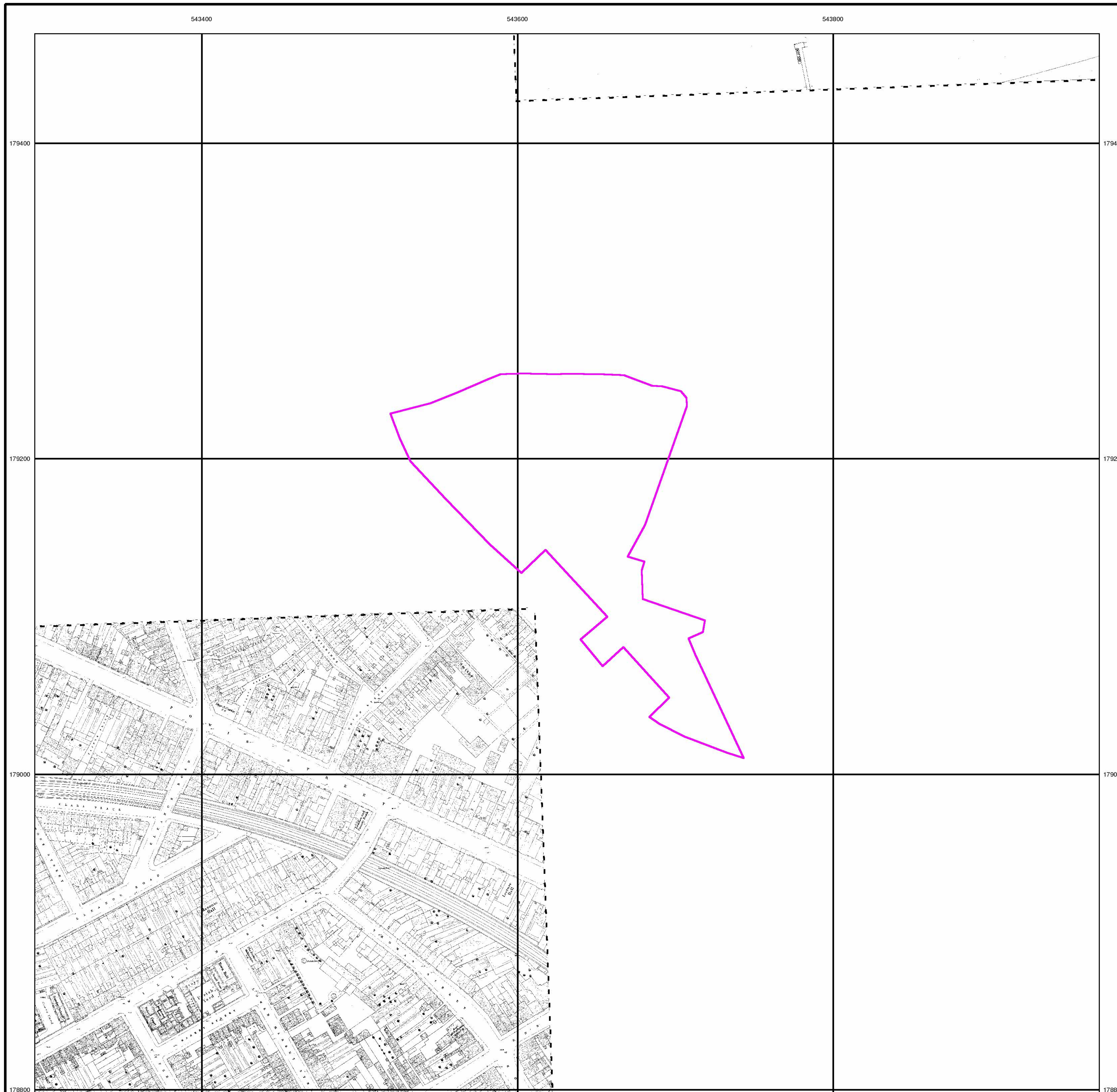
Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 0

### Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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Kent

Published 1895

Source map scale - 1:528

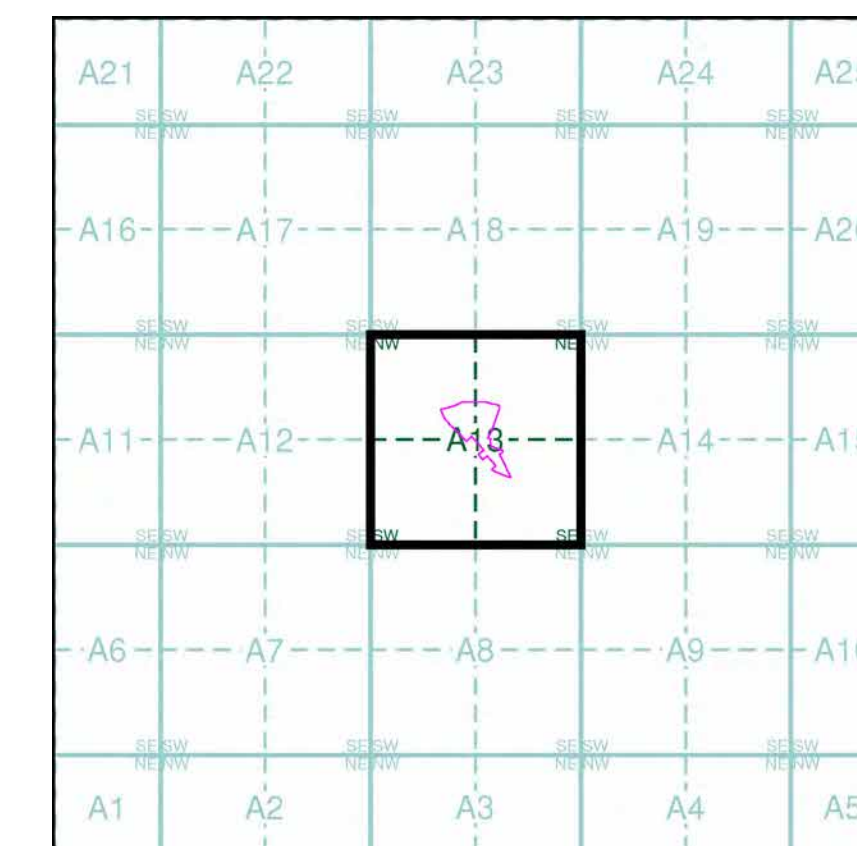
The 1:528 scale Ordnance Survey mapping was adopted in 1850 as an alternative to the 1:1056 scale, that had been deemed to be inadequate for sanitary planning, which had come very much to the fore following the passing of the Public Health Act of 1948. Around 29 towns in England and Wales were surveyed at this scale, the bulk of which were undertaken between 1850 and 1855. These were predominantly towns that were outside the areas being surveyed at 1:10,560 or 1:2500 scale. As well as showing the details characteristic of the later 1:500 plans, they show features of sanitary interest such as privies, taps, cow houses, cess pits, brew and bake houses and cart sheds and stables.

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### Map Name(s) and Date(s)

1002_06_017	1002_06_018
1895	1895
1:528	1:528
-----	
1002_06_023	
1895	
1:528	
-----	
1002_10_003	
1895	
1:528	

### Historical Town Plan - Segment A13



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
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London

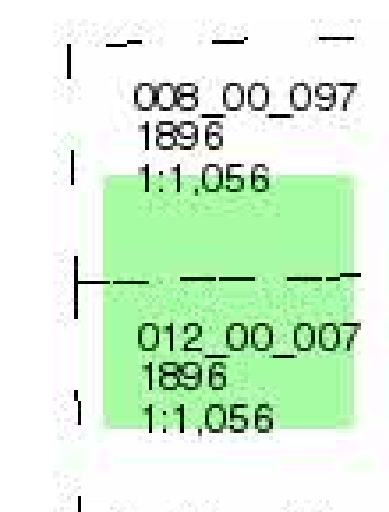
Published 1896

Source map scale - 1:1,056

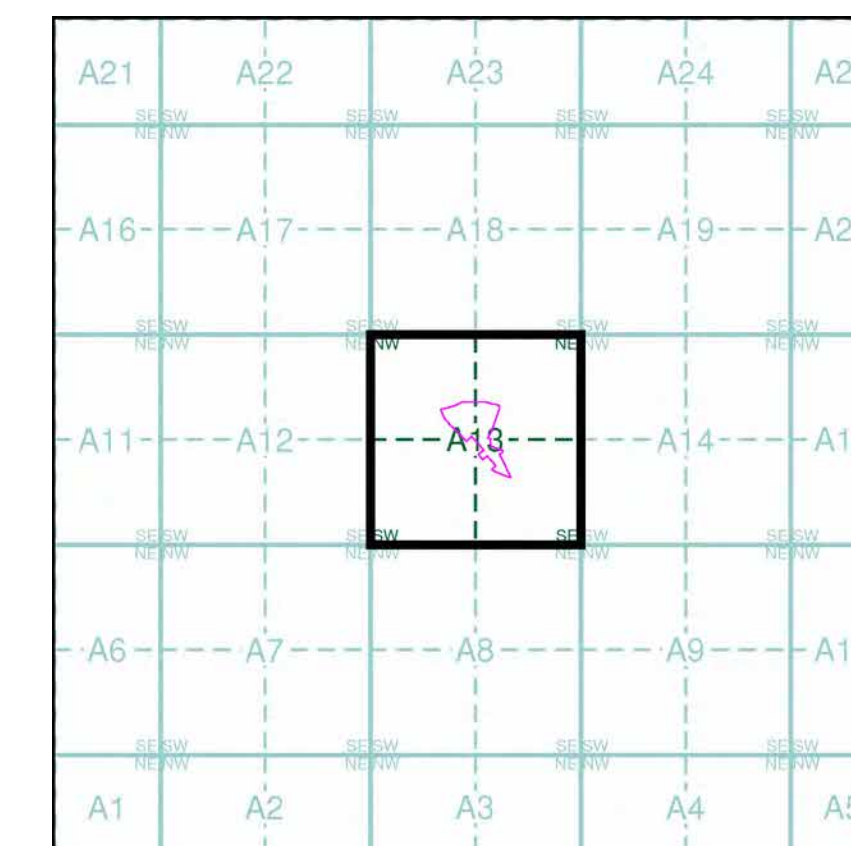
The 1:1056 scale of Ordnance Survey mapping was adopted for Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the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

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Map Name(s) and Date(s)



Historical Town Plan - Segment A13



Order Details

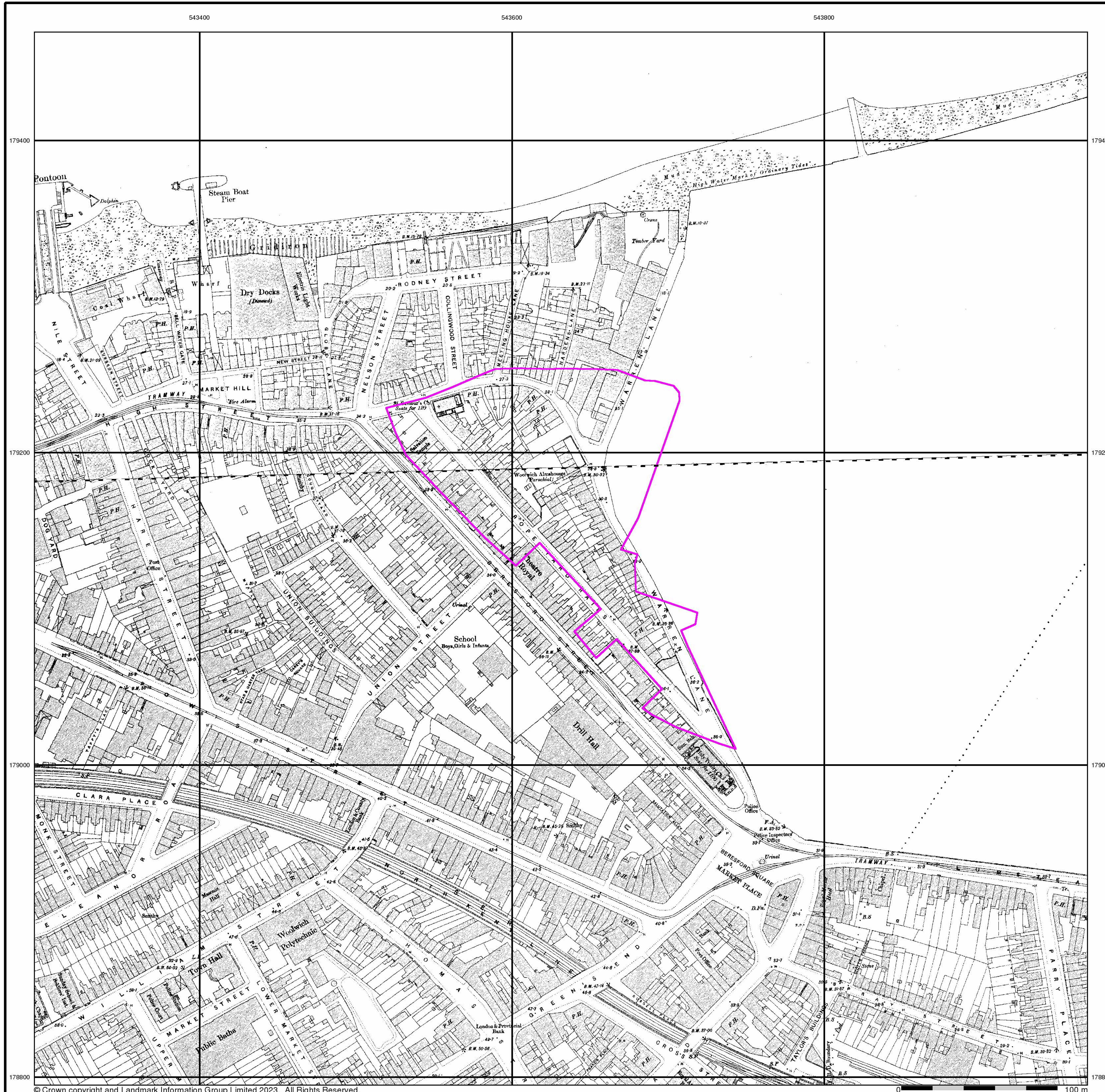
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Site Area (Ha): 2.18  
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London

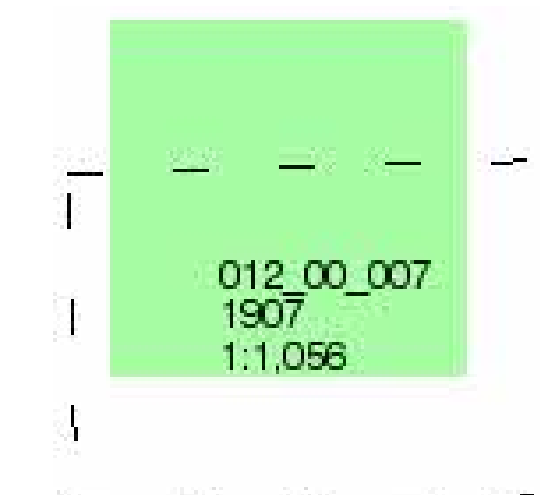
Published 1907

Source map scale - 1:1,056

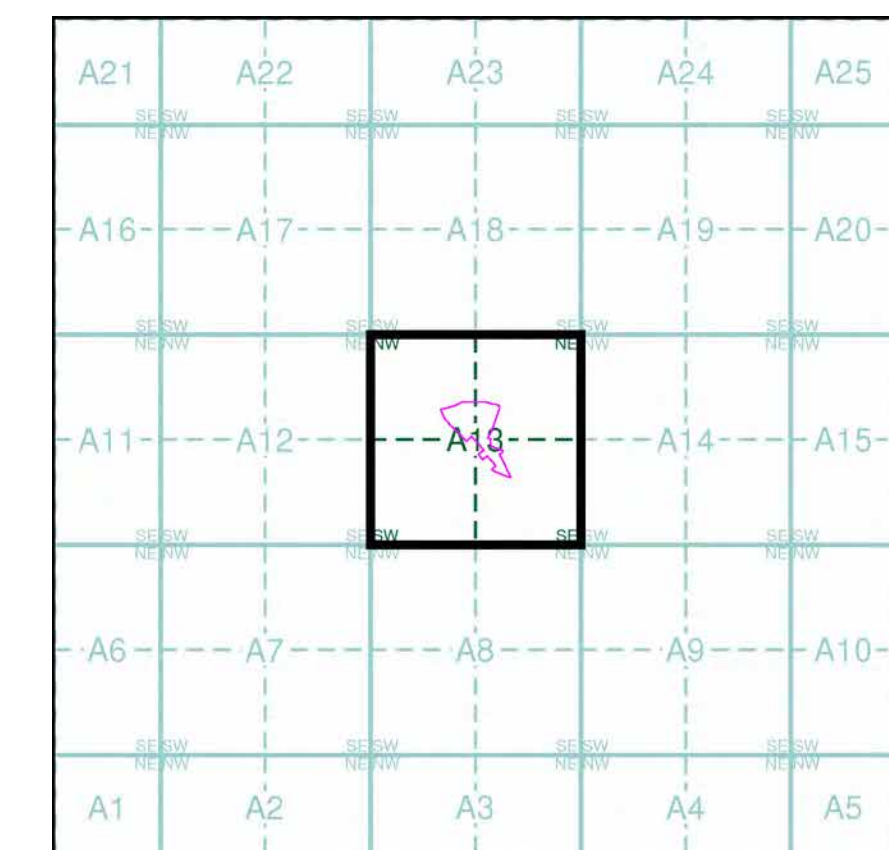
The 1:1056 scale of Ordnance Survey mapping was adopted from Ireland in 1848 and was used to survey towns with a population of over 4000, plus county towns of lesser population, in those counties mapped at the six-inch scale in 1841-55. The scale was the largest scale at which London was mapped by the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

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Map Name(s) and Date(s)



Historical Town Plan - Segment A13



Order Details

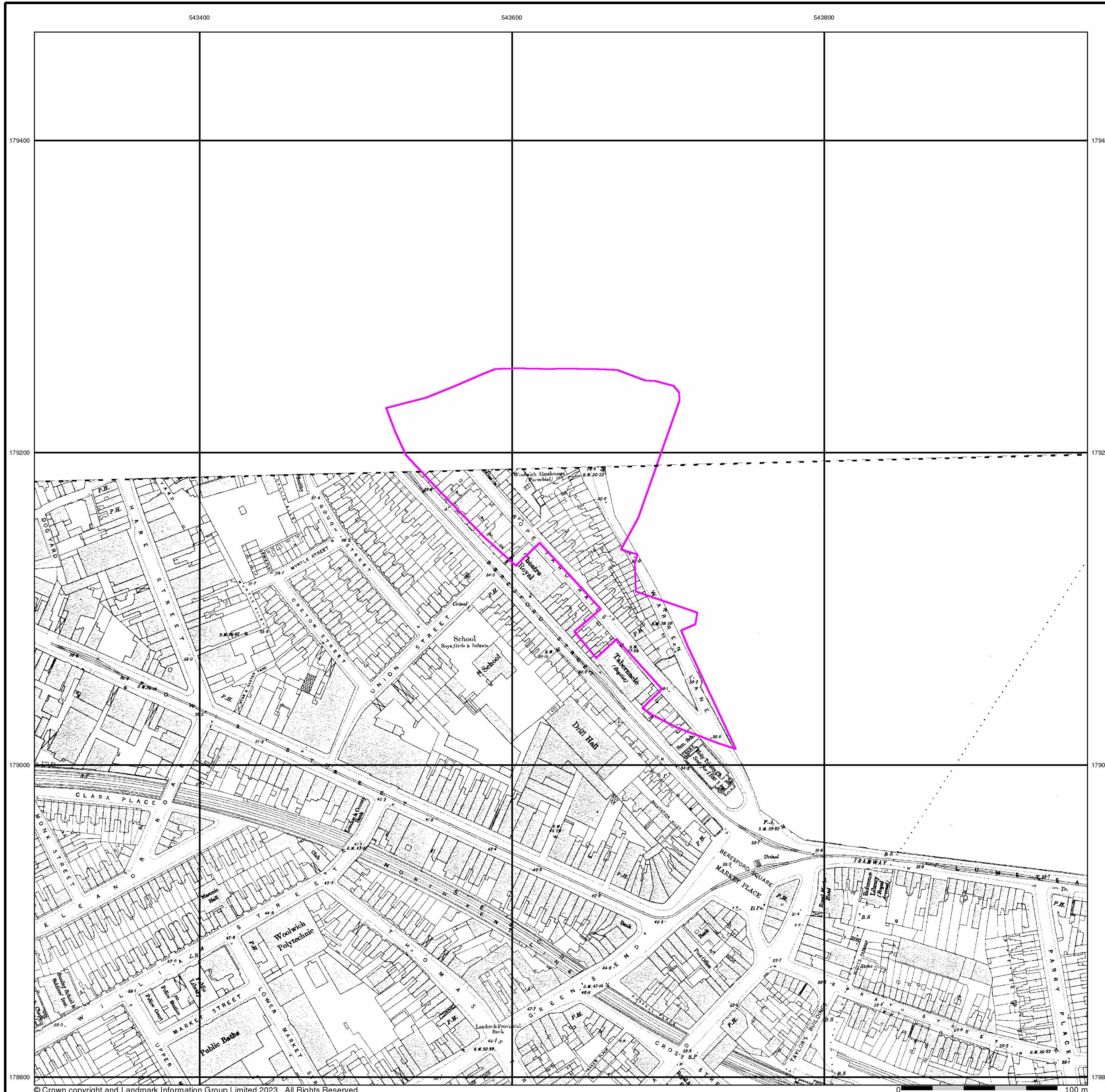
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London

Published 1850

Source map scale - 1:5,280

The historical town plans shown derive from Ordnance Survey mapping from the early to mid 1850s. The 1:2640 scale was introduced in the early 1850s, to survey districts covered by the Local Boards of Health and for a map of the Osborne Estate of Queen Victoria. The general style is similar to that of the early 1:2500s published shortly afterwards.

1:5280 scale was surveyed shortly afterwards in the mid 1850s as general purpose mapping with a standard of content similar to the more contemporary 1:10,560 mapping. The scale was also used for a reduction of the 1:1056 'skeleton survey' of London that was undertaken between 1848 and 1850.

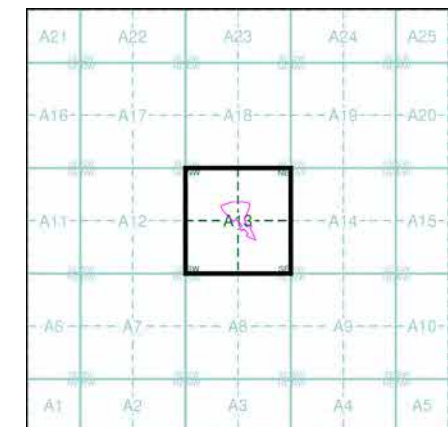
Please note: Due to the partial coverage of Historical Town Plans, it is possible that not all segments within an order will contain mapping. Only the segments that have Town Plan coverage will be generated.

Map Name(s) and Date(s)

008\_00\_000\_SE  
1850  
1:5,280

012\_00\_000\_NE  
1850  
1:5,280

Historical Town Plan - Segment A13



Order Details

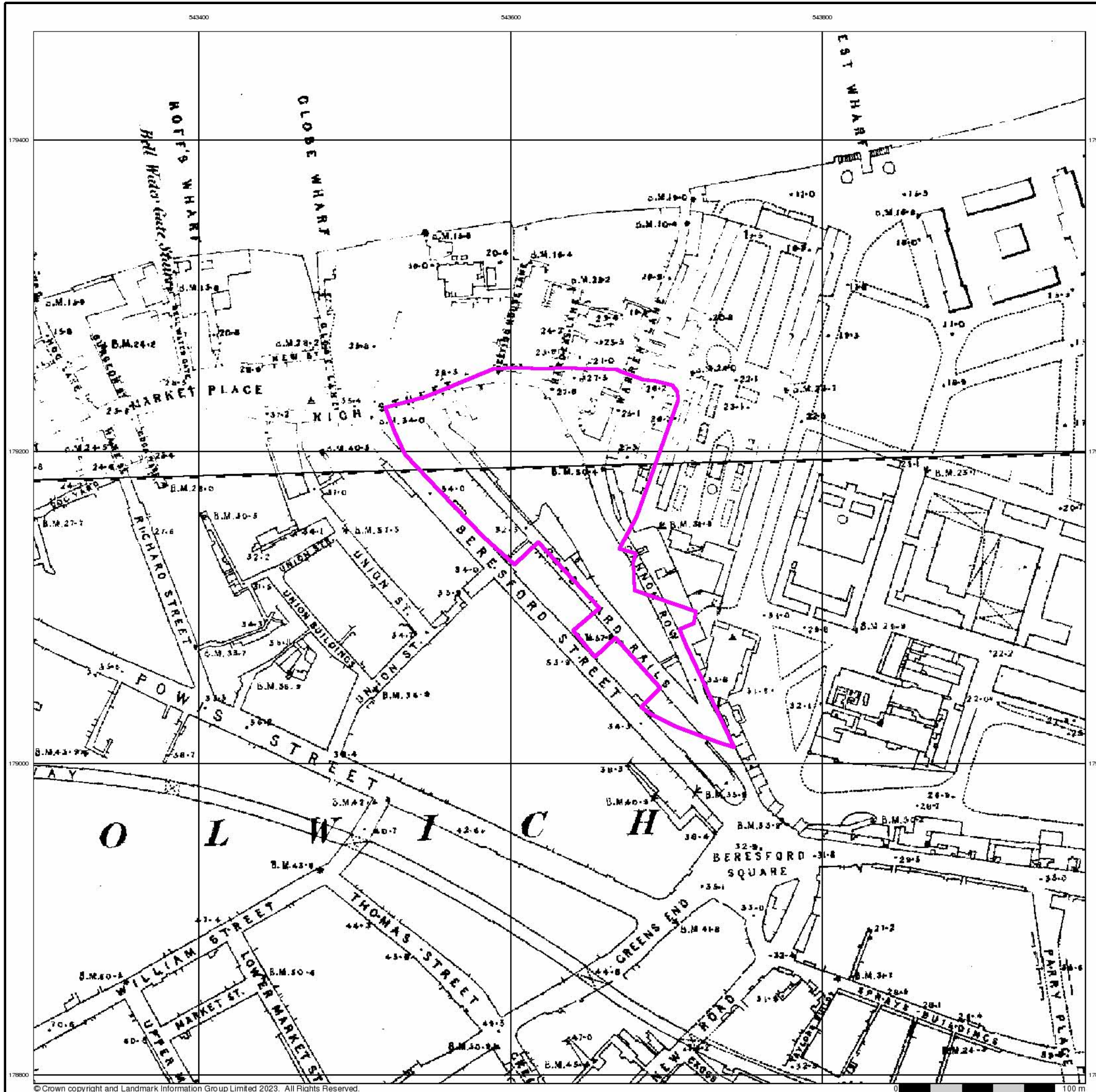
Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
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CHAS. E. GOAD, LTD  
CIVIL ENGINEERS

# EXPLANATION OF SIGNS USED ON INSURANCE PLANS OF TOWNS & CITIES

56 CROUCH HILL  
LONDON N. A.

## ABBREVIATIONS

ASS.	ASBESTOS
CORR.	CORRUGATED IRON
D.I.D.	DOUBLE IRON DOORS
DRA.	DRAPERY
D.	DWELLING
ELECT.	ELECTRICIAN
(E.M.)	ELECTRIC MOTORS
(ENG.)	STEAM ENGINE
FURNE.	FURNITURE
GAR.	GARAGE
(G.E.)	GAS ENGINE
H.W.	HARDWARE
I.COLS.	IRON COLUMNS OR STEEL STANCHIONS
JWLY.	JEWELLERY
M.C.L.	METAL CLAD
M.W.	MANCHESTER WAREHOUSE
M.L.	MATCH (OF WOOD) LINED
OIL	OIL & COLOR
(O.E.)	OIL ENGINE
P.H.	PUBLIC HOUSE
S.	SHOP
S.I.D.	SINGLE IRON DOORS
S.I.S.	SINGLE IRON SHUTTERS
TAI.	TAILORS
TENS.	TENEMENTS
W.G.	WIRED GLASS
W.N.	WIRE NETTING OVER GLASS

## COLORS

	BRICK, STONE OR CONCRETE
	WOOD
	AREAS CLEARED DUE TO ENEMY ACTION
	SKYLIGHTS ON 1 & 2 STORY BUILDINGS
	SKYLIGHTS ON HIGHER BUILDINGS
	METAL BUILDINGS
	TIMBER PILED OR STACKED

## WALLS

	PARTY WALL 2 STORIES OR OVER, A PROBABLE FIRE CUT OFF ENTIRE WALL, BUT DOUBTFUL AS FIRE CUT OFF
	DEFECTIVE WALL - IMPERFECT
	WALL ABOVE, IRON COLS. UNDER
	WALL SOME FLOORS ONLY (OR WOOD OR PLASTER PARTITION) ABOVE ROOF 6' TO 1'-6"
	— D9 — 1'-6" TO 2'-6"
	MATCH OR WOOD LINED
	WOOD CLAD WITH CORRUGATED IRON

## OPENINGS

	PASSAGE UNDER ON ALL FLOORS	} UNPROTECTED
	SOME FLOORS ONLY	
	ALL FLOORS (PROTECTED)	} SINGLE IRON DOORS
	ALL FLOORS (SOME PROTECTED)	
	SOME FLOORS ONLY (PROTECTED)	} DOUBLE IRON DOORS
	ALL FLOORS (SOME PROTECTED)	
	ALL FLOORS (PROTECTED)	
	SOME FLOORS ONLY (PROTECTED)	
	WOOD LOADING DOOR	
	IRON LOADING DOOR	

## WINDOWS

	ON ALL OR MOST FLOORS	} UNPROTECTED
	MORE THAN USUAL	
	OVERLOOKING	
	NEARLY ALL GLASS	
	OPENINGS THRO' & WINDOWS OVER ON SOME FLOORS ONLY	
	PROTECTED BY WIRED GLASS	} PROTECTED
	PROTECTED BY SINGLE IRON SHUTTERS	
	PROTECTED BY DOUBLE IRON SHUTTERS	
	WINDOWS IN FRONT & REAR OF BUILDINGS UNDERSTOOD UNLESS OTHERWISE SHOWN	

## FLOORS

1, 2, 3, 3½, 3¾ ON BUILDINGS ARE NUMBER OF STORIES ABOVE GROUND (3½ = 3 FLOORS & ATTIC)  
2 & 2B MEANS 2 STORIES & 2 BASEMENTS EAST & SUB-BASEMENT.

## SKYLIGHTS

A LESS THAN 50 SQUARE FEET (SAY 10'x5', OR 7'x7')  
OPENINGS THROUGH 2 FLOORS UNDER (EACH STROKE DENOTES AN OPENING.)  
WITH WELL HOLE THROUGH 3 FLOORS.  
LANT. LANTERN LIGHT, SIDES ONLY GLASS, OR VENT. OR RAISED VENTILATOR. } OVER 50 SQ. FT. TO SCALE

## HOISTS & LIFTS

	OPEN		OPEN TO STREET
	OPEN (WOOD FLOORS, 1 TO FLOORS)		ENCLOSED BRICK OR FIRE RESISTING WIRED GLASS DOORS
	ENCLOSED WOOD OR PLASTER		

IRON DOORS SHOWN AS EXPLAINED UNDER 'OPENINGS'

## ROOFS

ASS.	ASBESTOS
C.	CONCRETE
CORR.	CORRUGATED IRON
T.	METAL
P.	PATENT (FELT &c)
O.	SLATE
T.	TILE

PROFILES

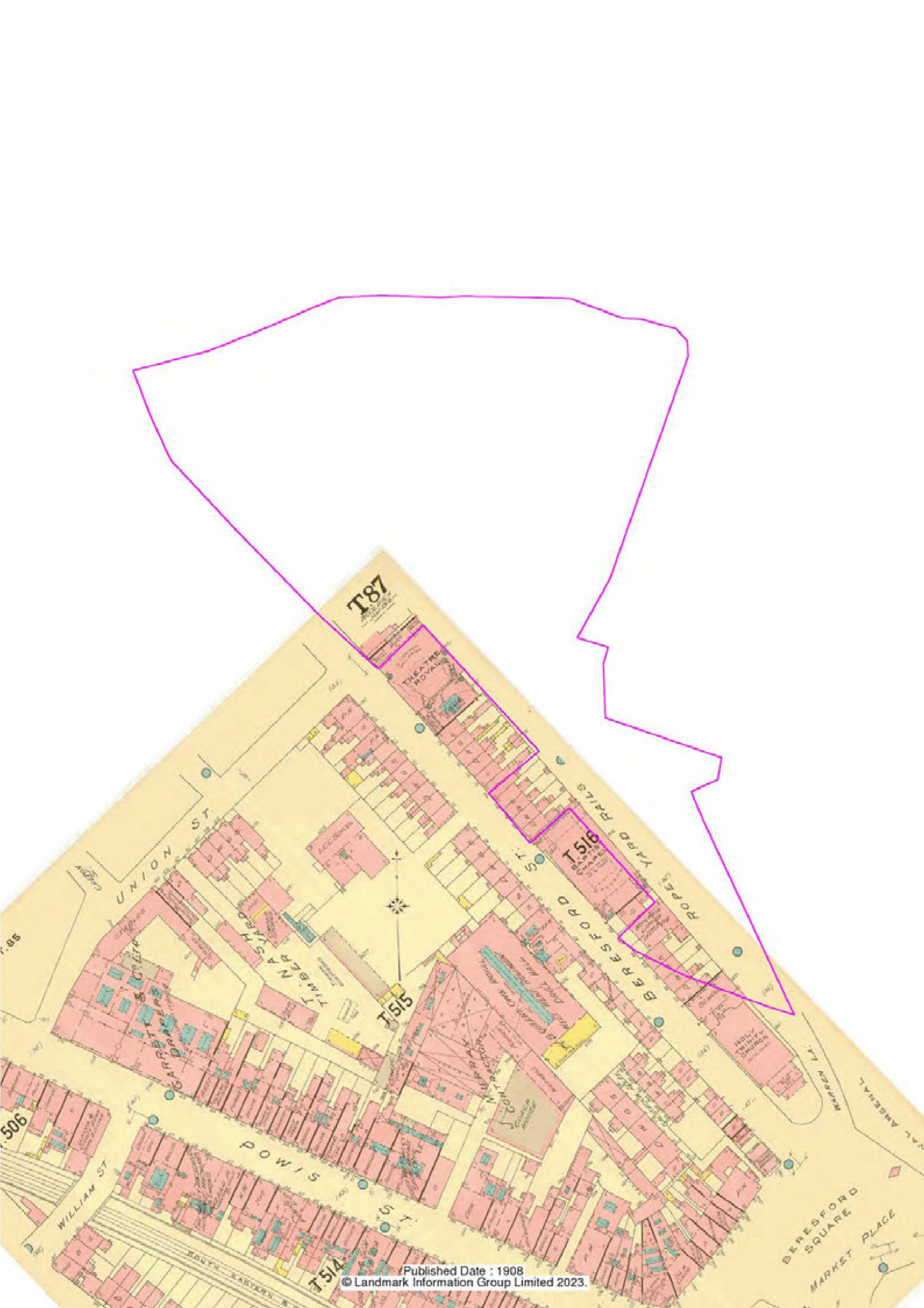


## SUNDRIES

	STEAM BOILERS
	BOILER SET IN BRICK
	FACTORY CHIMNEYS
	STEAM ENGINE
	OVERHANGING WOOD CORNICE
	FIRE ALARM BOX
	D9 ON KEY PLAN
	HYDRANT
	HYDRAULIC HYDRANT
	PRIVATE HYDRANT OR STAND PIPE
	DOUBLE HYDRANT
	SALT WATER HYDRANT
	SPRINKLER OR AUTO ALARM BELL

## REFERENCE NUMBERS

	NUMBERS PARALLEL WITH STREET ARE EXISTING STREET N <sup>OS</sup>
	WHERE TWO SETS OF STREET N <sup>OS</sup> IN SAME BLOCK COINCIDE, ADDITIONAL ARBITRARY N <sup>OS</sup> ARE GIVEN TO ONE SET (500 & UPWARDS)
	WHERE BUILDINGS TO WHICH THEY APPLIED ARE DEMOLISHED, STREET & ARBITRARY N <sup>OS</sup> ARE SHOWN & CROSSED THROUGH ON REVISION
	ARE STREET WIDTHS (37) ARE HEIGHTS OF GROUND ABOVE ORDNANCE DATUM
	HEIGHT IN FEET OF ADJOINING BUILDINGS WHERE STORIES DIFFER IN HEIGHT
	SIZES OF WATER MAINS SUPPLYING HYDRANTS



T87

T515

T516

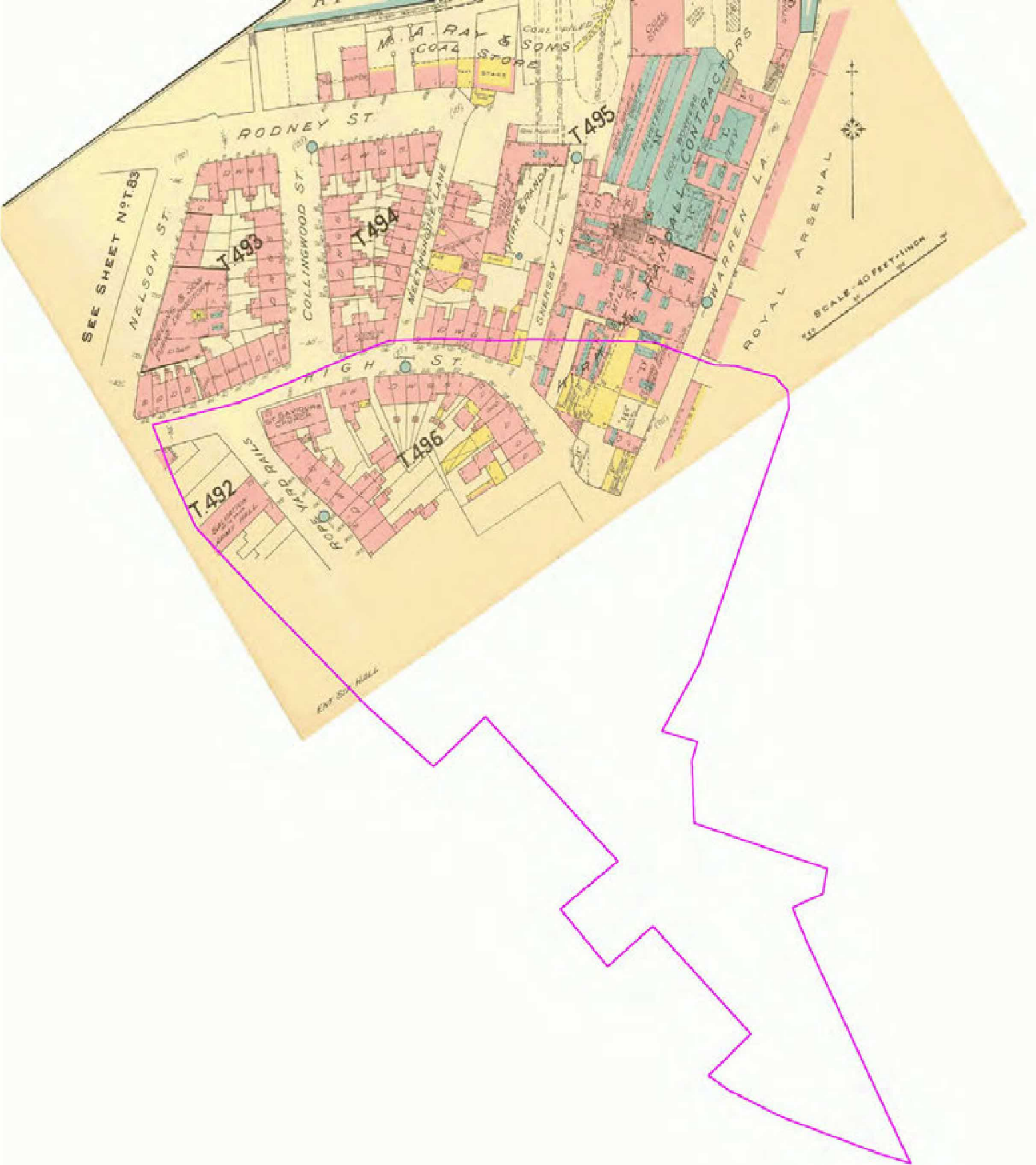
T515

T514

Published Date : 1908  
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# Historical Mapping Legends

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

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

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

**Inactive Quarry, Chalk Pit or Clay Pit** **Active Quarry, Chalk Pit or Clay Pit**  
**Rock** **Boulders**  
**Cliff** **Slopes** **Top**  
**Roofed Building** **Glazed Roof Building**  
**Sloping Masonry** **Archway**  
**Non-Coniferous Tree (surveyed)** **Coniferous Tree (surveyed)**  
**Non-Coniferous Trees (not surveyed)** **Coniferous Trees (not surveyed)**  
**Orchard Tree** **Scrub** **Bracken**  
**Coppice, Osier** **Reeds** **Marsh, Saltings**  
**Rough Grassland** **Heath** **Culvert**  
**Direction of water flow** **Bench Mark** **Antiquity (site of)**  
**Cave Entrance** **Triangulation Station** **Electricity Pylon**  
**Electricity Transmission Line**  
**County Boundary (Geographical)**  
**County & Civil Parish Boundary**  
**Civil Parish Boundary**  
**Admin. County or County Bor. Boundary**  
**London Borough Boundary**  
**Symbol marking point where boundary mereing changes**  
**BH** **Beer House** **P** **Pillar, Pole or Post**  
**BP, BS** **Boundary Post or Stone** **PO** **Post Office**  
**Cn, C** **Capstan, Crane** **PC** **Public Convenience**  
**Chy** **Chimney** **PH** **Public House**  
**D Fn** **Drinking Fountain** **Pp** **Pump**  
**EI P** **Electricity Pillar or Post** **SB, S Br** **Signal Box or Bridge**  
**FAP** **Fire Alarm Pillar** **SP, SL** **Signal Post or Light**  
**FB** **Foot Bridge** **Spr** **Spring**  
**GP** **Guide Post** **Tk** **Tank or Track**  
**H** **Hydrant or Hydraulic** **TCB** **Telephone Call Box**  
**LC** **Level Crossing** **TCP** **Telephone Call Post**  
**MH** **Manhole** **Tr** **Trough**  
**MP** **Mile Post or Mooring Post** **Wr Pt, Wr T** **Water Point, Water Tap**  
**MS** **Mile Stone** **W** **Well**  
**NTL** **Normal Tidal Limit** **Wd Pp** **Wind Pump**

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

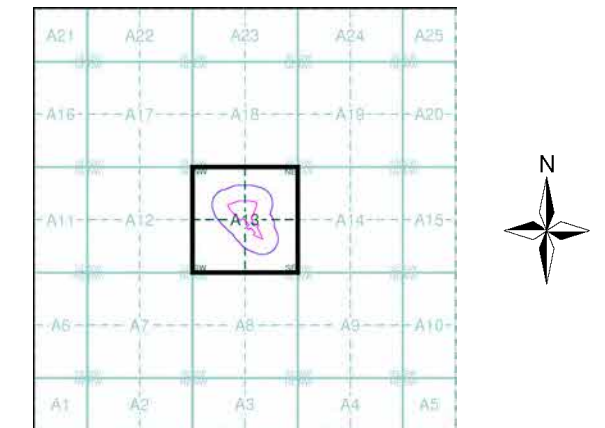
**Cliff** **Slopes** **Top**  
**Rock** **Rock (scattered)**  
**Boulders** **Boulders (scattered)**  
**Positioned Boulder** **Scree**  
**Non-Coniferous Tree (surveyed)** **Coniferous Tree (surveyed)**  
**Non-Coniferous Trees (not surveyed)** **Coniferous Trees (not surveyed)**  
**Orchard Tree** **Scrub** **Bracken**  
**Coppice, Osier** **Reeds** **Marsh, Saltings**  
**Rough Grassland** **Heath** **Culvert**  
**Direction of water flow** **Triangulation Station** **Antiquity (site of)**  
**Electricity Transmission Line** **Electricity Pylon**  
**B.M. 231.60m** **Bench Mark** **Buildings with Building Seed**  
**Roofed Building** **Glazed Roof Building**  
**Civil parish/community boundary**  
**District boundary**  
**County boundary**  
**Boundary post/stone**  
**Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)**  
**Bks** **Barracks** **P** **Pillar, Pole or Post**  
**Bty** **Battery** **PO** **Post Office**  
**Cemy** **Cemetery** **PC** **Public Convenience**  
**Chy** **Chimney** **Pp** **Pump**  
**Cis** **Cistern** **Ppg Sta** **Pumping Station**  
**Dismtd Rly** **Dismantled Railway** **PW** **Place of Worship**  
**EI Gen Sta** **Electricity Generating Station** **Sewage Ppg Sta** **Sewage Pumping Station**  
**EI P** **Electricity Pole, Pillar** **SB, S Br** **Signal Box or Bridge**  
**EI Sub Sta** **Electricity Sub Station** **SP, SL** **Signal Post or Light**  
**FB** **Filter Bed** **Spr** **Spring**  
**Fn / D Fn** **Fountain / Drinking Ftn.** **Tk** **Tank or Track**  
**Gas Gov** **Gas Valve Compound** **Tr** **Trough**  
**GVC** **Gas Governor** **Wd Pp** **Wind Pump**  
**GP** **Guide Post** **Wr Pt, Wr T** **Water Point, Water Tap**  
**MH** **Manhole** **Wks** **Works (building or area)**  
**MP, MS** **Mile Post or Mile Stone** **W** **Well**



## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Essex	1:2,500	1864	2
London	1:2,500	1869	3
Kent	1:2,500	1895	4
London	1:2,500	1896	5
London	1:2,500	1916	6
Essex	1:2,500	1916	7
Ordnance Survey Plan	1:1,250	1957	8
Additional SIMs	1:1,250	1957 - 1988	9
Ordnance Survey Plan	1:2,500	1958	10
Ordnance Survey Plan	1:1,250	1970 - 1971	11
Supply of Unpublished Survey Information	1:1,250	1973 - 1975	12
Additional SIMs	1:1,250	1977 - 1987	13
Additional SIMs	1:1,250	1986 - 1987	14
Ordnance Survey Plan	1:1,250	1988	15
Large-Scale National Grid Data	1:1,250	1991	16
Large-Scale National Grid Data	1:1,250	1992	17
Large-Scale National Grid Data	1:1,250	1996	18
Historical Aerial Photography	1:2,500	1999	19

## Historical Map - Segment A13



## Order Details

Order Number: 322278804\_1\_1  
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 Slice: A  
 Site Area (Ha): 2.18  
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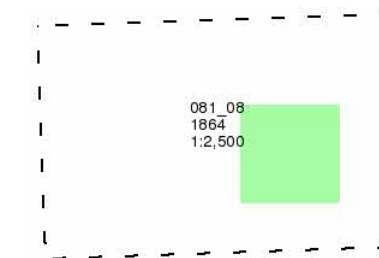
Essex

Published 1864

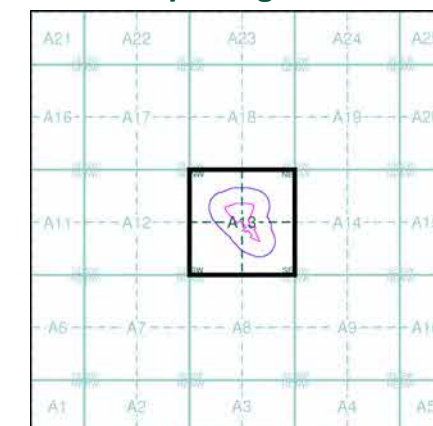
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



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London

Published 1869

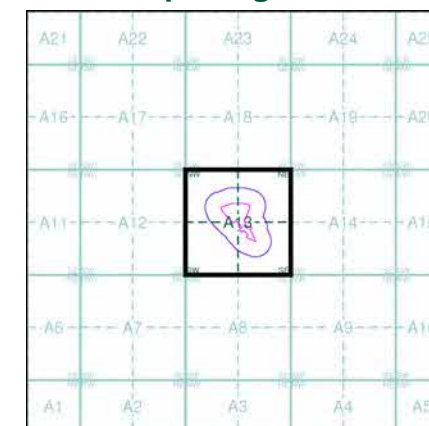
Source map scale - 1:2,500

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

Map Name(s) and Date(s)

049 00
1869
1:2,500
060 00
1869
1:2,500

Historical Map - Segment A13



Order Details

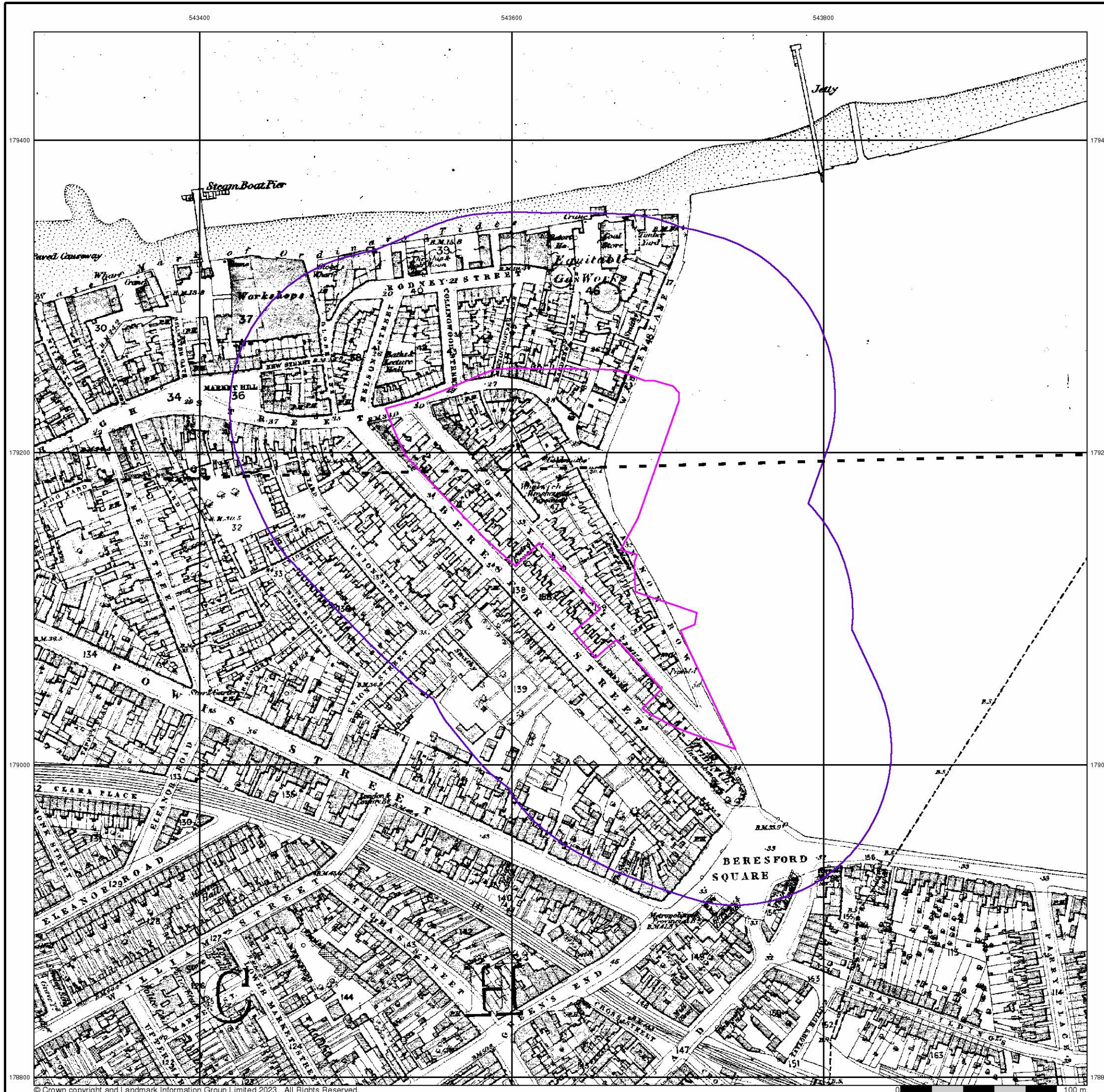
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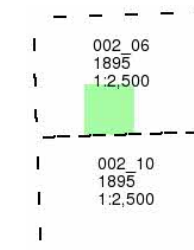
**Kent**

**Published 1895**

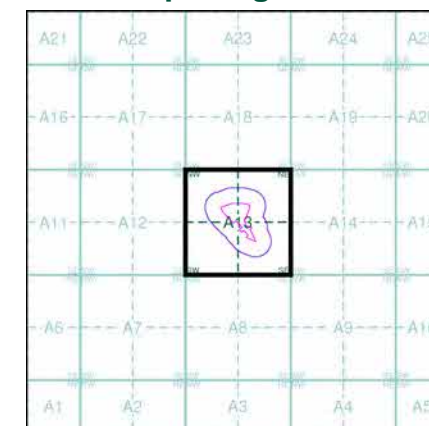
**Source map scale - 1:2,500**

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

**Map Name(s) and Date(s)**



**Historical Map - Segment A13**



**Order Details**

Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 100

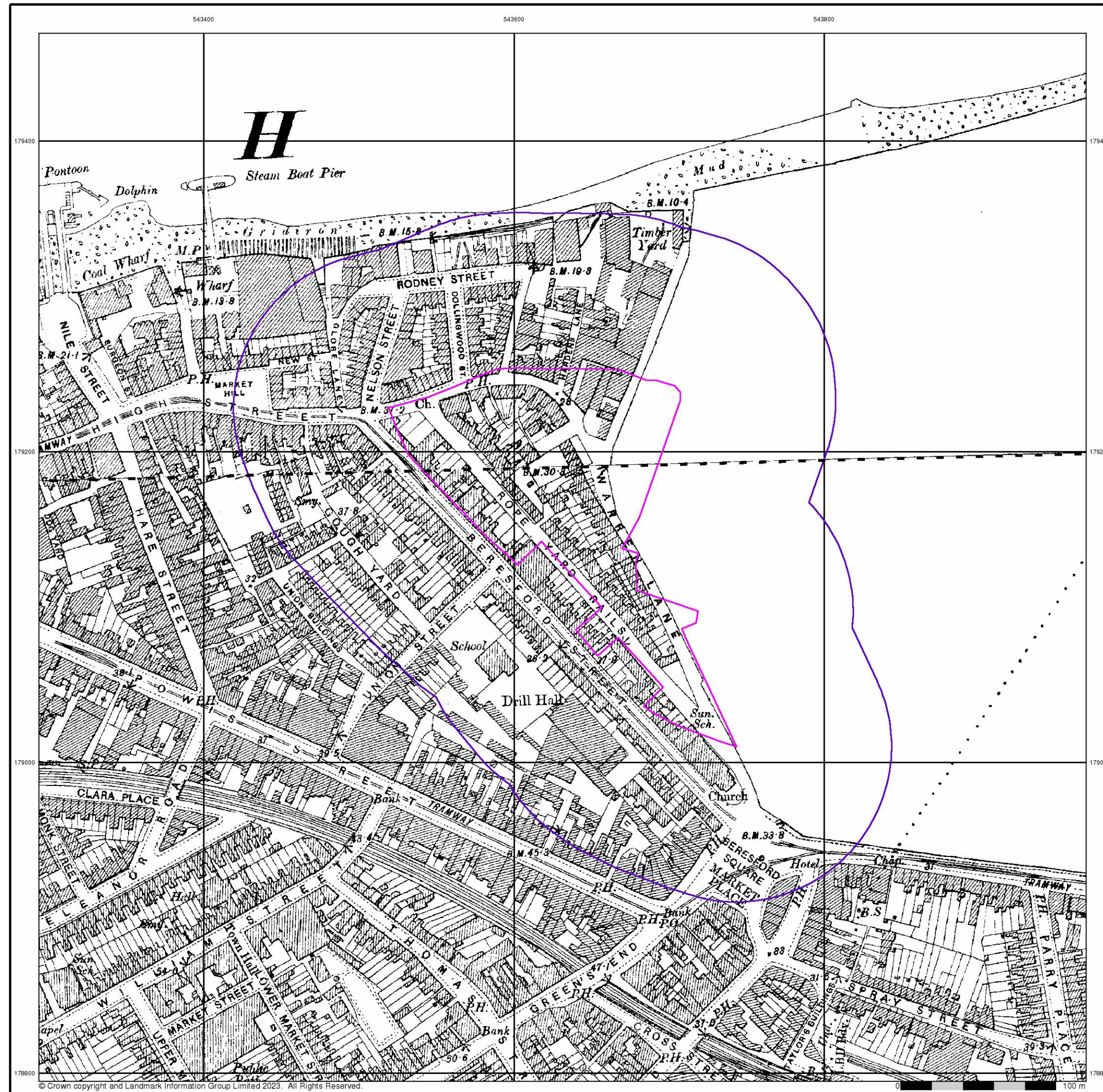
**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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





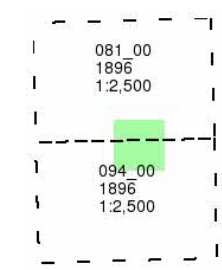
London

Published 1896

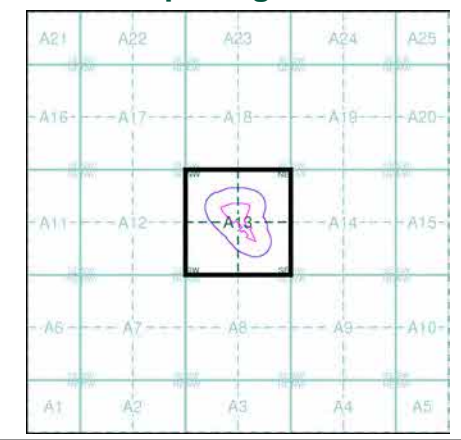
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

Site Details

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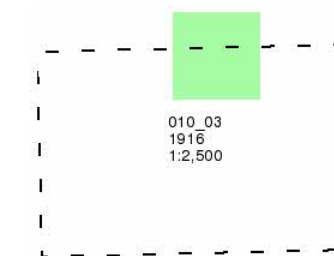
London

Published 1916

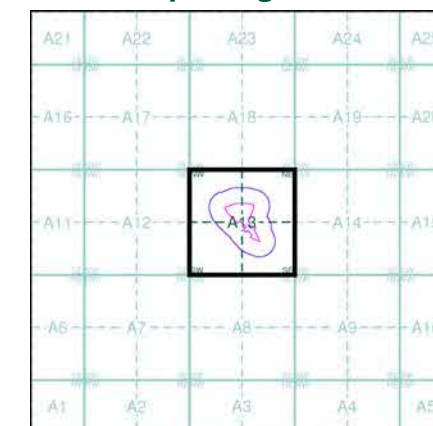
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

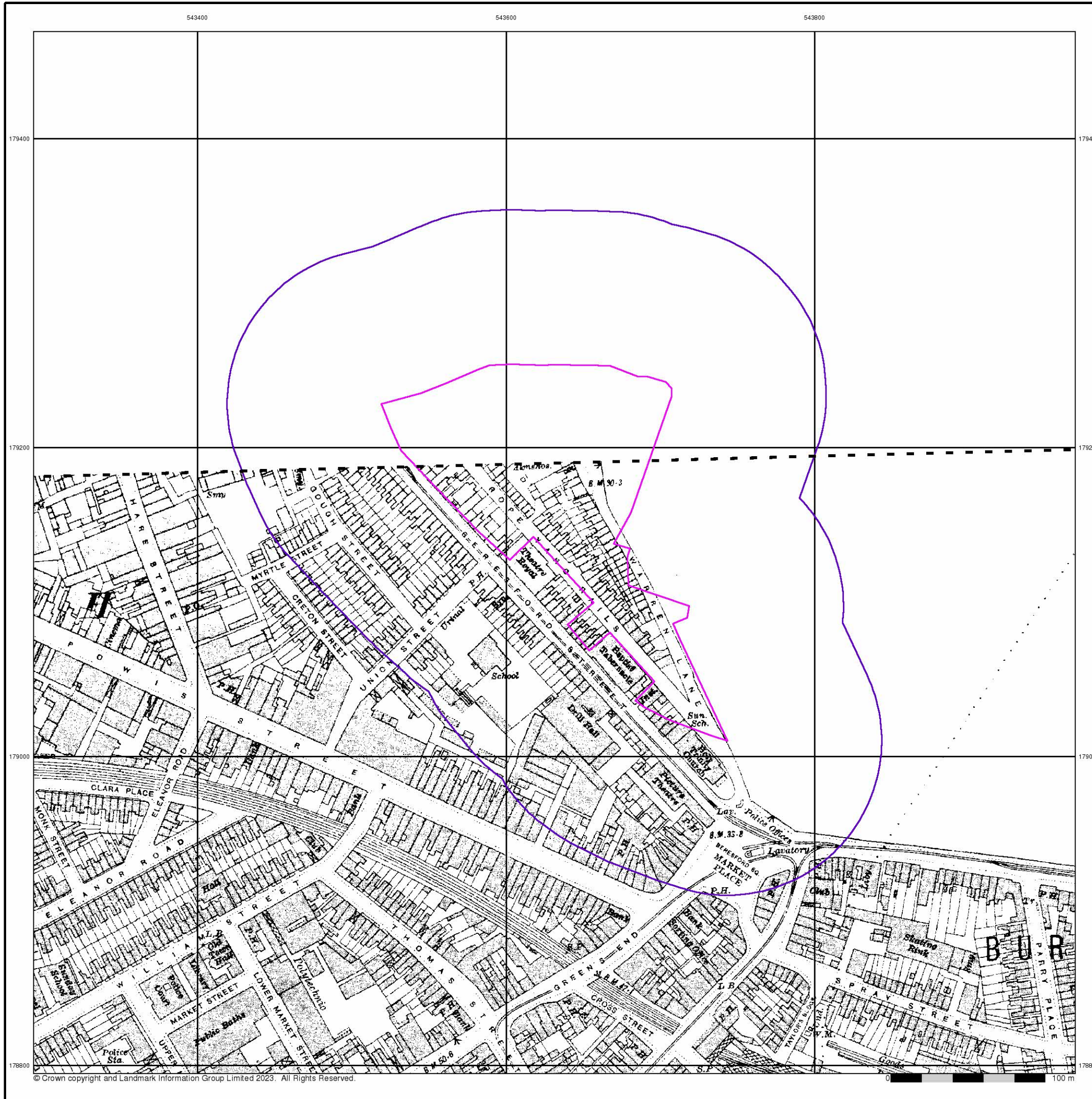
Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 100

Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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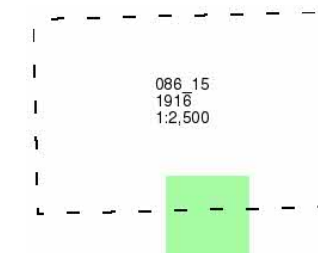
Essex

Published 1916

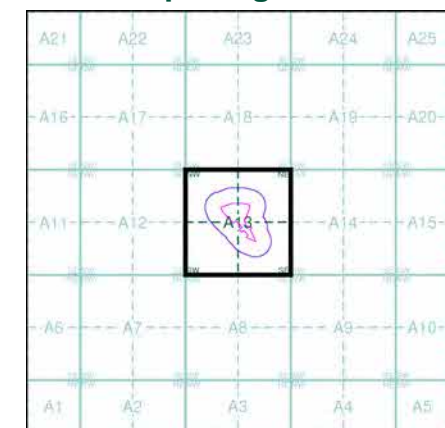
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 100

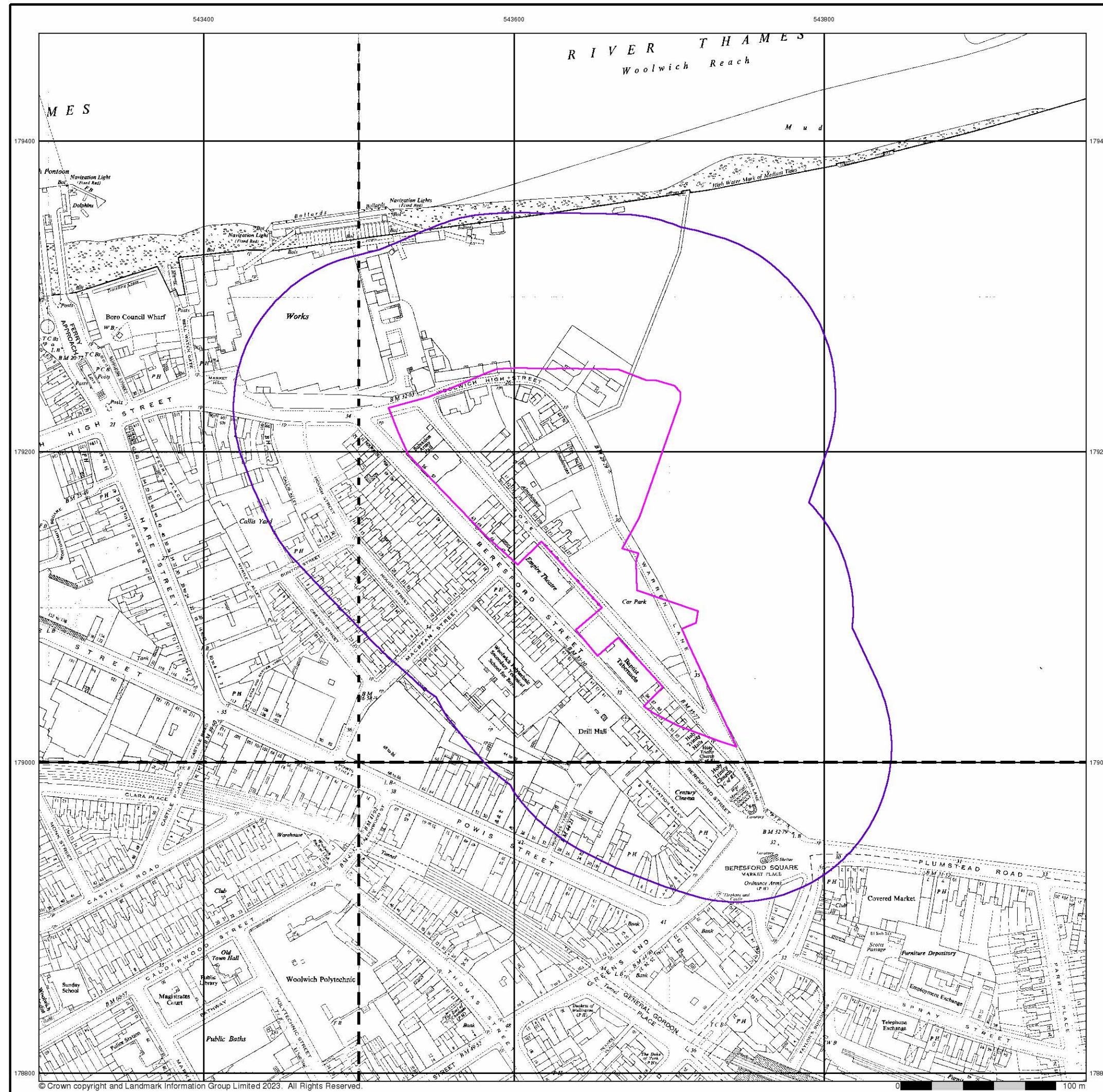
Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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





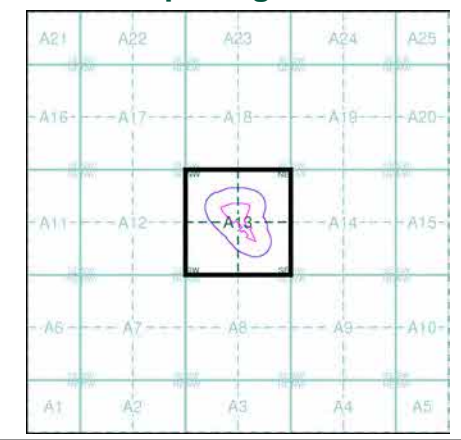
**Ordnance Survey Plan**  
**Published 1957**  
**Source map scale - 1:1,250**

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

**Map Name(s) and Date(s)**

TQ4379SW	TQ4379SE
1957	1957
1:1,250	1:1,250
TQ4378NW	TQ4378NE
1957	1957
1:1,250	1:1,250

**Historical Map - Segment A13**



**Order Details**

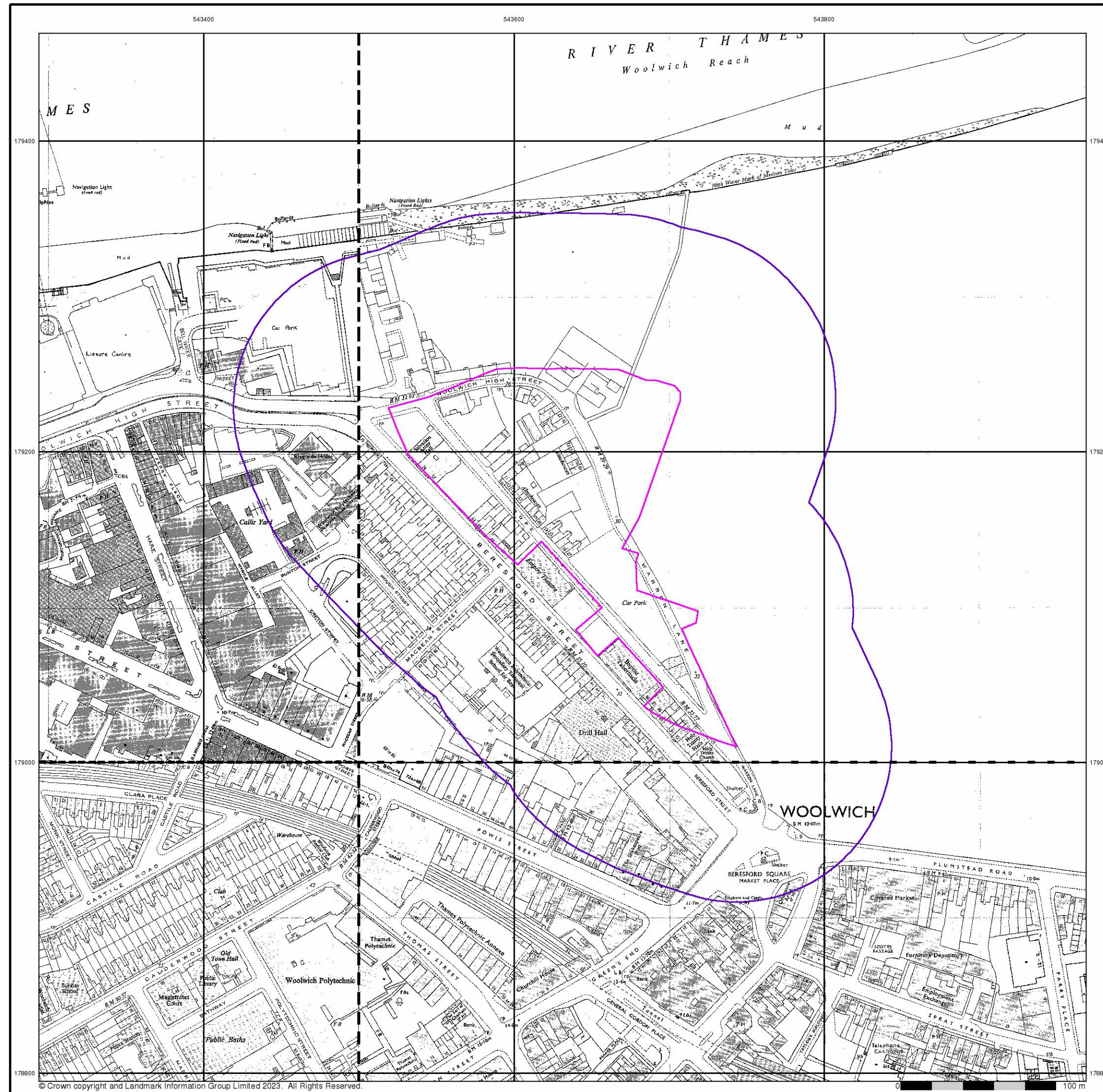
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



Tel: 0844 844 9952  
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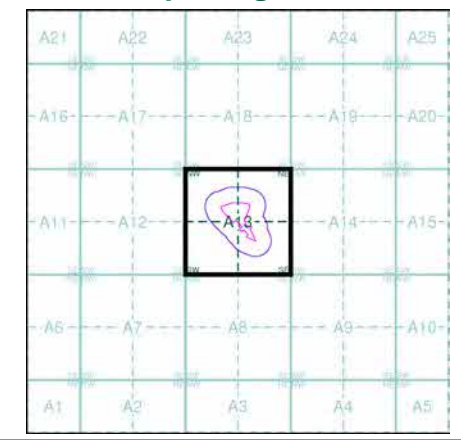
**Additional SIMs**  
**Published 1957 - 1988**  
**Source map scale - 1:1,250**

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

**Map Name(s) and Date(s)**

TQ4379SW 1988 1:1,250	TQ4379SE 1957 1:1,250
TQ4378NW 1957 1:1,250	TQ4378NE 1977 1:1,250

**Historical Map - Segment A13**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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### Ordnance Survey Plan

Published 1958

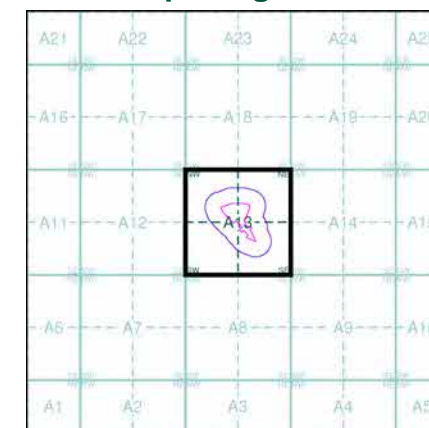
Source map scale - 1:2,500

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

### Map Name(s) and Date(s)

TQ4379
1958
1:2,500
TQ4378
1958
1:2,500

### Historical Map - Segment A13



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

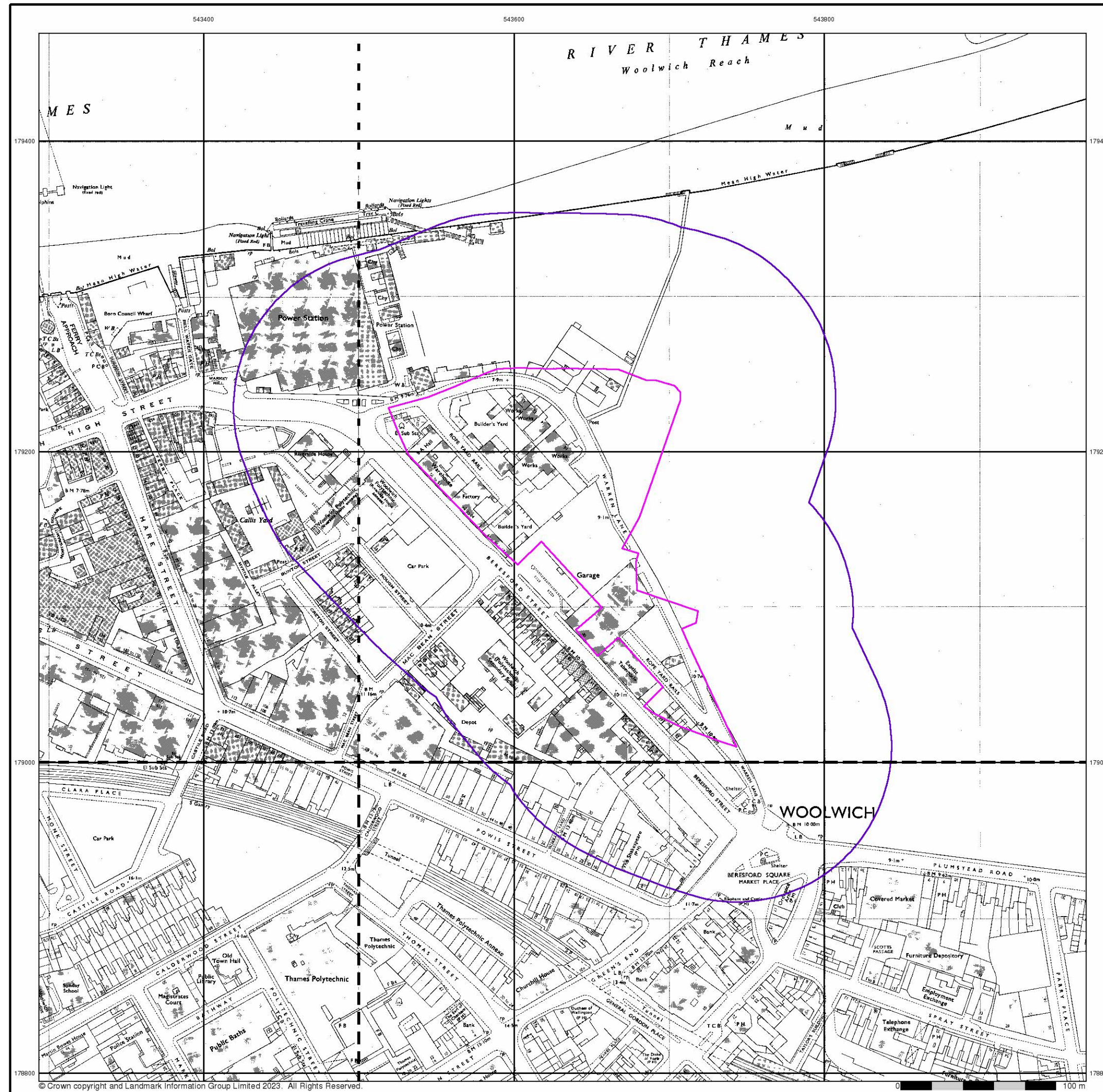
### Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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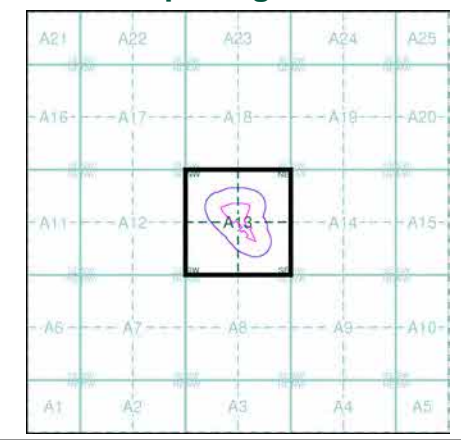
**Ordnance Survey Plan**  
**Published 1970 - 1971**  
**Source map scale - 1:1,250**

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

**Map Name(s) and Date(s)**

TQ4379SW 1970 1:1,250	TQ4379SE 1970 1:1,250
TQ4378NW 1971 1:1,250	TQ4378NE 1971 1:1,250

**Historical Map - Segment A13**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

**Site Details**

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## Supply of Unpublished Survey Information

Published 1973 - 1975

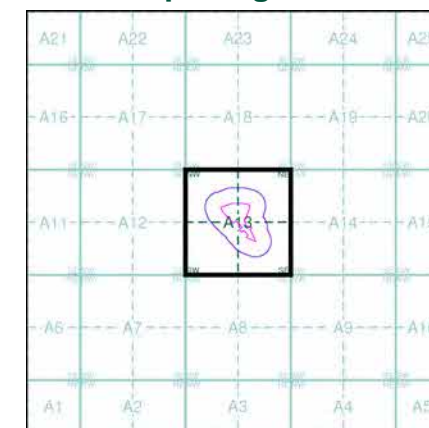
Source map scale - 1:1,250

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

### Map Name(s) and Date(s)

TQ4379SW	1975	1:1,250
TQ4378NW	1973	1:1,250

### Historical Map - Segment A13



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

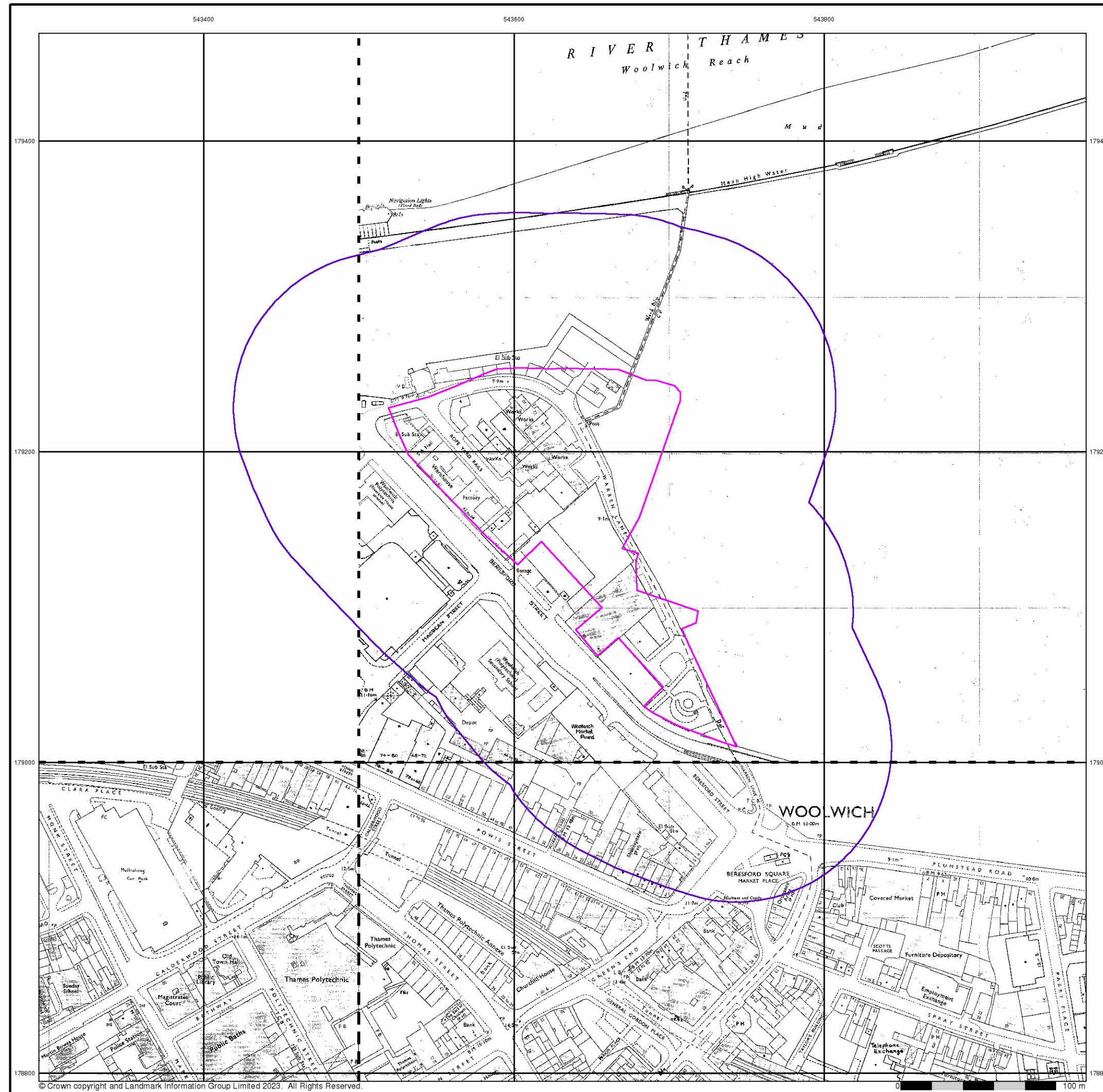
### Site Details

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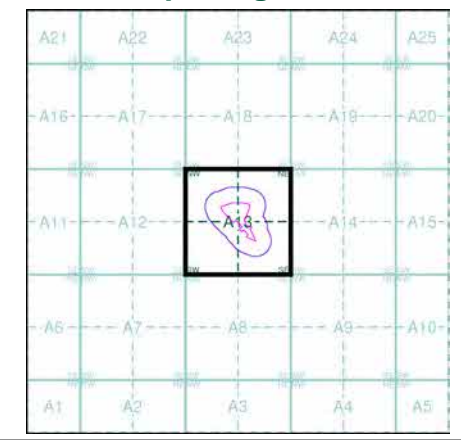
**Additional SIMs**  
**Published 1977 - 1987**  
**Source map scale - 1:1,250**

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**Map Name(s) and Date(s)**

TQ4379SE	1987	1:1,250
TQ4378NW	1977	1:1,250
TQ4378NE	1982	1:1,250

**Historical Map - Segment A13**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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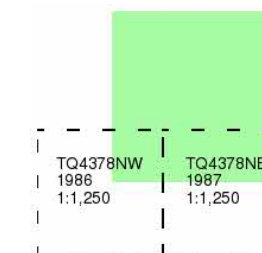
### Additional SIMs

Published 1986 - 1987

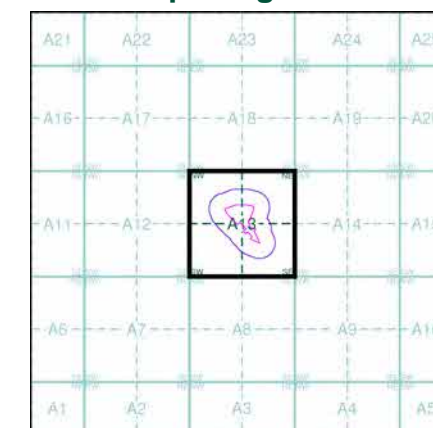
Source map scale - 1:1,250

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

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
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### Site Details

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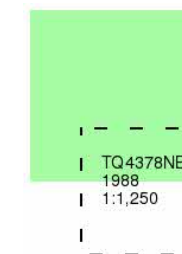
### Ordnance Survey Plan

Published 1988

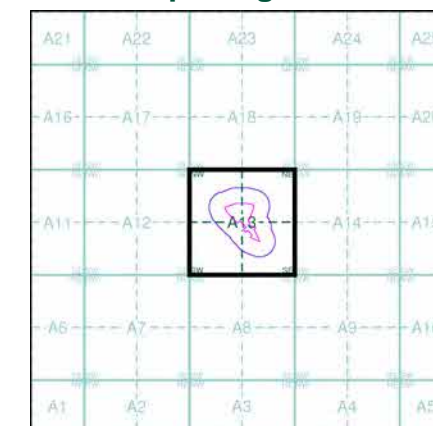
Source map scale - 1:1,250

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### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

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Site Area (Ha): 2.18  
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## Large-Scale National Grid Data

Published 1991

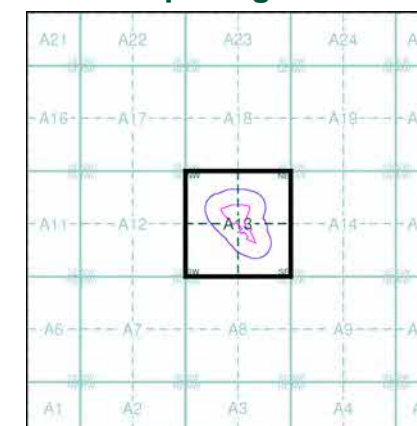
Source map scale - 1:1,250

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

### Map Name(s) and Date(s)

TQ4379SW 1991 1:1,250	TQ4379SE 1991 1:1,250
TQ4378NW 1991 1:1,250	TQ4378NE 1991 1:1,250

### Historical Map - Segment A13



### Order Details

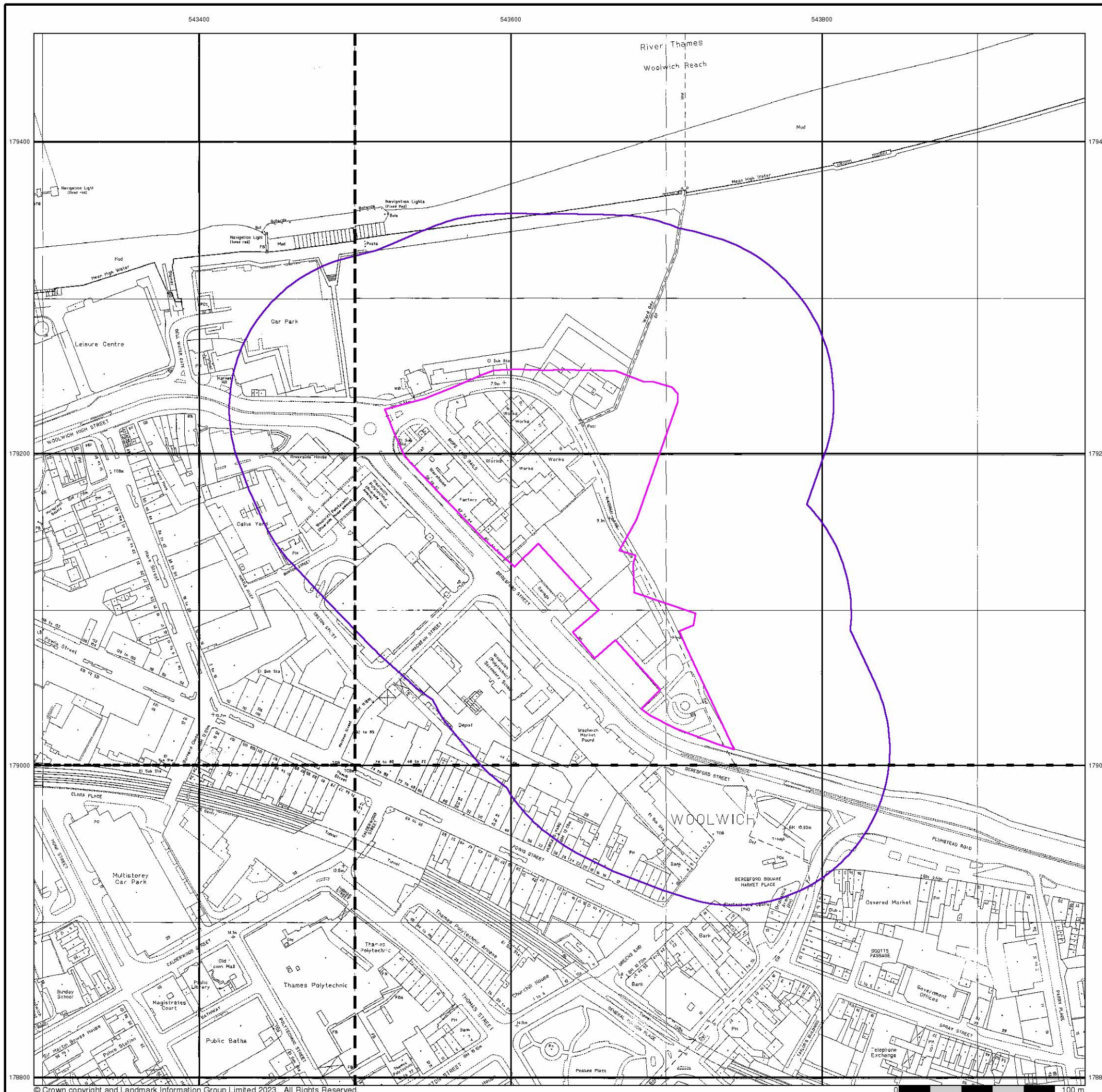
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 100

### Site Details

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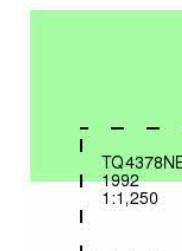
## Large-Scale National Grid Data

Published 1992

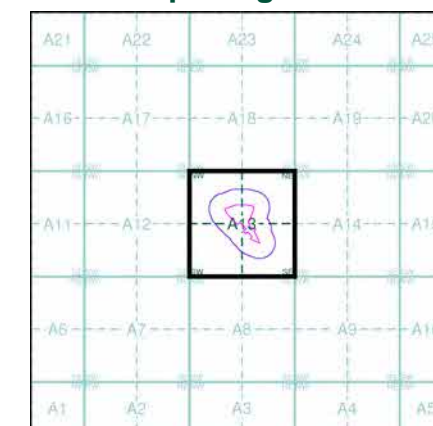
Source map scale - 1:1,250

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

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 100

### Site Details

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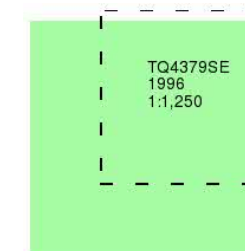
### Large-Scale National Grid Data

Published 1996

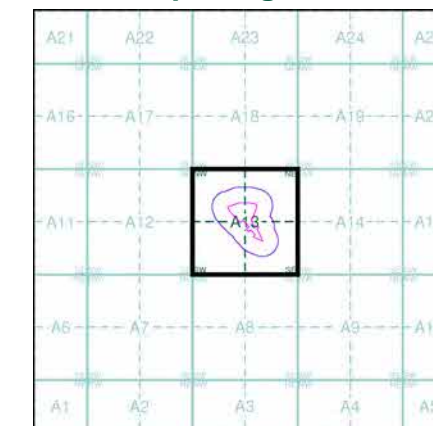
Source map scale - 1:1,250

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

### Map Name(s) and Date(s)



### Historical Map - Segment A13



### Order Details

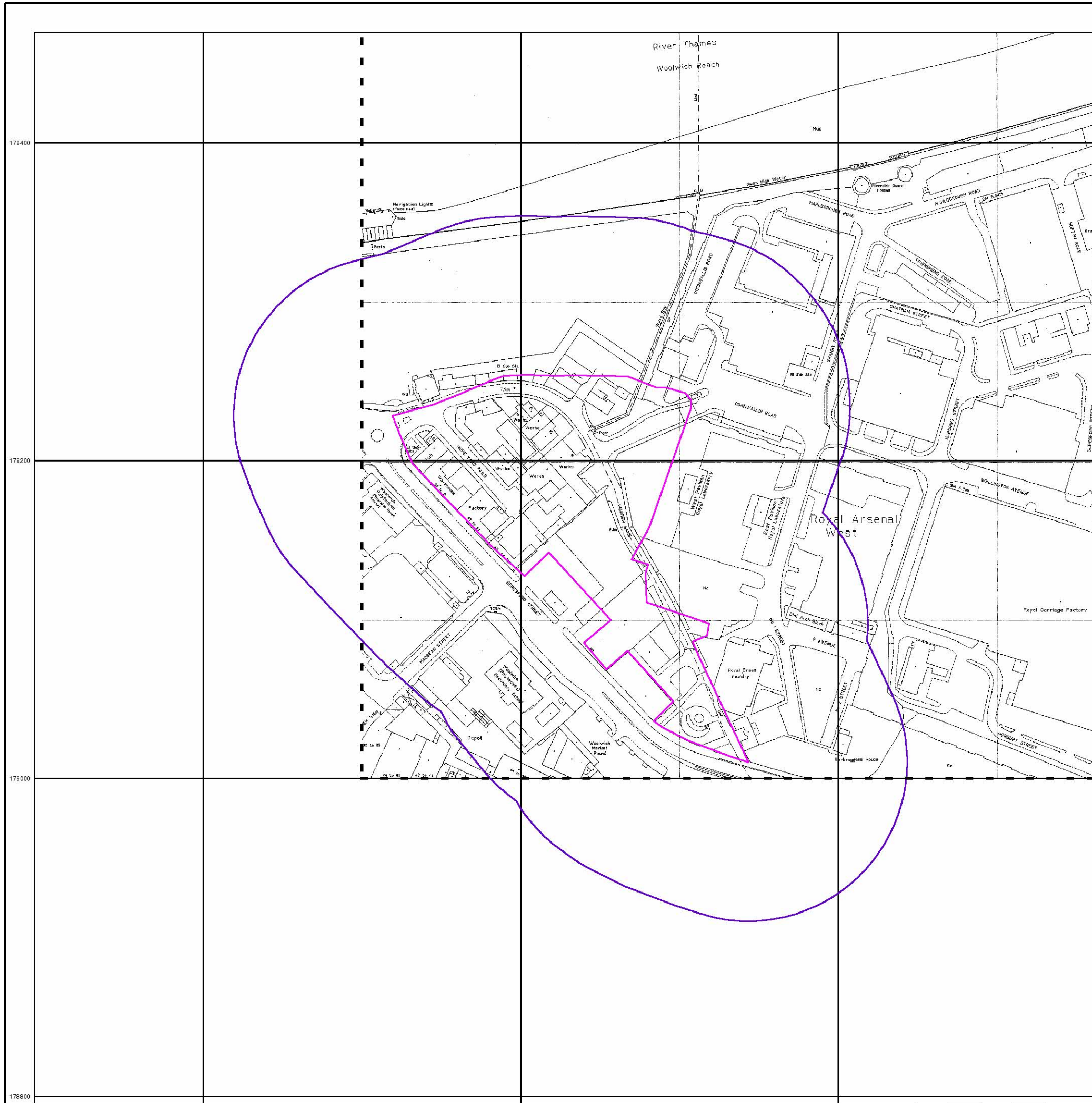
Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 100

### Site Details

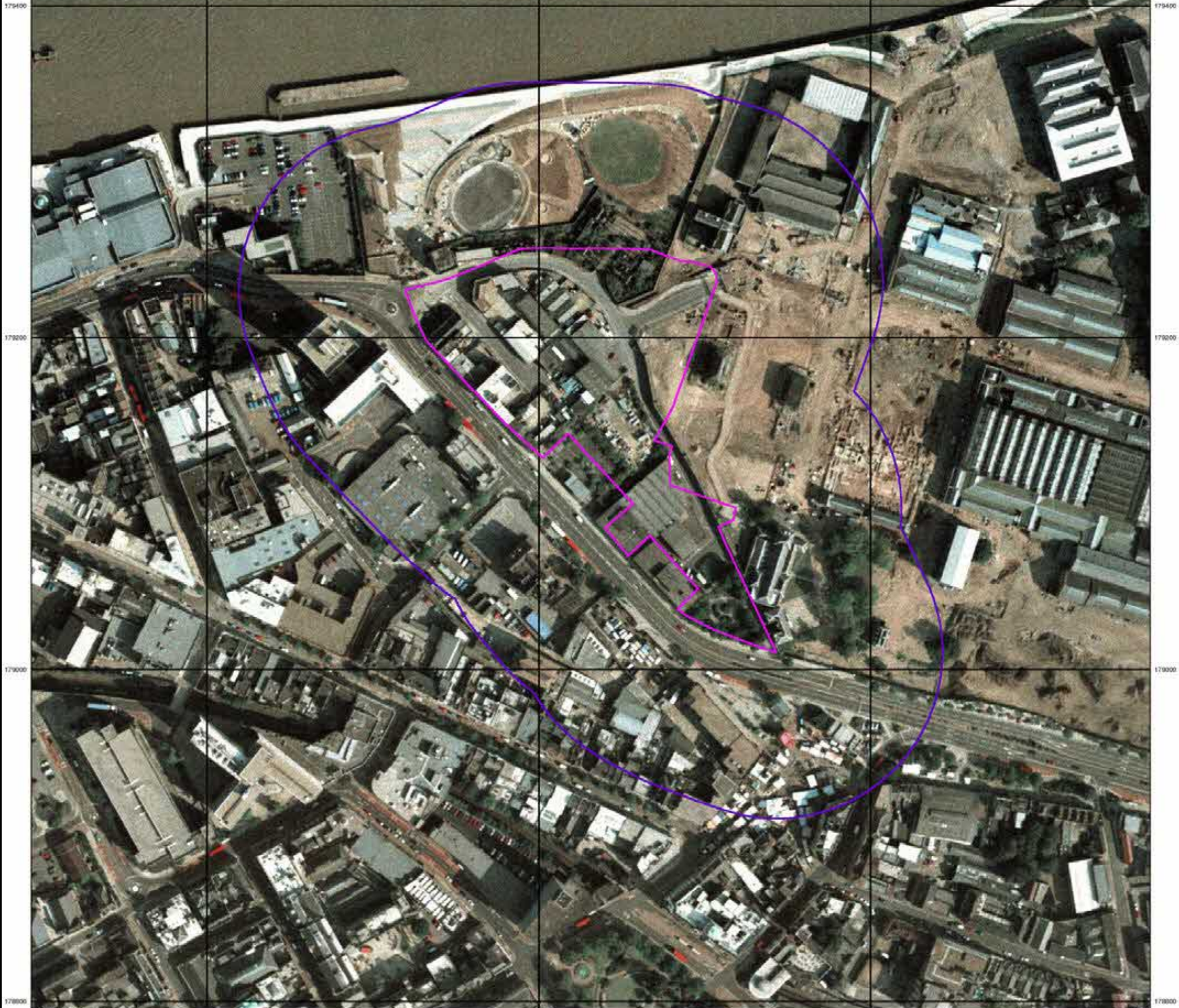
Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



Tel: 0844 844 9952  
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542600 543600 543600 543600

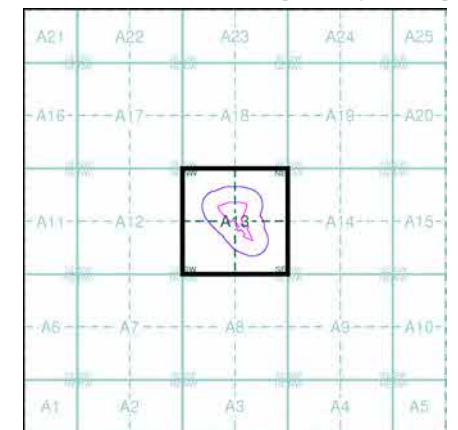


### Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

### Historical Aerial Photography - Segment A13



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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# Historical Mapping Legends

## Ordnance Survey County Series 1:10,560

- Gravel Pit
- Sand Pit
- Other Pits
- Quarry
- Shingle
- Orchard
- Osiers
- Reeds
- Marsh
- Mixed Wood
- Deciduous
- Brushwood
- Fir
- Furze
- Rough Pasture
- Arrow denotes flow of water
- Trigonometrical Station
- Site of Antiquities
- Bench Mark
- Pump, Guide Post, Signal Post
- Well, Spring, Boundary Post
- 285** Surface Level
- Sketched Contour
- Instrumental Contour
- Main Roads
- Minor Roads
- Sunken Road
- Raised Road
- Road over Railway
- Railway over River
- Railway over Road
- Level Crossing
- Road over River or Canal
- Road over Stream
- Road over Stream
- County Boundary (Geographical)
- County & Civil Parish Boundary
- Administrative County & Civil Parish Boundary
- Co. Boro. Bdy. County Borough Boundary (England)
- Co. Burgh Bdy. County Burgh Boundary (Scotland)
- R.D. Bdy. Rural District Boundary
- Civil Parish Boundary

## Ordnance Survey Plan 1:10,000

- Chalk Pit, Clay Pit or Quarry
- Gravel Pit
- Sand Pit
- Disused Pit or Quarry
- Refuse or Slag Heap
- Lake, Loch or Pond
- Dunes
- Boulders
- Coniferous Trees
- Non-Coniferous Trees
- Orchard
- Scrub
- Coppice
- Bracken
- Heath
- Rough Grassland
- Marsh
- Reeds
- Saltings
- Building
- Glasshouse
- Sloping Masonry
- Pylon
- Electricity Transmission Line
- Pole
- Cutting
- Embankment
- Standard Gauge Multiple Track
- Standard Gauge Single Track
- Siding, Tramway or Mineral Line
- Narrow Gauge
- Geographical County
- Administrative County, County Borough or County of City
- Municipal Borough, Urban or Rural District, Burgh or District Council
- Borough, Burgh or County Constituency  
Shown only when not coincident with other boundaries
- Civil Parish  
Shown alternately when coincidence of boundaries occurs
- BP, BS Boundary Post or Stone
- Ch Church
- CH Club House
- F E Sta Fire Engine Station
- FB Foot Bridge
- Fn Fountain
- GP Guide Post
- MP Mile Post
- MS Mile Stone
- Pol Sta Police Station
- PO Post Office
- PC Public Convenience
- PH Public House
- SB Signal Box
- Spr Spring
- TCB Telephone Call Box
- TCP Telephone Call Post
- W Well

## 1:10,000 Raster Mapping

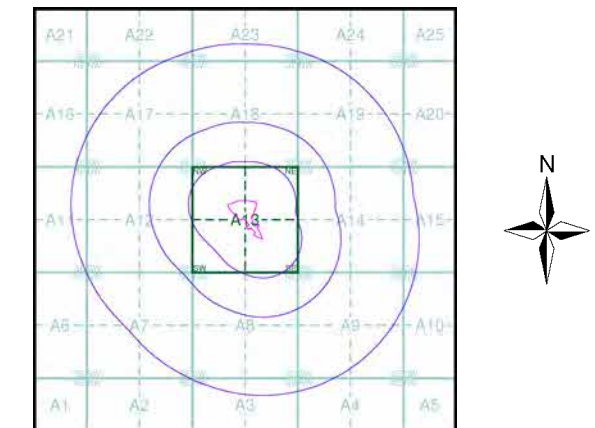
- Gravel Pit
- Rock
- Boulders
- Shingle
- Sand
- Slopes
- General detail
- Overhead detail
- Multi-track railway
- County boundary (England only)
- District, Unitary, Metropolitan, London Borough boundary
- Area of wooded vegetation
- Non-coniferous trees (scattered)
- Coniferous trees (scattered)
- Orchard
- Rough Grassland
- Scrub
- Water feature
- MHW(S) Mean high water (springs)
- Telephone line (where shown)
- Bench mark (where shown)
- Point feature (e.g. Guide Post or Mile Stone)
- Site of (antiquity)
- General Building
- Refuse tip or slag heap
- Rock (scattered)
- Boulders (scattered)
- Mud
- Sand Pit
- Top of cliff
- Underground detail
- Narrow gauge railway
- Single track railway
- Civil, parish or community boundary
- Constituency boundary
- Non-coniferous trees
- Coniferous trees
- Positioned tree
- Coppice or Osiers
- Heath
- Marsh, Salt Marsh or Reeds
- Flow arrows
- MLW(S) Mean low water (springs)
- Electricity transmission line (with poles)
- Triangulation station
- Pylon, flare stack or lighting tower
- Glasshouse
- Important Building



## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Kent	1:10,560	1870	3
Middlesex	1:10,560	1871 - 1873	4
Essex	1:10,560	1873	5
Middlesex	1:10,560	1873	6
London	1:10,560	1896	7
Essex	1:10,560	1898 - 1899	8
Kent	1:10,560	1898 - 1899	9
Kent	1:10,560	1910	10
Essex	1:10,560	1920	11
London	1:10,560	1920	12
Kent	1:10,560	1931	13
Kent	1:10,560	1931	14
Kent	1:10,560	1938	15
Essex	1:10,560	1938	16
London	1:10,560	1938	17
Ordnance Survey Plan	1:10,000	1940	18
Ordnance Survey Plan	1:10,000	1950	19
Ordnance Survey Plan	1:10,000	1962 - 1966	20
Ordnance Survey Plan	1:10,000	1974 - 1975	21
Ordnance Survey Plan	1:10,000	1982 - 1984	22
London	1:25,000	1985	23
Ordnance Survey Plan	1:10,000	1989	24
Ordnance Survey Plan	1:10,000	1991 - 1996	25
Ordnance Survey Plan	1:10,000	1996	26
10K Raster Mapping	1:10,000	1999	27
10K Raster Mapping	1:10,000	2006	28
VectorMap Local	1:10,000	2023	29

## Historical Map - Slice A



## Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

## Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



Tel: 0844 844 9952  
 Fax: 0844 844 9951  
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# Russian Military Mapping Legends

## 1:5,000 and 1:10,000 mapping

a. Not drawn to scale    b. Drawn to scale

**Government and Administrative Buildings**  
**Military and Industrial Buildings**  
**Military and Communication Areas**  
**Fireproof Building**  
**Non-fireproof Building**  
**Factory, mill, and flour mill, with chimneys**  
**Power Station, drawn to scale**  
**Radio Station, drawn to scale**  
**Abandoned Open-pit Mine or Quarry**  
**Oil Deposit or Well**  
**Oil Seepage**  
**Tailings Pile**  
**Bench Mark**  
**Drill Hole**  
**Burial Mound**  
**Triangulation Point on Burial Mound**  
**Single-track Railroad**  
**Double-track Railroad and Station Building**  
**Coniferous Forest**  
**Deciduous Forest**  
**Mixed Forest**  
**Lawns**  
**Citrus Orchard**  
**Wet Ground**  
**Scattered Vegetation**

**Values for prominent elevations**  
 243.8  
 186.0  
 0.2  
 180/12

**Russian Alphabet** (For reference and phonetic interpretation of map text)

А а (A)	З з (Z)	П п (P)	Ч ч (CH)
Б б (B)	И и (I)	Р р (R)	Ш ш (SH)
В в (V)	Й й (Y)	С с (S)	Щ щ (SHCH)
Г г (G)	К к (K)	Т т (T)	Ъ (-)
Д д (D)	Л л (L)	У у (U)	Ы (Y)
Е е (E)	М м (M)	Ф ф (F)	Ь (')
Ё ё (YO)	Н н (N)	Х х (KH)	Э э (E)
Ж ж (ZH)	О о (O)	Ц ц (TS)	Ю ю (YU or IU)
			Я я (YA or IA)

## 1:25,000 mapping

a. Not drawn to scale    b. Drawn to scale

**Government and Administrative Buildings**  
**Military and Industrial Buildings**  
**Military and Communication Areas**  
**Partly Demolished Buildings**  
**Demolished Buildings**  
**Built-Up Area with Fireproof Buildings Predominant**  
**Built-Up Area with Non-Fireproof Buildings Predominant**  
**Individual Fireproof Building**  
**Individual Dwelling, Fireproof**  
**Factory or Mill Chimney**  
**Operating Shaft or Mine**  
**Pit**  
**Oil or Natural Gas Derrick**  
**Cemetery**  
**Bench Mark**  
**Radio Station**  
**Small Bridge**  
**Telegraph/Telephone Lines**  
**Main Highway**  
**Highway under Construction**  
**Dismantled Railroad**  
**Railroad Under Construction**  
**Shore Embankment**  
**River or Ditch with Embankment**  
**Water Reservoir or Rain Water Pit**  
**Well**  
**Heavy (Index) Contour Line**  
**Contour Line and Value**  
**Half Contour Line**  
**Spot Elevation Value**  
**Coniferous**  
**Deciduous**  
**Mixed**  
**Scrub**

**Factory or Mill with Chimney**  
**Non-Operating Shaft or Mine**  
**Salt Mine**  
**Tailings Pile**  
**Gas Pump or Service Station**  
**Fuel Storage or Natural Gas Tank**  
**Power Station**  
**Transformer Station**  
**Burial Mound (height in metres)**  
**Triangulation Point on Burial Mound**  
**Triangulation Point**  
**Bench Mark (monumented)**  
**Telegraph Office**  
**Telephone Station**  
**Airfield or Seaplane Base**  
**Landing Strip**  
**Width of Road**  
**Steep Grade**  
**Double-track Railroad with First Class Station**  
**Railroad Under Construction**  
**Water Gauge**  
**Direction and velocity of current**  
**Water Level Mark**  
**Spring**  
**Isobath with value**  
**Spot Elevation Value**

## Key to Numbers on Mapping

### TQ47\_London

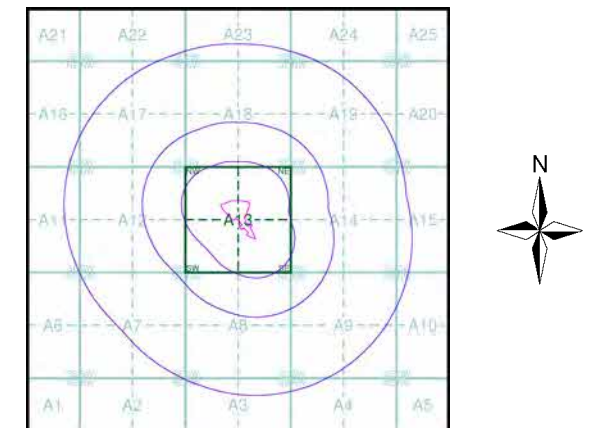
No.	Description
3	Storage (Artillery)
4	Storage (Artillery)
195	Chemical Plant
230	Military Barracks
233	Military Barracks



## Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Kent	1:10,560	1870	3
Middlesex	1:10,560	1871 - 1873	4
Essex	1:10,560	1873	5
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10K Raster Mapping	1:10,000	2006	28
VectorMap Local	1:10,000	2023	29

## Russian Map - Slice A



## Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

## Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



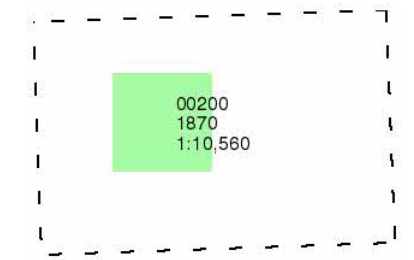
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



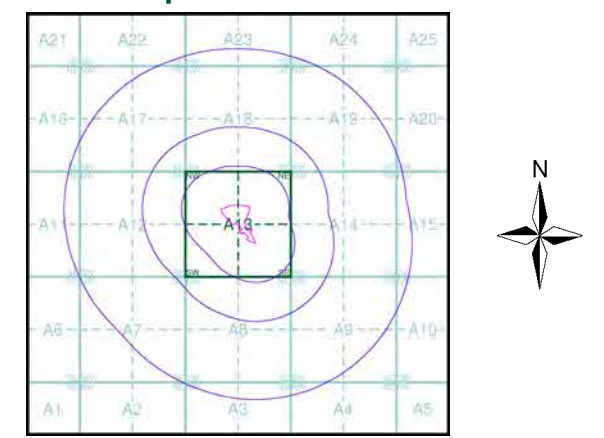
**Kent**  
**Published 1870**  
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
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## Middlesex

Published 1871 - 1873

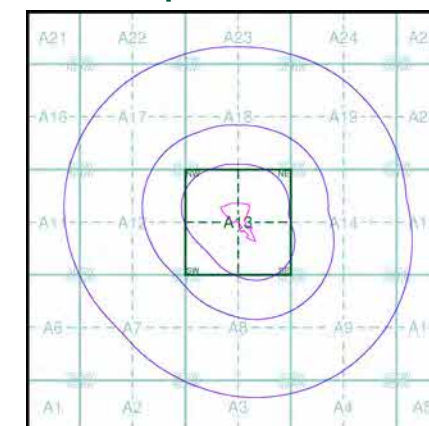
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

### Map Name(s) and Date(s)

01800	1873	1:10,560
02300	1871	1:10,560

### Historical Map - Slice A



### Order Details

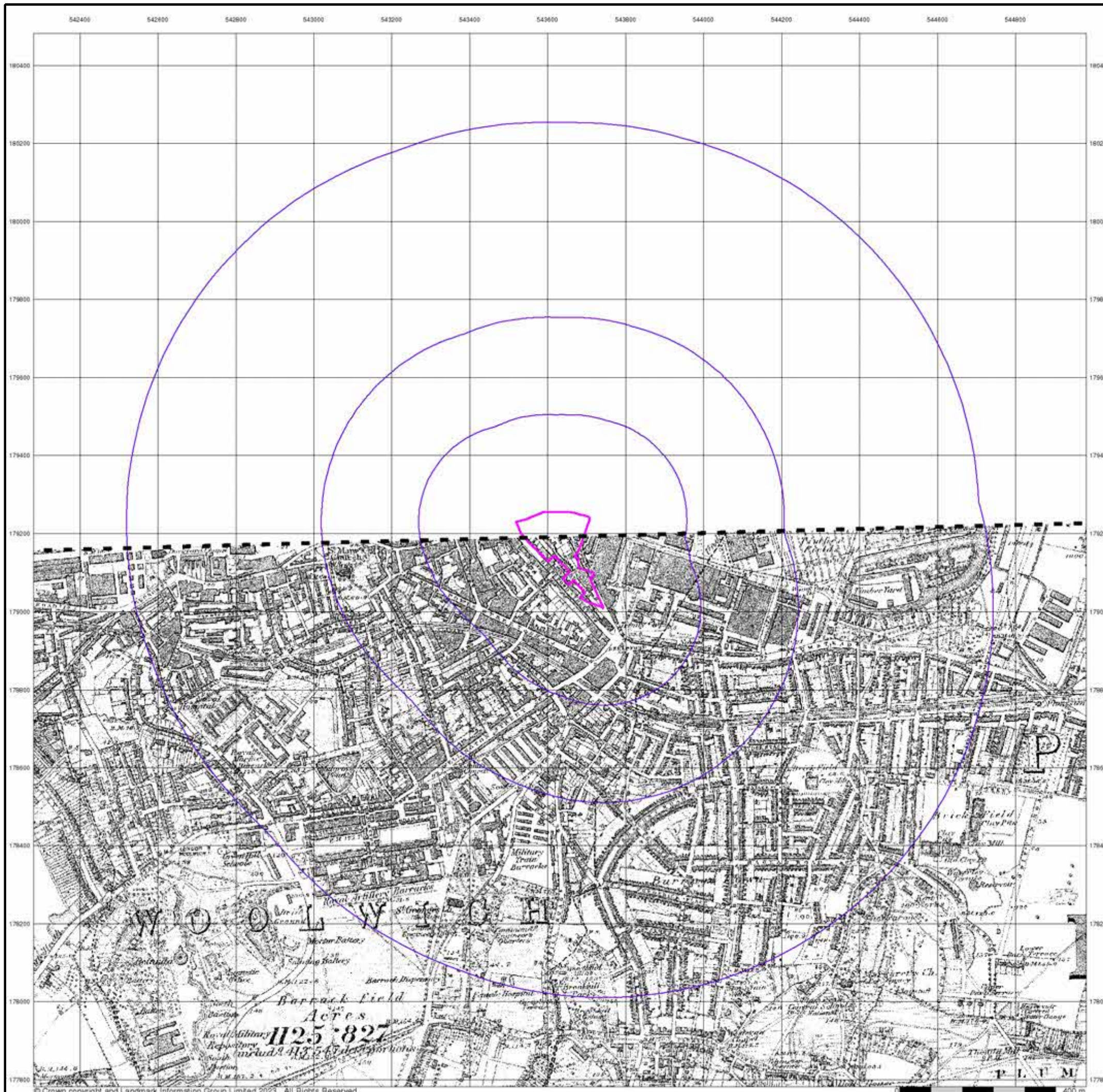
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

### Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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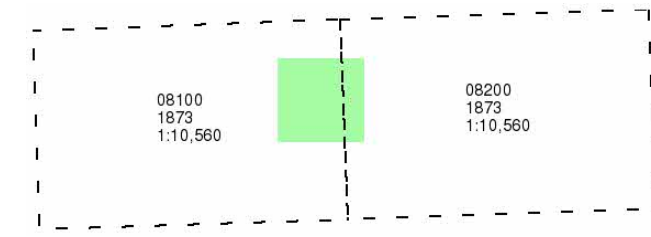
**Essex**

**Published 1873**

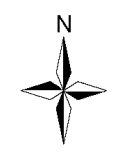
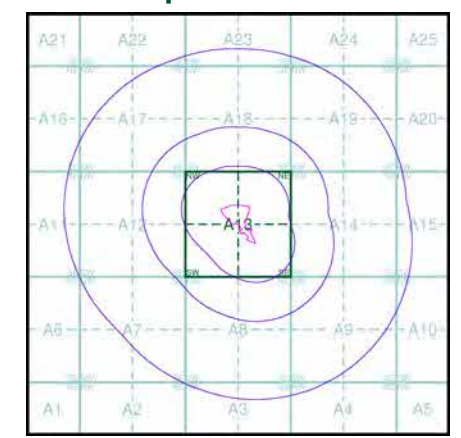
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

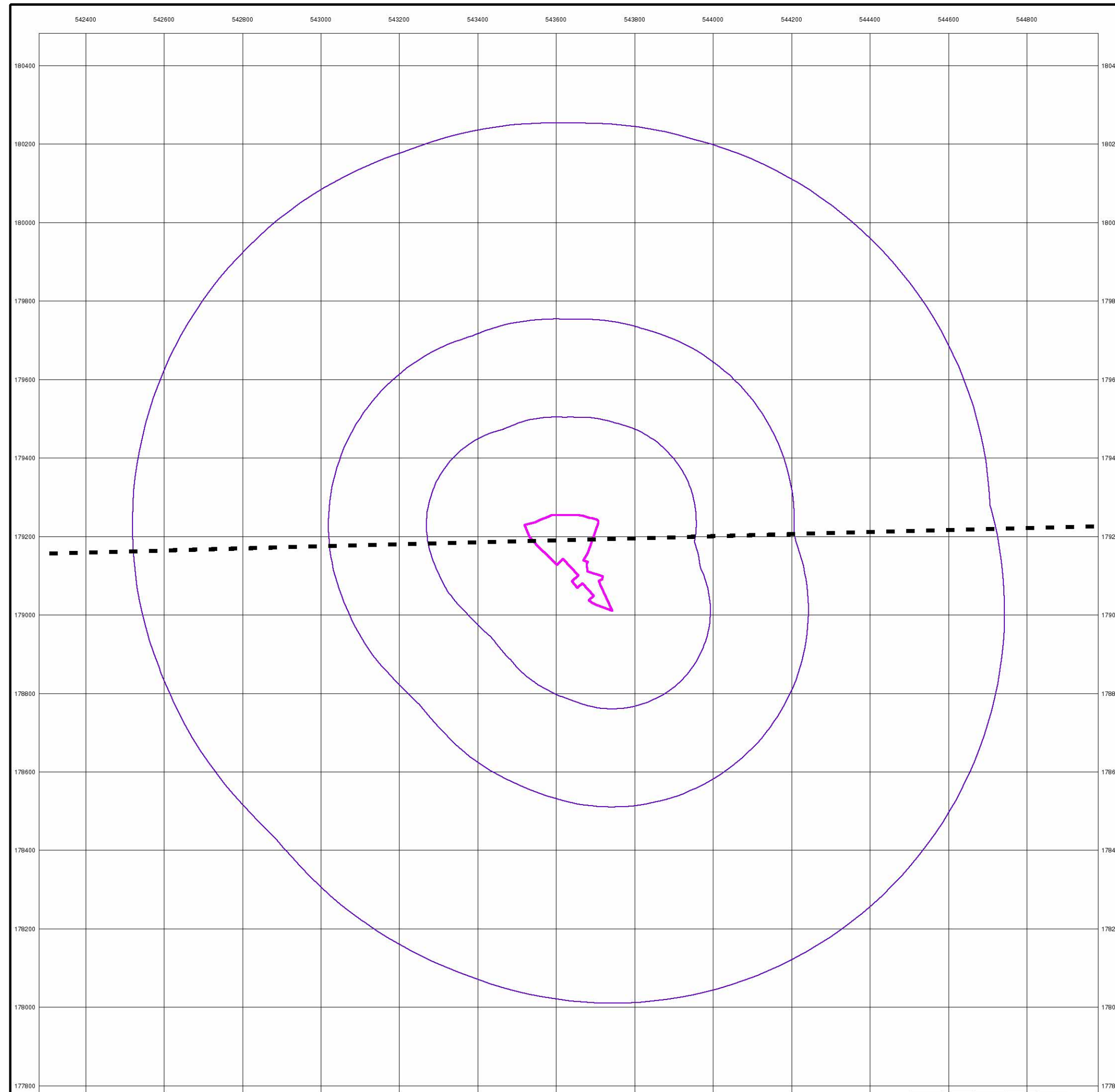
**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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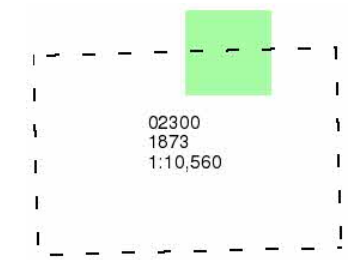
**Middlesex**

**Published 1873**

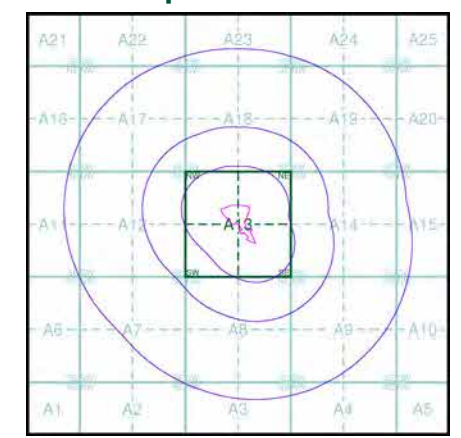
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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London

Published 1896

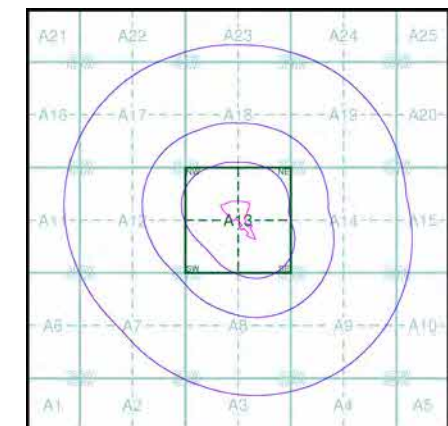
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

008SE	1896	1:10,560
012NE	1896	1:10,560

Historical Map - Slice A



Order Details

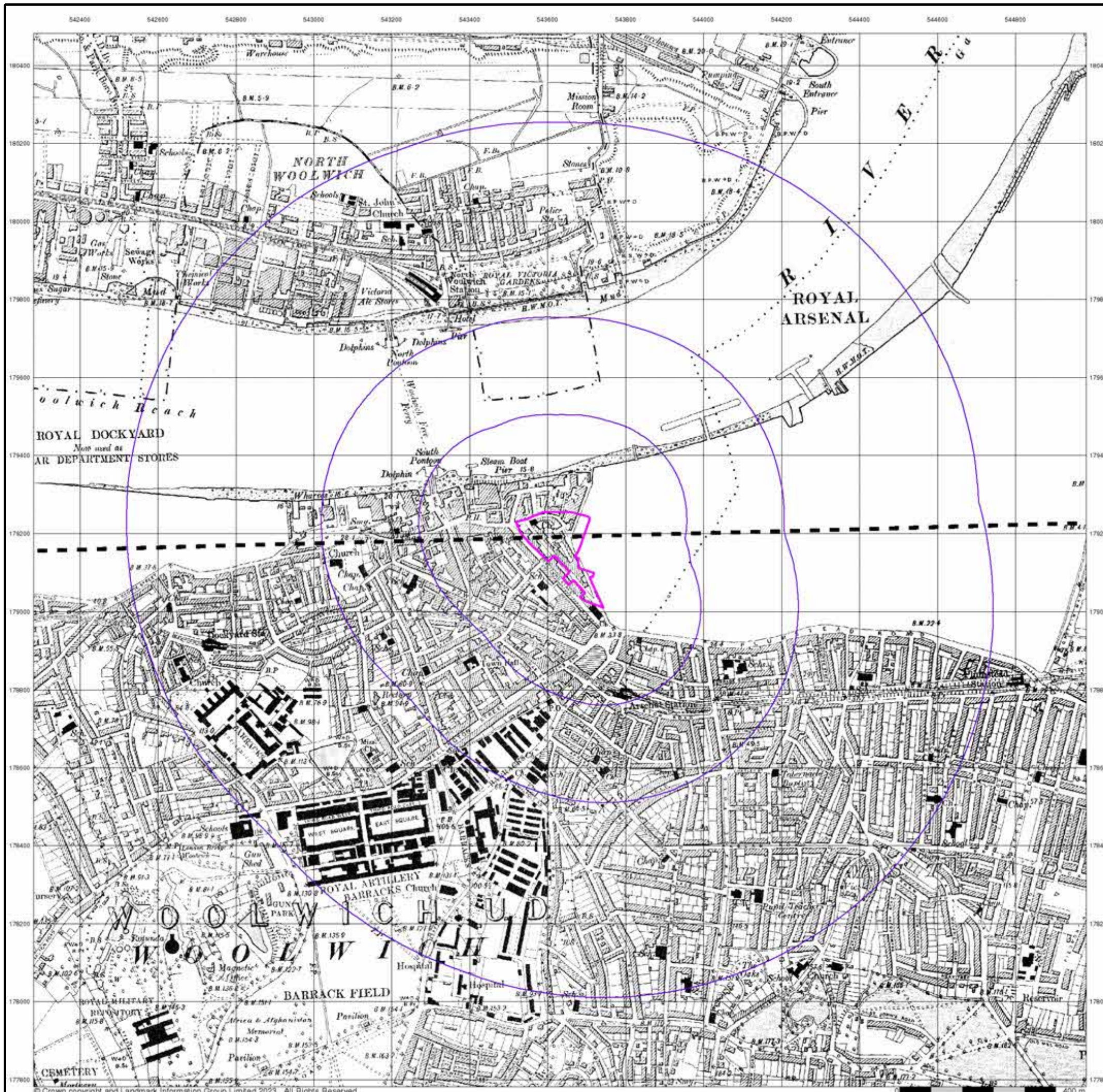
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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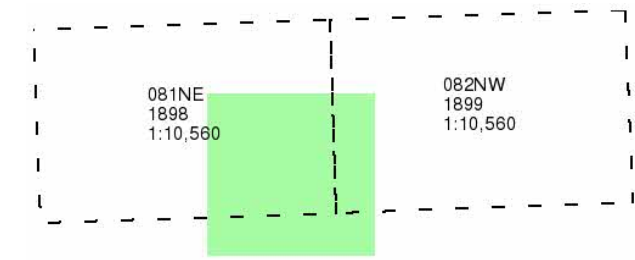




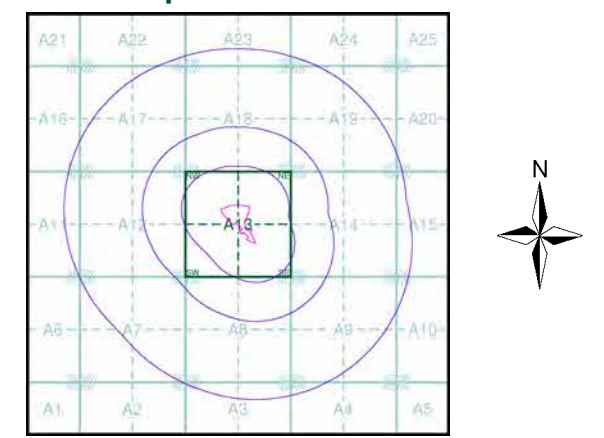
**Essex**  
**Published 1898 - 1899**  
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

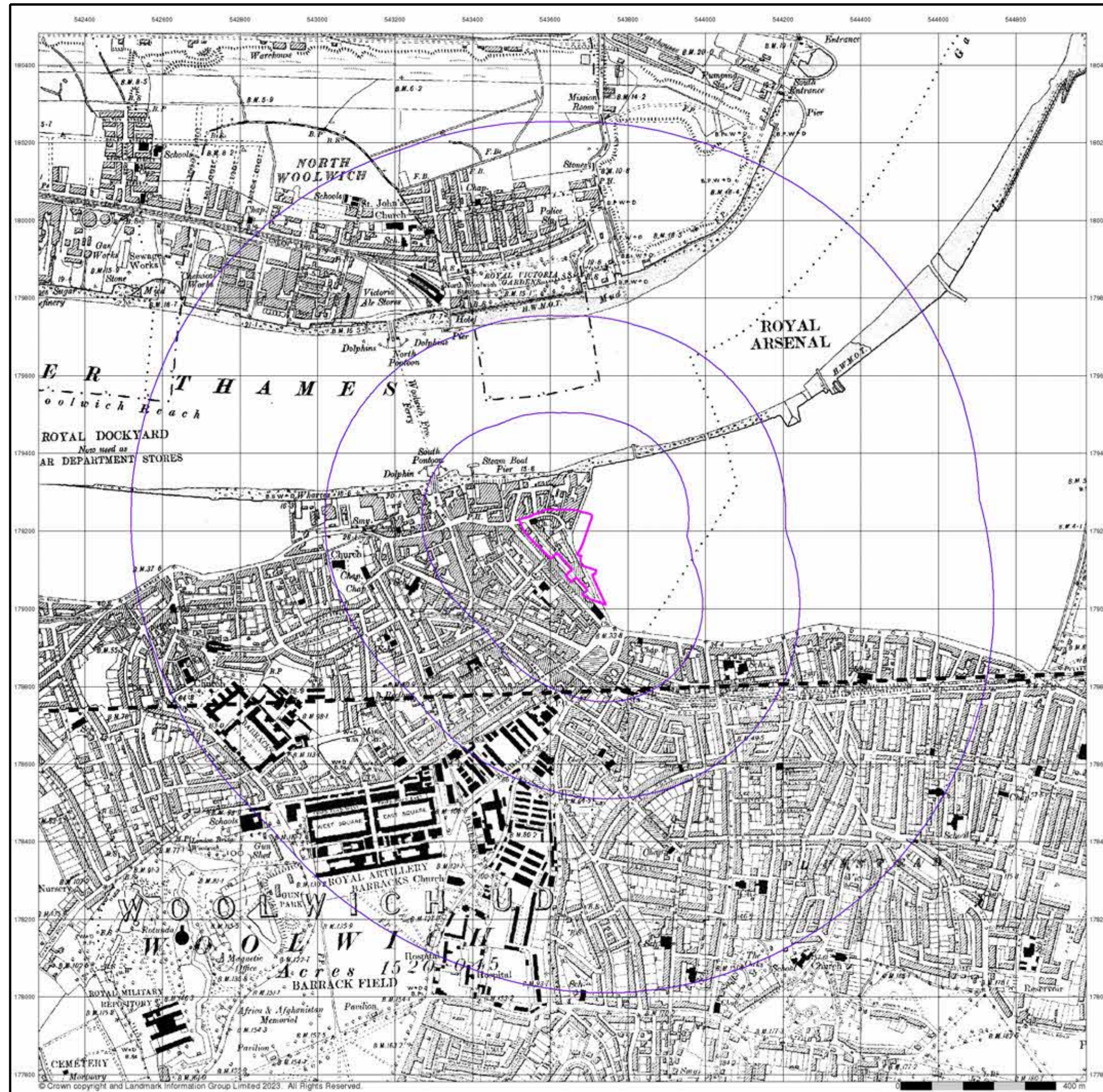
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

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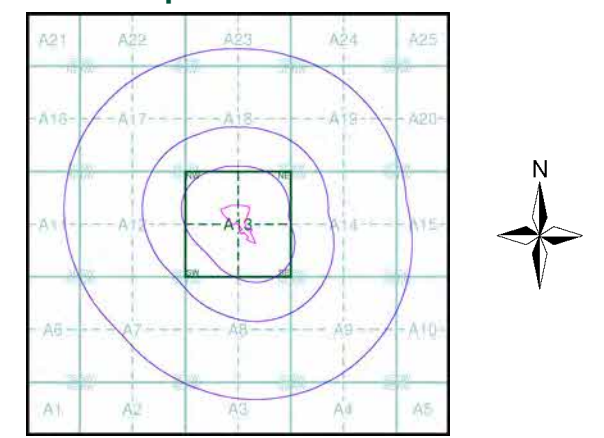
**Kent**  
**Published 1898 - 1899**  
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**

002NW	1899	1:10,560
002SW	1898	1:10,560

**Historical Map - Slice A**



**Order Details**

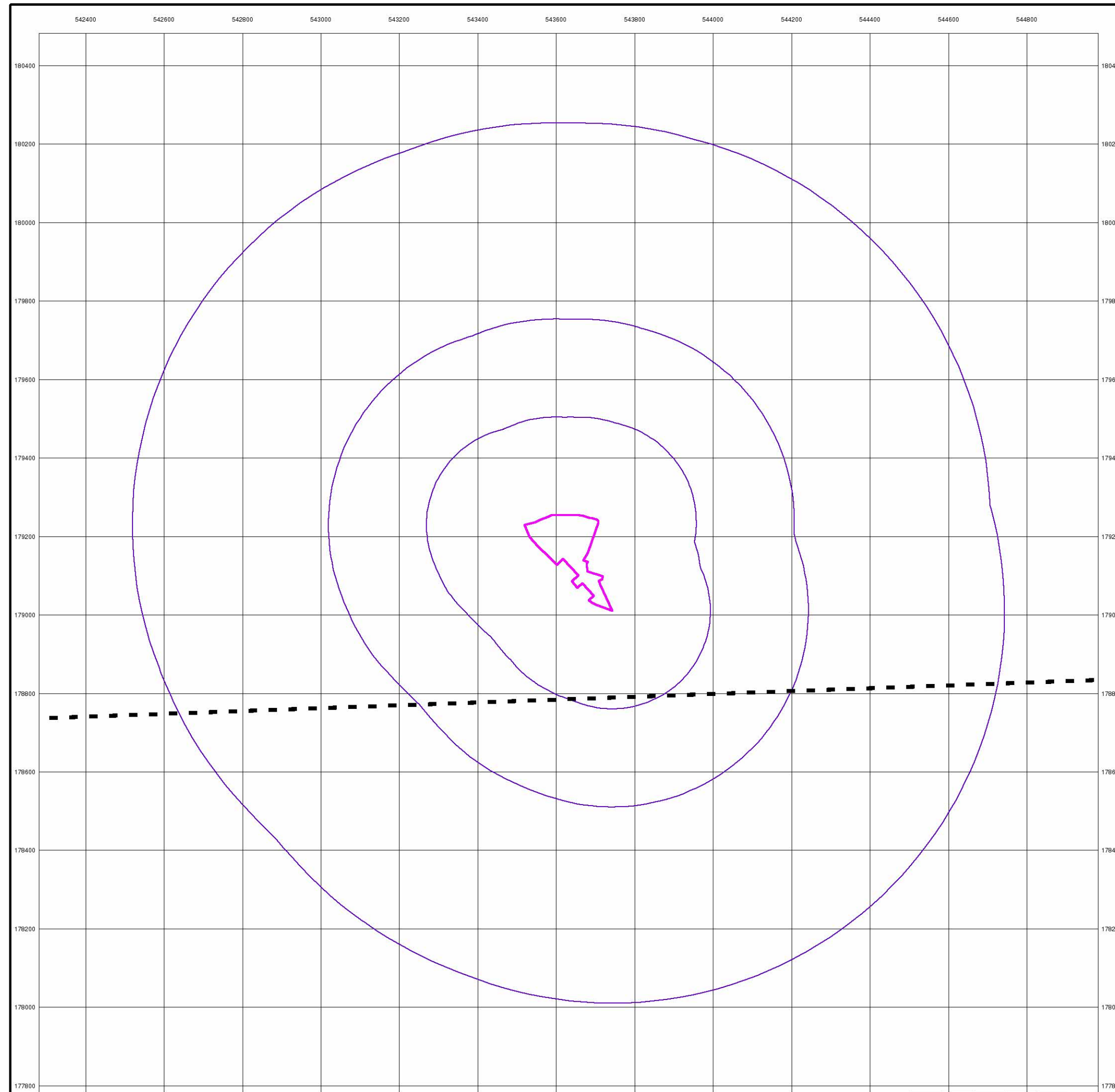
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

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Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



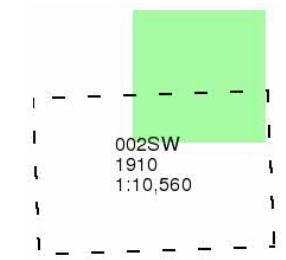
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



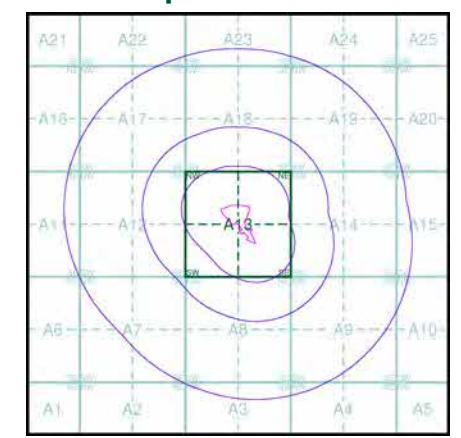
**Kent**  
**Published 1910**  
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
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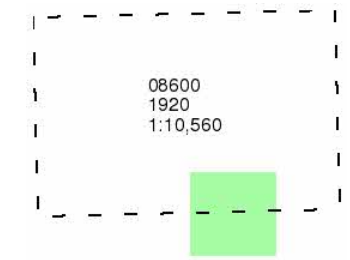
Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



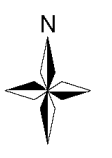
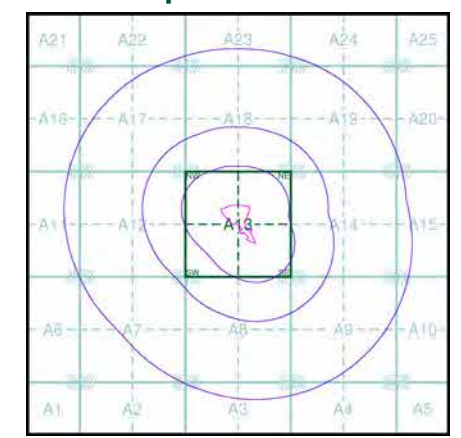
**Essex**  
**Published 1920**  
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

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 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

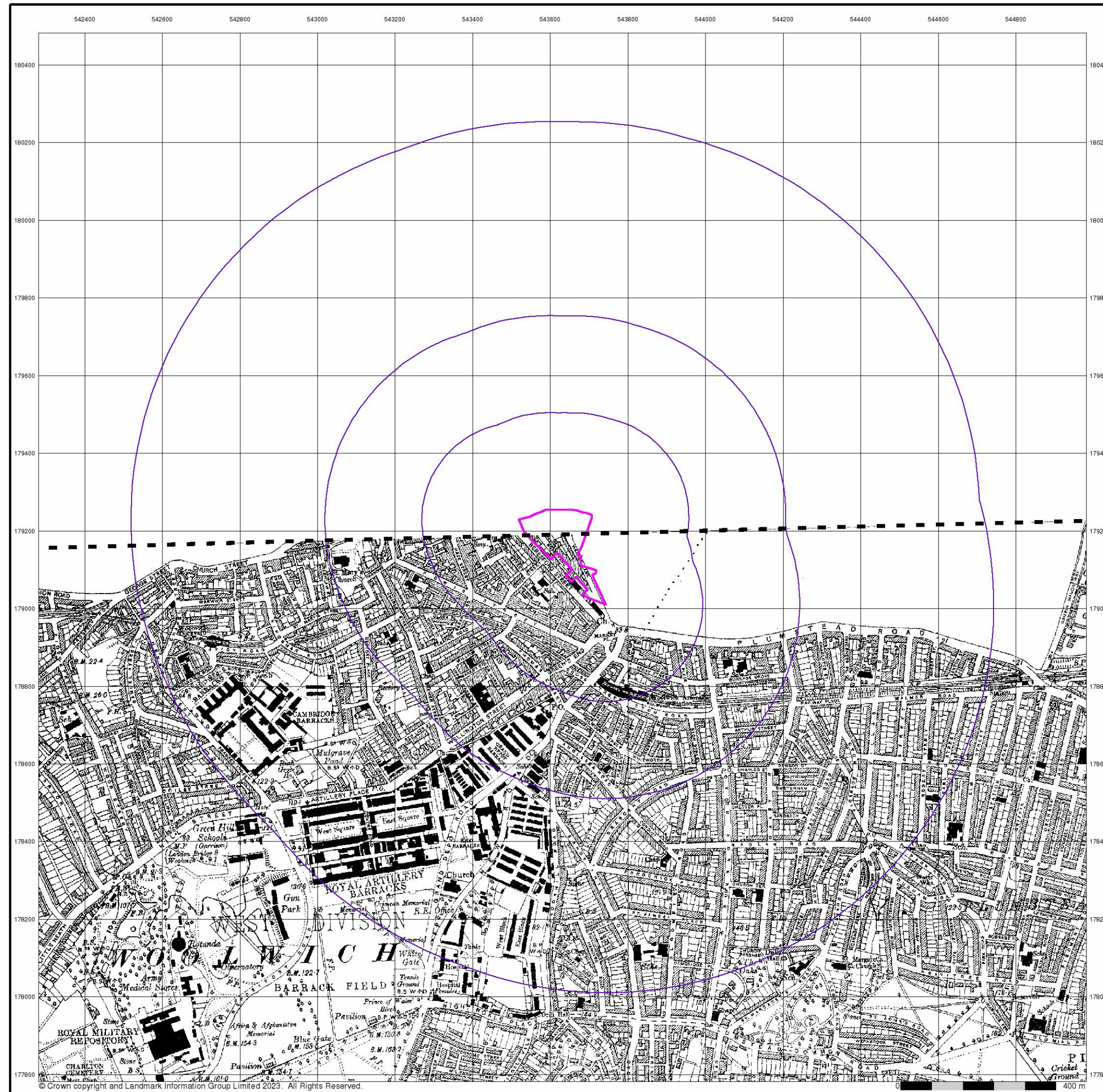
**Site Details**

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 Fax: 0844 844 9951  
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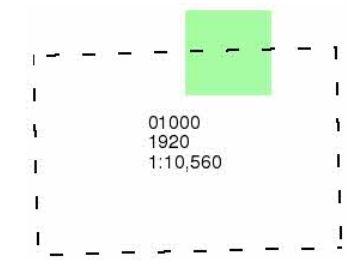




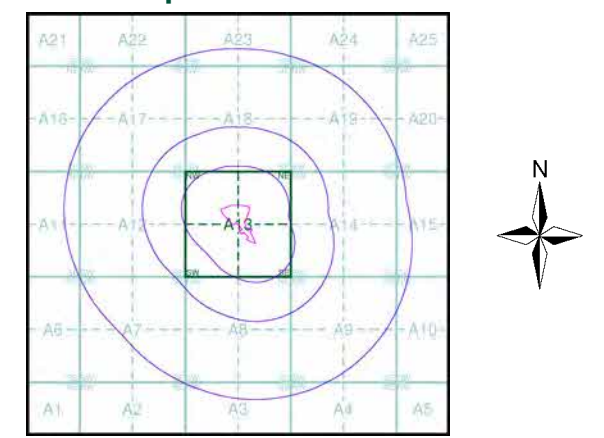
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**Published 1920**  
**Source map scale - 1:10,560**

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**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

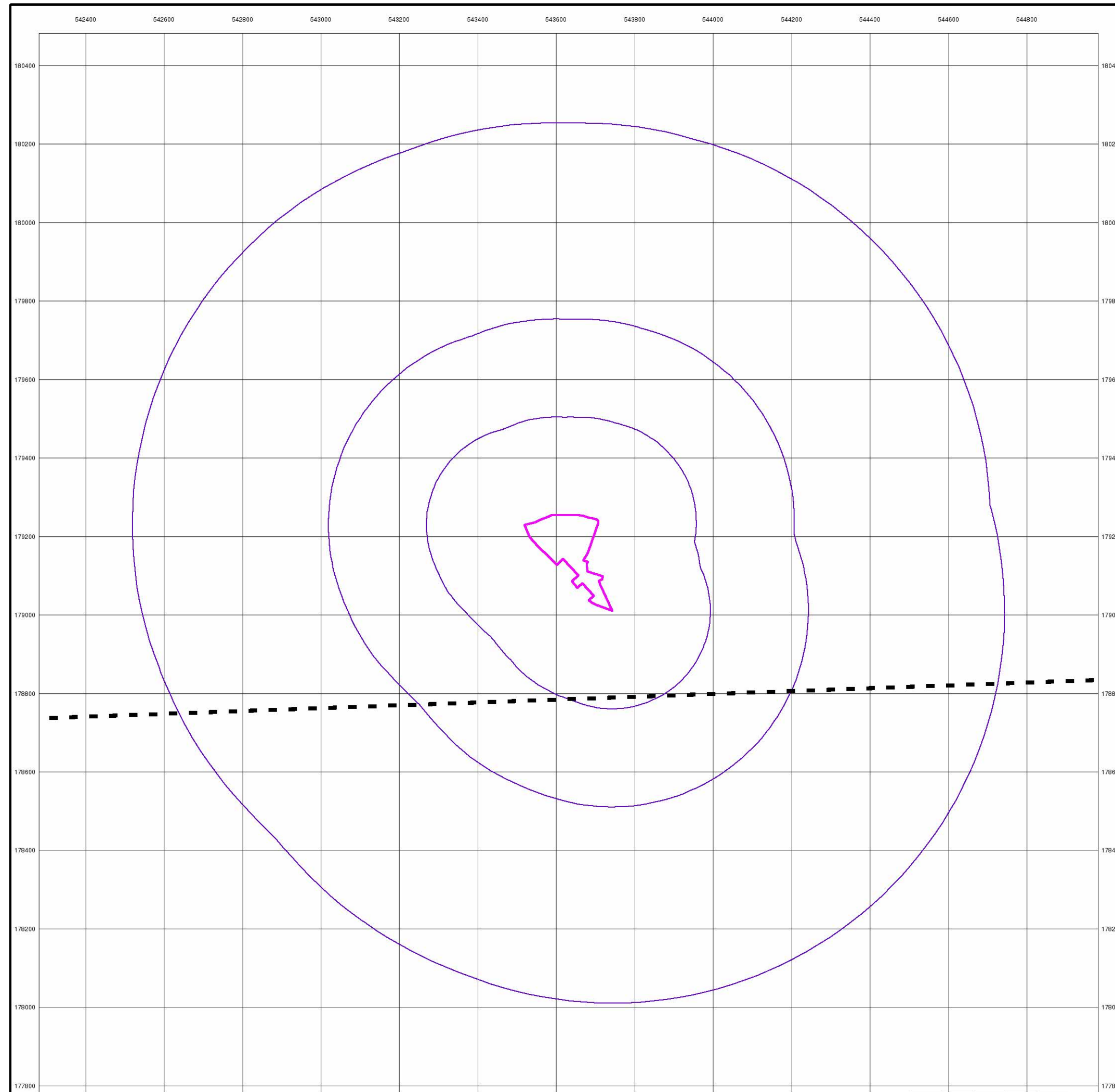
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**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



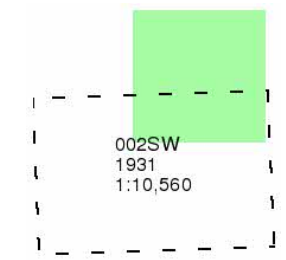
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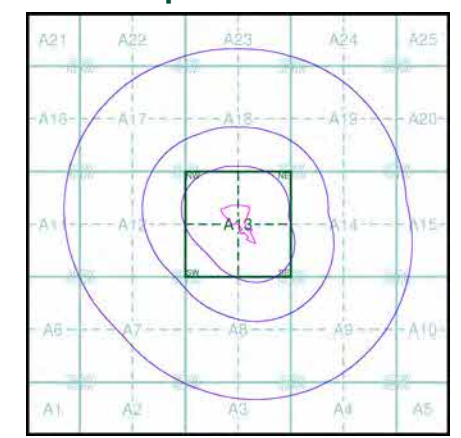
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**Published 1931**  
**Source map scale - 1:10,560**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

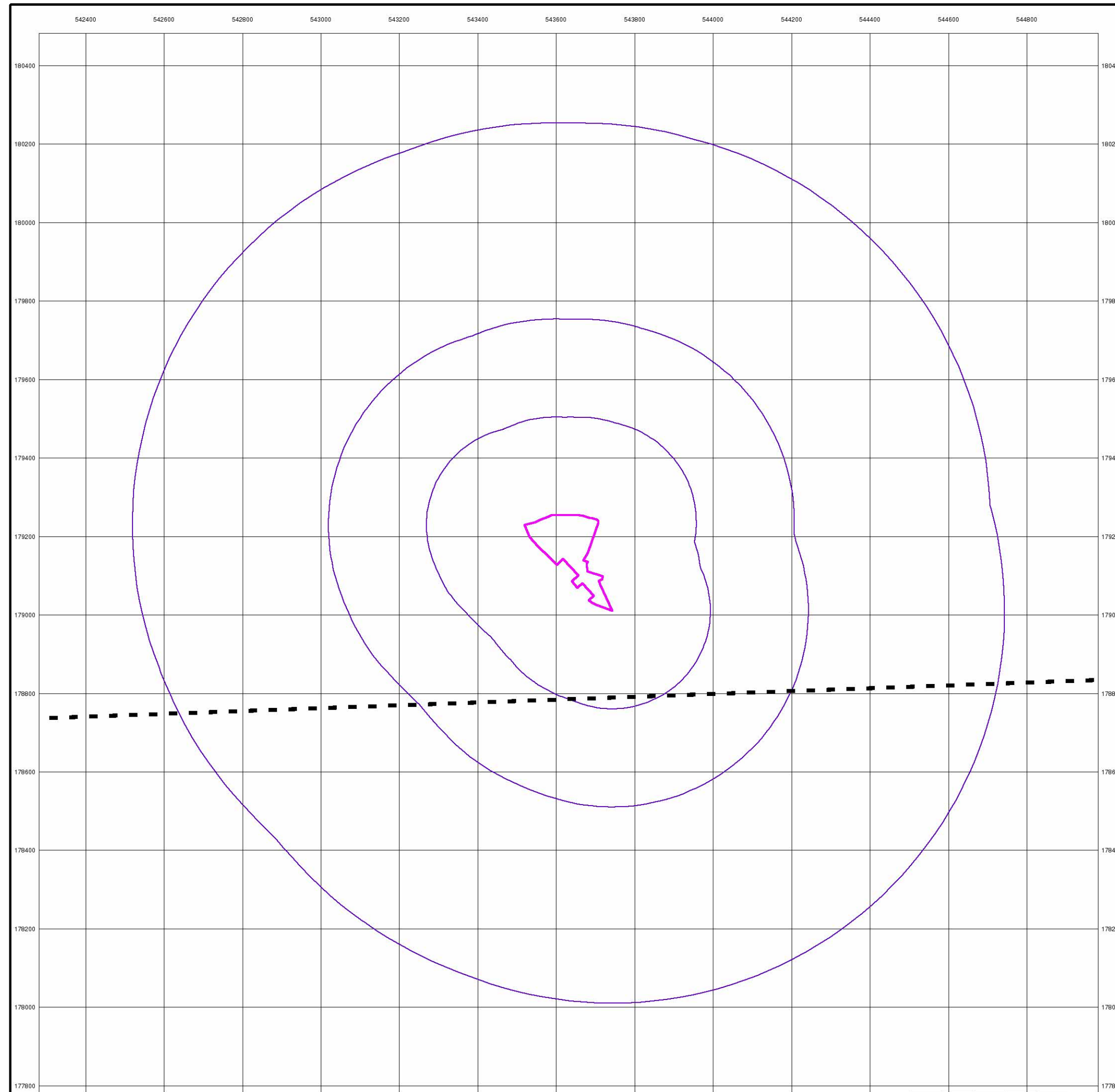
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**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



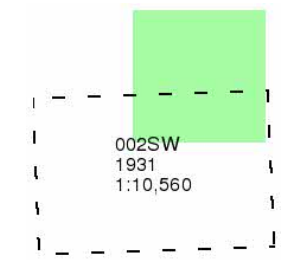
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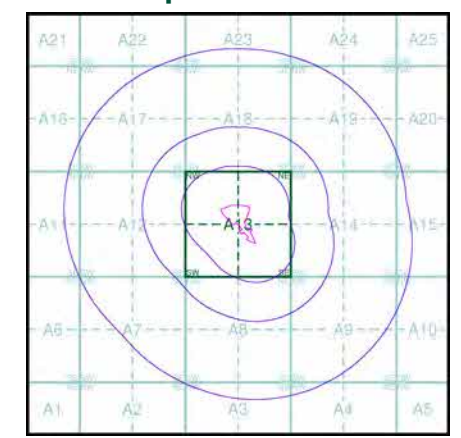
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**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

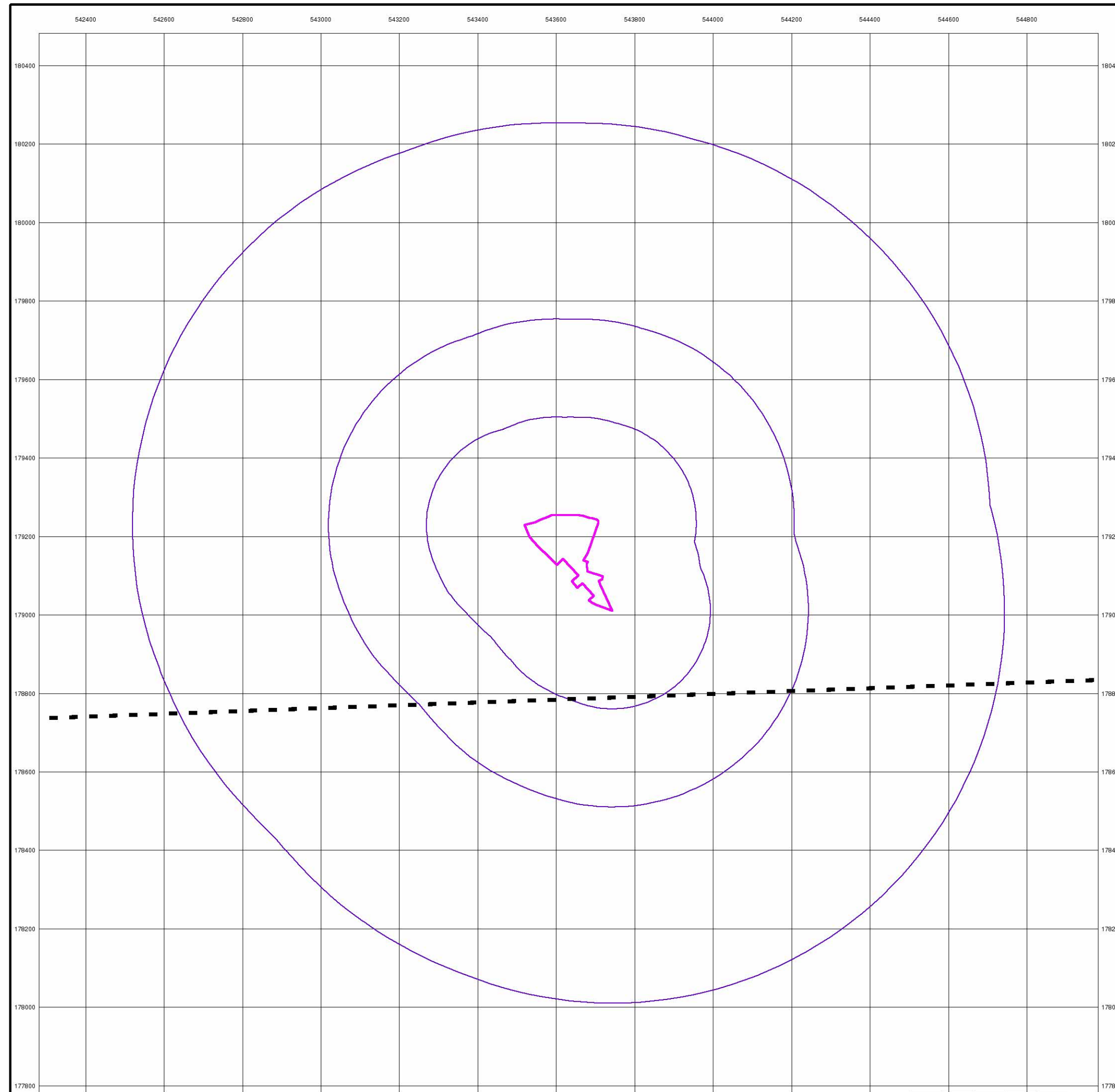
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**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



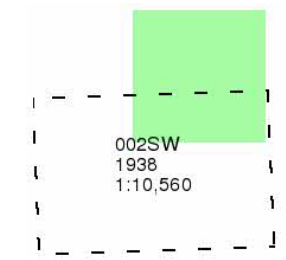
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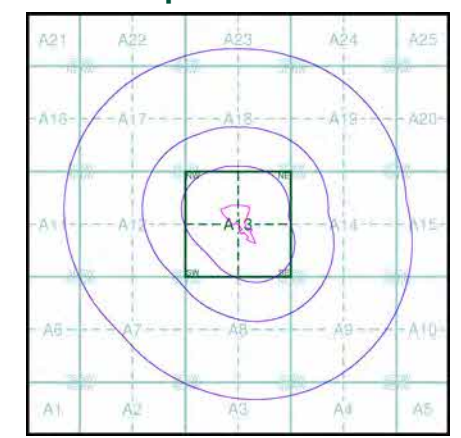
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**Published 1938**  
**Source map scale - 1:10,560**

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**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
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 Site Area (Ha): 2.18  
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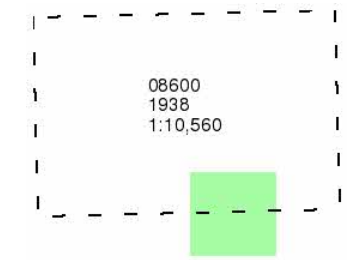
Essex

Published 1938

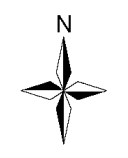
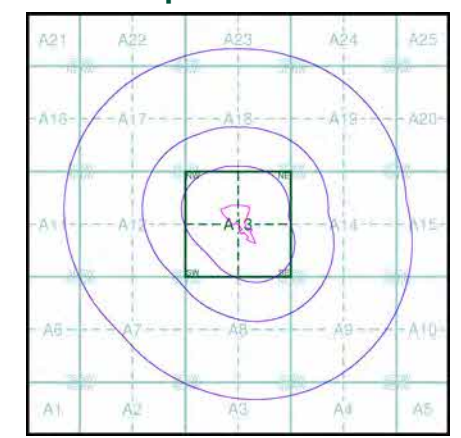
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

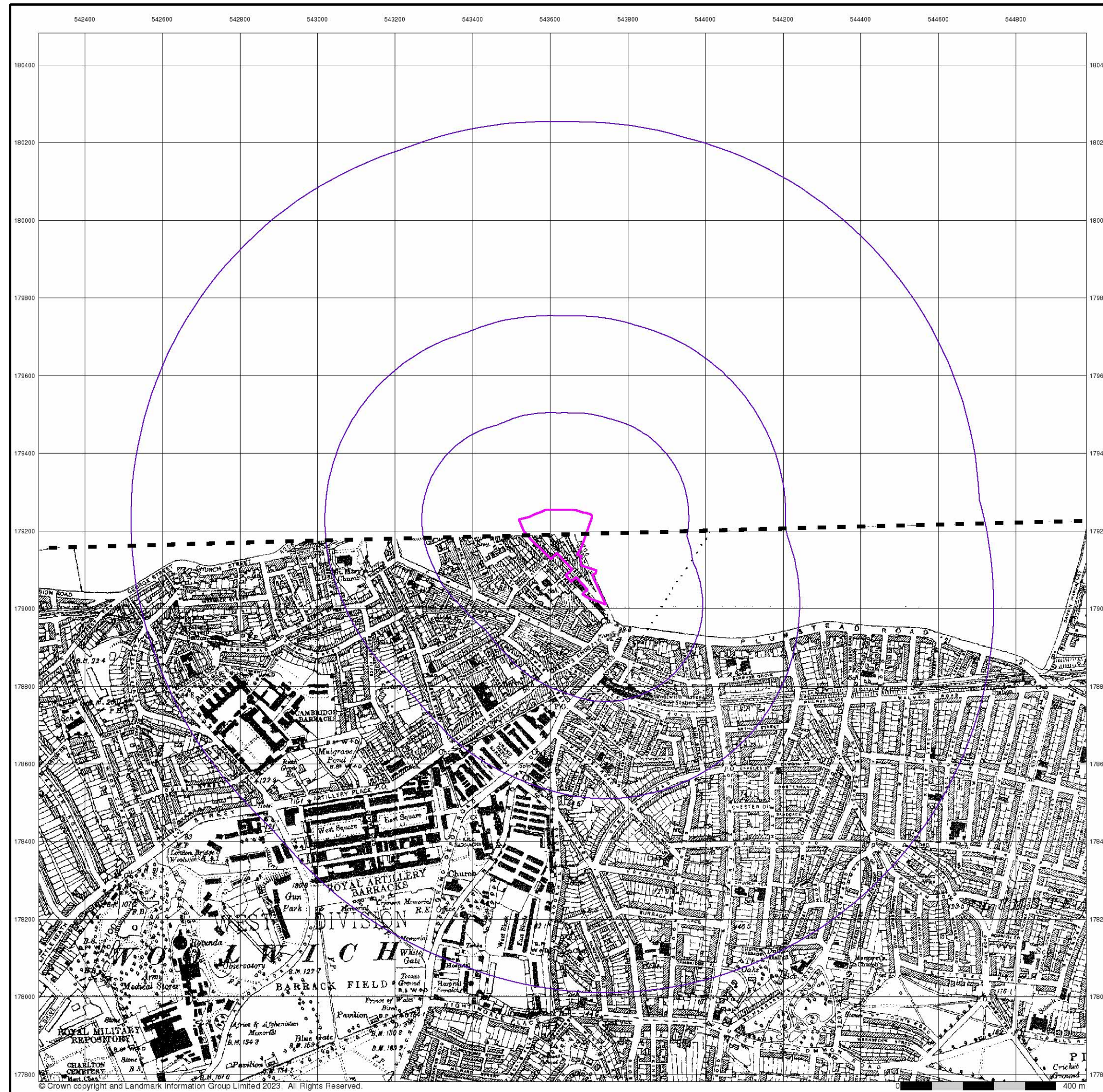
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Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



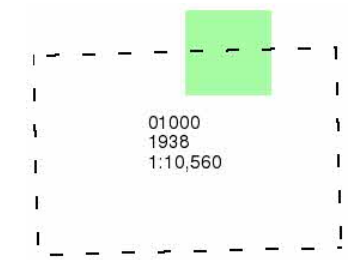
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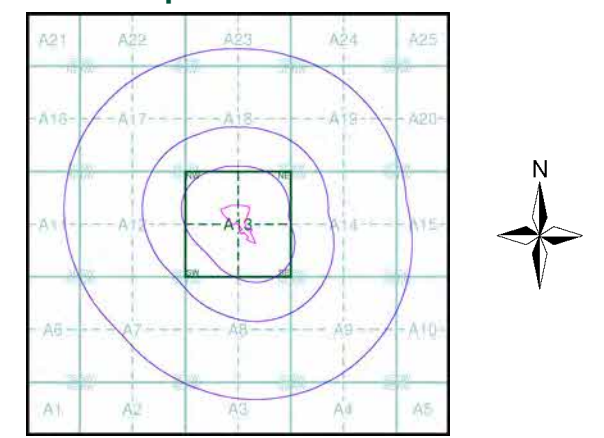
**London**  
**Published 1938**  
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**Map Name(s) and Date(s)**



**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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## Ordnance Survey Plan

Published 1940

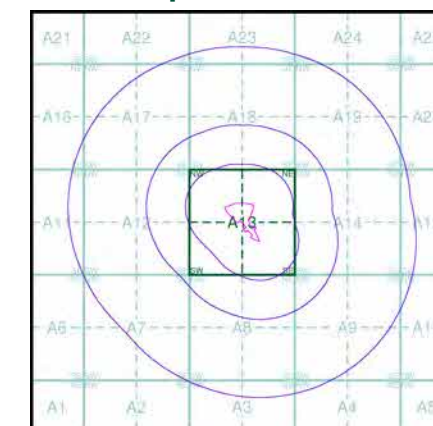
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### Map Name(s) and Date(s)

TQ48SW	1940
1:10,560	
TQ47NW	1940
1:10,560	

### Historical Map - Slice A



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
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### Site Details

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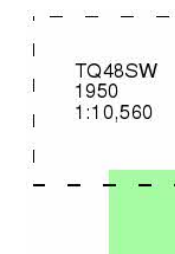
### Ordnance Survey Plan

Published 1950

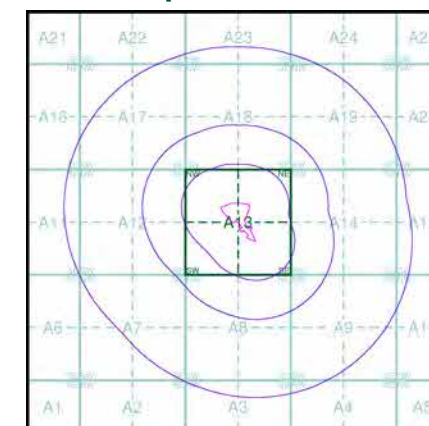
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### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

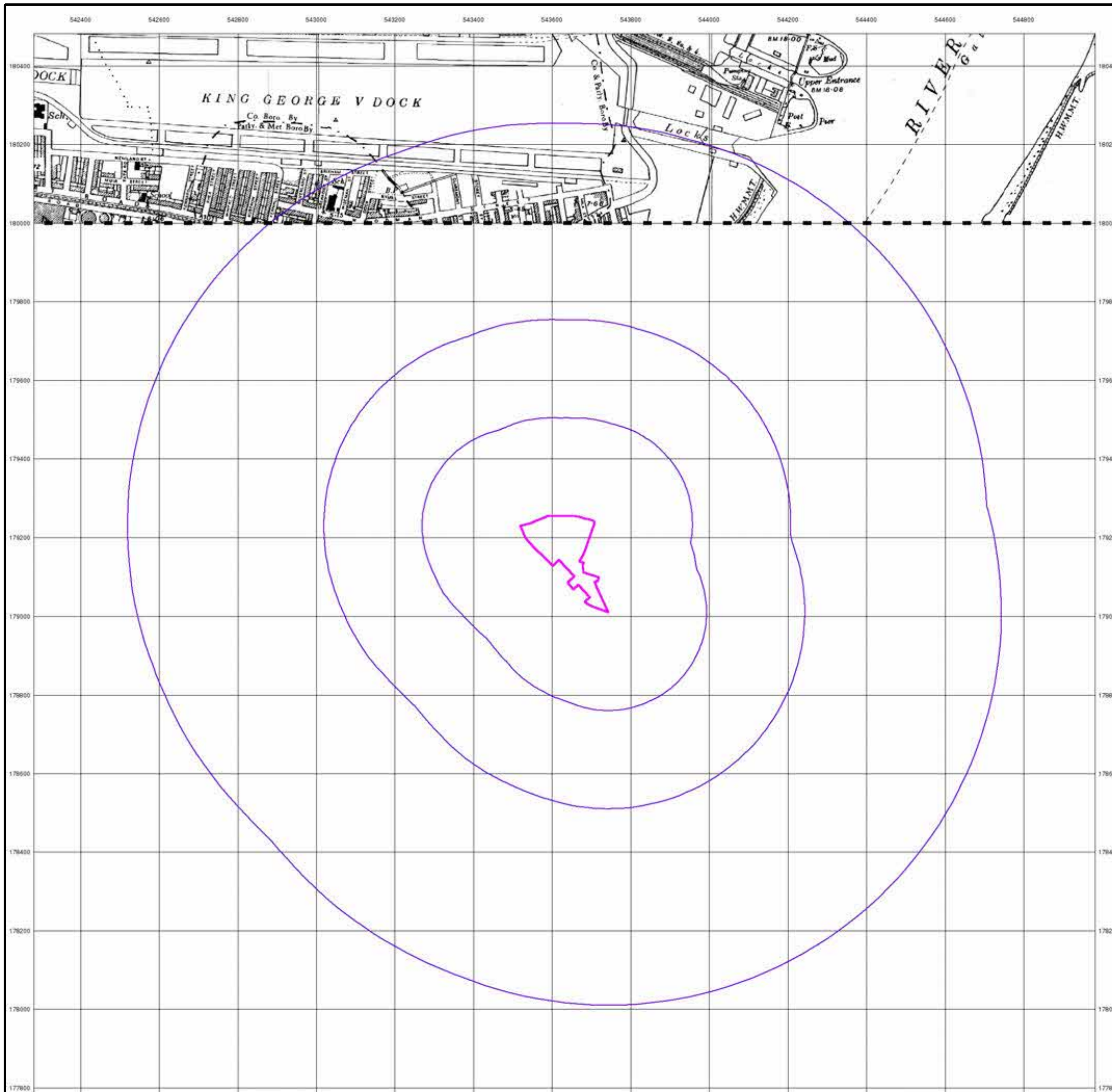
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### Site Details

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### Ordnance Survey Plan

Published 1962 - 1966

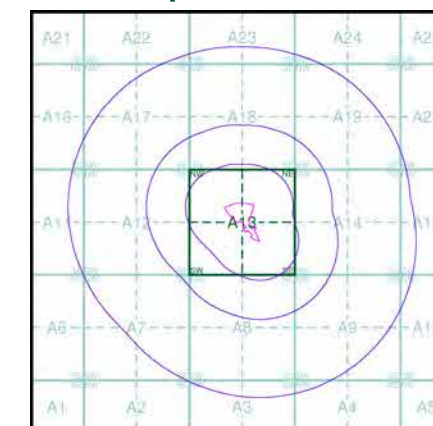
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### Map Name(s) and Date(s)

TQ48SW	1966	1:10,560
TQ47NW	1962	1:10,560

### Historical Map - Slice A



### Order Details

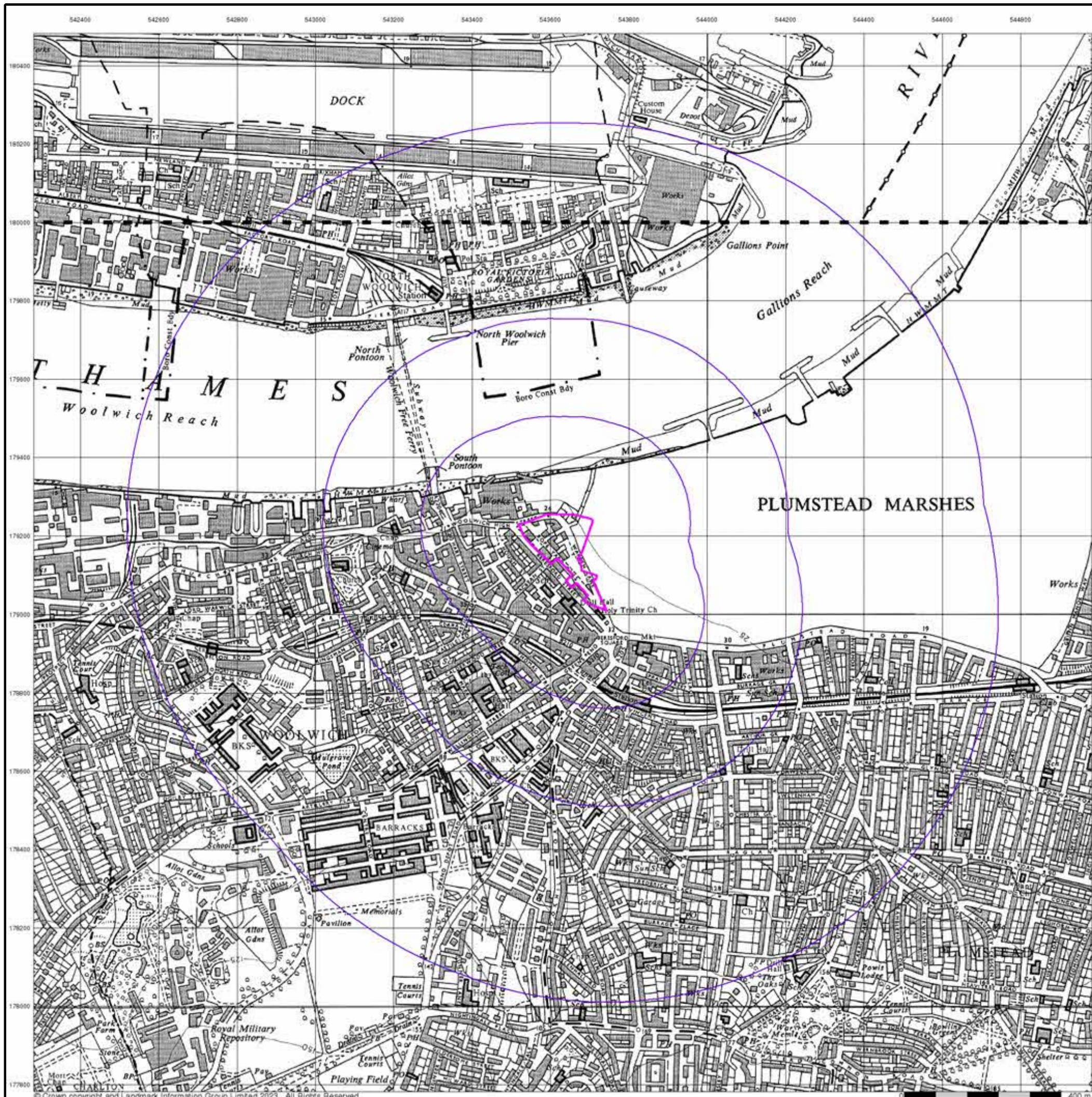
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### Site Details

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### Ordnance Survey Plan

Published 1974 - 1975

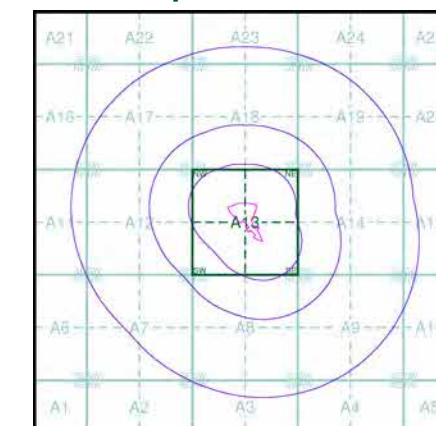
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### Map Name(s) and Date(s)

TQ48SW	1975	1:10,000
TQ47NW	1974	1:10,000

### Historical Map - Slice A



### Order Details

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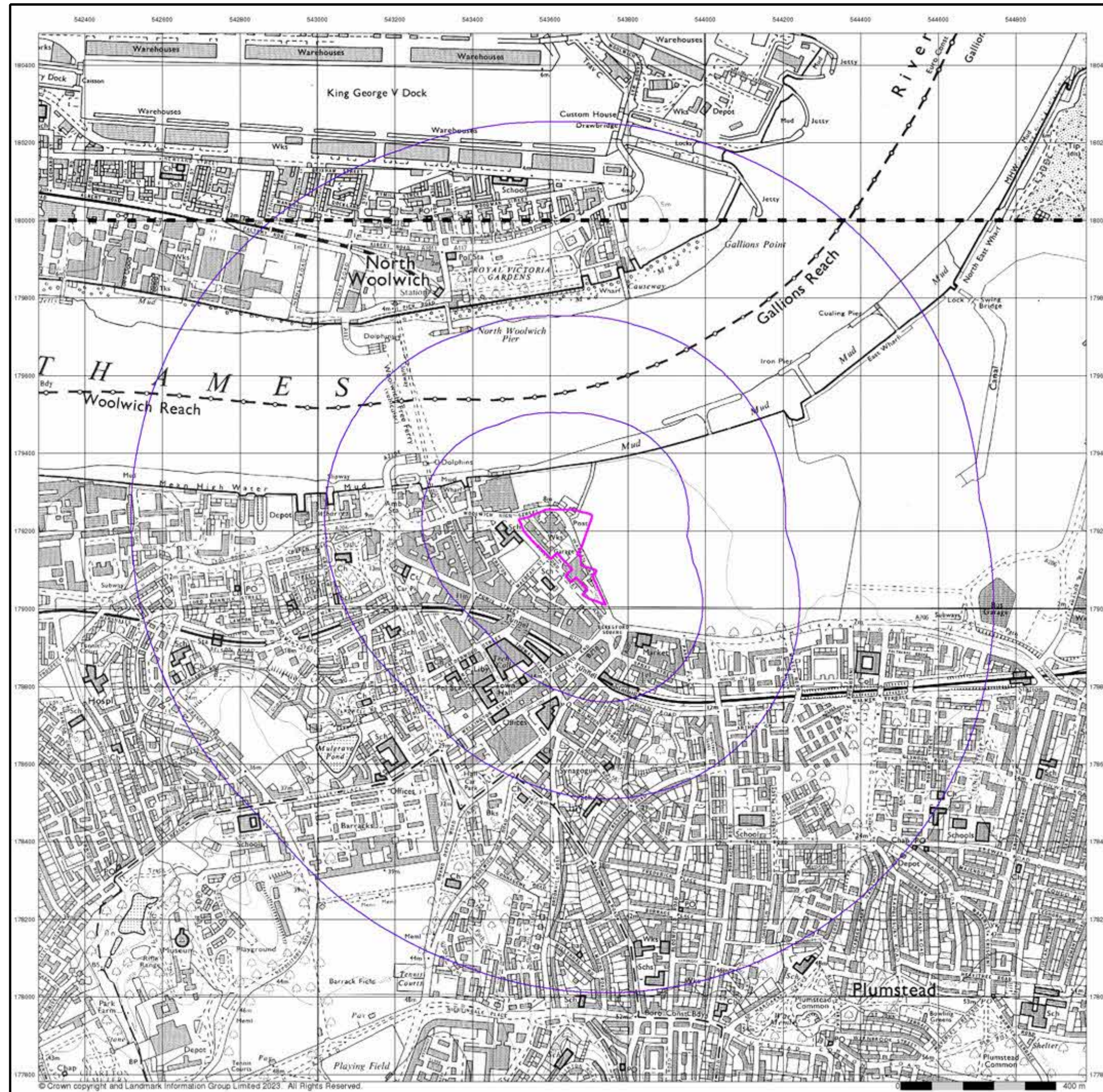
### Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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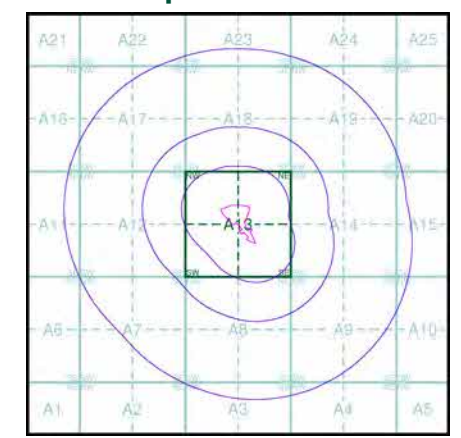
**Ordnance Survey Plan**  
**Published 1982 - 1984**  
**Source map scale - 1:10,000**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**

TQ48SW	1984	1:10,000
TQ47NW	1982	1:10,000

**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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**Site Details**

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Tel: 0844 844 9952  
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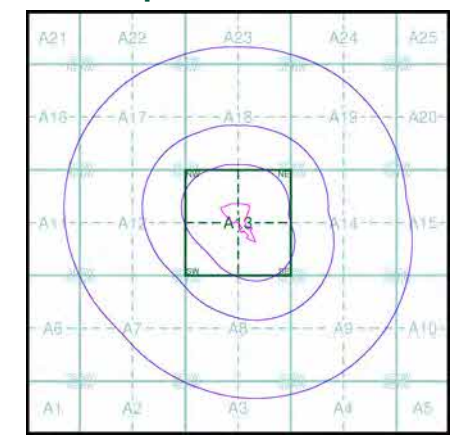
**London**  
**Published 1985**  
**Source map scale - 1:25,000**

These maps were produced by the Russian military during the Cold War between 1950 and 1997, and cover 103 towns and cities throughout the U.K. The maps are produced at 1:25,000, 1:10,000 and 1:5,000 scale, and show detailed land use, with colour-coded areas for development, green areas, and non-developed areas. Buildings are coloured black and important building uses (such as hospitals, post offices, factories etc.) are numbered, with a numbered key describing their use. They were produced by the Russians for the benefit of navigation, as well as strategic military sites and transport hubs, for use if they were to have invaded the U.K. The detailed information provided indicates that the areas were surveyed using land-based personnel, on the ground, in the cities that are mapped.

**Map Name(s) and Date(s)**

TQ48	1985	1:25,000
TQ47	1985	1:25,000

**Russian Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

**Site Details**

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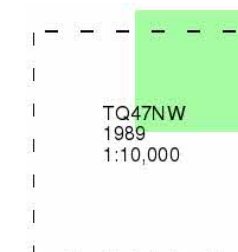
## Ordnance Survey Plan

Published 1989

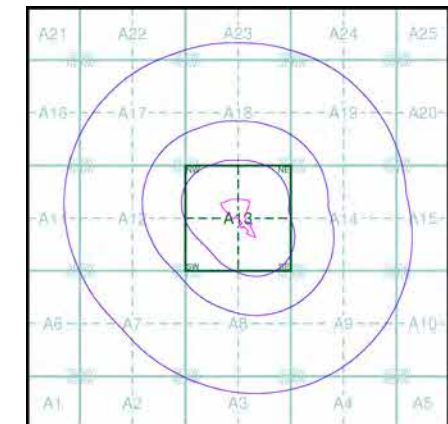
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### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 1000

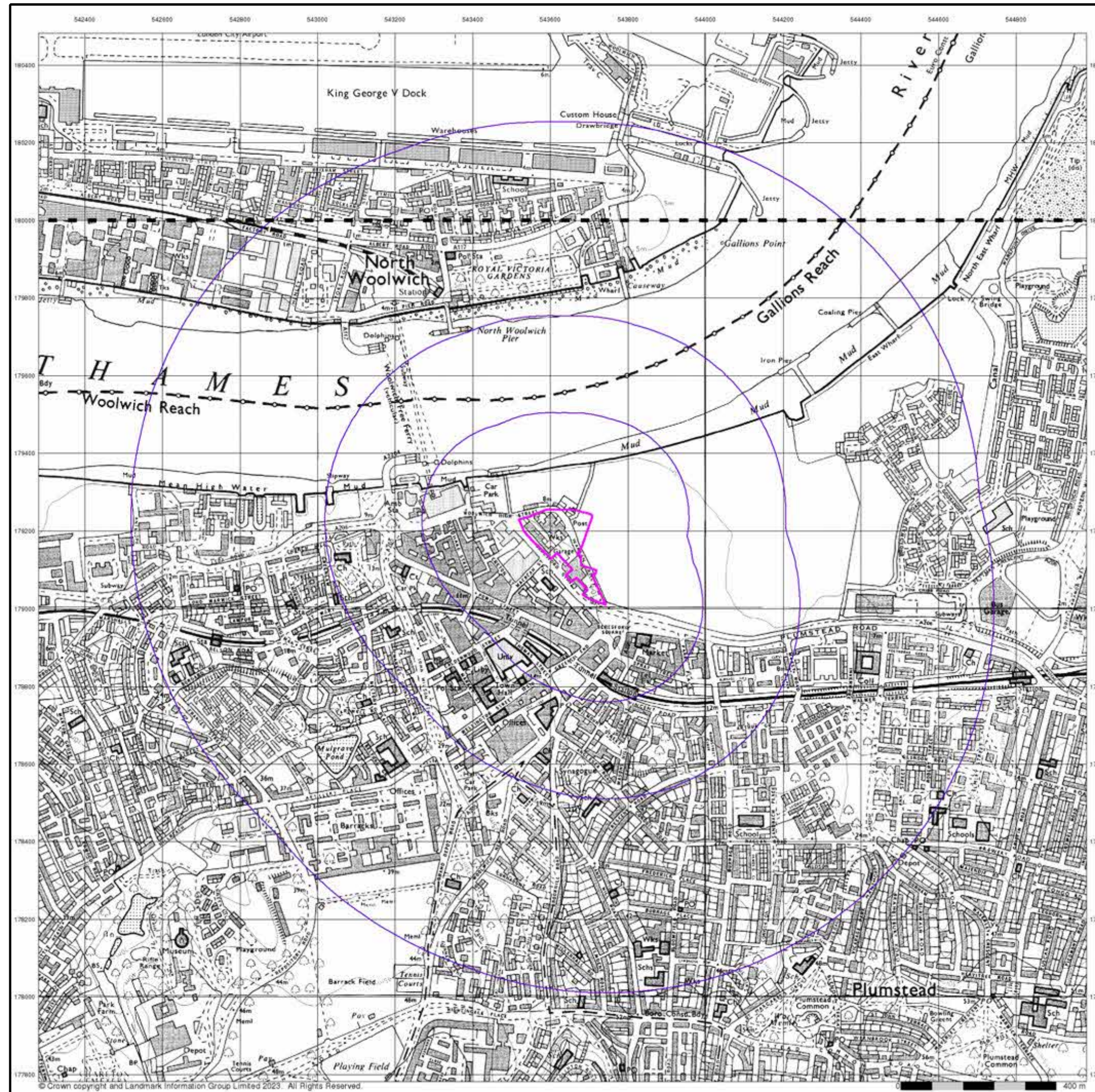
### Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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





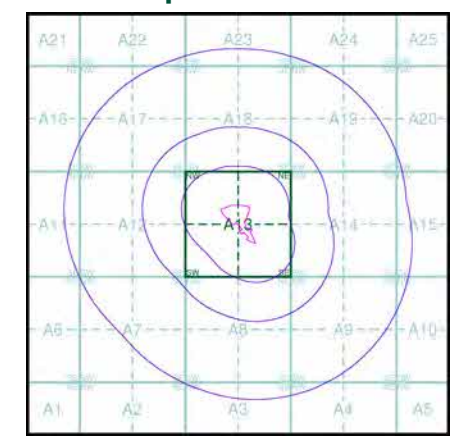
**Ordnance Survey Plan**  
**Published 1991 - 1996**  
**Source map scale - 1:10,000**

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

**Map Name(s) and Date(s)**

TQ48SW	1991	1:10,000
TQ47NW	1996	1:10,000

**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
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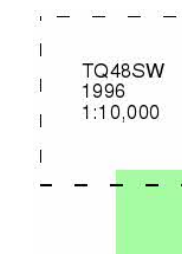
### Ordnance Survey Plan

Published 1996

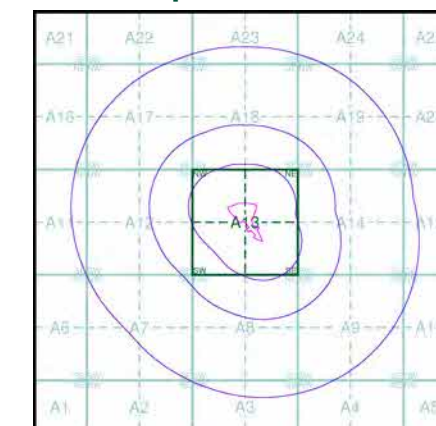
Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

### Map Name(s) and Date(s)



### Historical Map - Slice A



### Order Details

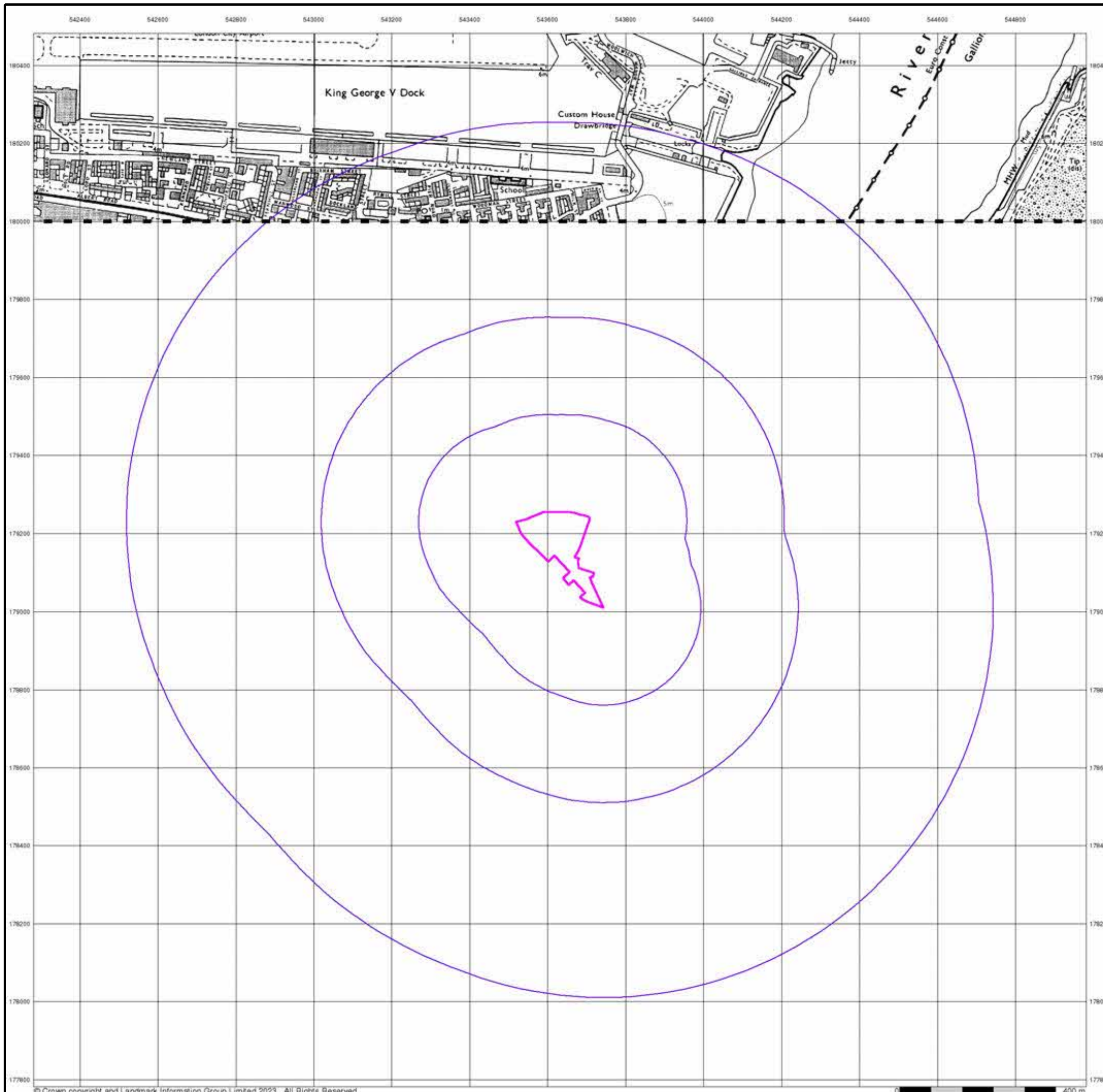
Order Number: 322278804\_1\_1  
Customer Ref: 2208001.001  
National Grid Reference: 543650, 179150  
Slice: A  
Site Area (Ha): 2.18  
Search Buffer (m): 1000

### Site Details

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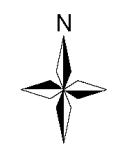
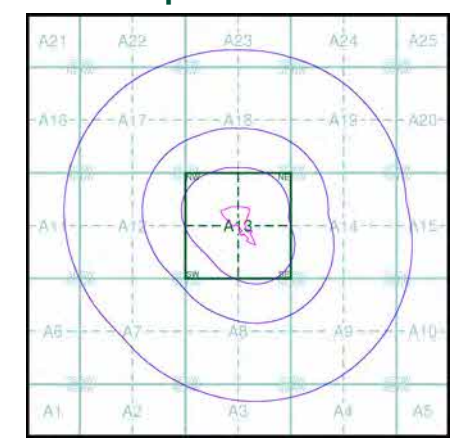
**10k Raster Mapping**  
**Published 1999**  
**Source map scale - 1:10,000**

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

**Map Name(s) and Date(s)**

TQ48SW	1999	1:10,000
TQ47NW	1999	1:10,000

**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

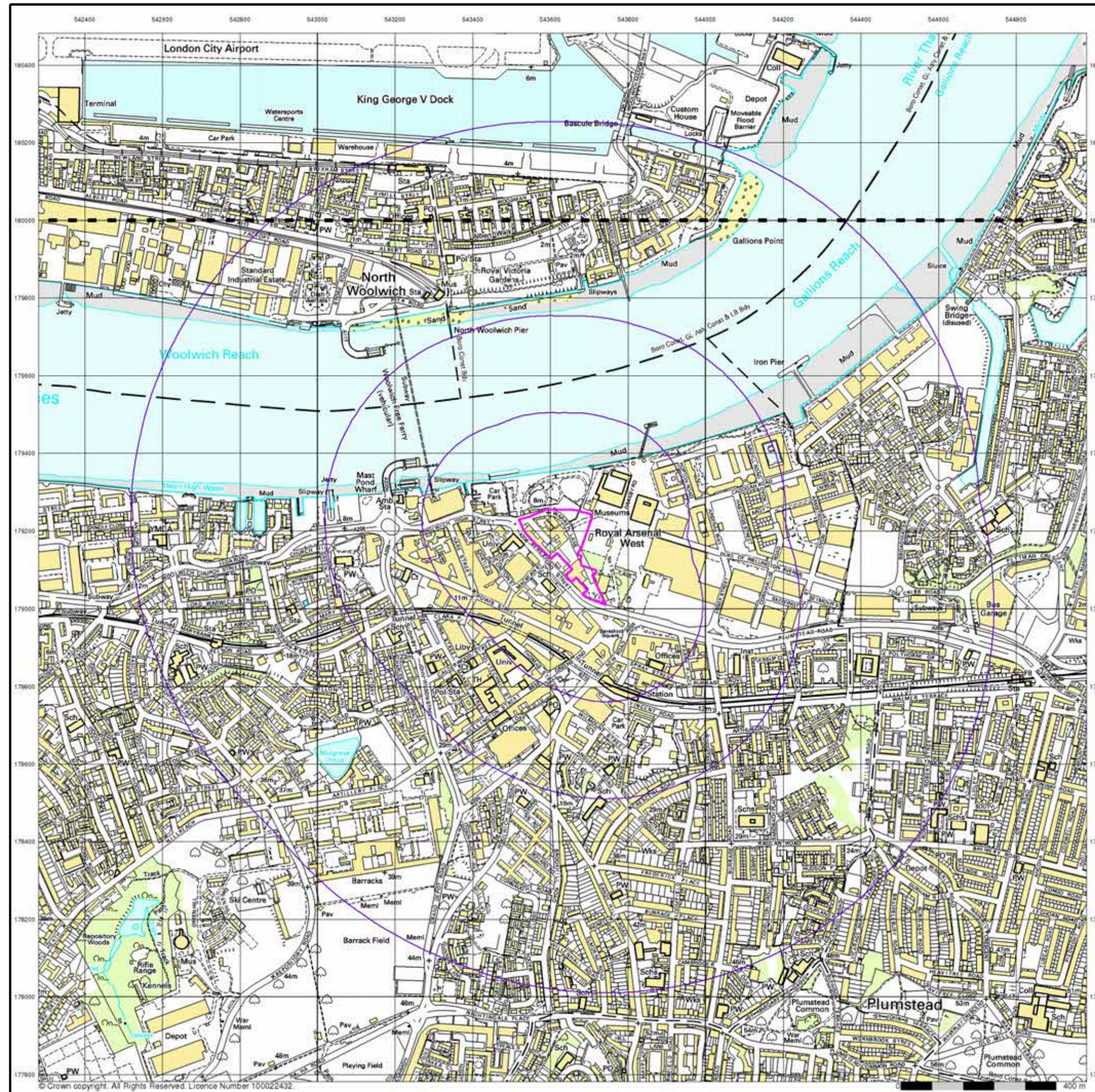
**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



Tel: 0844 844 9952  
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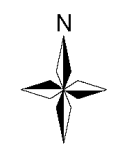
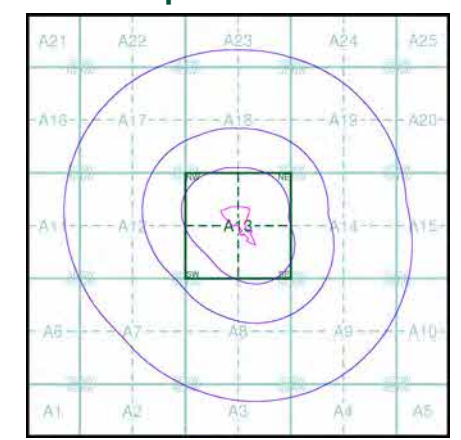
**10k Raster Mapping**  
**Published 2006**  
**Source map scale - 1:10,000**

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

**Map Name(s) and Date(s)**

TQ48SW	2006	1:10,000
TQ47NW	2006	1:10,000

**Historical Map - Slice A**



**Order Details**

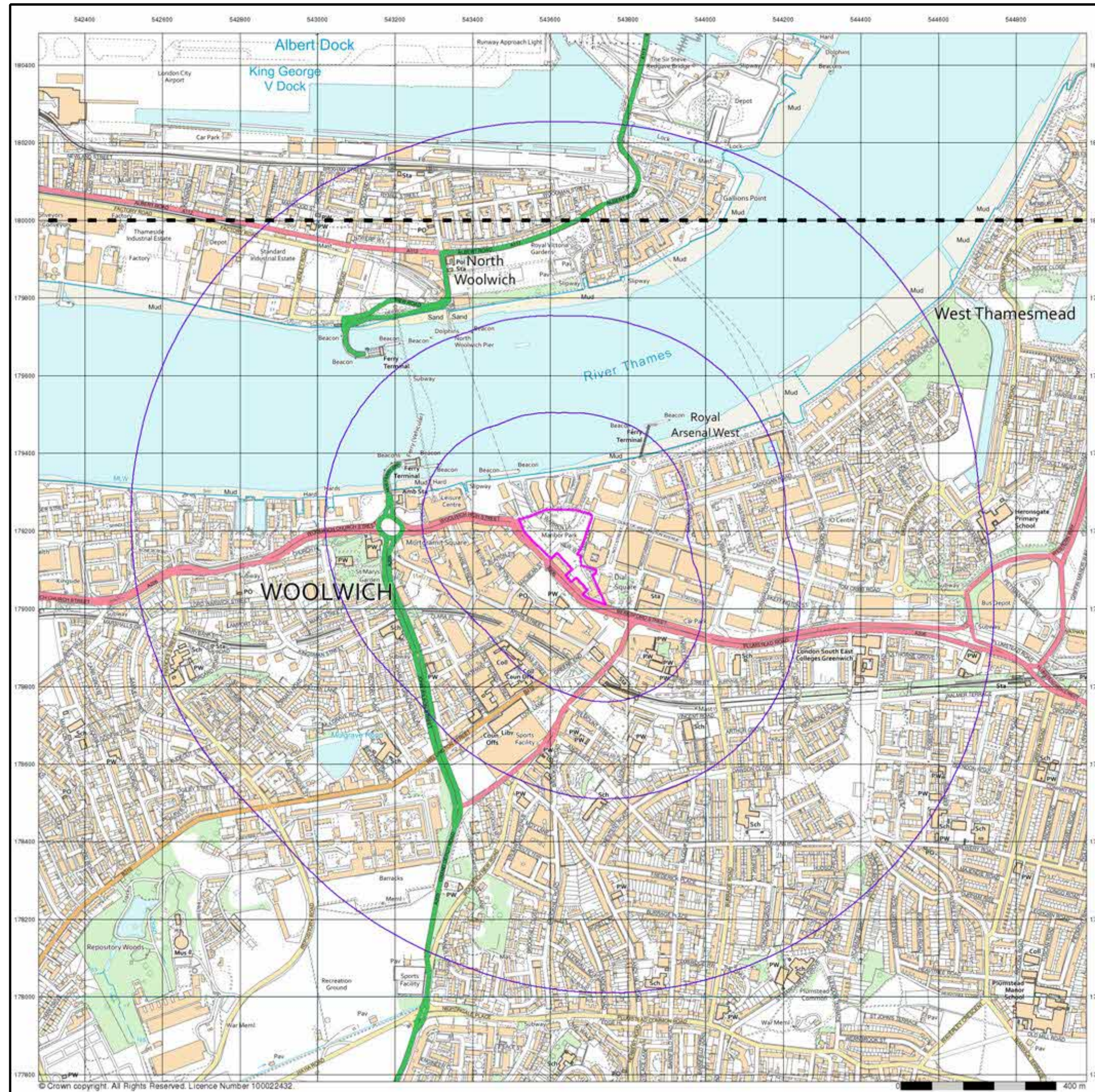
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

**Site Details**

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



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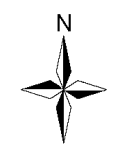
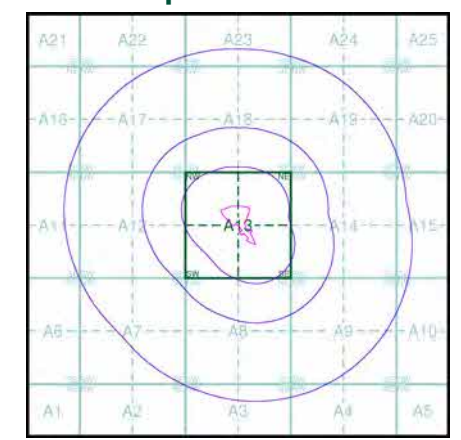
**VectorMap Local**  
**Published 2023**  
**Source map scale - 1:10,000**

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

**Map Name(s) and Date(s)**

- TQ48SW | 2023 | Variable
- TQ47NW | 2023 | Variable

**Historical Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

**Site Details**

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 Web: www.envirocheck.co.uk

Appendix C  
Envirocheck®



# Envirocheck<sup>®</sup> Report:

## Datasheet

### Order Details:

**Order Number:**

322278804\_1\_1

**Customer Reference:**

2208001.001

**National Grid Reference:**

543650, 179150

**Slice:**

A

**Site Area (Ha):**

2.18

**Search Buffer (m):**

1000

### Site Details:

Land at Maribor Park

New Warren Lane

LONDON

SE18 6NF

### Client Details:

Mr T .

Tweedie Evans Consulting Ltd

The Old Chapel

35a Southover

Wells

Somerset

BA5 1UH



Report Section	Page Number
Summary	-
Agency & Hydrological	1
Waste	15
Hazardous Substances	-
Geological	18
Industrial Land Use	24
Sensitive Land Use	-
Data Currency	55
Data Suppliers	63
Useful Contacts	64

## Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client. In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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## Report Version v53.0



## Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Agency &amp; Hydrological</b>					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 2		1		17
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 6		1	2	6
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 7		Yes		
Pollution Incidents to Controlled Waters	pg 7			4	5
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances	pg 9			3	2
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 10				1
Water Abstractions	pg 10			1	1 (*8)
Water Industry Act Referrals	pg 12			1	
Groundwater Vulnerability Map	pg 12	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk	pg 13	1	n/a	n/a	n/a
Groundwater Vulnerability - Local Information		1	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Superficial Aquifer Designations	pg 13	Yes	n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences	pg 13		Yes	n/a	n/a
Flooding from Rivers or Sea without Defences	pg 13		Yes	n/a	n/a
Areas Benefiting from Flood Defences	pg 13		Yes	n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences	pg 13		Yes	n/a	n/a
OS Water Network Lines	pg 13			1	5



## Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Waste</b>					
BGS Recorded Landfill Sites					
Historical Landfill Sites					
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 15		1		3
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites					
Potentially Infilled Land (Non-Water)	pg 15				2
Potentially Infilled Land (Water)	pg 16				4
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 16		2		
Registered Waste Treatment or Disposal Sites					
<b>Hazardous Substances</b>					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					



## Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Geological</b>					
BGS 1:625,000 Solid Geology	pg 18	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 18				Yes
BGS Recorded Mineral Sites	pg 18				1
BGS Urban Soil Chemistry	pg 18		Yes	Yes	Yes
BGS Urban Soil Chemistry Averages	pg 22	Yes			
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities	pg 22				1
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 22	Yes	Yes	n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 22	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 22	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 23		Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 23	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 23	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 23	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
<b>Industrial Land Use</b>					
Contemporary Trade Directory Entries	pg 24	3	42	60	107
Fuel Station Entries	pg 42		1		2
Points of Interest - Commercial Services	pg 42		13	15	29
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 47	6	1	3	15
Points of Interest - Public Infrastructure	pg 49		4	6	12
Points of Interest - Recreational and Environmental	pg 51		3	2	36
Gas Pipelines					
Underground Electrical Cables					





## Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
<b>Sensitive Land Use</b>					
Ancient Woodland					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (SW)	0	1	543651 179146
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (W)	0	1	543650 179146
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	7	1	543750 179150
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	29	1	543500 179250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	47	1	543600 179300
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (N)	75	1	543651 179350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	145	1	543800 179350
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	171	1	543350 179250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	221	1	543300 179250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	252	1	543900 179400
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NE (SE)	282	1	543850 178750
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SW (NW)	364	1	543450 179600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	370	1	543150 179250
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NE (S)	413	1	543651 178600
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SW (SE)	415	1	544100 178800
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	456	1	543150 178950
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	461	1	543700 178550
	<b>BGS Groundwater Flooding Susceptibility</b> Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A9NW (SE)	474	1	544050 178650



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	<p><b>Discharge Consents</b></p> <p>Operator: London Borough Of Greenwich  Property Type: SPORT, AMUSEMENT+RECREATION/GOLF CLUB/GYM/THEME PK/SPA  Location: Woolwich Leisure Centre &amp; Carpark, Woolwich, London  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Ctwc.1156  Permit Version: 1  Effective Date: 21st August 1986  Issued Date: 21st August 1986  Revocation Date: 4th October 1995  Discharge Type: Discharge Of Other Matter-Surface Water  Discharge: Saline Estuary  Environment:  Receiving Water: River Thames  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 100m</p>	A13NW (NW)	231	2	543300 179300
2	<p><b>Discharge Consents</b></p> <p>Operator: Waldair Court Management Company Limited  Property Type: CONSTRUCTION OF BUILDINGS  Location: Waldair Wharf, Bargehouse Road,London E15  Authority: Environment Agency, Thames Region  Catchment Area: Not Given  Reference: CTWC.1330  Permit Version: 1  Effective Date: 28th November 1986  Issued Date: 28th November 1986  Revocation Date: Not Supplied  Discharge Type: Discharge Of Other Matter-Surface Water  Discharge: Saline Estuary  Environment:  Receiving Water: River Thames Tidal  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 100m</p>	A18SE (N)	548	2	543700 179800
2	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: N Woolwich P.S., Albert Roadn Woolwich P.S.Albert Road  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.2366  Permit Version: 2  Effective Date: 3rd September 2010  Issued Date: 3rd September 2010  Revocation Date: Not Supplied  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Saline Estuary  Environment:  Receiving Water: Tidal Thames  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18SE (N)	551	2	543730 179800
2	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: N Woolwich P.S., Albert Roadn Woolwich P.S.Albert Road  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.2366  Permit Version: 1  Effective Date: 2nd November 1989  Issued Date: 2nd November 1989  Revocation Date: 2nd September 2010  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Saline Estuary  Environment:  Receiving Water: Tidal Thames  <b>Status: Temporary Consents (Water Act 1989, Section 113)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18SE (N)	551	2	543730 179800



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
2	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Limited.  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Albert Road Sewer, London  Authority: Environment Agency, Thames Region  Catchment Area: Not Given  Reference: CSAB.0523  Permit Version: 1  Effective Date: 5th October 1987  Issued Date: 5th October 1987  Revocation Date: 12th November 2021  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Saline Estuary  Environment:  Receiving Water: R.Thames ( Tidal )  <b>Status: Surrendered under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18SE (N)	551	2	543730 179800
2	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Woolwich Manorway  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.3043  Permit Version: 2  Effective Date: 3rd September 2010  Issued Date: 3rd September 2010  Revocation Date: 12th November 2021  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Woolwich Reach  <b>Status: Revoked under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18NE (N)	580	2	543720 179830
2	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Woolwich Manorway  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.3043  Permit Version: 1  Effective Date: 2nd November 1989  Issued Date: 2nd November 1989  Revocation Date: 2nd September 2010  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Woolwich Reach  <b>Status: Temporary Consents (Water Act 1989, Section 113)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A18NE (N)	580	2	543720 179830
3	<p><b>Discharge Consents</b></p> <p>Operator: Amec Plc  Property Type: CONSTRUCTION OF BUILDINGS  Location: Marlborough Road Off Armstrong Road Woolwich London Se18 6re  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Casm.1486  Permit Version: 2  Effective Date: 28th February 2008  Issued Date: 28th February 2008  Revocation Date: 1st October 2008  Discharge Type: Trade Effluent Discharge-Site Drainage  Discharge: Saline Estuary  Environment:  Receiving Water: The Thames Estuary  <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	563	2	544210 179490



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
3	<p><b>Discharge Consents</b></p> <p>Operator: Amec Plc  Property Type: CONSTRUCTION OF BUILDINGS  Location: Marlborough Road Off Armstrong Road Woolwich London Se18 6re  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Casm.1486  Permit Version: 1  Effective Date: 10th August 2006  Issued Date: 19th September 2006  Revocation Date: 27th February 2008  Discharge Type: Trade Effluent Discharge-Site Drainage  Discharge: Saline Estuary  Environment:  Receiving Water: The Thames Estuary  <b>Status: New Consent (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A19SW (NE)	563	2	544210 179490
4	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Limited.  Property Type: PUMPING STATION ON SEWERAGE NETWORK (WATER COMPANY)  Location: North Woolwich Pumping Station Storm Overflow, London  Authority: Environment Agency, Thames Region  Catchment Area: Not Given  Reference: CSSC.9966  Permit Version: 1  Effective Date: 11th February 1988  Issued Date: 11th February 1988  Revocation Date: 12th November 2021  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Saline Estuary  Environment:  Receiving Water: Tidal River Thames  <b>Status: Surrendered under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A17SE (NW)	603	2	543200 179740
5	<p><b>Discharge Consents</b></p> <p>Operator: London Borough Of Greenwich  Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES)  Location: Magistrates Court Housing Site,Leda Road, London  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Cntw.0350  Permit Version: 1  Effective Date: 7th March 1990  Issued Date: 7th March 1990  Revocation Date: 18th August 1994  Discharge Type: Discharge Of Other Matter-Surface Water  Discharge: Saline Estuary  Environment:  Receiving Water: River Thames  <b>Status: Authorisation revoked</b>  Positional Accuracy: Located by supplier to within 10m</p>	A12NW (W)	674	2	542850 179300
6	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Henley Road Cso Albert Road London E16 2jb  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.2679  Permit Version: 2  Effective Date: 3rd September 2010  Issued Date: 3rd September 2010  Revocation Date: 22nd December 2020  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Woolwich Reach  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	776	2	542920 179720



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Henley Road Cso Albert Road London E16 2jb  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.2679  Permit Version: 1  Effective Date: 2nd November 1989  Issued Date: 2nd November 1989  Revocation Date: 2nd September 2010  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Woolwich Reach  <b>Status: Temporary Consents (Water Act 1989, Section 113)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	776	2	542920 179720
6	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Ltd  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Henley Road Cso Albert Road London E16 2jb  Authority: Environment Agency, Thames Region  Catchment Area: Not Supplied  Reference: Temp.2679  Permit Version: 3  Effective Date: 23rd December 2020  Issued Date: 23rd December 2020  Revocation Date: Not Supplied  Discharge Type: Public Sewage: Storm Sewage Overflow  Discharge: Freshwater Stream/River  Environment:  Receiving Water: Woolwich Reach  <b>Status: Varied under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	782	2	542920 179730
6	<p><b>Discharge Consents</b></p> <p>Operator: Thames Water Utilities Limited.  Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY)  Location: Albert Road Sewer, London  Authority: Environment Agency, Thames Region  Catchment Area: Not Given  Reference: CSAB.0529  Permit Version: 1  Effective Date: 5th October 1987  Issued Date: 5th October 1987  Revocation Date: 12th November 2021  Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company  Discharge: Saline Estuary  Environment:  Receiving Water: R.Thames ( Tidal )  <b>Status: Surrendered under EPR 2010</b>  Positional Accuracy: Located by supplier to within 10m</p>	A17SW (NW)	788	2	542920 179740
7	<p><b>Discharge Consents</b></p> <p>Operator: Amec Group Limited &amp; Amec Spie Rail (Uk) Limited  Property Type: MAKING OF OTHER TRANSPORT EQUIP/SHIPS/TRAINS/BIKES  Location: Docklands Light Railway Nwtc Jv Royal Docks Off Woolwich Manor Way North Woolwich London E16 2pb  Authority: Environment Agency, Thames Region  Catchment Area: Non-Tidal (River Roding)  Reference: Canm.1005  Permit Version: 1  Effective Date: 1st December 2005  Issued Date: 7th December 2005  Revocation Date: 11th October 2006  Discharge Type: Trade Discharges - Site Drainage (Contam Surface Water, Not Tips)  Discharge: Land/Soakaway  Environment:  Receiving Water: To Land Via Boreholes  <b>Status: Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A23SW (N)	898	2	543550 180150



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8	<p><b>Discharge Consents</b></p> <p>Operator: Amec Group Ltd &amp; Amec Spie Rail (Uk) Ltd  Property Type: LAND TRANSPORT + VIA PIPELINES/FREIGHT  Location: Royal Docks Off Woolwich Manor Way North Woolwich London E16 2pb  Authority: Environment Agency, Thames Region  Catchment Area: Non-Tidal (River Roding)  Reference: Canm.1032  Permit Version: 1  Effective Date: 13th January 2006  Issued Date: 17th January 2006  Revocation Date: 11th October 2006  Discharge Type: Trade Discharge - Process Water  Discharge: Land/Soakaway  Environment:  Receiving Water: Ground Waters Via Rech Bholes  <b>Status: Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 100m</p>	A23SW (N)	946	2	543600 180200
9	<p><b>Discharge Consents</b></p> <p>Operator: Amec Group Ltd &amp; Amec Spie Rail (Uk) Ltd  Property Type: LAND TRANSPORT + VIA PIPELINES/FREIGHT  Location: Docklands Light Railway Nwtc Jv Royal Docks Off Woolwich Manor Way North Woolwich London E16 2pb  Authority: Environment Agency, Thames Region  Catchment Area: Non-Tidal (River Roding)  Reference: Canm.1006  Permit Version: 1  Effective Date: 8th December 2005  Issued Date: 25th January 2006  Revocation Date: 11th October 2006  Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company  Discharge: Freshwater Stream/River  Environment:  Receiving Water: To River Thames  <b>Status: Revoked (Water Resources Act 1991, Section 88 &amp; Schedule 10 as amended by Environment Act 1995)</b>  Positional Accuracy: Located by supplier to within 10m</p>	A19NW (NE)	960	2	544117 180108
10	<p><b>Prosecutions Relating to Controlled Waters</b></p> <p>Location: Store Road Pumping Station, Store Road, LONDON, E16 2EH  Prosecution Text: EA Data 08/02/2000, Polluting the River Thames with undiluted sewage at North Woolwich due to an electrical failure in the pumping station causing the storm pump to come online.  Prosecution Act: WRA91 s85(3a)  Hearing Date: 3rd February 2000  Verdict: Guilty  Fine: 5000  Cost: 700  Positional Accuracy: Manually positioned to the address or location</p>	A17NE (NW)	776	2	543091 179875
11	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Shell Woolwich Petrol Filling Station  Location: 125-127 Woolwich High Street, Woolwich, London, SE18 6DN  Authority: London Borough of Greenwich, Environmental Health Department  Permit Reference: Lbg 227/A  Dated: 20th January 1999  Process Type: Local Authority Air Pollution Control  Description: PG1/14 Petrol filling station  <b>Status: Authorised</b>  Positional Accuracy: Automatically positioned to the address</p>	A12NE (W)	236	3	543291 179173
12	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Woolwich Express  Location: 59 Woolwich New Road, London, Se18 6ed  Authority: London Borough of Greenwich, Environmental Health Department  Permit Reference: 312  Dated: Not Supplied  Process Type: Local Authority Pollution Prevention and Control  Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>  Positional Accuracy: Manually positioned to the address or location</p>	A8NE (S)	288	3	543657 178736
13	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: T &amp; T Launderette And Dry Cleaners  Location: 9 Anglesea Road, Se18 6eg  Authority: London Borough of Greenwich, Environmental Health Department  Permit Reference: 331  Dated: Not Supplied  Process Type: Local Authority Pollution Prevention and Control  Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>  Positional Accuracy: Manually positioned to the address or location</p>	A8NE (S)	363	3	543646 178661



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: W J King (Garages) Ltd            Location: 40 Artillery Place, Woolwich, London, SE18 4AE            Authority: London Borough of Greenwich, Environmental Health Department            Permit Reference: 230            Dated: 20th January 1999            Process Type: Local Authority Air Pollution Control            Description: PG1/14 Petrol filling station  <b>Status: Authorised</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NE (SW)	739	3	543130 178548
14	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Wj King (Garages) Ltd            Location: 40 Artillery Place, Woolwich, LONDON, SE18 1SF            Authority: London Borough of Greenwich, Environmental Health Department            Permit Reference: 127            Dated: 23rd May 1996            Process Type: Local Authority Air Pollution Control            Description: PG6/34 Respraying of road vehicles  <b>Status: Authorised</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NE (SW)	739	3	543128 178549
15	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Tills Petrol Filling Station            Location: 79 Sandy Hill Road, Woolwich, LONDON, SE18 7BQ            Authority: London Borough of Greenwich, Environmental Health Department            Permit Reference: Lbg 228/A            Dated: 20th January 1999            Process Type: Local Authority Air Pollution Control            Description: PG1/14 Petrol filling station  <b>Status: Authorised</b>            Positional Accuracy: Automatically positioned to the address</p>	A8SE (S)	781	3	543778 178231
16	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: 2in1 Dry Cleaners            Location: 6 Pier Parade, London, E16 2ly            Authority: London Borough of Newham, Environmental Health Department            Permit Reference: LA-PPC 124/11            Dated: 1st April 2011            Process Type: Local Authority Pollution Prevention and Control            Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>            Positional Accuracy: Manually positioned to the address or location</p>	A17NE (NW)	850	4	543264 180039
17	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: King'S Troop Royal Horse Artillery            Location: Napier Lines, Artillery Road, Woolwich, Se18 4bb            Authority: London Borough of Greenwich, Environmental Health Department            Permit Reference: 154            Dated: Not Supplied            Process Type: Local Authority Pollution Prevention and Control            Description: Part B - General Waste Disposal Process (No Specific Reference)  <b>Status: Application Not Yet Authorised</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NW (SW)	918	3	542954 178475
18	<p><b>Local Authority Pollution Prevention and Controls</b></p> <p>Name: Unique Dry Cleaners            Location: 6 Frances Street, Woolwich, Se18 5ef            Authority: London Borough of Greenwich, Environmental Health Department            Permit Reference: 322            Dated: Not Supplied            Process Type: Local Authority Pollution Prevention and Control            Description: PG6/46 Dry cleaning  <b>Status: Permitted</b>            Positional Accuracy: Manually positioned to the address or location</p>	A7NW (SW)	942	3	542873 178525
	<b>Nearest Surface Water Feature</b>	A13NW (NW)	17	-	543550 179256
19	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Woolwich Reach            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: Not Supplied            Incident Reference: SE940006            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A19SW (NE)	393	2	544000 179500





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
20	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Woolwich Arsenal            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 29th October 1993            Incident Reference: SE930331            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A19SW (NE)	470	2	544100 179495
20	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Woolwich Arsenal            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 24th October 1993            Incident Reference: SE930323            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A19SW (NE)	473	2	544100 179500
20	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Woolwich Arsenal            Authority: Environment Agency, Thames Region            Pollutant: Miscellaneous - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 16th February 1994            Incident Reference: SE940043            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A19SW (NE)	474	2	544105 179495
21	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Woolwich Ferry            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 19th October 1994            Incident Reference: SE940347            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A12NE (W)	547	2	543000 179400
22	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Woolwich Ferry            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 20th May 1995            Incident Reference: SE950224            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A12SE (W)	567	2	543000 179000
23	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: SILVERTOWN            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Not Supplied            Incident Date: 13th May 1996            Incident Reference: SE960201            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A17SE (NW)	599	2	543150 179700



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
24	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: NORTH WOOLWICH            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 28th July 1995            Incident Reference: SE950326            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 2 - Significant Incident            Positional Accuracy: Located by supplier to within 100m</p>	A17SW (NW)	723	2	542900 179600
25	<p><b>Pollution Incidents to Controlled Waters</b></p> <p>Property Type: Not Given            Location: Thamesmead West            Authority: Environment Agency, Thames Region            Pollutant: Oils - Unknown            Note: Confirmed As A Pollution Incident            Incident Date: 12th October 1994            Incident Reference: SE940341            Catchment Area: Not Given            Receiving Water: Not Given            Cause of Incident: Not Given            Incident Severity: Category 3 - Minor Incident            Positional Accuracy: Located by supplier to within 100m</p>	A14NE (E)	908	2	544600 179400
26	<p><b>Registered Radioactive Substances</b></p> <p>Name: University Of Greenwich            Location: Woolwich Campus, Wellington Street, WOOLWICH, LONDON, SE18 6PF            Authority: Environment Agency, Thames Region            Permit Reference: Bw7929            Dated: 1st December 2003            Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)            Description: Minor variation to authorisation under RSA  <b>Status: Authorisation either revoked or cancelled</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (S)	272	2	543530 178812
26	<p><b>Registered Radioactive Substances</b></p> <p>Name: University Of Greenwich            Location: Woolwich Campus, Wellington Street, Woolwich, LONDON, SE18 6PF            Authority: Environment Agency, Thames Region            Permit Reference: AD6935            Dated: 31st March 1991            Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)            Description: Authorisation under RSA  <b>Status: Authorisation superseded by a substantial or non substantial variation</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (S)	272	2	543530 178812
26	<p><b>Registered Radioactive Substances</b></p> <p>Name: University Of Greenwich            Location: Woolwich Campus, Wellington Street, LONDON, Greater London, SE18 6PF            Authority: Environment Agency, Thames Region            Permit Reference: AP0739            Dated: 25th May 1995            Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)            Description: Substantial variation to authorisation under RSA  <b>Status: Authorisation superseded by a substantial or non substantial variation</b>            Positional Accuracy: Automatically positioned to the address</p>	A13SW (S)	273	2	543535 178807
27	<p><b>Registered Radioactive Substances</b></p> <p>Name: Le(A) Reme Units            Location: Woolwich Garrison, Repository Road, Woolwich, LONDON, Greater London, SE18 4QA            Authority: Environment Agency, Thames Region            Permit Reference: AB9836            Dated: 21st August 1992            Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)            Description: Authorisation under RSA  <b>Status: Authorisation either revoked or cancelled</b>            Positional Accuracy: Unknown</p>	A7SE (SW)	821	2	543138 178424



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	<p><b>Registered Radioactive Substances</b></p> <p>Name: Ministry Of Defence            Location: Royal Artillery Training Area, Woolwich Garrison, Woolwich, London, Se18 6xp            Authority: Environment Agency, Thames Region            Permit Reference: Bw8054            Dated: 1st December 2003            Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7)            Description: Minor variation to authorisation under RSA  <b>Status: Authorisation either revoked or cancelled</b>            Positional Accuracy: Manually positioned within the geographical locality</p>	A7NW (SW)	958	2	542884 178490
29	<p><b>Substantiated Pollution Incident Register</b></p> <p>Authority: Environment Agency - South East Region, Kent &amp; South London Area            Incident Date: 21st October 2007            Incident Reference: 539952            Water Impact: Category 2 - Significant Incident            Air Impact: Category 4 - No Impact            Land Impact: Category 4 - No Impact            Positional Accuracy: Located by supplier to within 10m            Pollutant: Pollutant Not Identified: Not Identified</p>	A12NW (W)	705	2	542815 179236
30	<p><b>Water Abstractions</b></p> <p>Operator: London Borough Of Greenwich            Licence Number: 28/39/44/0018            Permit Version: Not Supplied            Location: Woolwich Baths, Woolwich, LONDON, Se18            Authority: Environment Agency, Thames Region            Abstraction: Domestic Use Only            Abstraction Type: Not Supplied            Source: Groundwater            Daily Rate (m3): 614            Yearly Rate (m3): 31822            Details: Chalk (Undifferentiated)            Authorised Start: Not Supplied            Authorised End: Not Supplied            Permit Start Date: Not Supplied            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	A13SW (SW)	370	2	543400 178800
31	<p><b>Water Abstractions</b></p> <p>Operator: Amec Group Ltd            Licence Number: 28/39/45/0014            Permit Version: 1            Location: River Thames At East End Of King George V Dock, London E16            Authority: Environment Agency, Thames Region            Abstraction: Construction: General use relating to Secondary Category (Low Loss)            Abstraction Type: Water may be abstracted from a single point            Source: Tidal            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Adjacent To King George V Dock            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 25th November 2005            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 10m</p>	A23SW (N)	938	2	543540 180190
	<p><b>Water Abstractions</b></p> <p>Operator: T &amp; L Sugars Limited            Licence Number: 28/39/45/0006            Permit Version: 103            Location: River Thames At Thames Refinery, Silvertown, London E16            Authority: Environment Agency, Thames Region            Abstraction: Food And Drink: Non-Evaporative Cooling            Abstraction Type: Water may be abstracted from a single point            Source: Tidal            Daily Rate (m3): Not Supplied            Yearly Rate (m3): Not Supplied            Details: Thames Refinery, Silvertown, London E16            Authorised Start: 01 January            Authorised End: 31 December            Permit Start Date: 9th September 2010            Permit End Date: Not Supplied            Positional Accuracy: Located by supplier to within 100m</p>	A16SE (NW)	1347	2	542300 179800



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Tate &amp; Lyle Sugars  Licence Number: 28/39/45/0006  Permit Version: 102  Location: River Thames At Thames Refinery, Silvertown, London E16  Authority: Environment Agency, Thames Region  Abstraction: Food And Drink: Non-Evaporative Cooling  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Thames Refinery, Silvertown, London E16  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 2nd February 2010  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A16SE (NW)	1347	2	542300 179800
	<p><b>Water Abstractions</b></p> <p>Operator: Tate &amp; Lyle Sugars  Licence Number: 28/39/45/0006  Permit Version: 101  Location: River Thames At Thames Refinery, Silvertown, London E16  Authority: Environment Agency, Thames Region  Abstraction: Food And Drink: Non-Evaporative Cooling  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): 60916  Yearly Rate (m3): 16365600  Details: Thames Refinery, Silvertown, London E16  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 29th July 1999  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	A16SE (NW)	1347	2	542300 179800
	<p><b>Water Abstractions</b></p> <p>Operator: T &amp; L Sugars Limited  Licence Number: 28/39/45/0006  Permit Version: 104  Location: River Thames At Thames Refinery, Silvertown, London E16.  Authority: Environment Agency, Thames Region  Abstraction: Food And Drink: Non-Evaporative Cooling  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Thames Refinery, Silvertown, London E16  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 10th June 2016  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A16SW (W)	1456	2	542154 179733
	<p><b>Water Abstractions</b></p> <p>Operator: T &amp; L Sugars Limited  Licence Number: 28/39/45/0006  Permit Version: 103  Location: River Thames At Thames Refinery, Silvertown, London E16.  Authority: Environment Agency, Thames Region  Abstraction: Food And Drink: Non-Evaporative Cooling  Abstraction Type: Water may be abstracted from a single point  Source: Tidal  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Thames Refinery, Silvertown, London E16  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 9th September 2010  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A16SW (W)	1456	2	542154 179733



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>Water Abstractions</b></p> <p>Operator: Pressure Coolers Limited  Licence Number: Th/039/0044/022  Permit Version: 1  Location: 67-69 Nathan Way, London  Authority: Environment Agency, Thames Region  Abstraction: Food And Drink: Water Bottling  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: 67-69 Nathan Way, London  Authorised Start: 01 April  Authorised End: 31 March  Permit Start Date: 21st November 2019  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	A15NE (E)	1573	2	545310 179140
	<p><b>Water Abstractions</b></p> <p>Operator: European Colour (Pigments) Ltd  Licence Number: 28/39/44/0034  Permit Version: 101  Location: Nathan Way, West Thamesmead Business Park - Borehole 'A'  Authority: Environment Agency, Thames Region  Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss)  Abstraction Type: Water may be abstracted from a single point  Source: Groundwater  Daily Rate (m3): Not Supplied  Yearly Rate (m3): Not Supplied  Details: Nathan Way, West Thamesmead Business Park, London  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 12th December 2000  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 10m</p>	(E)	1857	2	545580 179280
	<p><b>Water Abstractions</b></p> <p>Operator: European Colour (Pigments) Ltd  Licence Number: 28/39/44/0034  Permit Version: 100  Location: Nathan Way, West Thamesmead Business Park - Borehole 'A'  Authority: Environment Agency, Thames Region  Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss)  Abstraction Type: Not Supplied  Source: Groundwater  Daily Rate (m3): 750  Yearly Rate (m3): 200000  Details: Nathan Way, West Thamesmead Business Park, London  Authorised Start: 01 January  Authorised End: 31 December  Permit Start Date: 9th March 1998  Permit End Date: Not Supplied  Positional Accuracy: Located by supplier to within 100m</p>	(E)	1857	2	545580 179280
32	<p><b>Water Industry Act Referrals</b></p> <p>Name: Thames Polytechnic  Location: THAMES POLYTECHNIC, WELLINGTON STREET, WELLINGTON STREET, WOOLWICH, LONDON, SE18 4BG  Authority: Environment Agency, Thames Region  Permit Reference: AF0512  Dated: 31st March 1992  Process Type: Permissions or amendments to discharge under the Water Industry Act 1991  Description: Processes which result in the discharge of Special Category effluents under The Trade Effluents (Prescribed Processes and Substances) Regulations  <b>Status: Application cancelled</b>  Positional Accuracy: Automatically positioned to the address</p>	A13SW (S)	265	2	543535 178817
	<p><b>Groundwater Vulnerability Map</b></p> <p>Combined Classification: Secondary Superficial Aquifer - High Vulnerability  Combined Vulnerability: High  Combined Aquifer: Productive Bedrock Aquifer, Productive Superficial Aquifer  Pollutant Speed: High  Bedrock Flow: Well Connected Fractures  Dilution: &lt;300 mm/year  Baseflow Index: &gt;70%  Superficial Patchiness: &gt;90%  Superficial Thickness: 3-10m  Superficial Recharge: No Data</p>	A13NE (SW)	0	5	543651 179146



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Groundwater Vulnerability - Soluble Rock Risk</b> Classification: Significant Risk - Problems Unlikely	A13NE (SW)	0	5	543651 179146
	<b>Bedrock Aquifer Designations</b> Aquifer Designation: Secondary Aquifer - A	A13NE (SW)	0	5	543651 179146
	<b>Superficial Aquifer Designations</b> Aquifer Designation: Secondary Aquifer - Undifferentiated	A13NE (SW)	0	5	543651 179146
	<b>Extreme Flooding from Rivers or Sea without Defences</b> Type: Extent of Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13NE (N)	47	2	543717 179314
	<b>Flooding from Rivers or Sea without Defences</b> Type: Extent of Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Models Boundary Accuracy: As Supplied	A13NE (N)	60	2	543717 179314
	<b>Areas Benefiting from Flood Defences</b> Type: Area Benefiting from Flood Defences Boundary Accuracy: As Supplied	A13NW (NW)	47	2	543483 179258
	<b>Areas Benefiting from Flood Defences</b> Type: Area Benefiting from Flood Defences Boundary Accuracy: As Supplied	A13NE (N)	76	2	543714 179318
	<b>Areas Benefiting from Flood Defences</b> Type: Area Benefiting from Flood Defences Boundary Accuracy: As Supplied	A13NW (NW)	156	2	543380 179298
	<b>Flood Water Storage Areas</b> None				
	<b>Flood Defences</b> Type: Flood Defences Reference: Not Supplied	A13NW (NW)	39	2	543530 179272
33	<b>OS Water Network Lines</b> Watercourse Form: Tidal river Watercourse Length: 4269.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Thames Catchment Name: Thames Primacy: 1	A18SW (N)	315	6	543604 179571
34	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 551.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A15NW (E)	971	6	544673 179335
35	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 320.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A23SE (N)	981	6	543906 180204
36	<b>OS Water Network Lines</b> Watercourse Form: Tidal river Watercourse Length: 392.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A24SW (N)	989	6	544054 180167



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
37	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 1197.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 1	A23SE (N)	995	6	543679 180247
38	<b>OS Water Network Lines</b> Watercourse Form: Lake Watercourse Length: 356.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Thames Primacy: 2	A23SE (N)	996	6	543731 180246



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
39	<b>Licensed Waste Management Facilities (Locations)</b> Licence Number: 83241 Location: 6-14 Beresford Street, Woolwich, London, SE18 6BE Operator Name: Greenwich London Borough Council Operator Location: Not Supplied Authority: Environment Agency - South East Region, Kent & South London Area Site Category: Household, Commercial And Industrial Transfer Stations <b>Licence Status: Surrendered</b> Issued: 16th April 1992 Last Modified: 4th September 1995 Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: 28th February 2009 IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SE (S)	25	2	543661 179027
40	<b>Licensed Waste Management Facilities (Locations)</b> Licence Number: 120031 Location: Unit 6, Standard Industrial Estate, London, E16 2EJ Operator Name: EUROPEAN METAL RECYCLING LIMITED Operator Location: Not Supplied Authority: Environment Agency - Thames Region, North East Area Site Category: Not Supplied <b>Licence Status: Issued</b> Issued: 14th February 2019 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	919	2	542879 179887
41	<b>Licensed Waste Management Facilities (Locations)</b> Licence Number: 103174 Location: Units 6 & 7 Standard Ind Est, Factory Road, Silvertown, London, E16 2EJ Operator Name: London City Metals Ltd Operator Location: Not Supplied Authority: Environment Agency - Thames Region, North East Area Site Category: Metal recycling site <b>Licence Status: Expired</b> Issued: 19th August 2011 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: 29th July 2017 Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	982	2	542801 179897
41	<b>Licensed Waste Management Facilities (Locations)</b> Licence Number: 400735 Location: Unit 6, Standard Industrial Estate, Factory Road, London, E16 2EJ Operator Name: London City Metals Limited Operator Location: Not Supplied Authority: Environment Agency - Thames Region, North East Area Site Category: Vehicle depollution facility <b>Licence Status: Revoked</b> Issued: 17th October 2013 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: 29th July 2017 Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A17NW (NW)	987	2	542809 179913
	<b>Local Authority Landfill Coverage</b> Name: London Borough of Greenwich - Has supplied landfill data		0	3	543651 179146
	<b>Local Authority Landfill Coverage</b> Name: London Borough of Newham - Has supplied landfill data		266	7	543566 179520
42	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1996	A9NW (SE)	586	-	544221 178672





Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
43	<b>Potentially Infilled Land (Non-Water)</b> Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1996	A9NE (SE)	902	-	544536 178582
44	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A18NE (N)	689	-	543783 179932
45	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1870	A7NE (SW)	702	-	543090 178646
46	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A18NE (N)	808	-	543955 180010
47	<b>Potentially Infilled Land (Water)</b> Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1882	A17NE (NW)	821	-	543257 180005
48	<b>Registered Waste Transfer Sites</b> Licence Holder: L.B. of Greenwich Licence Reference: DL125 Site Location: Market Traders Compound, 6-14 Beresford Street, WOOLWICH, London, SE18 Operator Location: 50 Woolwich New Road, GREENWICH, London, SE18 6HQ Authority: Environment Agency - Thames Region, South East Area Site Category: Transfer Max Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year) Waste Source: No known restriction on source of waste Restrictions: Licence Status: Operational as far as is known Dated: 16th April 1992 Preceded By: DL125 Licence: Superseded By: Not Given Licence: Positional Accuracy: Manually positioned to the address or location Boundary Quality: Not Supplied Authorised Waste: Calcium Carb/Sulphate(Gypsum)/Chloride Cardboard/Fibreboard Cement Cork,Ebonite,Kapok Decontam.Containers (< 50 L Cap.) Iron,Steel,Alum.Brass,Copper,Tin,Zinc Leather Lwra Cat. Bi Gen.Non-Putresc. Namely Lwra Cat. C 'Putresc' Namely Magnesium Carb. Max.Waste Permitted By Licence- Stated Paper (Incl. Oiled/Tarred) Plasterboard Plastics (Finished Prods/Manuf.Scrap) String,Rope,Fibre(Manmade/Natural) Wood (Incl. Saw/Sanderdust) Wood Prods (Incl.Chip/Fibreboard) Wool,Cotton,Linen,Hemp,Sisal,Hessian Prohibited Waste: Clinical - As In Coll/Disp.Reg's Of '88 Leather Proc'G Waste Metal Swarf,Dusts,Particulate Noxious, Poisoning, Polluting Sub'S P.F.A. & Vanadium Contam. Ash Sludges/Liquids Special Wastes Toxic Metal Slags	A13SE (S)	36	2	543655 179015



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
48	<p><b>Registered Waste Transfer Sites</b></p> <p>Licence Holder: L.B. of Greenwich            Licence Reference: DL125            Site Location: Market Traders Compound, 6-14 Beresford Street, WOOLWICH, London, SE18</p> <p>Operator Location: 50 Woolwich Nw Road, GREENWICH, London, SE18 6HQ            Authority: Environment Agency - Thames Region, South East Area            Site Category: Transfer            Max Input Rate: Very Small (Less than 10,000 tonnes per year)            Waste Source: No known restriction on source of waste</p> <p>Restrictions:            Licence Status: Record supersededSuperseded            Dated: 1st June 1983            Preceded By: Not Given            Licence:            Superseded By: DL125            Licence:            Positional Accuracy: Manually positioned to the address or location            Boundary Quality: Not Supplied            Authorised Waste: Commercial Waste From Street Market            Prohibited Waste: Clinical Wastes                                      Notifiable Wastes                                      Special Wastes</p>	A13SE (S)	36	2	543655 179015



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS 1:625,000 Solid Geology</b> Description: Thanet Sand Formation	A13NE (SW)	0	1	543651 179146
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: no data Chromium Concentration: 60 - 90 mg/kg Lead Concentration: no data Nickel Concentration: 15 - 30 mg/kg	A12NE (W)	533	1	543000 179345
	<b>BGS Estimated Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: no data Chromium Concentration: 60 - 90 mg/kg Lead Concentration: no data Nickel Concentration: 15 - 30 mg/kg	A19NW (N)	865	1	544000 180055
49	<b>BGS Recorded Mineral Sites</b> Site Name: Arthur Street Brick Field Location: Plumstead, Woolwich, London, Greater London Source: British Geological Survey, National Geoscience Information Service Reference: 130851 Type: Opencast Status: Ceased Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Palaeogene Geology: Lambeth Group Commodity: Common Clay and Shale Positional Accuracy: Located by supplier to within 10m	A9NW (SE)	647	1	544262 178625
	<b>BGS Measured Urban Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Grid: 543763, 179221 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 15.60 mg/kg Cadmium Measured Concentration: 0.60 mg/kg Chromium Measured Concentration: 59.60 mg/kg Lead Measured Concentration: 78.20 mg/kg Nickel Measured Concentration: 25.60 mg/kg	A13NE (NE)	58	1	543763 179221
	<b>BGS Measured Urban Soil Chemistry</b> Source: British Geological Survey, National Geoscience Information Service Grid: 543666, 178830 Soil Sample Type: Topsoil Sample Area: London Arsenic Measured Concentration: 28.50 mg/kg Cadmium Measured Concentration: 10.40 mg/kg Chromium Measured Concentration: 184.00 mg/kg Lead Measured Concentration: 510.60 mg/kg Nickel Measured Concentration: 66.10 mg/kg	A13SE (S)	196	1	543666 178830



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543249, 179224            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 13.10 mg/kg            Concentration:            Cadmium Measured 0.80 mg/kg            Concentration:            Chromium Measured 61.50 mg/kg            Concentration:            Lead Measured 204.00 mg/kg            Concentration:            Nickel Measured 17.90 mg/kg            Concentration:</p>	A12NE (W)	271	1	543249 179224
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543302, 178665            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 10.60 mg/kg            Concentration:            Cadmium Measured 0.90 mg/kg            Concentration:            Chromium Measured 60.70 mg/kg            Concentration:            Lead Measured 743.50 mg/kg            Concentration:            Nickel Measured 21.10 mg/kg            Concentration:</p>	A8NW (SW)	533	1	543302 178665
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 544287, 179160            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 11.40 mg/kg            Concentration:            Cadmium Measured 0.40 mg/kg            Concentration:            Chromium Measured 49.10 mg/kg            Concentration:            Lead Measured 144.00 mg/kg            Concentration:            Nickel Measured 17.20 mg/kg            Concentration:</p>	A14NW (E)	564	1	544287 179160
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 544219, 178652            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 20.40 mg/kg            Concentration:            Cadmium Measured 1.80 mg/kg            Concentration:            Chromium Measured 99.60 mg/kg            Concentration:            Lead Measured 249.20 mg/kg            Concentration:            Nickel Measured 31.30 mg/kg            Concentration:</p>	A9NW (SE)	596	1	544219 178652
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543417, 179877            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 27.70 mg/kg            Concentration:            Cadmium Measured 0.90 mg/kg            Concentration:            Chromium Measured 89.90 mg/kg            Concentration:            Lead Measured 358.20 mg/kg            Concentration:            Nickel Measured 48.90 mg/kg            Concentration:</p>	A18NW (N)	647	1	543417 179877



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543604, 179902            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 16.90 mg/kg            Concentration:            Cadmium Measured 0.40 mg/kg            Concentration:            Chromium Measured 73.00 mg/kg            Concentration:            Lead Measured 242.10 mg/kg            Concentration:            Nickel Measured 31.10 mg/kg            Concentration:</p>	A18NW (N)	648	1	543604 179902
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 542828, 179110            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 14.70 mg/kg            Concentration:            Cadmium Measured 0.70 mg/kg            Concentration:            Chromium Measured 60.20 mg/kg            Concentration:            Lead Measured 748.00 mg/kg            Concentration:            Nickel Measured 22.60 mg/kg            Concentration:</p>	A12SW (W)	702	1	542828 179110
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543780, 178211            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 4.20 mg/kg            Concentration:            Cadmium Measured 0.60 mg/kg            Concentration:            Chromium Measured 50.60 mg/kg            Concentration:            Lead Measured 3424.70 mg/kg            Concentration:            Nickel Measured 18.60 mg/kg            Concentration:</p>	A8SE (S)	801	1	543780 178211
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 544440, 179629            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 11.70 mg/kg            Concentration:            Cadmium Measured 0.70 mg/kg            Concentration:            Chromium Measured 66.70 mg/kg            Concentration:            Lead Measured 196.40 mg/kg            Concentration:            Nickel Measured 24.10 mg/kg            Concentration:</p>	A19SE (NE)	831	1	544440 179629
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543273, 178239            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 12.90 mg/kg            Concentration:            Cadmium Measured 0.60 mg/kg            Concentration:            Chromium Measured 52.60 mg/kg            Concentration:            Lead Measured 301.50 mg/kg            Concentration:            Nickel Measured 16.70 mg/kg            Concentration:</p>	A7SE (SW)	896	1	543273 178239



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543885, 180132            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 13.10 mg/kg            Concentration:            Cadmium Measured 0.30 mg/kg            Concentration:            Chromium Measured 72.30 mg/kg            Concentration:            Lead Measured 186.90 mg/kg            Concentration:            Nickel Measured 26.20 mg/kg            Concentration:</p>	A18NE (N)	906	1	543885 180132
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 543269, 180105            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 17.10 mg/kg            Concentration:            Cadmium Measured 0.50 mg/kg            Concentration:            Chromium Measured 74.50 mg/kg            Concentration:            Lead Measured 263.20 mg/kg            Concentration:            Nickel Measured 24.60 mg/kg            Concentration:</p>	A17NE (N)	910	1	543269 180105
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 544308, 178250            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 12.70 mg/kg            Concentration:            Cadmium Measured 0.70 mg/kg            Concentration:            Chromium Measured 50.30 mg/kg            Concentration:            Lead Measured 277.00 mg/kg            Concentration:            Nickel Measured 19.10 mg/kg            Concentration:</p>	A9SE (SE)	948	1	544308 178250
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 542727, 178659            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 10.90 mg/kg            Concentration:            Cadmium Measured 0.40 mg/kg            Concentration:            Chromium Measured 52.70 mg/kg            Concentration:            Lead Measured 262.80 mg/kg            Concentration:            Nickel Measured 18.90 mg/kg            Concentration:</p>	A7NW (SW)	969	1	542727 178659
	<p><b>BGS Measured Urban Soil Chemistry</b></p> <p>Source: British Geological Survey, National Geoscience Information Service            Grid: 544635, 178601            Soil Sample Type: Topsoil            Sample Area: London            Arsenic Measured 12.60 mg/kg            Concentration:            Cadmium Measured 2.00 mg/kg            Concentration:            Chromium Measured 47.10 mg/kg            Concentration:            Lead Measured 158.50 mg/kg            Concentration:            Nickel Measured 18.50 mg/kg            Concentration:</p>	A9NE (SE)	982	1	544635 178601



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>BGS Urban Soil Chemistry Averages</b> Source: British Geological Survey, National Geoscience Information Service Sample Area: London Count Id: 7209 Arsenic Minimum Concentration: 1.00 mg/kg Arsenic Average Concentration: 17.00 mg/kg Arsenic Maximum Concentration: 161.00 mg/kg Cadmium Minimum Concentration: 0.10 mg/kg Cadmium Average Concentration: 0.90 mg/kg Cadmium Maximum Concentration: 165.20 mg/kg Chromium Minimum Concentration: 13.00 mg/kg Chromium Average Concentration: 79.00 mg/kg Chromium Maximum Concentration: 2094.00 mg/kg Lead Minimum Concentration: 11.00 mg/kg Lead Average Concentration: 280.00 mg/kg Lead Maximum Concentration: 10000.00 mg/kg Nickel Minimum Concentration: 2.00 mg/kg Nickel Average Concentration: 28.00 mg/kg Nickel Maximum Concentration: 506.00 mg/kg	A13NE (SW)	0	1	543651 179146
	<b>Coal Mining Affected Areas</b> In an area that might not be affected by coal mining				
	<b>Man-Made Mining Cavities</b> Easting: 544200 Northing: 178600 Distance: 614 Quadrant Reference: A9 Quadrant Reference: NW Bearing Ref: SE Cavity Type: Historical Brick Works-Potential Chalk Mining Commodity: Chalk Solid Geology Detail: Lambeth Group, Thanet Sand Formation, Upper Chalk Formation Superficial Geology: Worked Ground Detail:	A9NW (SE)	614	8	544200 178600
	<b>Non Coal Mining Areas of Great Britain</b> Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Non Coal Mining Areas of Great Britain</b> Risk: Rare Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	52	1	543743 179278
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Potential for Collapsible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	52	1	543743 179278
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (E)	0	1	543688 179160
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	110	1	543623 179368
	<b>Potential for Compressible Ground Stability Hazards</b> Hazard Potential: High Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	136	1	543591 179393



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Potential for Ground Dissolution Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (NW)	153	1	543505 179386
	<b>Potential for Landslide Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	110	1	543623 179368
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NW (N)	136	1	543591 179393
	<b>Potential for Running Sand Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	165	1	543510 178941
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	52	1	543743 179278
	<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	165	1	543510 178941
	<b>Radon Potential - Radon Affected Areas</b> Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146
	<b>Radon Potential - Radon Protection Measures</b> Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (SW)	0	1	543651 179146





## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	<b>Contemporary Trade Directory Entries</b> Name: Molyneux Press Ltd Location: 10-12, Warren Lane, London, SE18 6BS Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	0	-	543611 179226
50	<b>Contemporary Trade Directory Entries</b> Name: Business Innovation Centre Ltd Location: 16, Warren Lane, London, SE18 6BW Classification: Precision Engineers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	0	-	543626 179203
51	<b>Contemporary Trade Directory Entries</b> Name: Kingsfisher Accident Repairs Location: Rope Yard Rails, LONDON, SE18 6BN Classification: Car Body Repairs <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (NW)	0	-	543631 179177
52	<b>Contemporary Trade Directory Entries</b> Name: Site Assistant Services Location: Royal Sovereign House, 40, Beresford Street, London, SE18 6BF Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (W)	32	-	543555 179128
53	<b>Contemporary Trade Directory Entries</b> Name: Rolenco Ltd Location: Riverside House, Woolwich High Street, London, SE18 6DN Classification: Freight Forwarders <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A13NW (W)	54	-	543475 179195
54	<b>Contemporary Trade Directory Entries</b> Name: White Knights Laundry Services Ltd Location: 38, MacBean Street, London, SE18 6LW Classification: Laundries & Launderettes <b>Status: Inactive</b> Positional Accuracy: Automatically positioned in the proximity of the address	A13SW (SW)	84	-	543546 179066
55	<b>Contemporary Trade Directory Entries</b> Name: Namaste A 2 Z Location: 2, CADET HOUSE, 2, VICTORY PARADE, PLUMSTEAD ROAD, LONDON, SE18 6FL Classification: Cargo Handling Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	89	-	543832 179009
56	<b>Contemporary Trade Directory Entries</b> Name: The Perfume Shop Woolwich Superdrug Location: 14-20, POWIS STREET, WOOLWICH, SE18 6LF Classification: Perfume Suppliers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13SE (S)	92	-	543662 178943
56	<b>Contemporary Trade Directory Entries</b> Name: Snappy Snaps Location: 2, Powis Street, London, SE18 6LF Classification: Photographic Processors <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (S)	94	-	543704 178925
56	<b>Contemporary Trade Directory Entries</b> Name: Www.Requestacleaner.Com Location: 14-16, Powis Street, London, SE18 6LF Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (S)	99	-	543661 178936
56	<b>Contemporary Trade Directory Entries</b> Name: Fads Location: 22-24, Green's End, London, SE18 6JY Classification: Wallpapers & Wall Coverings <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (S)	140	-	543701 178877



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
57	<b>Contemporary Trade Directory Entries</b> Name: S W S Location: 11, Beresford Square, London, SE18 6BA Classification: Domestic Appliances - Servicing, Repairs & Parts Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (S)	108	-	543742 178903
57	<b>Contemporary Trade Directory Entries</b> Name: Shaw Clean Ltd Location: 14, Beresford Square, London, SE18 6BA Classification: Dry Cleaners Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (S)	122	-	543752 178889
58	<b>Contemporary Trade Directory Entries</b> Name: Reval Ward Ltd Location: 3, Plumstead Road, London, SE18 7BZ Classification: Electrical Goods Sales, Manufacturers & Wholesalers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	109	-	543814 178928
58	<b>Contemporary Trade Directory Entries</b> Name: Femsilva Oil & Gas Ltd Location: 1c, Woolwich New Road, London, SE18 6EX Classification: Oil Companies Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	124	-	543812 178907
58	<b>Contemporary Trade Directory Entries</b> Name: I Q Square Services Ltd Location: 1 Woolwich New Road, London, SE18 6EX Classification: Freight Forwarders Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	124	-	543810 178906
58	<b>Contemporary Trade Directory Entries</b> Name: D O S Cleaners & Porters Location: 1C, WOOLWICH NEW ROAD, LONDON, SE18 6EX Classification: Cleaning Services - Domestic Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	125	-	543812 178907
58	<b>Contemporary Trade Directory Entries</b> Name: Sanco Group Location: 5, Woolwich New Road, London, SE18 6EX Classification: Commercial Cleaning Services Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	134	-	543803 178891
59	<b>Contemporary Trade Directory Entries</b> Name: Currys Digital Location: 60, Powis Street, London, SE18 6LQ Classification: Electrical Goods Sales, Manufacturers & Wholesalers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (SW)	123	-	543563 178986
60	<b>Contemporary Trade Directory Entries</b> Name: Plumstead Rubbish Clearance Location: 111, Woolwich High Street, London, SE18 6DN Classification: Rubbish Clearance Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A13NW (W)	142	-	543378 179218
60	<b>Contemporary Trade Directory Entries</b> Name: Green Wellness Location: 112, Woolwich High Street, London, SE18 6DN Classification: Medical & Dental Laboratories Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (W)	145	-	543375 179218
60	<b>Contemporary Trade Directory Entries</b> Name: George Autos Location: 1 Woolwich High St, London, SE18 6DS Classification: Garage Services Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A13NW (W)	164	-	543356 179226
61	<b>Contemporary Trade Directory Entries</b> Name: Electromode Location: 36-42, Hare Street, London, SE18 6LZ Classification: Domestic Appliances - Servicing, Repairs & Parts Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (W)	155	-	543385 179148



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
62	<b>Contemporary Trade Directory Entries</b> Name: Homey & Lewis Forwarding Location: 9, Plumstead Road, London, SE18 7BZ Classification: Freight Forwarders <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A13SE (SE)	189	-	543908 178919
63	<b>Contemporary Trade Directory Entries</b> Name: Brighthouse Location: 105, Powis Street, London, SE18 6JB Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (SW)	216	-	543423 178999
64	<b>Contemporary Trade Directory Entries</b> Name: Spray Street Autos Location: 31a Spray Street, Greenwich, London, SE18 6AP Classification: Garage Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	218	-	543905 178865
64	<b>Contemporary Trade Directory Entries</b> Name: London Jag Centre Location: 31, Spray Street, London, SE18 6AP Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	218	-	543905 178866
64	<b>Contemporary Trade Directory Entries</b> Name: Paul Smee B M W Specialist Location: 31a Spray Street, Greenwich, London, SE18 6AP Classification: Garage Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	218	-	543905 178865
64	<b>Contemporary Trade Directory Entries</b> Name: Spray Street Autos Location: 31, Spray Street, London, SE18 6AP Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	218	-	543905 178866
64	<b>Contemporary Trade Directory Entries</b> Name: A1 Montys Bodyworks Location: 31, Spray Street, London, SE18 6AP Classification: Car Body Repairs <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	218	-	543905 178866
64	<b>Contemporary Trade Directory Entries</b> Name: Todd Meat Trading Co Ltd Location: 39, Spray Street, London, SE18 6AP Classification: Meat - Wholesale <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	242	-	543916 178841
64	<b>Contemporary Trade Directory Entries</b> Name: Michael'S Meat Market Location: 39, Spray Street, London, SE18 6AP Classification: Meat - Wholesale <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	242	-	543916 178841
65	<b>Contemporary Trade Directory Entries</b> Name: Finesse Colour Ltd Location: 5, MORTGRAMIT SQUARE, LONDON, SE18 6DR Classification: Printers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A13NW (W)	218	-	543319 179144
65	<b>Contemporary Trade Directory Entries</b> Name: Crawford Car Sales Location: 125-129, Woolwich High Street, London, SE18 6DS Classification: Car Dealers - Used <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (W)	221	-	543304 179181
65	<b>Contemporary Trade Directory Entries</b> Name: Hyper Services Ltd Location: 125-127, Woolwich High Street, London, SE18 6DS Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13NW (W)	222	-	543304 179181



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
65	<b>Contemporary Trade Directory Entries</b> Name: Approved Cars Location: 125 Woolwich High Street, London, SE18 6DS Classification: Car Dealers <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A12NE (W)	235	-	543291 179173
65	<b>Contemporary Trade Directory Entries</b> Name: Shell (Uk) Ltd Location: 125-127, Woolwich High Street, London, SE18 6DS Classification: Petrol Filling Stations - 24 Hour <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	236	-	543291 179173
65	<b>Contemporary Trade Directory Entries</b> Name: Morgan Richards Location: 125-127, Woolwich High Street, London, SE18 6DS Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	236	-	543291 179173
65	<b>Contemporary Trade Directory Entries</b> Name: Payne Autos Location: 125-129, Woolwich High Street, London, SE18 6DS Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	236	-	543291 179173
65	<b>Contemporary Trade Directory Entries</b> Name: A R Payne Autos Ltd Location: 125-129, WOOLWICH HIGH STREET, LONDON, SE18 6DS Classification: Car Body Repairs <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	237	-	543288 179178
65	<b>Contemporary Trade Directory Entries</b> Name: A.C.E Autogas Ltd Location: 160-170, Powis Street, London, SE18 6NL Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	256	-	543277 179147
66	<b>Contemporary Trade Directory Entries</b> Name: Tidy Cleaners Ltd Location: Flat 227, The Vista Building, 30, Calderwood Street, London, SE18 6JF Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (SW)	225	-	543463 178947
67	<b>Contemporary Trade Directory Entries</b> Name: Kall Kwik Location: 23, Thomas Street, London, SE18 6HU Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (S)	227	-	543538 178863
67	<b>Contemporary Trade Directory Entries</b> Name: Nationwide Cleaners East London Location: 18-36, Wellington Street, London, SE18 6PF Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (SW)	266	-	543493 178851
68	<b>Contemporary Trade Directory Entries</b> Name: Pest Control (Woolwich) Location: 529 Woolwich New Rd, London, SE18 6ED Classification: Pest & Vermin Control <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A8NE (S)	231	-	543680 178789
69	<b>Contemporary Trade Directory Entries</b> Name: Bluevision Services (Uk) Ltd Location: C, 1, Parry Place, London, SE18 6AN Classification: Freight Forwarders <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	238	-	543952 178896
69	<b>Contemporary Trade Directory Entries</b> Name: Varietes Domestic Service Location: 22, Plumstead Road, London, SE18 7BZ Classification: Domestic Appliances - Servicing, Repairs & Parts <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (SE)	250	-	543970 178905



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	<b>Contemporary Trade Directory Entries</b> Name: Widescope International Location: 22, Plumstead Road, London, SE18 7BZ Classification: Freight Forwarders <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (SE)	251	-	543970 178905
69	<b>Contemporary Trade Directory Entries</b> Name: Clemenchi Ltd Location: 22, Plumstead Road, LONDON, SE18 7BZ Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (SE)	251	-	543970 178905
69	<b>Contemporary Trade Directory Entries</b> Name: Compliance Impact Ltd Location: 22, Plumstead Road, LONDON, SE18 7BZ Classification: Hygiene & Cleansing Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (SE)	251	-	543970 178905
69	<b>Contemporary Trade Directory Entries</b> Name: Tompkins Service Location: 24, Plumstead Road, London, SE18 7BZ Classification: Washing Machines - Servicing & Repairs <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (SE)	269	-	543989 178902
69	<b>Contemporary Trade Directory Entries</b> Name: Cleaners Polthorne Estate Location: London, Se18 7hr Classification: Cleaning Services - Domestic <b>Status: Active</b> Positional Accuracy: Manually positioned within the geographical locality	A14SW (SE)	295	-	544021 178913
70	<b>Contemporary Trade Directory Entries</b> Name: Heaney Meat Ltd Location: 14, Parry Place, London, SE18 6AN Classification: Meat - Wholesale <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	252	-	543934 178846
70	<b>Contemporary Trade Directory Entries</b> Name: Heaney Meat Ltd Location: 14, Parry Place, London, SE18 6AN Classification: Meat - Wholesale <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	252	-	543934 178846
70	<b>Contemporary Trade Directory Entries</b> Name: B & J Services Location: 15, Parry Place, London, SE18 6AN Classification: Washing Machines - Servicing & Repairs <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SE (SE)	289	-	543968 178830
71	<b>Contemporary Trade Directory Entries</b> Name: Worldwide Link Uk Location: 1-3, Love Lane, London, SE18 6QT Classification: Freight Forwarders <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NW (S)	265	-	543607 178779
72	<b>Contemporary Trade Directory Entries</b> Name: Cheri'S Beauty Salon Location: 131, Woolwich High Street, London, SE18 6DS Classification: Electrolysis <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	266	-	543258 179182
73	<b>Contemporary Trade Directory Entries</b> Name: Cleaners Woolwich Location: 18-36, Wellington Street, London, SE18 6PF Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (S)	272	-	543530 178812
73	<b>Contemporary Trade Directory Entries</b> Name: Cleaners Woolwich Location: 18-36, Wellington Street, London, SE18 6PF Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (S)	272	-	543530 178812



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
73	<b>Contemporary Trade Directory Entries</b> Name: 786 Services Ltd Location: Suite 115 Block P, 18-36 Wellington Street, London, SE18 6PF Classification: Commercial Cleaning Services Status: <b>Active</b> Positional Accuracy: Manually positioned to the address or location	A13SW (S)	272	-	543530 178812
73	<b>Contemporary Trade Directory Entries</b> Name: Smart Chemical Co Ltd The Location: Woolwich Campus, Wellington Street, London, SE18 6PF Classification: Chemicals - Distributors & Wholesalers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (S)	272	-	543530 178812
74	<b>Contemporary Trade Directory Entries</b> Name: Cleaning Services Woolwich Location: London, Se18 6ed Classification: Cleaning Services - Domestic Status: <b>Active</b> Positional Accuracy: Manually positioned within the geographical locality	A8NE (S)	275	-	543643 178754
74	<b>Contemporary Trade Directory Entries</b> Name: Woolwich Express Dry Cleaners Location: 59, Woolwich New Road, London, SE18 6ED Classification: Dry Cleaners Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	288	-	543657 178736
74	<b>Contemporary Trade Directory Entries</b> Name: Cleaning Services Woolwich Location: 65, Woolwich New Road, London, SE18 6ED Classification: Cleaning Services - Domestic Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	300	-	543646 178727
75	<b>Contemporary Trade Directory Entries</b> Name: Furlongs Location: 160, Powis Street, London, SE18 6NL Classification: Garage Services Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	277	-	543264 179122
75	<b>Contemporary Trade Directory Entries</b> Name: A I S Services Ltd Location: 160-162, Powis Street, London, SE18 6NL Classification: Commercial Cleaning Services Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12SE (W)	277	-	543264 179122
75	<b>Contemporary Trade Directory Entries</b> Name: Ais Facilities Cleaning Service Ltd Location: 162 Powis St, London, SE18 6NL Classification: Commercial Cleaning Services Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12SE (W)	281	-	543262 179117
76	<b>Contemporary Trade Directory Entries</b> Name: Worldwide Link Ltd Location: 1-3, LOVE LANE, LONDON, SE18 6QT Classification: Airfreight Services Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A8NW (S)	279	-	543587 178772
76	<b>Contemporary Trade Directory Entries</b> Name: Vivid Perception Location: Island Business Centre 18-36, Wellington Street, London, SE18 6PF Classification: Freight Forwarders Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A13SW (S)	293	-	543517 178796
76	<b>Contemporary Trade Directory Entries</b> Name: Castlewoods Location: 5-6, Love Lane, London, SE18 6QT Classification: Garage Services Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NW (S)	313	-	543545 178755
76	<b>Contemporary Trade Directory Entries</b> Name: Tesco Petrol Station Location: Grand Depot Road, London, SE18 6HQ Classification: Petrol Filling Stations Status: <b>Active</b> Positional Accuracy: Manually positioned within the geographical locality	A8NW (S)	342	-	543505 178745



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	<b>Contemporary Trade Directory Entries</b> Name: Pison-Business Solutions Ltd Location: 20-22, Wilmount Street, London, SE18 6EN Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	325	-	543717 178686
77	<b>Contemporary Trade Directory Entries</b> Name: Femsilva Ltd Location: 20-22, Wilmount Street, London, SE18 6EN Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	325	-	543717 178686
78	<b>Contemporary Trade Directory Entries</b> Name: Cleaners Polthorne Estate Location: 26, London, SE18 7HR Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A14SW (SE)	325	-	544041 178882
79	<b>Contemporary Trade Directory Entries</b> Name: Orbit Vu Location: 11 Gunnery Terrace, 13 Cornwallis Road, Greenwich, London, SE18 6SW Classification: Photographic Equipment & Supplies - Manufacturers <b>Status: Active</b> Positional Accuracy: Manually positioned to the address or location	A14SW (E)	335	-	544071 179076
79	<b>Contemporary Trade Directory Entries</b> Name: F P Mailing (Premier) Ltd Location: 9-11 Gunnery Ter, Cornwallis Rd, London, SE18 6SW Classification: Mailing Machines & Equipment <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A14SW (E)	348	-	544086 179068
79	<b>Contemporary Trade Directory Entries</b> Name: Upscalecleaners Location: 9-11, Gunnery Terrace, Cornwallis Road, London, SE18 6SW Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	349	-	544087 179069
79	<b>Contemporary Trade Directory Entries</b> Name: Upscalecleaners Location: 9-11, Gunnery Terrace, Cornwallis Road, London, SE18 6SW Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	349	-	544087 179069
80	<b>Contemporary Trade Directory Entries</b> Name: Citipost Ltd Location: 16, Gunnery Terrace, Cornwallis Road, London, SE18 6SW Classification: Distribution Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	341	-	544083 178988
81	<b>Contemporary Trade Directory Entries</b> Name: Scrap Yard In London Htt Location: 12-14 Gunnery Terrace, London, se18 6sw Classification: Car Breakers & Dismantlers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	346	-	544088 179017
81	<b>Contemporary Trade Directory Entries</b> Name: Scorpion Press Location: 7, Gunnery Terrace, London, SE18 6SW Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	362	-	544100 179066
81	<b>Contemporary Trade Directory Entries</b> Name: Scorpion Press Ltd Location: 7, Gunnery Terrace, Cornwallis Road, London, SE18 6SW Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	362	-	544100 179066
81	<b>Contemporary Trade Directory Entries</b> Name: Lloyd Worrall Location: Suite G9b Gunnery Terrace, Cornwallis Road, London, SE18 6SW Classification: Hardware <b>Status: Active</b> Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	366	-	544107 179041



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
81	<b>Contemporary Trade Directory Entries</b> Name: Carlow Precast Location: Gunner House Gunner Terrace, Cornwallis Road, London, SE18 6SW Classification: Concrete Products <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	371	-	544110 179064
81	<b>Contemporary Trade Directory Entries</b> Name: Citipost (Europe) Ltd Location: Gunner Ter, Cornwallis Rd, London, SE18 6SW Classification: Distribution Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A14SW (E)	382	-	544124 179031
81	<b>Contemporary Trade Directory Entries</b> Name: Carlow Precasts Location: 1, Gunner Terrace, Cornwallis Road, London, SE18 6SW Classification: Concrete Products <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	400	-	544141 179052
82	<b>Contemporary Trade Directory Entries</b> Name: Ask Mobile Accessories Location: 89, Woolwich New Road, London, SE18 6ED Classification: Mobile Phone Accessories and Car Kits <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NW (S)	355	-	543621 178677
82	<b>Contemporary Trade Directory Entries</b> Name: T & T Launderette Location: 9, ANGLESEA ROAD, LONDON, SE18 6EG Classification: Dry Cleaners <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	363	-	543646 178661
82	<b>Contemporary Trade Directory Entries</b> Name: Big M Motor Spares Ltd Location: 93-95, Woolwich New Road, London, SE18 6EF Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NW (S)	390	-	543610 178644
83	<b>Contemporary Trade Directory Entries</b> Name: Plaistow Broadway Petrol Fitting Station Ltd Location: 37, Market Street, London, SE18 6QR Classification: Petrol Filling Stations <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A13SW (SW)	378	-	543350 178844
84	<b>Contemporary Trade Directory Entries</b> Name: Stephen James Mini Woolwich Location: UNIT 10, THE I O CENTRE, SKEFFINGTON STREET, LONDON, SE18 6SR Classification: Car Dealers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	453	-	544193 179060
84	<b>Contemporary Trade Directory Entries</b> Name: Stephen James Bmw Woolwich Location: UNIT 10, THE I O CENTRE, SKEFFINGTON STREET, LONDON, SE18 6SR Classification: Car Dealers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	453	-	544193 179060
84	<b>Contemporary Trade Directory Entries</b> Name: Blitz Sports Location: Unit 10, The I O Centre, Skeffington Street, London, SE18 6SR Classification: Leisure & Sportswear Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	453	-	544193 179060
84	<b>Contemporary Trade Directory Entries</b> Name: Stephen James Woolwich - Bmw Location: UNIT 10, THE I O CENTRE, SKEFFINGTON STREET, LONDON, SE18 6SR Classification: Car Dealers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	453	-	544193 179060
85	<b>Contemporary Trade Directory Entries</b> Name: Maksx Ltd Location: Apartment 155, Building 50, Argyll Road, London, SE18 6PL Classification: Road Haulage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (NE)	462	-	544141 179396





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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	<b>Contemporary Trade Directory Entries</b> Name: C D L London Ltd Location: Unit 22, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Distribution Services Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	475	-	544204 179123
87	<b>Contemporary Trade Directory Entries</b> Name: G English Electronics Ltd Location: UNIT 8, THE I O CENTRE, SKEFFINGTON STREET, LONDON, SE18 6SR Classification: Electrical Goods Sales, Manufacturers & Wholesalers Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	482	-	544224 178989
88	<b>Contemporary Trade Directory Entries</b> Name: Trident Printing Location: Unit 25, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	485	-	544192 179212
88	<b>Contemporary Trade Directory Entries</b> Name: Dartex Office Furniture Location: Unit 23, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Office Furniture & Equipment Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	489	-	544200 179186
88	<b>Contemporary Trade Directory Entries</b> Name: T P S Print Ltd Location: Unit 24 The I O Centre, Armstrong Road, Greenwich, London, SE18 6RS Classification: Printers Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	495	-	544202 179201
88	<b>Contemporary Trade Directory Entries</b> Name: Crowne Print Finishers Location: Unit 24 The I O Centre, Armstrong Road, Greenwich, London, SE18 6RS Classification: Print Finishers Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	495	-	544202 179201
88	<b>Contemporary Trade Directory Entries</b> Name: Trident Printing Location: 24-26 Armstrong Road, London, SE18 6RS Classification: Printers Status: <b>Inactive</b> Positional Accuracy: Manually positioned to the address or location	A14NW (E)	498	-	544205 179200
89	<b>Contemporary Trade Directory Entries</b> Name: D S K Electronics Location: 63, WALPOLE PLACE, WOOLWICH, SE18 6TR Classification: Electrical Goods Sales, Manufacturers & Wholesalers Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A8NE (S)	490	-	543655 178529
90	<b>Contemporary Trade Directory Entries</b> Name: T R L Print Location: UNIT 25, THE I O CENTRE, ARMSTRONG ROAD, WOOLWICH, SE18 6RS Classification: Printers Status: <b>Active</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	492	-	544198 179214
90	<b>Contemporary Trade Directory Entries</b> Name: T F W Printers Ltd Location: Unit 28-29, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	522	-	544228 179254
90	<b>Contemporary Trade Directory Entries</b> Name: P T D Ltd Location: UNIT 28-29, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: Printers Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	522	-	544228 179254
91	<b>Contemporary Trade Directory Entries</b> Name: Unique Cleaning Services Location: Flat 78, Canada Court, 109, Brookhill Road, London, SE18 6BJ Classification: Carpet, Curtain & Upholstery Cleaners Status: <b>Inactive</b> Positional Accuracy: Automatically positioned to the address	A8NW (S)	499	-	543592 178535



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
92	<b>Contemporary Trade Directory Entries</b> Name: C D L Location: Units 21-22 The I O Centre, Armstrong Road, Greenwich, London, SE18 6RS Classification: Freight Forwarders <b>Status: Active</b> Positional Accuracy: Manually positioned to the address or location	A14NW (E)	504	-	544231 179136
92	<b>Contemporary Trade Directory Entries</b> Name: Briar Location: Duke of Wellington Av, London, SE18 6SS Classification: Mechanical Engineers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A14SW (E)	509	-	544246 179086
92	<b>Contemporary Trade Directory Entries</b> Name: F I T Shirts Location: UNIT 20, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: T-Shirts <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	524	-	544258 179106
92	<b>Contemporary Trade Directory Entries</b> Name: Smiths Office Furniture Location: Armstrong Road, London, SE18 6RD Classification: Office Furniture & Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	524	-	544258 179107
93	<b>Contemporary Trade Directory Entries</b> Name: David Wealth Location: Flat 9, Abel House, Plumstead Road, London, SE18 7DD Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SW (E)	529	-	544262 178912
94	<b>Contemporary Trade Directory Entries</b> Name: K M Heating Location: 113, Burrage Road, London, SE18 7LN Classification: Boilers - Servicing, Replacements & Repairs <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9NW (SE)	530	-	544082 178603
95	<b>Contemporary Trade Directory Entries</b> Name: Eque Distribution Ltd Location: Flat 603, Mizzen Mast House, Mast Quay, London, SE18 5NP Classification: Distribution Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A12NE (W)	544	-	542976 179254
96	<b>Contemporary Trade Directory Entries</b> Name: Ironing Service Location: St. Mary St, London, SE18 5AL Classification: Ironing & Home Laundry Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A12SE (W)	565	-	543017 178966
96	<b>Contemporary Trade Directory Entries</b> Name: Royal Pro Location: 12, St. Mary Street, London, SE18 5AL Classification: Commercial Cleaning Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (W)	597	-	542988 178953
97	<b>Contemporary Trade Directory Entries</b> Name: C K Design & Print Ltd Location: Unit 37, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	580	-	544287 179227
97	<b>Contemporary Trade Directory Entries</b> Name: Carter Allen Ltd Location: Unit 33, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Office Equipment Manufacturers & Distributors <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	598	-	544304 179271
97	<b>Contemporary Trade Directory Entries</b> Name: Delatim Ltd Location: UNIT 33, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: Door Manufacturers - Industrial <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14NW (E)	599	-	544305 179263



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
97	<b>Contemporary Trade Directory Entries</b> Name: Hobbyshopuk Location: Unit 34, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	610	-	544316 179274
97	<b>Contemporary Trade Directory Entries</b> Name: Complete Print Solutions Location: UNIT 35, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: Printers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	623	-	544329 179270
97	<b>Contemporary Trade Directory Entries</b> Name: Aeguana Ltd Location: UNIT 35, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: Mechanical Engineers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	623	-	544329 179270
97	<b>Contemporary Trade Directory Entries</b> Name: T G Print & Design Location: Unit 36, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	633	-	544338 179281
97	<b>Contemporary Trade Directory Entries</b> Name: T G Print Location: Unit 36, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	633	-	544338 179281
97	<b>Contemporary Trade Directory Entries</b> Name: Flagship Print Location: Unit 36, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	633	-	544338 179281
98	<b>Contemporary Trade Directory Entries</b> Name: Cityplus Servicesnlimited Location: Flat 14, Parker House, 120, Brookhill Road, London, SE18 6UU Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SW (S)	580	-	543596 178449
99	<b>Contemporary Trade Directory Entries</b> Name: Cleaners Woolwich Location: FLAT 34, ELLISTON HOUSE, WELLINGTON STREET, LONDON, SE18 6QF Classification: Cleaning Services - Domestic <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7NE (SW)	588	-	543258 178631
100	<b>Contemporary Trade Directory Entries</b> Name: Absolute Hygiene Solutions Location: UNIT 42, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: Hygiene & Cleansing Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	600	-	544319 179178
101	<b>Contemporary Trade Directory Entries</b> Name: Gurkha Beer Uk Location: First Floor Room 3 Conduit Business Centre, 2 The Mews, Greenwich, London, SE18 7AP Classification: Bottle Manufacturers & Suppliers <b>Status: Active</b> Positional Accuracy: Manually positioned to the address or location	A8SE (S)	620	-	543829 178397
101	<b>Contemporary Trade Directory Entries</b> Name: Allied Remedial Treatments Ltd Location: 4, CONDUIT MEWS, LONDON, SE18 7AP Classification: Damp & Dry Rot Control <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	636	-	543815 178379



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
102	<b>Contemporary Trade Directory Entries</b> Name: Gilmex International Ltd Location: UNIT, 40 THE I O CENTRE, ARMSTRONG ROAD, WOOLWICH, SE18 6RS Classification: Print Finishers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	622	-	544335 179201
102	<b>Contemporary Trade Directory Entries</b> Name: Blinds Poles & Tracks Direct Location: Unit 45, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Blinds, Awnings & Canopies <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	647	-	544368 179177
102	<b>Contemporary Trade Directory Entries</b> Name: Osgood Textiles Ltd Location: UNIT 41, THE I O CENTRE, ARMSTRONG ROAD, LONDON, SE18 6RS Classification: Children & Babywear - Manufacturers & Wholesalers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	651	-	544367 179195
102	<b>Contemporary Trade Directory Entries</b> Name: Cleaning Services Location: Pettacre Cl, London, SE28 0BX Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A14NE (E)	674	-	544396 179178
103	<b>Contemporary Trade Directory Entries</b> Name: A T A Cleaning Location: 12, Conduit Road, London, SE18 7AJ Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	632	-	543876 178393
104	<b>Contemporary Trade Directory Entries</b> Name: Extra Carpets London Location: 8, WILLOW LANE, LONDON, SE18 5TB Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A12SE (SW)	664	-	542991 178815
105	<b>Contemporary Trade Directory Entries</b> Name: Isis Office Ltd Location: Unit 39, The I O Centre, Armstrong Road, London, SE18 6RS Classification: Printers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	673	-	544378 179284
106	<b>Contemporary Trade Directory Entries</b> Name: Us Ltd Location: 7 Pier Rd, London, E16 2JJ Classification: Catering Equipment <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A18NW (NW)	701	-	543309 179897
107	<b>Contemporary Trade Directory Entries</b> Name: Veolia Location: Nathan Way, London, SE28 0AN Classification: Waste Disposal Services <b>Status: Active</b> Positional Accuracy: Manually positioned within the geographical locality	A14SE (E)	710	-	544443 179127
107	<b>Contemporary Trade Directory Entries</b> Name: Gods War Gaming Location: Flat 96, Long Acre House, Pettacre Close, London, SE28 0PB Classification: Toys, Games & Sporting Goods - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	745	-	544480 179114
108	<b>Contemporary Trade Directory Entries</b> Name: Eurotech Engineering Ltd Location: Flat 1, Sovereign House, Europe Road, London, SE18 5QN Classification: Mechanical Engineers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12NW (W)	714	-	542809 179160
109	<b>Contemporary Trade Directory Entries</b> Name: Wicks Plastics Location: 5, Lowestoft Mews, London, E16 2ST Classification: Catering Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18NE (N)	715	-	543856 179942



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
110	<b>Contemporary Trade Directory Entries</b> Name: Touch Of Glass Prints Location: 40, MULGRAVE ROAD, LONDON, SE18 5TY Classification: Printers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7NE (SW)	717	-	542974 178749
110	<b>Contemporary Trade Directory Entries</b> Name: E U Energy Location: 44, Mulgrave Road, London, SE18 5TY Classification: Energy Efficient Products and Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A7NE (SW)	727	-	542963 178746
111	<b>Contemporary Trade Directory Entries</b> Name: O A Electricals Location: 54, Brookhill Road, London, SE18 6TU Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	718	-	543637 178300
112	<b>Contemporary Trade Directory Entries</b> Name: Fast Cleaners Location: 23, Sky Studios, 147, Albert Road, London, E16 2JN Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NE (NW)	730	-	543250 179906
112	<b>Contemporary Trade Directory Entries</b> Name: Fast Cleaners Ltd Location: 23, Sky Studios, 147, Albert Road, London, E16 2JN Classification: Carpet, Curtain & Upholstery Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NE (NW)	731	-	543247 179907
112	<b>Contemporary Trade Directory Entries</b> Name: Uk Commercial Power Uk Ltd Location: 165 Albert Rd, London, E16 2JD Classification: Mechanical Engineers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A17NE (NW)	748	-	543236 179920
113	<b>Contemporary Trade Directory Entries</b> Name: W J King Garages Ltd Location: 40, ARTILLERY PLACE, WOOLWICH, SE18 4AB Classification: Car Dealers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A7NE (SW)	741	-	543105 178570
114	<b>Contemporary Trade Directory Entries</b> Name: Signature Industries Ltd Location: Tom Cribb Road, London, SE28 0BH Classification: Radio Communication Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	756	-	544498 179021
114	<b>Contemporary Trade Directory Entries</b> Name: Signature Industries Ltd Location: Tom Cribb Road, London, SE28 0BH Classification: Radio Communication Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	756	-	544498 179021
114	<b>Contemporary Trade Directory Entries</b> Name: Bhl Leather Location: Unit 2, Gateway Business Centre, Tom Cribb Road, London, SE28 0EZ Classification: Leather Garments & Products <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	804	-	544546 179025
115	<b>Contemporary Trade Directory Entries</b> Name: Kimss Ltd Location: Swetenham Walk, London, SE18 7EZ Classification: Abrasive Products - Manufacturers & Distributors <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A9SW (SE)	763	-	544242 178433
116	<b>Contemporary Trade Directory Entries</b> Name: A Washing Machine Healer Location: 12, Storey Street, London, E16 2LT Classification: Domestic Appliances - Servicing, Repairs & Parts <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18NW (N)	763	-	543390 179990



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
117	<b>Contemporary Trade Directory Entries</b> Name: W Taylor & Sons Location: 76, Bloomfield Road, London, SE18 7JQ Classification: Scrap Metal Merchants <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	774	-	543946 178264
117	<b>Contemporary Trade Directory Entries</b> Name: S S D Motors Location: 75-79 Bloomfield Road, Greenwich, London, SE18 7JJ Classification: Garage Services <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	783	-	543913 178246
117	<b>Contemporary Trade Directory Entries</b> Name: J C Garage Location: 75-77, Bloomfield Road, London, SE18 7JJ Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	792	-	543918 178238
117	<b>Contemporary Trade Directory Entries</b> Name: Scarf Multi Skill Engineering Location: 22-23, Burrage Place, London, SE18 7BG Classification: Domestic Appliances - Servicing, Repairs & Parts <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	806	-	543918 178224
118	<b>Contemporary Trade Directory Entries</b> Name: Tills Location: 79, Sandy Hill Road, London, SE18 7BQ Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	780	-	543778 178232
119	<b>Contemporary Trade Directory Entries</b> Name: Data Techniques Location: Unit 4, Gateway Business Centre, Tom Cribb Road, London, SE28 0EZ Classification: Fibre Optics <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	795	-	544537 178978
120	<b>Contemporary Trade Directory Entries</b> Name: Castlewood Garage Location: 1, Burrage Place, Plumstead, SE18 7BG Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	797	-	543905 178230
121	<b>Contemporary Trade Directory Entries</b> Name: City Chairs Location: Flat 65, Claymill House, Raglan Road, London, SE18 7HX Classification: Office Furniture & Equipment <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9SW (SE)	806	-	544197 178345
122	<b>Contemporary Trade Directory Entries</b> Name: Leonedahlia Cleaning Ltd Location: Flat 18, Sarah Turnbull House, 43, Brewhouse Road, London, SE18 5SH Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SW (W)	812	-	542815 178818
123	<b>Contemporary Trade Directory Entries</b> Name: E 3 Taxis Location: 3d-3f, Unit, Standard Industrial Estate, Henley Road, London, E16 2ES Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17SW (NW)	812	-	542917 179773
123	<b>Contemporary Trade Directory Entries</b> Name: Ping Pong Location: Unit 3f, Standard Industrial Estate, Henley Road, LONDON, E16 2ES Classification: Food Products - Manufacturers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17SW (NW)	812	-	542917 179773
124	<b>Contemporary Trade Directory Entries</b> Name: Super Bright Domestic Ltd Location: Flat 7, Plantagenet House, 1, Leda Road, London, SE18 5QR Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A12SW (W)	814	-	542712 179128



## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
125	<b>Contemporary Trade Directory Entries</b> Name: Cleaners North Woolwich Location: 16, Woodman Street, London, E16 2NF Classification: Cleaning Services - Domestic <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A18NW (N)	825	-	543591 180079
126	<b>Contemporary Trade Directory Entries</b> Name: The Retailers Market Ltd Location: 28, Pier Parade, London, E16 2LJ Classification: Electrical Goods Sales, Manufacturers & Wholesalers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NE (NW)	828	-	543267 180017
126	<b>Contemporary Trade Directory Entries</b> Name: 2 In 1 Dry Cleaners & Launderette Location: 6, Pier Parade, London, E16 2LJ Classification: Dry Cleaners <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NE (NW)	848	-	543264 180037
126	<b>Contemporary Trade Directory Entries</b> Name: 2 In 1 Dry Cleaner Location: 6 Pier Parade, London, E16 2LJ Classification: Dry Cleaners <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A17NE (NW)	849	-	543263 180037
127	<b>Contemporary Trade Directory Entries</b> Name: Burrage Autos Location: 37, Burrage Place, London, SE18 7BG Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9SW (S)	833	-	543999 178218
128	<b>Contemporary Trade Directory Entries</b> Name: Sola Express Ltd Location: 3, CARRONADE PLACE, THAMESMEAD, SE28 0EE Classification: Airfreight Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14NE (E)	840	-	544532 179394
129	<b>Contemporary Trade Directory Entries</b> Name: Colton Commercials Location: 1j-1k, Unit, Standard Industrial Estate, Factory Road, London, E16 2EJ Classification: Commercial Vehicle Servicing, Repairs, Parts & Accessories <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NW (NW)	856	-	542935 179854
129	<b>Contemporary Trade Directory Entries</b> Name: Asiatic Location: Unit 1h, Standard Industrial Estate, Factory Road, London, E16 2EJ Classification: Frozen Food Processors & Distributors <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NW (NW)	862	-	542937 179864
129	<b>Contemporary Trade Directory Entries</b> Name: Metamorphosis Car Care Ltd Location: Unit 1d, Standard Industrial Estate, Factory Road, London, E16 2EJ Classification: Garage Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NW (NW)	884	-	542945 179900
130	<b>Contemporary Trade Directory Entries</b> Name: Henry & Henry Location: 95, ANN STREET, PLUMSTEAD, SE18 7LS Classification: Builders' Merchants <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A9NE (SE)	860	-	544529 178662
130	<b>Contemporary Trade Directory Entries</b> Name: The Lump Partnership Location: 79, Glyndon Road, LONDON, SE18 7PA Classification: Engineering Services <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A9NE (SE)	882	-	544538 178628
131	<b>Contemporary Trade Directory Entries</b> Name: 16o4 Location: 56, Hudson Place, London, SE18 7SL Classification: Clocks & Watches - Manufacturers & Wholesalers <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A9SW (SE)	874	-	544273 178316



## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
132	<b>Contemporary Trade Directory Entries</b> Name: O J'S Pallet Services Location: Unit 3g Standard Industrial Estate, Henley Road, London, E16 2ES Classification: Pallets, Crates & Packing Cases <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A17NW (NW)	882	-	542870 179825
132	<b>Contemporary Trade Directory Entries</b> Name: Bedrock Print Finishers Ltd Location: Unit 1n, Standard Industrial Estate, Factory Road, London, E16 2EJ Classification: Print Finishers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NW (NW)	909	-	542875 179868
132	<b>Contemporary Trade Directory Entries</b> Name: Bedrock Print Finishers Ltd Location: Unit 1N, Standard Ind Est, Factory Rd, London, E16 2EJ Classification: Print Finishers <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A17NW (NW)	909	-	542874 179868
132	<b>Contemporary Trade Directory Entries</b> Name: Online Lubricants Ltd Location: Unit 1S, Standard Industrial Estate, Factory Road, London, E16 2EJ Classification: Oil Companies <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17NW (NW)	929	-	542883 179905
132	<b>Contemporary Trade Directory Entries</b> Name: Architech Engineering Location: Unit 1T, Standard Ind Est, Factory Rd, London, E16 2EJ Classification: Air Conditioning Equipment & Systems <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the address or location	A17NW (NW)	935	-	542884 179914
133	<b>Contemporary Trade Directory Entries</b> Name: Gmund Location: 56, Cumberland Court, Erebus Drive, London, SE28 0GE Classification: Paper & Pulp Mills <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A19SE (NE)	884	-	544491 179644
133	<b>Contemporary Trade Directory Entries</b> Name: Office Chair (Uk) Location: Sark Tower, Erebus Dr, London, SE28 0GG Classification: Office Furniture & Equipment <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A19SE (NE)	889	-	544508 179624
134	<b>Contemporary Trade Directory Entries</b> Name: Cleaning Solutions Location: Felixstowe Court Galleons Reach, London, E16 2RR Classification: Commercial Cleaning Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned within the geographical locality	A18NE (N)	898	-	543865 180128
135	<b>Contemporary Trade Directory Entries</b> Name: C W E Dairies Ltd Location: Unit 5a, Standard Industrial Estate, Henley Road, London, E16 2ES Classification: Dairies <b>Status: Active</b> Positional Accuracy: Automatically positioned to the address	A17SW (NW)	899	-	542828 179803
135	<b>Contemporary Trade Directory Entries</b> Name: Marconi Marine Location: 5f-5k, Unit, Standard Industrial Estate, Henley Road, London, E16 2ES Classification: Electronic Engineers <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A17SW (NW)	929	-	542791 179805
136	<b>Contemporary Trade Directory Entries</b> Name: J S Transport Location: Factory Rd, London, E16 2EJ Classification: Road Haulage Services <b>Status: Inactive</b> Positional Accuracy: Manually positioned to the road within the address or location	A17NW (NW)	909	-	542949 179936
137	<b>Contemporary Trade Directory Entries</b> Name: Pest Pro Location: 34, Polthorne Grove, Polthorne Estate, London, SE18 7DU Classification: Pest & Vermin Control <b>Status: Inactive</b> Positional Accuracy: Automatically positioned to the address	A14SE (E)	911	-	544637 178838





## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
138	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Ybee Services            Location: 68, Brookhill Close, LONDON, SE18 6UD            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A3NW (S)	927	-	543489 178119
139	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Londons Royal Docks            Location: Fishguard Way, Newham, London, E16 2RG            Classification: Ports, Docks &amp; Harbours  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned within the geographical locality</p>	A18NE (N)	932	-	543968 180136
139	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Royal Docks Management Authority Ltd            Location: PIERHEAD, KING GEORGE V LOCK, FISHGUARD WAY, NORTH WOOLWICH, LONDON, E16 2RG            Classification: Ports, Docks &amp; Harbours  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A23SE (N)	955	-	543950 180164
140	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Permagard            Location: 1u-1v, Unit, Standard Industrial Estate, Factory Road, London, E16 2EJ            Classification: Commercial Vehicle &amp; Car Cleaning Equipment &amp; Supplies  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NW (NW)	940	-	542887 179923
141	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Unit Dry Cleaners            Location: 6, Frances Street, London, SE18 5EF            Classification: Dry Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NW (SW)	941	-	542873 178525
141	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Dots Soap Opera            Location: 4, Frances Street, London, SE18 5EF            Classification: Laundries &amp; Launderettes  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NW (SW)	944	-	542877 178517
142	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: C R Cleaning            Location: 101, Glyndon Road, London, SE18 7PA            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9NE (SE)	958	-	544617 178619
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: W Humphreys Transport (London) Ltd            Location: Unit 7, Standard Industrial Estate, Factory Road, London, E16 2EJ            Classification: Commercial Vehicle Bodybuilders &amp; Repairers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NW (NW)	961	-	542826 179894
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: W Humphreys            Location: Unit 7, Standard Industrial Estate, Factory Road, London, E16 2EJ            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NW (NW)	961	-	542826 179894
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Energyst Cat Rental Power            Location: Unit 7, Standard Industrial Estate, Factory Road, London, E16 2EJ            Classification: Generators - Sales &amp; Service  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NW (NW)	961	-	542826 179894
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: S J Selfe &amp; Sons Ltd            Location: Unit 7, Standard Industrial Estate, Factory Road, London, E16 2EJ            Classification: Road Haulage Services  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A17NW (NW)	961	-	542826 179894



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
143	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Halso Petroleum South            Location: Unit 7, Standard Industrial Estate, Factory Road, London, E16 2EJ            Classification: Fuel Dealers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the address or location</p>	A17NW (NW)	961	-	542826 179894
144	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Cleaners Thamesmead West            Location: 53, Whinchat Road, London, SE28 0EA            Classification: Carpet, Curtain &amp; Upholstery Cleaners  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A15NW (E)	977	-	544682 179291
145	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Thames Tyres            Location: 3 Foreland St, London, SE18 7BY            Classification: Tyre Dealers  <b>Status: Inactive</b>            Positional Accuracy: Manually positioned to the road within the address or location</p>	A15SW (E)	977	-	544708 178861
145	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Bok Cop            Location: Yard F, Foreland Street, London, SE18 7BY            Classification: Tyre Dealers  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A15SW (E)	990	-	544721 178854
146	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: D &amp; E Foods Ltd            Location: FLAT 4, MILNE HOUSE, OGILBY STREET, WOOLWICH, SE18 5EJ            Classification: Packaging Materials Manufacturers &amp; Suppliers  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A7NW (SW)	981	-	542754 178602
147	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Mary Maid            Location: 42f, Walmer Terrace, London, SE18 7EB            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A10NW (E)	986	-	544693 178747
148	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Shining Homes            Location: 11, St. Margarets Terrace, London, SE18 7RW            Classification: Cleaning Services - Domestic  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9SW (SE)	991	-	544251 178159
149	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: D J Building Supplies            Location: 11, Brewery Road, London, SE18 7PS            Classification: Builders' Merchants  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A9SE (SE)	993	-	544537 178415
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Stagecoach            Location: Plumstead Bus Garage, Pettman Crescent, London, SE28 0BJ            Classification: Bus &amp; Coach Operators &amp; Stations  <b>Status: Active</b>            Positional Accuracy: Automatically positioned to the address</p>	A15SW (E)	997	-	544739 178974
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Stagecoach            Location: Plumstead Bus Garage, Pettman Crescent, London, SE28 0BJ            Classification: Bus &amp; Coach Operators &amp; Stations  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A15SW (E)	997	-	544739 178974
150	<p><b>Contemporary Trade Directory Entries</b></p> <p>Name: Johnstones Leyland Decorating Centre            Location: Plumstead Bus Garage, Pettman Crescent, London, SE28 0BJ            Classification: Painting &amp; Decorating Supplies  <b>Status: Inactive</b>            Positional Accuracy: Automatically positioned to the address</p>	A15SW (E)	997	-	544739 178974



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
151	<b>Fuel Station Entries</b> Name: Shell Woolwich Location: 125-129, Woolwich High Street , Woolwich , London, Outer London, SE18 6DS Brand: Shell Premises Type: Not Applicable <b>Status: Obsolete</b> Positional Accuracy: Automatically positioned to the address	A12NE (W)	236	-	543291 179173
152	<b>Fuel Station Entries</b> Name: W J King Garages Woolwich Location: 40, Artillery Place , Woolwich , London, Outer London, SE18 4AB Brand: Harvest Energy Premises Type: Petrol Station <b>Status: Open</b> Positional Accuracy: Manually positioned to the address or location	A7NE (SW)	725	-	543143 178554
153	<b>Fuel Station Entries</b> Name: Tills Garage Ltd Location: 79, Sandy Hill Road Burrage Place, Plumstead , London, Outer London, SE18 7BQ Brand: UNBRANDED Premises Type: Not Applicable <b>Status: Obsolete</b> Positional Accuracy: Automatically positioned to the address	A8SE (S)	781	-	543778 178231
154	<b>Points of Interest - Commercial Services</b> Name: Namaste a 2 Z Location: 2 Cadet House Victory Parade, Plumstead Road, London, SE18 6FL Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (SE)	88	9	543831 179008
155	<b>Points of Interest - Commercial Services</b> Name: I Q Square Services Ltd Location: 1 Woolwich New Road, London, SE18 6EX Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (SE)	124	9	543810 178906
156	<b>Points of Interest - Commercial Services</b> Name: Spray Street Autos Location: 31a Spray Street, Woolwich, London, SE18 6AP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (SE)	218	9	543905 178865
156	<b>Points of Interest - Commercial Services</b> Name: A1 Montys Spraypaint & Bodywork Location: 31 Spray Street, London, SE18 6AP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (SE)	218	9	543905 178866
156	<b>Points of Interest - Commercial Services</b> Name: Monty's Location: 31 Spray Street, London, SE18 6AP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (SE)	218	9	543905 178866
156	<b>Points of Interest - Commercial Services</b> Name: Paul Smee B M W Specialist Location: 31a Spray Street, Woolwich, London, SE18 6AP Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A13SE (SE)	218	9	543905 178865
156	<b>Points of Interest - Commercial Services</b> Name: Bluevision Services (UK) Ltd Location: C 1 Parry Place, London, SE18 6AN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (SE)	238	9	543952 178896
156	<b>Points of Interest - Commercial Services</b> Name: B S L Investment Ltd Location: 1c Parry Place, London, SE18 6AN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (SE)	238	9	543952 178896



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
156	<b>Points of Interest - Commercial Services</b> Name: Bsl Investment Location: 1c Parry Place, London, SE18 6AN Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SE (SE)	238	9	543952 178896
156	<b>Points of Interest - Commercial Services</b> Name: Widescope International Location: 22 Plumstead Road, London, SE18 7BZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (SE)	251	9	543970 178905
157	<b>Points of Interest - Commercial Services</b> Name: Morgan Richards Location: 125-129 Woolwich High Street, London, SE18 6DS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	236	9	543291 179173
157	<b>Points of Interest - Commercial Services</b> Name: Payne Autos Location: 125-129 Woolwich High Street, London, SE18 6DS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	236	9	543291 179173
157	<b>Points of Interest - Commercial Services</b> Name: Payne Autos Location: 125-129 Woolwich High Street, London, SE18 6DS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	236	9	543291 179173
157	<b>Points of Interest - Commercial Services</b> Name: A R Payne Autos Ltd Location: 125-129 Woolwich High Street, Woolwich, London, SE18 6DS Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	237	9	543288 179178
157	<b>Points of Interest - Commercial Services</b> Name: Furlongs Location: 160-170 Powis Street, London, SE18 6NL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12NE (W)	256	9	543277 179147
157	<b>Points of Interest - Commercial Services</b> Name: Furlongs Location: 160 Powis Street, Woolwich, London, SE18 6NL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12SE (W)	277	9	543264 179122
157	<b>Points of Interest - Commercial Services</b> Name: Morgan Richards Location: 160 Powis Street, London, SE18 6NL Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12SE (W)	277	9	543264 179122
158	<b>Points of Interest - Commercial Services</b> Name: Bismadel & Co Ltd Location: 18-36 Wellington Street, London, SE18 6PF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SW (S)	272	9	543530 178812
158	<b>Points of Interest - Commercial Services</b> Name: Vivid Perception Location: Island Business Centre 18-36, Wellington Street, London, SE18 6PF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A13SW (S)	293	9	543517 178796
158	<b>Points of Interest - Commercial Services</b> Name: Castlewoods Location: 5-6 Love Lane, London, SE18 6QT Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (S)	313	9	543545 178755



## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
159	<b>Points of Interest - Commercial Services</b> Name: Citipost Ltd Location: 16 Gunnery Terrace, Cornwallis Road, London, SE18 6SW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	341	9	544083 178988
159	<b>Points of Interest - Commercial Services</b> Name: Citipost A M P Ltd Location: 16 Gunnery Terrace, Cornwallis Road, London, SE18 6SW Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	341	9	544083 178988
160	<b>Points of Interest - Commercial Services</b> Name: Big M Motor Spares Ltd Location: 93-95 Woolwich New Road, London, SE18 6EF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (S)	390	9	543610 178644
160	<b>Points of Interest - Commercial Services</b> Name: Big M Motor Spares Ltd Location: 93-95 Woolwich New Road, London, SE18 6EF Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8NW (S)	390	9	543610 178644
161	<b>Points of Interest - Commercial Services</b> Name: Audi Mobile Auto Electrician Location: 10 Castile Road, Woolwich, London, SE18 6JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A12SE (SW)	411	9	543285 178863
162	<b>Points of Interest - Commercial Services</b> Name: Maksx Ltd Location: Apartment 155 Building 50, Argyll Road, London, SE18 6PL Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (NE)	462	9	544141 179396
163	<b>Points of Interest - Commercial Services</b> Name: C D L London Ltd Location: Unit 22 The I O Centre, Armstrong Road, London, SE18 6RS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	475	9	544204 179123
163	<b>Points of Interest - Commercial Services</b> Name: C D L London Ltd Location: Unit 22 The I O Centre, Armstrong Road, London, SE18 6RS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SW (E)	475	9	544204 179123
163	<b>Points of Interest - Commercial Services</b> Name: C D L Location: Units 21-22 The I O Centre, Armstrong Road, Greenwich, London, SE18 6RS Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14NW (E)	504	9	544231 179136
164	<b>Points of Interest - Commercial Services</b> Name: Eque Distribution Ltd Location: Flat 603, Mizzen Mast House, Mast Quay, London, SE18 5NP Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12NE (W)	544	9	542976 179254
165	<b>Points of Interest - Commercial Services</b> Name: M G I Location: 1 Kingsman Street, London, SE18 5QF Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A12SW (W)	651	9	542892 179057
166	<b>Points of Interest - Commercial Services</b> Name: A D I Environmental Services Ltd Location: Thames House 141-143, Albert Road, London, E16 2JD Category: Recycling Services Class Code: Recycling, Reclamation and Disposal Positional Accuracy: Positioned to address or location	A17NE (NW)	700	9	543277 179885



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
167	<b>Points of Interest - Commercial Services</b> Name: 24hr Windscreens Direct Ltd Location: 11 St. James Close, London, SE18 7LE Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A9SW (SE)	756	9	544108 178348
168	<b>Points of Interest - Commercial Services</b> Name: Tills Location: 79 Sandy Hill Road, London, SE18 7BQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	780	9	543778 178232
168	<b>Points of Interest - Commercial Services</b> Name: Tills Garage Services Location: 79 Sandy Hill Road, London, SE18 7BQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	780	9	543778 178232
168	<b>Points of Interest - Commercial Services</b> Name: Tills Location: 79 Sandy Hill Road, London, SE18 7BQ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	780	9	543778 178232
169	<b>Points of Interest - Commercial Services</b> Name: S S D Motors Location: 79 Bloomfield Road, Plumstead, SE18 7JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	783	9	543913 178246
169	<b>Points of Interest - Commercial Services</b> Name: J C Garage Location: 75-77 Bloomfield Road, London, SE18 7JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	793	9	543918 178238
169	<b>Points of Interest - Commercial Services</b> Name: J C Garage Location: 77 Bloomfield Road, London, SE18 7JJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	793	9	543917 178237
169	<b>Points of Interest - Commercial Services</b> Name: Castlewood Garage Location: 1 Burrage Place, Plumstead, SE18 7BG Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A8SE (S)	797	9	543905 178230
170	<b>Points of Interest - Commercial Services</b> Name: City Airport Taxi Garage Location: Unit 3d Standard Industrial Estate, Henley Road, North Woolwich, London, E16 2ES Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	811	9	542915 179768
170	<b>Points of Interest - Commercial Services</b> Name: E 3 Taxis Location: 3d-3f Unit Standard Industrial Estate, Henley Road, London, E16 2ES Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	812	9	542917 179773
170	<b>Points of Interest - Commercial Services</b> Name: E 3 Taxis Location: Unit 3d-3e Standard Industrial Estate, Henley Road, London, E16 2ES Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17SW (NW)	812	9	542917 179773
171	<b>Points of Interest - Commercial Services</b> Name: Intersped Logistics (UK) Ltd Location: Unit 9 Gateway Business Centre, Tom Cribb Road, London, SE28 0EZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SE (E)	860	9	544602 178977



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
171	<b>Points of Interest - Commercial Services</b> Name: Intersped Logistics UK Ltd Location: Unit 9 Gateway Business Centre, Tom Cribb Road, London, SE28 0EZ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A14SE (E)	860	9	544602 178977
172	<b>Points of Interest - Commercial Services</b> Name: X9 Vehicle Management Services Ltd Location: Unit 1f Standard Industrial Estate, Factory Road, London, E16 2EJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NW (NW)	872	9	542940 179880
172	<b>Points of Interest - Commercial Services</b> Name: Metamorphis Car Care Ltd Location: Unit 1d Standard Industrial Estate, Factory Road, London, E16 2EJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NW (NW)	884	9	542945 179900
172	<b>Points of Interest - Commercial Services</b> Name: Bromstone Engineering Ltd Location: Unit 1C Standard Industrial Estate, Factory Road, London, E16 2EJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A17NW (NW)	890	9	542947 179909
173	<b>Points of Interest - Commercial Services</b> Name: Car Tec Detailing Location: 101 Ann Street, London, SE18 7LT Category: Personal, Consumer and other Services Class Code: Vehicle Cleaning Services Positional Accuracy: Positioned to address or location	A9NE (SE)	895	9	544524 178573
174	<b>Points of Interest - Commercial Services</b> Name: Pest-pro Location: 34 Polthorne Grove, Polthorne Estate, London, SE18 7DU Category: Contract Services Class Code: Pest and Vermin Control Positional Accuracy: Positioned to address or location	A14SE (E)	911	9	544637 178838
175	<b>Points of Interest - Commercial Services</b> Name: Classic Shipping Services Location: Unit 5j Standard Industrial Estate, Henley Road, London, E16 2ES Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A17NW (NW)	948	9	542770 179808
176	<b>Points of Interest - Commercial Services</b> Name: Stiller Group Ltd Location: King George V Dock, Woolwich Manor Way, London, E16 2NJ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A23SE (N)	955	9	543950 180165
176	<b>Points of Interest - Commercial Services</b> Name: Stiller Group Location: King George V Dock, Woolwich Manor Way, London, E16 2NJ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A23SE (N)	955	9	543950 180165
177	<b>Points of Interest - Commercial Services</b> Name: S J Selfe & Sons Ltd Location: Unit 7 Standard Industrial Estate, Factory Road, London, E16 2EJ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A17NW (NW)	961	9	542826 179894
177	<b>Points of Interest - Commercial Services</b> Name: W Humphreys Location: Unit 7 Standard Industrial Estate, Factory Road, London, E16 2EJ Category: Transport, Storage and Delivery Class Code: Distribution and Haulage Positional Accuracy: Positioned to address or location	A17NW (NW)	962	9	542827 179896
178	<b>Points of Interest - Commercial Services</b> Name: Abbey Autos Location: 1 Hillreach, Woolwich, London, SE18 4AJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	993	9	542821 178505



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
178	<b>Points of Interest - Commercial Services</b> Name: Abbey Autos Location: 1-2 Hillreach, London, SE18 4AJ Category: Repair and Servicing Class Code: Vehicle Repair, Testing and Servicing Positional Accuracy: Positioned to address or location	A7NW (SW)	997	9	542815 178505
179	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	0	9	543628 179197
179	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	0	9	543610 179191
179	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	0	9	543588 179196
179	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	0	9	543608 179221
179	<b>Points of Interest - Manufacturing and Production</b> Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (W)	0	9	543573 179171
179	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A13NW (NW)	0	9	543600 179226
180	<b>Points of Interest - Manufacturing and Production</b> Name: B S L Location: 1c Parry Place, London, SE18 6AN Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13SE (SE)	238	9	543952 178896
180	<b>Points of Interest - Manufacturing and Production</b> Name: Imol Business Centre Ltd Location: 22 Plumstead Road, London, SE18 7BZ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A14SW (SE)	251	9	543970 178905
181	<b>Points of Interest - Manufacturing and Production</b> Name: Island Business Centre Location: 18-36 Wellington Street, London, SE18 6PF Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A13SW (S)	272	9	543530 178812
181	<b>Points of Interest - Manufacturing and Production</b> Name: Island Business Centre Location: SE18 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A13SW (SW)	285	9	543496 178822
182	<b>Points of Interest - Manufacturing and Production</b> Name: A-Z 1st Freeofficefinder.Com Location: 20 Grand Depot Road, London, SE18 6SJ Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to address or location	A8NW (S)	576	9	543403 178533





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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
183	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SE (S)	624	9	543815 178391
184	<b>Points of Interest - Manufacturing and Production</b> Name: Tanks Location: E16 Category: Industrial Features Class Code: Tanks (Generic) Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	656	9	543696 179908
185	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	701	9	544444 179014
185	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: SE28 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	701	9	544444 179014
185	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: SE28 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	760	9	544503 179002
185	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	763	9	544506 179003
186	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	768	9	543073 178566
186	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: SE18 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	769	9	543073 178565
187	<b>Points of Interest - Manufacturing and Production</b> Name: Gateway Business Centre Location: SE28 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	812	9	544555 179006
188	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A8SE (S)	862	9	543869 178158
189	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A9SW (S)	904	9	543975 178137
190	<b>Points of Interest - Manufacturing and Production</b> Name: Standard Industrial Estate Location: E16 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17NW (NW)	906	9	542850 179839



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
190	<b>Points of Interest - Manufacturing and Production</b> Name: Standard Industrial Estate Location: E16 Category: Industrial Features Class Code: Business Parks and Industrial Estates Positional Accuracy: Positioned to an adjacent address or location	A17NW (NW)	935	9	542810 179837
191	<b>Points of Interest - Manufacturing and Production</b> Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A3NE (S)	997	9	543964 178039
192	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Location: SE18 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A13SE (SE)	99	9	543833 179050
193	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Arsenal Rail Station Location: Vincent Road, SE18 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A8NE (S)	226	9	543763 178786
193	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Arsenal Station Location: Vincent Road, SE18 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A8NE (S)	226	9	543763 178786
194	<b>Points of Interest - Public Infrastructure</b> Name: Shell UK Ltd Location: 125-127 Woolwich High Street, London, SE18 6DS Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A12NE (W)	231	9	543292 179187
195	<b>Points of Interest - Public Infrastructure</b> Name: Tesco Petrol Station Location: Grand Depot Road, London, SE18 6HQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8NW (S)	378	9	543532 178689
196	<b>Points of Interest - Public Infrastructure</b> Name: Plaistow Broadway Ltd Location: 37 Market Street, London, SE18 6QR Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13SW (SW)	378	9	543350 178844
196	<b>Points of Interest - Public Infrastructure</b> Name: Plaistow Broadway Filling Station Location: 37 Market Street, London, SE18 6QR Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A13SW (SW)	378	9	543350 178844
196	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Police Station Location: 29 Market Street, London, SE18 6QR Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A13SW (SW)	382	9	543357 178828
196	<b>Points of Interest - Public Infrastructure</b> Name: Metropolitan Police Service Woolwich Location: 29 Market Street, Woolwich, London, SE18 6QR Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A13SW (SW)	382	9	543357 178828
196	<b>Points of Interest - Public Infrastructure</b> Name: Metropolitan Police Service Location: Market St, London, SE18 6QR Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A13SW (SW)	385	9	543356 178826



Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
197	<b>Points of Interest - Public Infrastructure</b> Name: North Woolwich Station Location: Pier Road, E16 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A18NW (NW)	618	9	543307 179808
197	<b>Points of Interest - Public Infrastructure</b> Name: North Woolwich Police Station Location: Albert Road, London, E16 2JJ Category: Central and Local Government Class Code: Police Stations Positional Accuracy: Positioned to address or location	A18NW (N)	696	9	543338 179902
198	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Fire Station Location: Woolwich Fire Station 24, Sunbury Street, London, SE18 5LU Category: Central and Local Government Class Code: Fire Brigade Stations Positional Accuracy: Positioned to address or location	A12SW (W)	625	9	542937 179004
199	<b>Points of Interest - Public Infrastructure</b> Name: W J King Garages Woolwich Location: 40 Artillery Place, London, SE18 4AB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A7NE (SW)	725	9	543143 178554
199	<b>Points of Interest - Public Infrastructure</b> Name: W J King Ltd Woolwich Location: 40 Artillery Place, London, SE18 4AB Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A7NE (SW)	741	9	543105 178570
200	<b>Points of Interest - Public Infrastructure</b> Name: T Tills Location: 79 Sandy Hill Road, London, SE18 7BQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8SE (S)	780	9	543778 178232
200	<b>Points of Interest - Public Infrastructure</b> Name: Tills Garage Ltd Location: 79 Sandy Hill Road, London, SE18 7BQ Category: Road And Rail Class Code: Petrol and Fuel Stations Positional Accuracy: Positioned to address or location	A8SE (S)	781	9	543778 178231
201	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Dockyard Rail Station Location: Belson Road, SE18 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A12SW (W)	855	9	542728 178905
201	<b>Points of Interest - Public Infrastructure</b> Name: Woolwich Dockyard Station Location: Belson Road, SE18 Category: Public Transport, Stations and Infrastructure Class Code: Railway Stations, Junctions and Halts Positional Accuracy: Positioned to address or location	A12SW (W)	855	9	542728 178905
202	<b>Points of Interest - Public Infrastructure</b> Name: Stagecoach Location: Plumstead Bus Garage, Pettman Crescent, London, SE28 0BJ Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A15SW (E)	997	9	544739 178974
202	<b>Points of Interest - Public Infrastructure</b> Name: East London Bus Group Location: Plumstead Bus Garage, Pettman Crescent, London, SE28 0BJ Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A15SW (E)	997	9	544739 178974
202	<b>Points of Interest - Public Infrastructure</b> Name: Stagecoach Location: Plumstead Bus Garage, Pettman Crescent, Thamesmead, SE28 0BJ Category: Public Transport, Stations and Infrastructure Class Code: Bus and Coach Stations, Depots and Companies Positional Accuracy: Positioned to address or location	A15SW (E)	997	9	544739 178974



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
203	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Warren Lane, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A13NW (NW)	61	9	543567 179310
204	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NE (S)	245	9	543659 178781
204	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Woolwich New Road, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NE (S)	245	9	543659 178781
205	<b>Points of Interest - Recreational and Environmental</b> Name: Play Area Location: SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8NE (SE)	377	9	543899 178668
206	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Duke Of Wellington Avenue, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A14NW (E)	395	9	544112 179150
207	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SE (W)	595	9	542958 179034
207	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Sunbury Street, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	602	9	542950 179033
208	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	661	9	542861 179170
208	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Maud Cashmore Way, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A12NW (W)	662	9	542860 179169
209	<b>Points of Interest - Recreational and Environmental</b> Name: Play Area Location: E16 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18NW (N)	664	9	543470 179906
210	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Albert Road, E16 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A18NE (N)	682	9	543642 179935
210	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	699	9	543677 179952



## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
210	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Albert Road, E16 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A18NE (N)	702	9	543669 179955
211	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Mulgrave Road, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NE (SW)	748	9	542968 178707
212	<b>Points of Interest - Recreational and Environmental</b> Name: Skateboard Park Location: Connaught Road, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8SW (S)	766	9	543568 178265
212	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	768	9	543558 178265
213	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	796	9	542728 179150
213	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Venus Road, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A12NW (W)	796	9	542727 179158
214	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Clendon Way, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A14SE (E)	825	9	544547 178825
214	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A14SE (E)	827	9	544548 178823
215	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	868	9	543059 179964
215	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Albert Road, E16 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A17NE (NW)	870	9	543053 179963
216	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Vicarage Road, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A9NE (SE)	874	9	544448 178494
216	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	876	9	544448 178491



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
216	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A9NE (SE)	947	9	544529 178483
217	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Belson Road, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A12SW (W)	878	9	542713 178881
217	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A12SW (W)	879	9	542713 178878
218	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	879	9	543516 178162
218	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A3NW (S)	943	9	543524 178094
218	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Brookhill Close, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A3NW (S)	943	9	543524 178094
218	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Brookhill Close, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A3NW (S)	944	9	543525 178092
219	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	888	9	543372 178202
219	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Mill Lane, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	888	9	543372 178202
219	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A8SW (S)	954	9	543391 178124
219	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Gunner Lane, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A8SW (S)	959	9	543383 178121
220	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	911	9	542880 178562



## Industrial Land Use

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
220	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Hillreach, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	993	9	542808 178519
220	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A7NW (SW)	994	9	542808 178518
221	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A11SE (W)	956	9	542586 179023
221	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Bowling Green Row, SE18 Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to address or location	A11SE (W)	958	9	542584 179024
221	<b>Points of Interest - Recreational and Environmental</b> Name: Playground Location: Not Supplied Category: Recreational Class Code: Playgrounds Positional Accuracy: Positioned to an adjacent address or location	A11SE (W)	999	9	542534 179068



Agency & Hydrological	Version	Update Cycle
<b>Contaminated Land Register Entries and Notices</b> Environment Agency - Head Office London Borough of Barking And Dagenham - Health and Consumer Services London Borough of Greenwich - Environmental Health Department London Borough of Newham - Environmental Health Department London Borough of Bexley - Environmental Health Department London Borough of Bromley - Environmental Health Department London Borough of Lewisham - Environmental Health Department London Borough of Redbridge - Environmental Health Department London Borough of Tower Hamlets - Environmental Health Department	June 2020 October 2017 October 2017 October 2017 September 2017 September 2017 September 2017 September 2017 September 2017	Annually Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
<b>Discharge Consents</b> Environment Agency - Southern Region Environment Agency - Thames Region	July 2023 July 2023	Quarterly Quarterly
<b>Enforcement and Prohibition Notices</b> Environment Agency - Thames Region	March 2013	
<b>Integrated Pollution Controls</b> Environment Agency - Thames Region	January 2009	
<b>Integrated Pollution Prevention And Control</b> Environment Agency - South East Region - Kent & South London Area Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region	January 2023 January 2023 January 2023	Quarterly Quarterly Quarterly
<b>Local Authority Integrated Pollution Prevention And Control</b> London Borough of Redbridge - Environmental Health Department London Borough of Newham - Environmental Health Department London Borough of Bromley - Environmental Health Department London Borough of Greenwich - Environmental Health Department London Borough of Bexley - Environmental Health Department London Borough of Barking And Dagenham - Environmental Health Department London Borough of Tower Hamlets - Environmental Health Department London Port Health Authority - Environmental Services London Borough of Lewisham - Environmental Health Department	December 2014 December 2020 July 2015 June 2014 March 2015 May 2016 October 2014 October 2014 September 2014	Variable Variable Variable Variable Variable Variable Variable Variable Variable
<b>Local Authority Pollution Prevention and Controls</b> London Borough of Redbridge - Environmental Health Department London Borough of Barking And Dagenham - Environmental Health Department London Borough of Greenwich - Environmental Health Department London Borough of Newham - Environmental Health Department London Borough of Bromley - Environmental Health Department London Borough of Bexley - Environmental Health Department London Borough of Tower Hamlets - Environmental Health Department London Port Health Authority - Environmental Services London Borough of Lewisham - Environmental Health Department	December 2014 December 2020 December 2020 December 2020 July 2015 March 2015 October 2014 October 2014 September 2014	Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update Annual Rolling Update
<b>Local Authority Pollution Prevention and Control Enforcements</b> London Borough of Redbridge - Environmental Health Department London Borough of Bromley - Environmental Health Department London Borough of Greenwich - Environmental Health Department London Borough of Bexley - Environmental Health Department London Borough of Newham - Environmental Health Department London Borough of Barking And Dagenham - Environmental Health Department London Borough of Tower Hamlets - Environmental Health Department London Port Health Authority - Environmental Services London Borough of Lewisham - Environmental Health Department	December 2014 July 2015 June 2014 March 2015 March 2015 May 2016 October 2014 October 2014 September 2014	Variable Variable Variable Variable Variable Variable Variable Variable Variable
<b>Nearest Surface Water Feature</b> Ordnance Survey	August 2023	





Agency & Hydrological	Version	Update Cycle
<b>Pollution Incidents to Controlled Waters</b> Environment Agency - Southern Region Environment Agency - Thames Region	December 1999 September 1999	
<b>Prosecutions Relating to Authorised Processes</b> Environment Agency - Thames Region	July 2015	
<b>Prosecutions Relating to Controlled Waters</b> Environment Agency - Thames Region	March 2013	
<b>Registered Radioactive Substances</b> Environment Agency - Thames Region Environment Agency - Head Office	June 2016 May 2023	As notified Quarterly
<b>River Quality</b> Environment Agency - Head Office	November 2001	Not Applicable
<b>River Quality Biology Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>River Quality Chemistry Sampling Points</b> Environment Agency - Head Office	April 2012	
<b>Substantiated Pollution Incident Register</b> Environment Agency - South East Region - Kent & South London Area Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area Environment Agency - Thames Region - South East Area	July 2023 July 2023 July 2023 July 2023	Quarterly Quarterly Quarterly Quarterly
<b>Water Abstractions</b> Environment Agency - Southern Region Environment Agency - Thames Region	October 2023 October 2023	Quarterly Quarterly
<b>Water Industry Act Referrals</b> Environment Agency - Thames Region	October 2017	
<b>Groundwater Vulnerability Map</b> Environment Agency - Head Office	June 2018	As notified
<b>Groundwater Vulnerability - Soluble Rock Risk</b> Environment Agency - Head Office	June 2018	As notified
<b>Bedrock Aquifer Designations</b> Environment Agency - Head Office	January 2018	As notified
<b>Superficial Aquifer Designations</b> Environment Agency - Head Office	January 2018	As notified
<b>Source Protection Zones</b> Environment Agency - Head Office	September 2022	Bi-Annually
<b>Extreme Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	August 2023	Quarterly
<b>Flooding from Rivers or Sea without Defences</b> Environment Agency - Head Office	August 2023	Quarterly
<b>Areas Benefiting from Flood Defences</b> Environment Agency - Head Office	February 2023	Quarterly
<b>Flood Water Storage Areas</b> Environment Agency - Head Office	August 2023	Quarterly
<b>Flood Defences</b> Environment Agency - Head Office	August 2022	Quarterly
<b>OS Water Network Lines</b> Ordnance Survey	July 2023	Quarterly
<b>Surface Water 1 in 30 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually



## Data Currency

<b>Agency &amp; Hydrological</b>	<b>Version</b>	<b>Update Cycle</b>
<b>Surface Water 1 in 100 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water 1 in 1000 year Flood Extent</b> Environment Agency - Head Office	May 2018	Annually
<b>Surface Water Suitability</b> Environment Agency - Head Office	February 2016	Annually
<b>BGS Groundwater Flooding Susceptibility</b> British Geological Survey - National Geoscience Information Service	May 2013	As notified



Waste	Version	Update Cycle
<b>BGS Recorded Landfill Sites</b> British Geological Survey - National Geoscience Information Service	November 2002	As notified
<b>Historical Landfill Sites</b> Environment Agency - Head Office	July 2023	Quarterly
<b>Integrated Pollution Control Registered Waste Sites</b> Environment Agency - Thames Region	January 2009	Not Applicable
<b>Licensed Waste Management Facilities (Landfill Boundaries)</b> Environment Agency - South East Region - Kent & South London Area Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area Environment Agency - Thames Region - South East Area	July 2023 July 2023 July 2023 July 2023	Quarterly Quarterly Quarterly Quarterly
<b>Licensed Waste Management Facilities (Locations)</b> Environment Agency - South East Region - Kent & South London Area Environment Agency - South East Region - North East Thames Area Environment Agency - Thames Region - North East Area Environment Agency - Thames Region - South East Area	January 2023 January 2023 January 2023 January 2023	Quarterly Quarterly Quarterly Quarterly
<b>Local Authority Landfill Coverage</b> London Borough of Barking And Dagenham - Environmental Health Department London Borough of Bexley - Environmental Health Department London Borough of Bromley - Environmental Health Department London Borough of Greenwich - Environmental Health Department London Borough of Lewisham - Environmental Health Department London Borough of Newham London Borough of Redbridge - Environmental Health Department London Borough of Tower Hamlets - Environmental Health Department	February 2003 February 2003 February 2003 February 2003 February 2003 February 2003 February 2003 February 2003	Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable
<b>Local Authority Recorded Landfill Sites</b> London Borough of Barking And Dagenham - Environmental Health Department London Borough of Bexley - Environmental Health Department London Borough of Bromley - Environmental Health Department London Borough of Greenwich - Environmental Health Department London Borough of Lewisham - Environmental Health Department London Borough of Newham London Borough of Redbridge - Environmental Health Department London Borough of Tower Hamlets - Environmental Health Department	October 2018 October 2018 October 2018 October 2018 October 2018 October 2018 October 2018 October 2018	
<b>Potentially Infilled Land (Non-Water)</b> Landmark Information Group Limited	December 1999	
<b>Potentially Infilled Land (Water)</b> Landmark Information Group Limited	December 1999	
<b>Registered Landfill Sites</b> Environment Agency - Thames Region - North East Area Environment Agency - Thames Region - South East Area	March 2006 March 2006	Not Applicable Not Applicable
<b>Registered Waste Transfer Sites</b> Environment Agency - Thames Region - North East Area Environment Agency - Thames Region - South East Area	April 2018 April 2018	
<b>Registered Waste Treatment or Disposal Sites</b> Environment Agency - Thames Region - North East Area Environment Agency - Thames Region - South East Area	June 2015 June 2015	



Hazardous Substances	Version	Update Cycle
<b>Control of Major Accident Hazards Sites (COMAH)</b> Health and Safety Executive	March 2023	Bi-Annually
<b>Explosive Sites</b> Health and Safety Executive	March 2017	
<b>Notification of Installations Handling Hazardous Substances (NIHHS)</b> Health and Safety Executive	August 2001	
<b>Planning Hazardous Substance Enforcements</b> London Borough of Greenwich - Planning Department London Borough of Newham London Borough of Tower Hamlets London Borough of Bromley London Port Health Authority - Environmental Services London Borough of Bexley - Development Control London Borough of Barking And Dagenham London Borough of Lewisham - Planning Services London Borough of Redbridge	April 2023 April 2023 April 2023 February 2016 January 2008 January 2016 January 2023 June 2023 May 2023	Variable Variable Variable Variable Annual Rolling Update Variable Variable Variable Variable
<b>Planning Hazardous Substance Consents</b> London Borough of Lewisham - Planning Services London Borough of Barking And Dagenham London Borough of Bromley London Borough of Greenwich - Planning Department London Borough of Newham London Borough of Redbridge London Borough of Tower Hamlets London Port Health Authority - Environmental Services London Borough of Bexley - Development Control	April 2015 February 2016 February 2016 February 2016 February 2016 February 2016 February 2016 January 2008 January 2016	Variable Variable Variable Variable Variable Variable Variable Annual Rolling Update Variable



Geological	Version	Update Cycle
<b>BGS 1:625,000 Solid Geology</b> British Geological Survey - National Geoscience Information Service	January 2009	As notified
<b>BGS Estimated Soil Chemistry</b> British Geological Survey - National Geoscience Information Service	December 2015	As notified
<b>BGS Recorded Mineral Sites</b> British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
<b>BGS Urban Soil Chemistry</b> British Geological Survey - National Geoscience Information Service	December 2015	As notified
<b>BGS Urban Soil Chemistry Averages</b> British Geological Survey - National Geoscience Information Service	December 2015	As notified
<b>CBSCB Compensation District</b> Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
<b>Coal Mining Affected Areas</b> The Coal Authority - Property Searches	February 2023	Annual Rolling Update
<b>Mining Instability</b> Ove Arup & Partners	June 1998	Not Applicable
<b>Non Coal Mining Areas of Great Britain</b> British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
<b>Potential for Collapsible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	April 2020	As notified
<b>Potential for Compressible Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Ground Dissolution Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Landslide Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Running Sand Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Potential for Shrinking or Swelling Clay Ground Stability Hazards</b> British Geological Survey - National Geoscience Information Service	January 2019	As notified
<b>Radon Potential - Radon Affected Areas</b> British Geological Survey - National Geoscience Information Service	September 2022	Annually
<b>Radon Potential - Radon Protection Measures</b> British Geological Survey - National Geoscience Information Service	September 2022	Annually












<b>Industrial Land Use</b>	<b>Version</b>	<b>Update Cycle</b>
<b>Contemporary Trade Directory Entries</b> Thomson Directories	July 2023	Quarterly
<b>Fuel Station Entries</b> Catalist Ltd - Experian	August 2023	Quarterly
<b>Gas Pipelines</b> National Grid	October 2021	Bi-Annually
<b>Points of Interest - Commercial Services</b> PointX	September 2023	Quarterly
<b>Points of Interest - Education and Health</b> PointX	September 2023	Quarterly
<b>Points of Interest - Manufacturing and Production</b> PointX	September 2023	Quarterly
<b>Points of Interest - Public Infrastructure</b> PointX	September 2023	Quarterly
<b>Points of Interest - Recreational and Environmental</b> PointX	September 2023	Quarterly
<b>Underground Electrical Cables</b> National Grid	February 2023	Bi-Annually



Sensitive Land Use	Version	Update Cycle
<b>Ancient Woodland</b> Natural England	April 2023	Bi-Annually
<b>Areas of Adopted Green Belt</b> London Borough of Barking And Dagenham London Borough of Bexley - Development Control London Borough of Bromley London Borough of Greenwich London Borough of Lewisham London Borough of Newham London Borough of Redbridge London Borough of Tower Hamlets	August 2023 August 2023 August 2023 August 2023 August 2023 August 2023 August 2023 August 2023	Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly
<b>Areas of Unadopted Green Belt</b> London Borough of Barking And Dagenham London Borough of Bexley - Development Control London Borough of Bromley London Borough of Greenwich London Borough of Lewisham London Borough of Newham London Borough of Redbridge London Borough of Tower Hamlets	August 2023 August 2023 August 2023 August 2023 August 2023 August 2023 August 2023 August 2023	Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly
<b>Areas of Outstanding Natural Beauty</b> Natural England	April 2023	Bi-Annually
<b>Environmentally Sensitive Areas</b> Natural England	August 2023	
<b>Forest Parks</b> Forestry Commission	May 2023	Not Applicable
<b>Local Nature Reserves</b> Natural England	August 2023	Bi-Annually
<b>Marine Nature Reserves</b> Natural England	April 2023	Bi-Annually
<b>National Nature Reserves</b> Natural England	August 2023	Bi-Annually
<b>National Parks</b> Natural England	February 2018	Bi-Annually
<b>Nitrate Sensitive Areas</b> Natural England	April 2023	Not Applicable
<b>Nitrate Vulnerable Zones</b> Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Environment Agency - Head Office	April 2016 March 2023	Bi-Annually
<b>Ramsar Sites</b> Natural England	October 2023	Bi-Annually
<b>Sites of Special Scientific Interest</b> Natural England	March 2023	Bi-Annually
<b>Special Areas of Conservation</b> Natural England	April 2023	Bi-Annually
<b>Special Protection Areas</b> Natural England	April 2023	Bi-Annually

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	 <b>British Geological Survey</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Centre for Ecology and Hydrology	 <b>Centre for Ecology &amp; Hydrology</b> <small>NATURAL ENVIRONMENT RESEARCH COUNCIL</small>
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

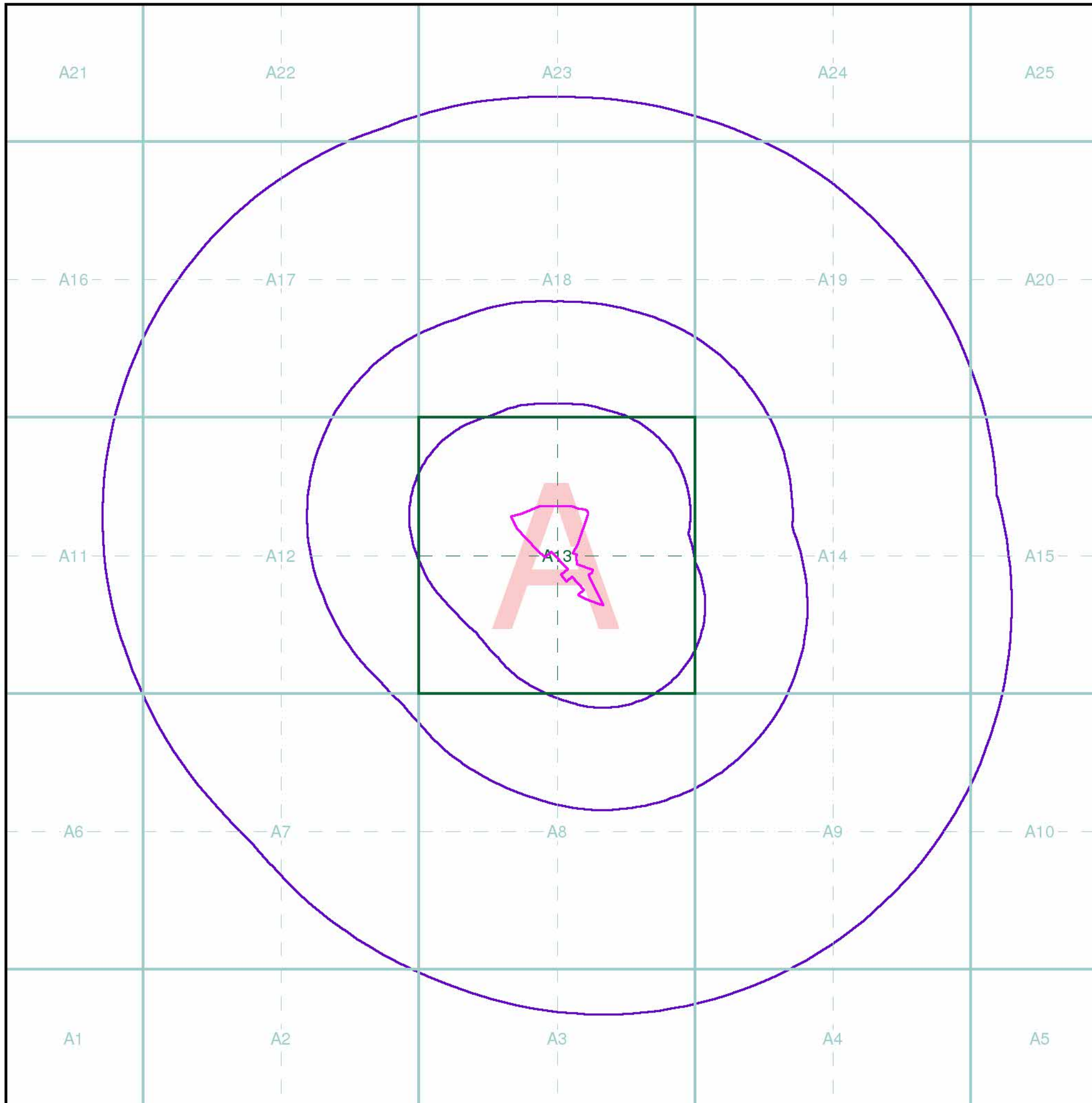




## Useful Contacts

Contact	Name and Address	Contact Details
1	<b>British Geological Survey - Enquiry Service</b> British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	<b>Environment Agency - National Customer Contact Centre (NCCC)</b> PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	<b>London Borough of Greenwich - Environmental Health Department</b> 12th Floor, Riverside House, Woolwich, London, SE18 6DN	Telephone: 020 8854 8888 Fax: 020 8921 8322 Website: www.greenwich.gov.uk
4	<b>London Borough of Newham - Environmental Health Department</b> Alice Billings House, 2-12 West Ham Lane, London, E15 4SF	Telephone: 020 8430 2000 Fax: 020 8557 8869 Website: www.newham.gov.uk
5	<b>Environment Agency - Head Office</b> Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
6	<b>Ordnance Survey</b> Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
7	<b>London Borough of Newham</b> Town Hall Annexe, Barking Road, East Ham, London, E6 2RP	Telephone: 020 8430 2000 Fax: 020 8472 2284 Website: www.newham.gov.uk
8	<b>Stantec UK Ltd</b> Caversham Bridge House, Waterman Place, Reading, RG1 8DN	Telephone: 0118 950 0761 Email: pba.reading@stantec.com Website: www.stantec.com
9	<b>PointX</b> 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
10	<b>Natural England</b> County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
-	<b>Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards</b> Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	<b>Landmark Information Group Limited</b> Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



## Index Map

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

### Slice

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

### Segment

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

### Quadrant

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

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

## Client Details

Mr T., Tweedie Evans Consulting Ltd, The Old Chapel, 35a Southover, Wells, Somerset, BA5 1UH

## Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543640, 179170  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

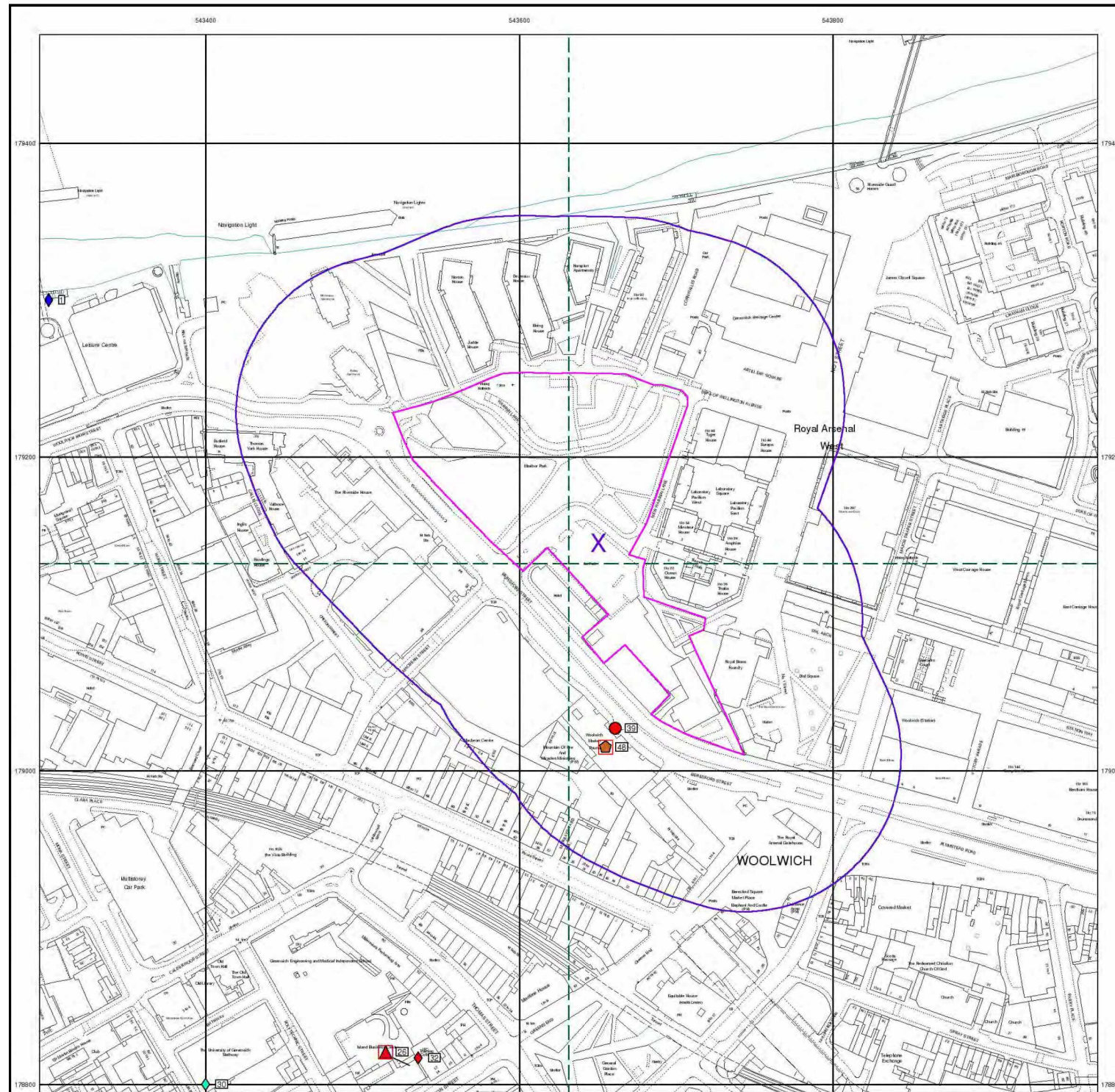
## Site Details

Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF

Full Terms and Conditions can be found on the following link:  
<http://www.landmarkinfo.co.uk/Terms/Show/515>

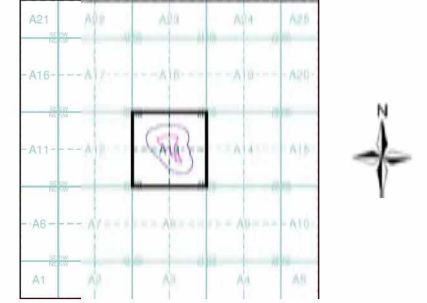


Tel: 0844 844 9952  
 Fax: 0844 844 9951  
 Web: www.envirocheck.co.uk



- General**
- Specified Site
  - Specified Buffer(s)
  - Seventy of Type at Location
  - Prison
  - Bearing Reference Point
  - Overhead Transmission Line
  - Map ID
- Agency and Hydrological**
- Contaminated Land Register Entry or Notice
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Prosecution Relating to Controlled Waters
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Referral
- Waste**
- BOG Recorded Landfill Site (Location)
  - BOG Recorded Landfill Site (Location)
  - EA Historic Landfill (Outdated Area)
  - EA Historic Landfill (Region)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Location)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Local Authority Recorded Landfill Site (Location)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Registered Landfill Site
  - Registered Landfill Site (Location)
  - Registered Landfill Site (Pore buffers to 10m)
  - Registered Landfill Site (Pore buffers to 200m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - EMRS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Geological**
- BOG Recorded Mineral Site

**Site Sensitivity Map - Segment A13**

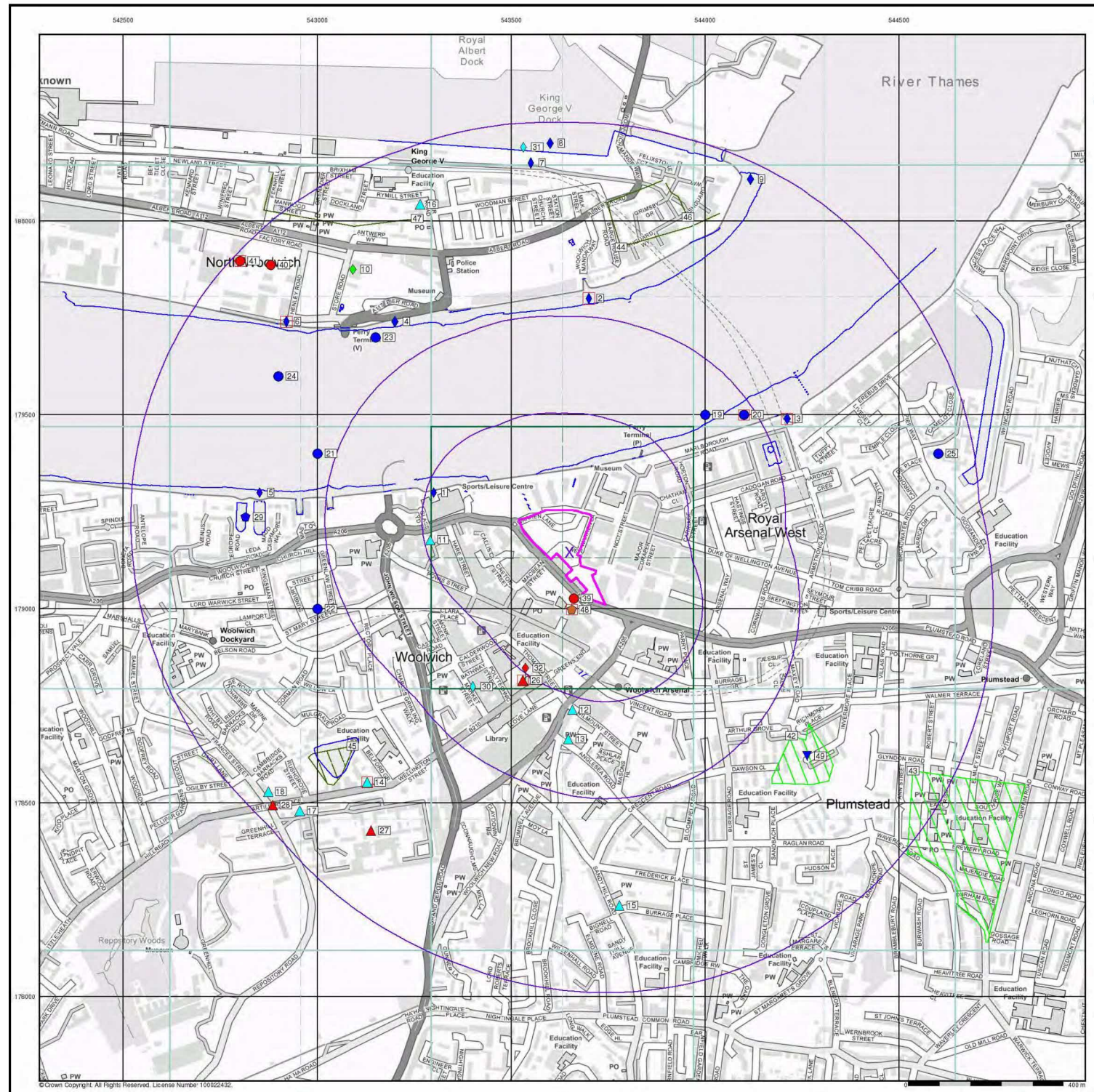


**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Plot Buffer (m): 100

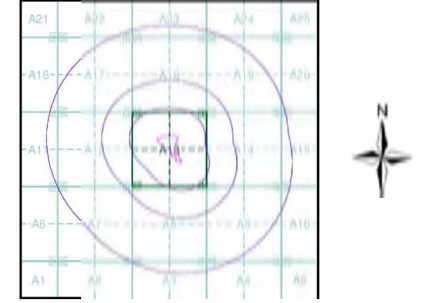
**Site Details**  
 Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF

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



- General**
- Specified Site
  - Specified Outcrop(s)
  - Discharge Reference Point
  - Map ID
- Agency and Hydrological**
- Contaminated Land Register (Entry or Notice (Status))
  - Discharge Consent
  - Enforcement or Prohibition Notice
  - Integrated Pollution Control
  - Integrated Pollution Prevention Control
  - Local Authority Integrated Pollution Prevention and Control
  - Local Authority Pollution Prevention and Control Enforcement
  - Pollution Incident to Controlled Waters
  - Prosecution Relating to Authorised Processes
  - Registered Radioactive Substance
  - River Network or Water Feature
  - River Quality Sampling Point
  - Substantiated Pollution Incident Register
  - Water Abstraction
  - Water Industry Act Return
- Waste**
- DO5 Recorded Landfill Site (Location)
  - DO5 Recorded Landfill Site (Status)
  - EA Historic Landfill (Beyond Feed)
  - EA Historic Landfill (Active)
  - Integrated Pollution Control Registered Waste Site
  - Licensed Waste Management Facility (Landfill Boundary)
  - Licensed Waste Management Facility (Location)
  - Local Authority Recorded Landfill Site (Status)
  - Local Authority Recorded Landfill Site (Location)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Non-water)
  - Potentially Infilled Land (Water)
  - Potentially Infilled Land (Water)
  - Registered Landfill Site (Location)
  - Registered Landfill Site (Pure Inferred to 10m)
  - Registered Landfill Site (Pure Inferred to 20m)
  - Registered Waste Transfer Site (Location)
  - Registered Waste Transfer Site
  - Registered Waste Treatment or Disposal Site (Location)
  - Registered Waste Treatment or Disposal Site
- Hazardous Substances**
- COMAH Site
  - Explosive Site
  - PHS Site
  - Planning Hazardous Substance Consent
  - Planning Hazardous Substance Enforcement
- Geological**
- DO5 Recorded Mineral Site

**Site Sensitivity Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

**Site Details**  
 Land at Maribor Park, New Warren Lane, LONDON, SE18 6NF



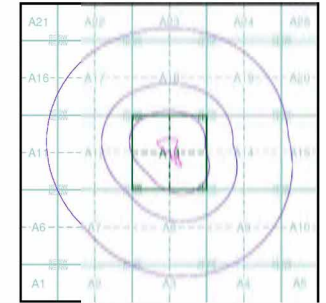
### Industrial Land Use Map

- General**
- Specified Site
  - Specified Buffer(s)
  - Bearing Reference Point
  - Site
  - Map ID

### Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

### Industrial Land Use Map - Slice A



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

### Site Details

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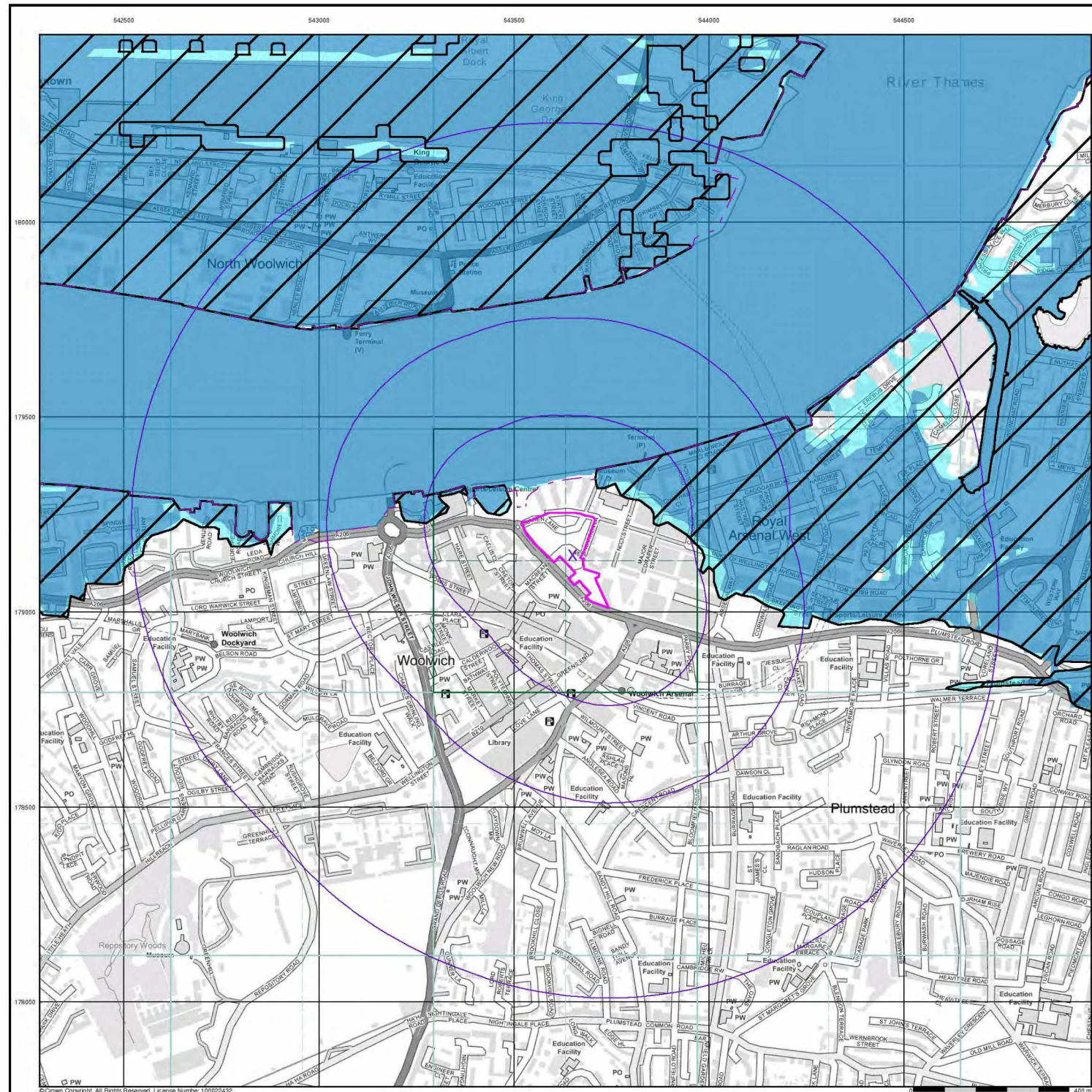


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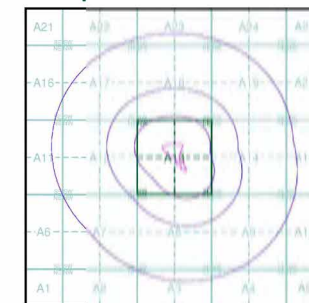
- Specified Site
- Specified Buffer(s)
- Dealing Reference Point

### Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Seas without Defences (Zone 2)
- Flooding from Rivers or Seas without Defences (Zone 3)
- Area Deriving from Flood Defence
- Flood Water Storage Areas
- Flood Defence



### Flood Map - Slice A



### Order Details

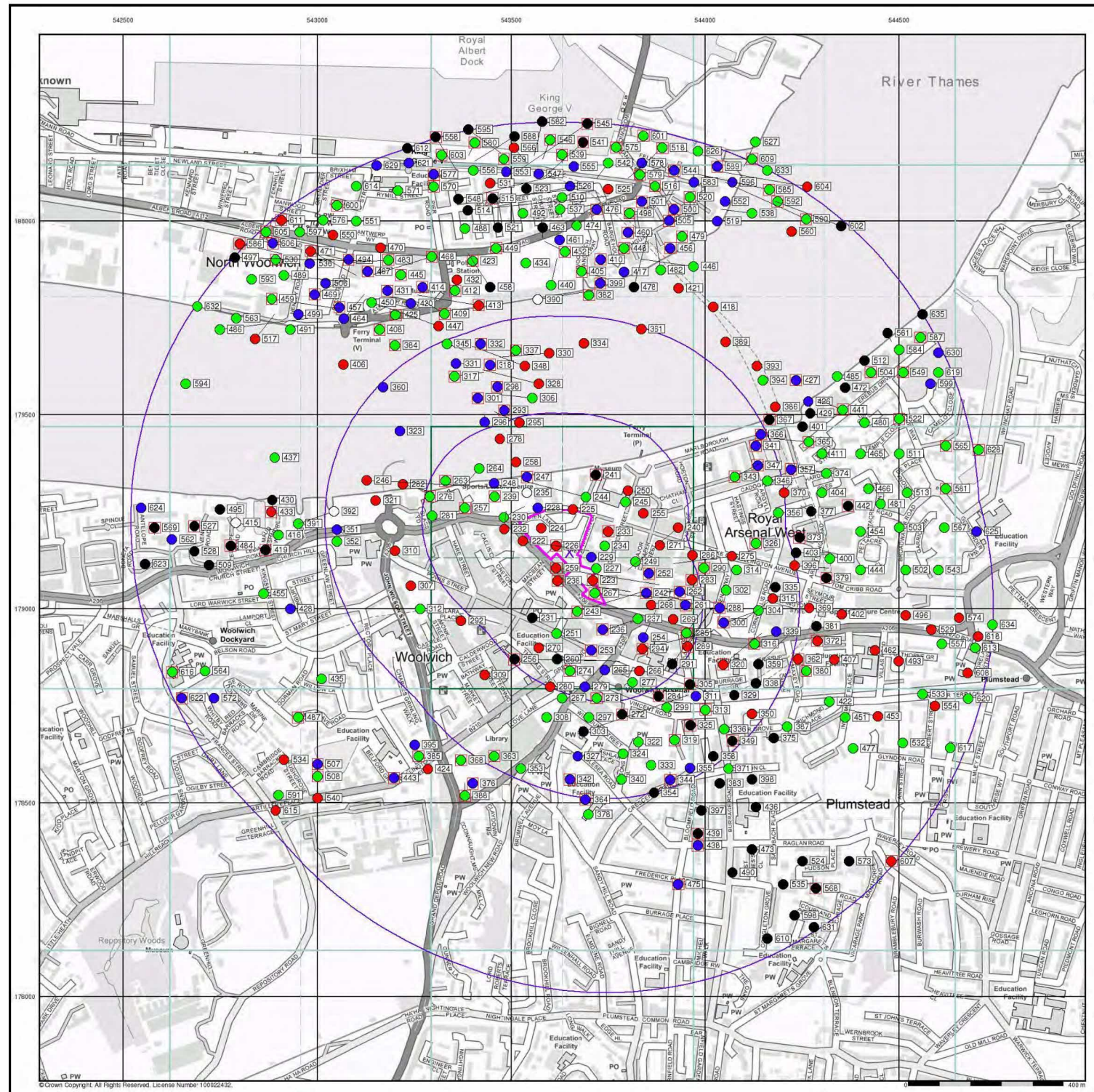
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 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

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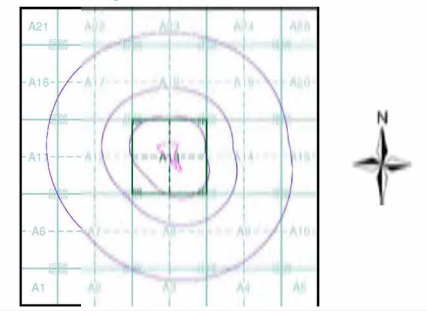
- General**
- Specified Site
  - Specified Buffer(s)
  - X Bearing Reference Point
  - Map ID
  - General of Type at Location

- Agency and Hydrological (Boreholes)**
- BGS Borehole Depth 0 - 10m
  - BGS Borehole Depth 10 - 30m
  - BGS Borehole Depth 30m +
  - Confidential
  - Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of [www.envirocheck.co.uk](http://www.envirocheck.co.uk).

**Borehole Map - Slice A**



**Order Details**

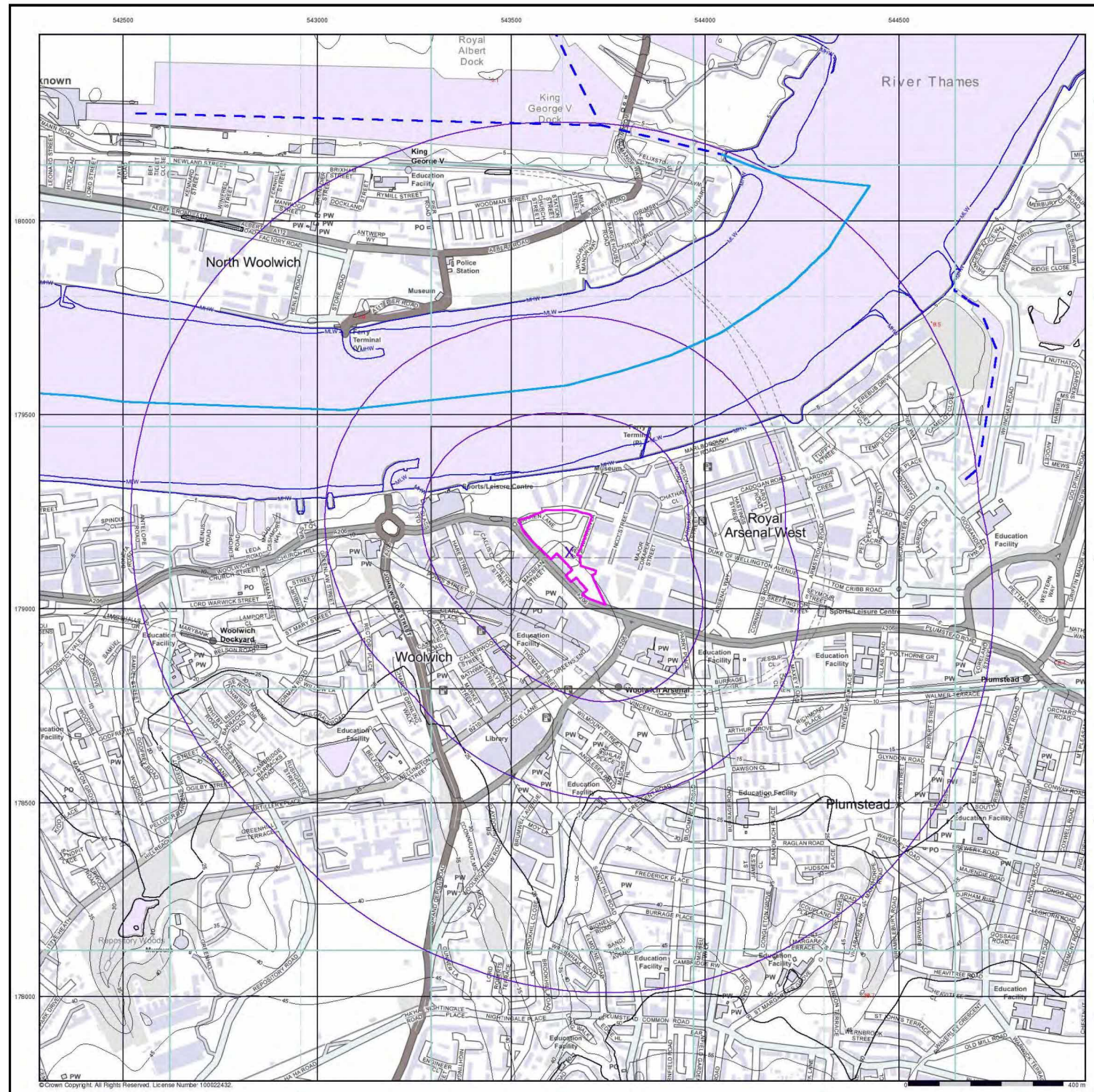
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

**Site Details**

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**General**

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

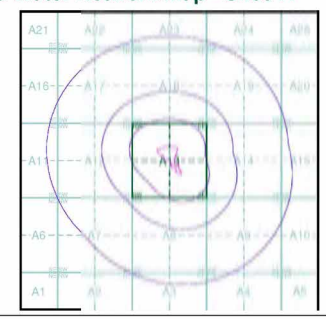
**OS Water Network Data**

- |              |                         |
|--------------|-------------------------|
| Canal        | Drain                   |
| Reservoir    | Other                   |
| Foreshore    | Lake                    |
| Marsh        | Transfer                |
| Tidal River  | Lock Or Flight Of Locks |
| Inland River | Sea                     |

**Contours (height in meters)**

- Standard Contour      Mean Low Water
- Master Contour      Mean High Water
- Spot Height 'M'S

**OS Water Network Map - Slice A**



**Order Details**

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
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**Site Details**

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### General

- Specified Site
- Specified Buffer(s)
- Drawing Reference Point

### Risk of Flooding from Surface Water

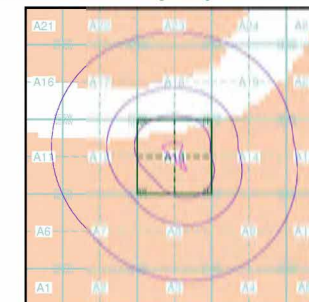
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

### Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

### EA/NRW Suitability Map - Slice A



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
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### Site Details

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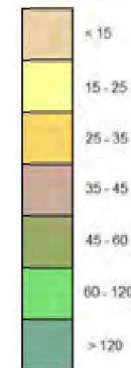
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- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

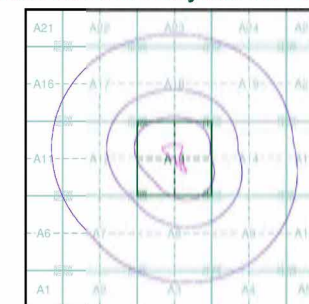
### Urban Soil Chemistry Arsenic

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Arsenic Concentrations mg/kg



### Urban Soil Chemistry Arsenic - Slice A



### Order Details

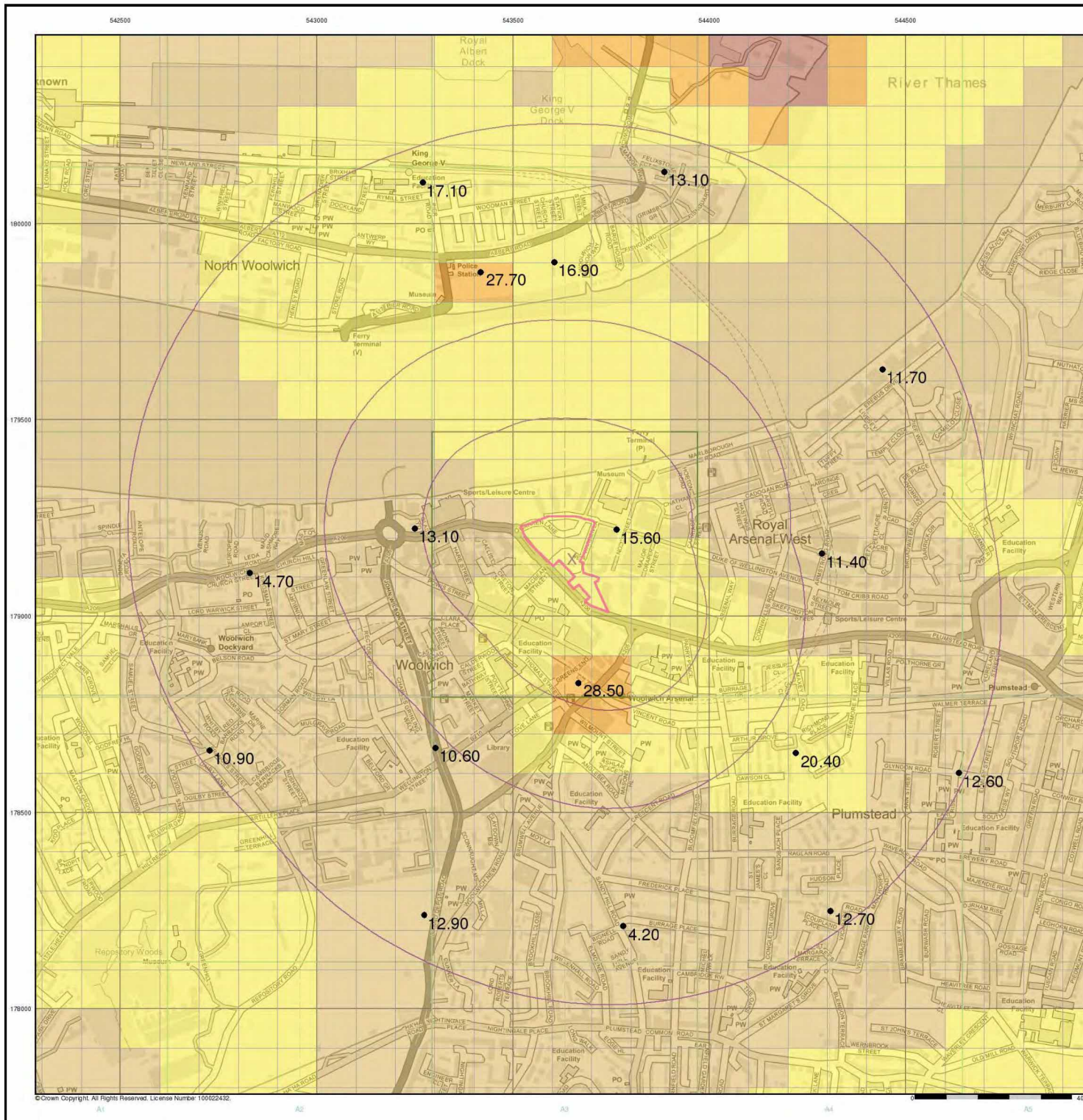
Order Details: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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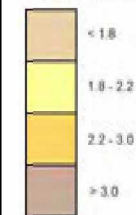
### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

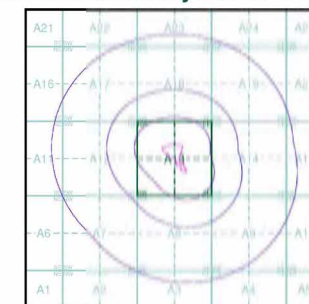
### Urban Soil Chemistry Cadmium

● BGS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Cadmium Concentrations mg/kg



### Urban Soil Chemistry Cadmium - Slice A



### Order Details

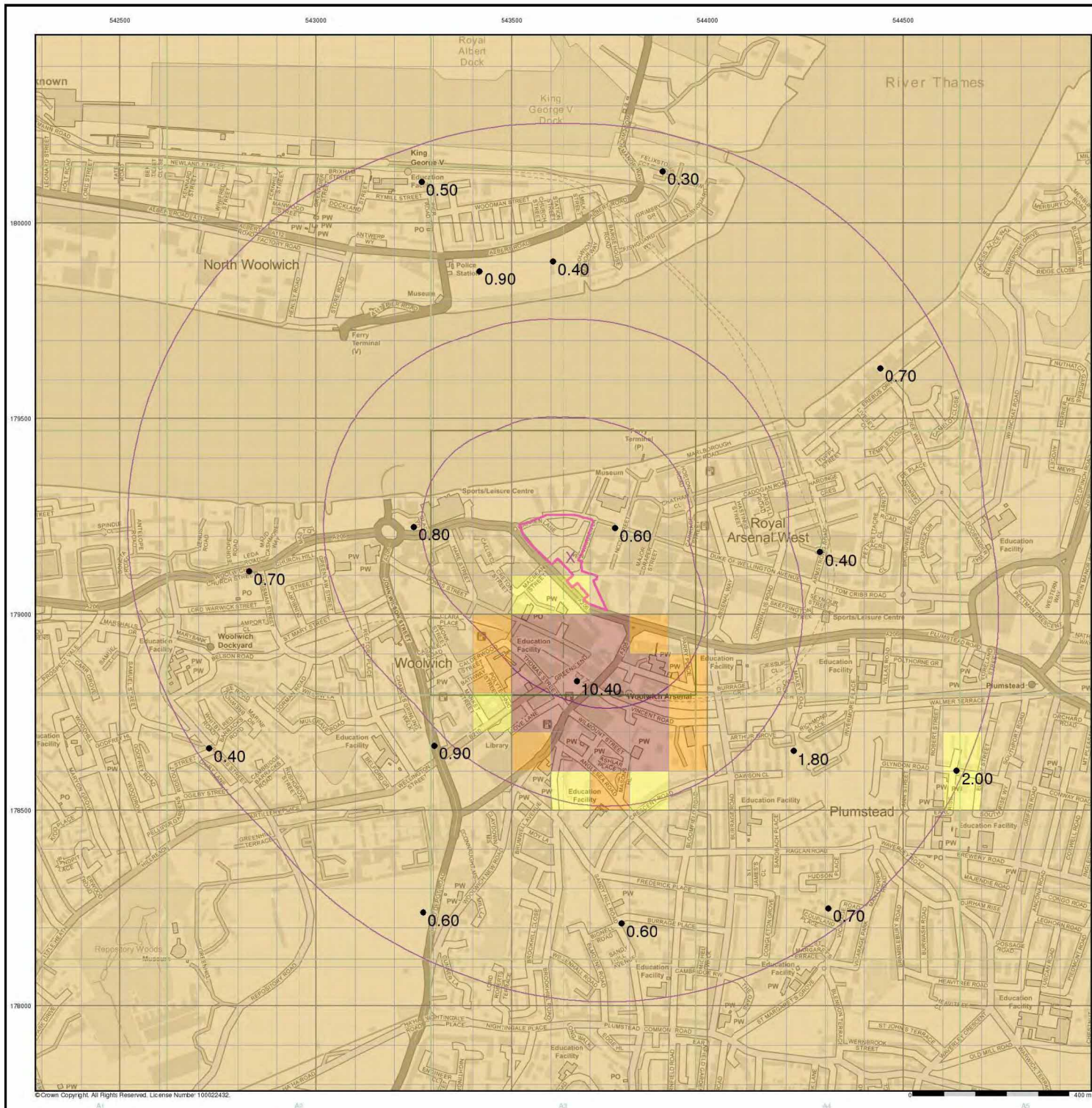
Order Details: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

### Site Details

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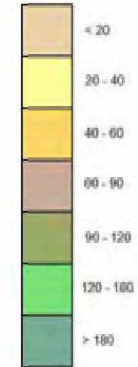
General

- Specified Site
- Specified Buffer(s)
- Display Reference Point

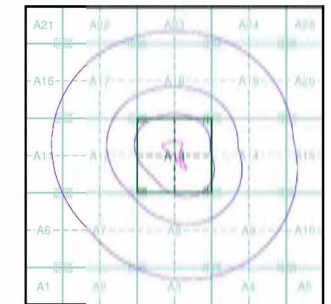
Urban Soil Chemistry Chromium

• BQS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Chromium Concentrations mg/kg



Urban Soil Chemistry Chromium - Slice A



Order Details

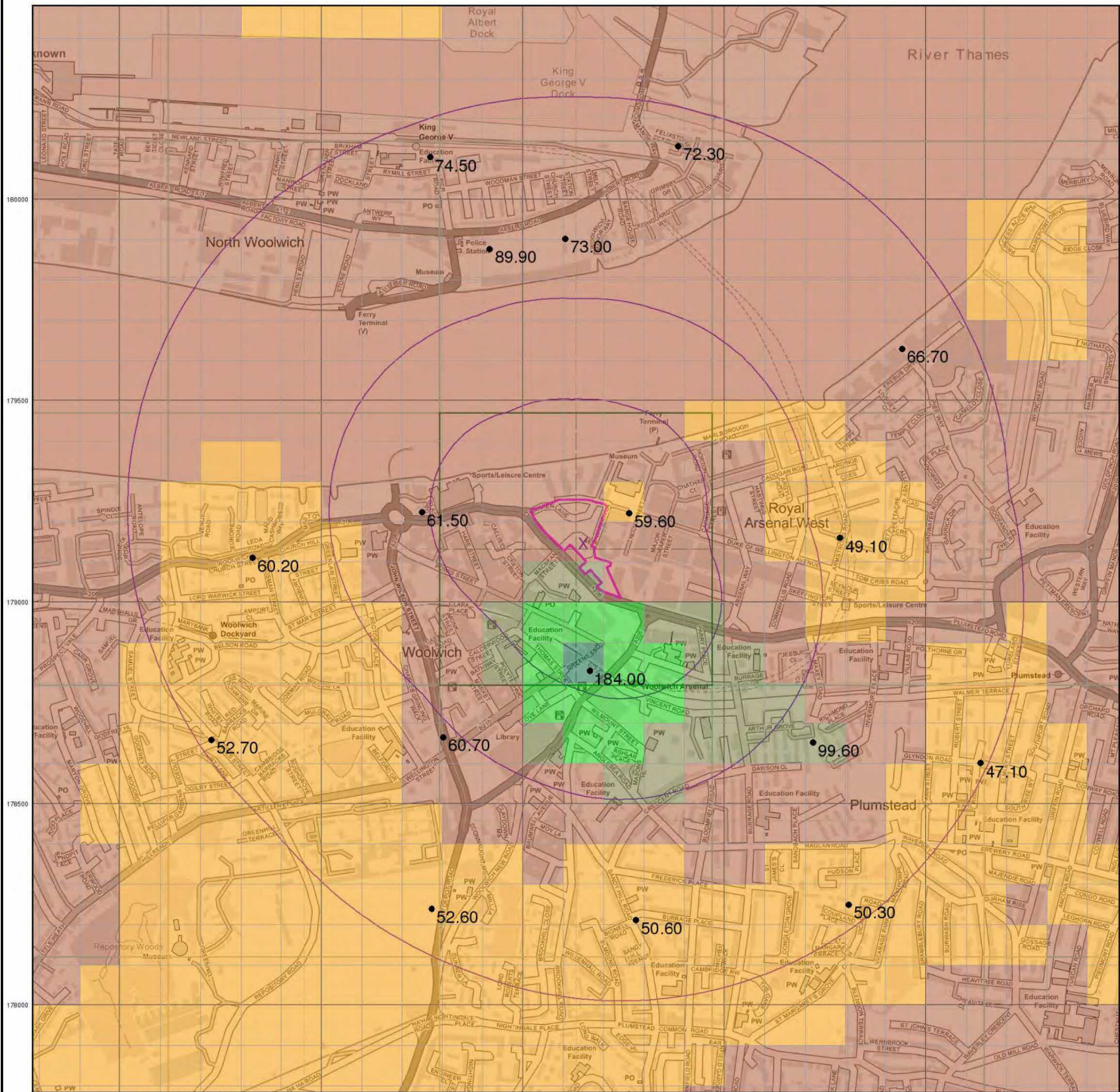
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 National Grid Reference: 543650, 179150  
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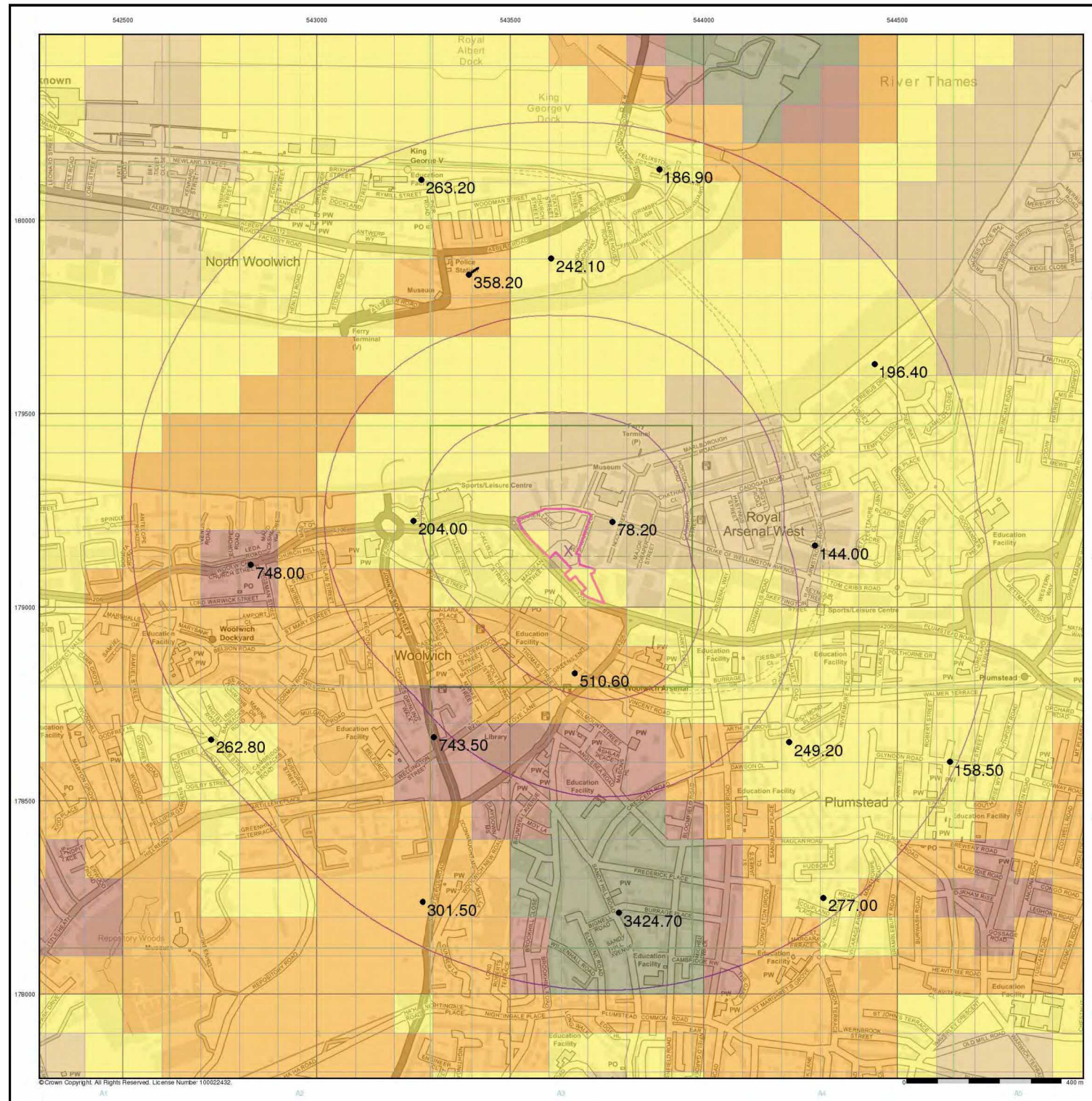
Site Details

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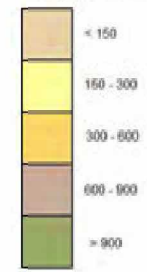
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- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

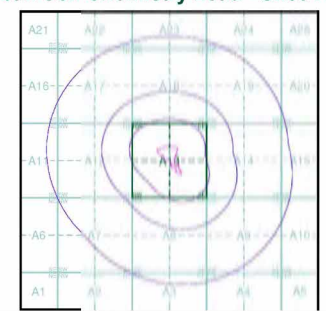
**Urban Soil Chemistry Lead**

● BOS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Lead Concentrations mg/kg



**Urban Soil Chemistry Lead - Slice A**



**Order Details**

Order Details: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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**Site Details**

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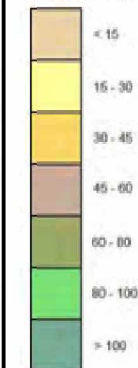
### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

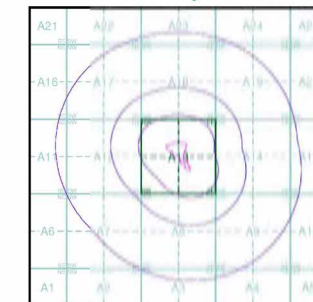
### Urban Soil Chemistry Nickel

● BQS Urban Soil Chemistry Measured Concentration Values (mg/kg)

Nickel Concentrations mg/kg



### Urban Soil Chemistry Nickel - Slice A



### Order Details

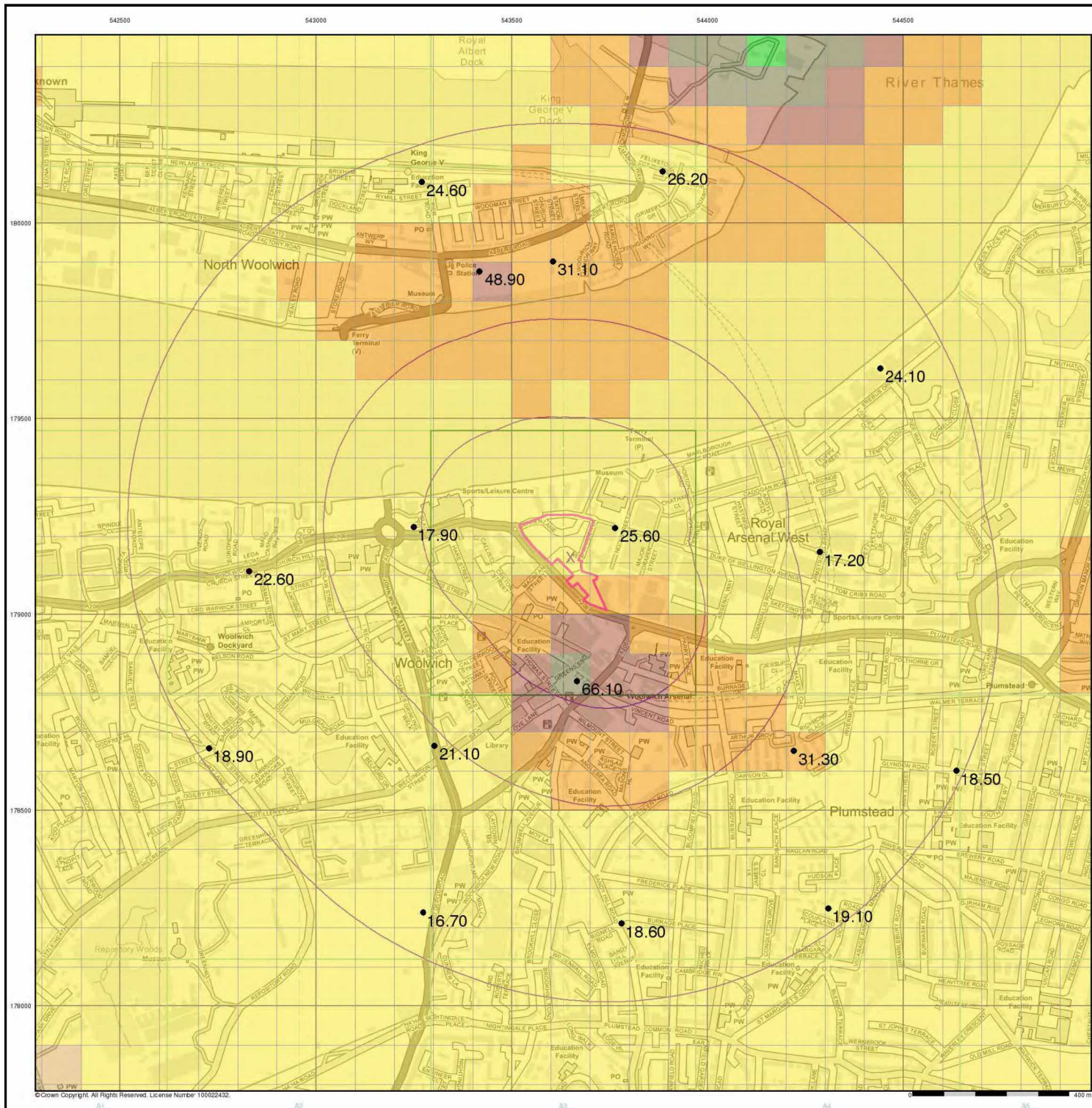
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 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

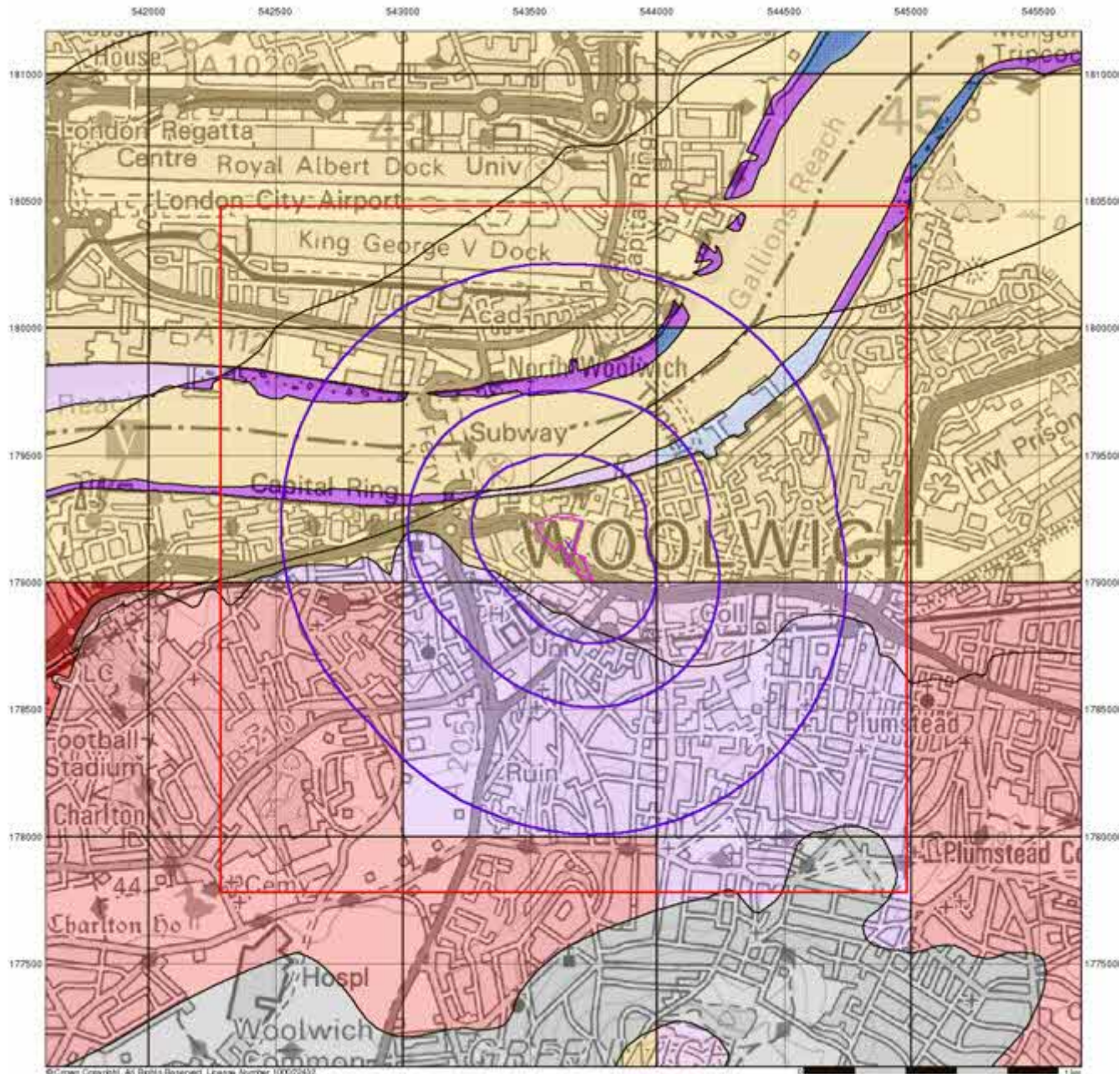
### Site Details

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## Groundwater Vulnerability

### General

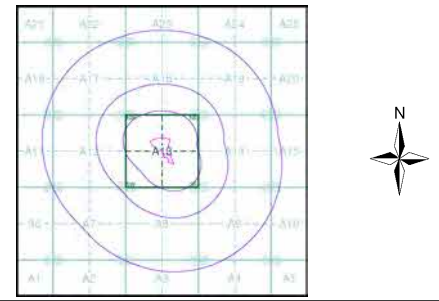
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

- | Bedrock Aquifers                        | Superficial Aquifers                    |
|---|---|
| High Vulnerability, Principal Aquifer   | High Vulnerability, Principal Aquifer   |
| High Vulnerability, Secondary Aquifer   | High Vulnerability, Secondary Aquifer   |
| Medium Vulnerability, Principal Aquifer | Medium Vulnerability, Principal Aquifer |
| Medium Vulnerability, Secondary Aquifer | Medium Vulnerability, Secondary Aquifer |
| Low Vulnerability, Principal Aquifer    | Low Vulnerability, Principal Aquifer    |
| Low Vulnerability, Secondary Aquifer    | Low Vulnerability, Secondary Aquifer    |

- Unproductive Aquifer
- Soluble Rock

### Site Sensitivity Context Map - Slice A



### Order Details

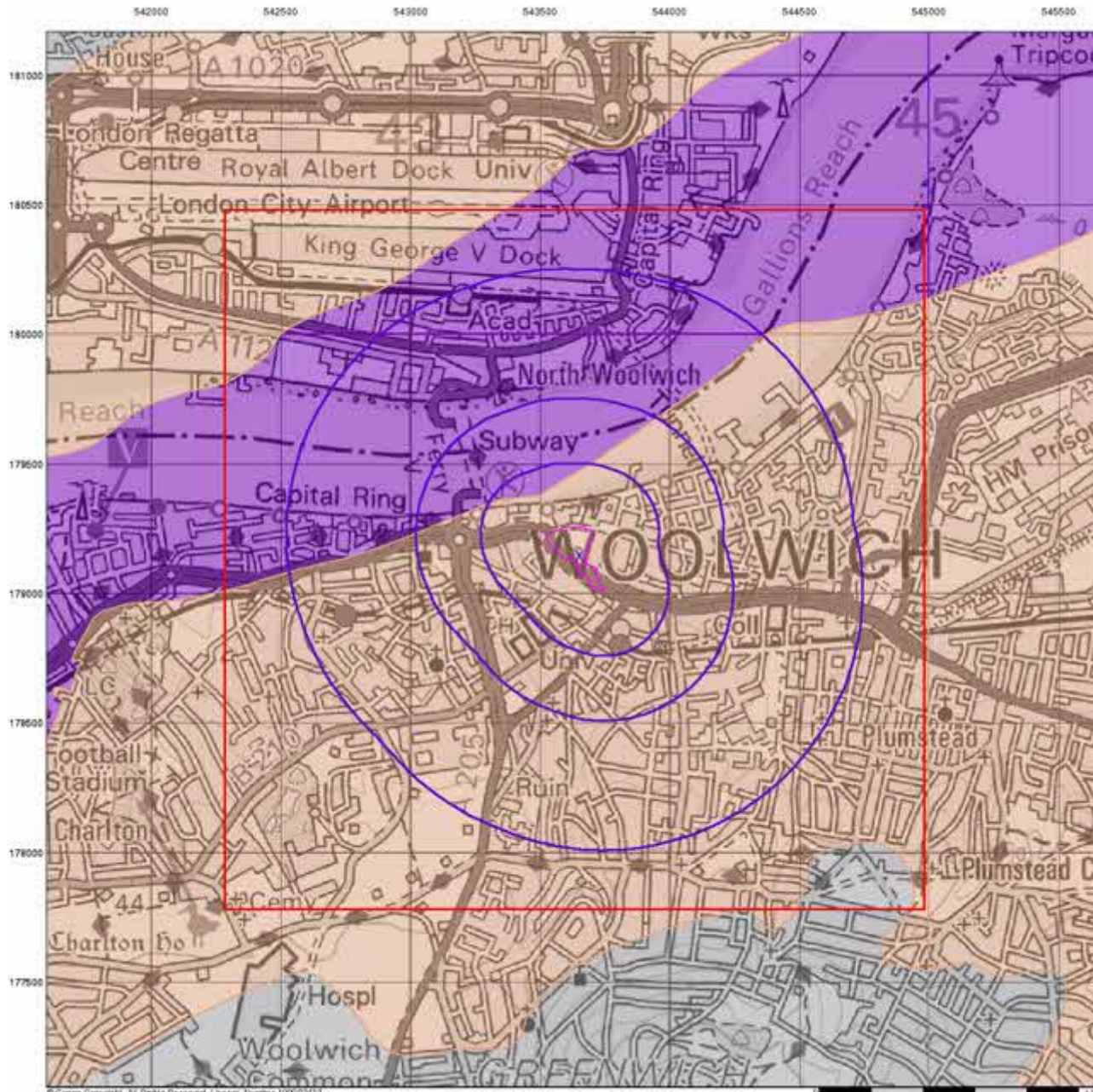
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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### Site Details

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## Bedrock Aquifer Designation

### General

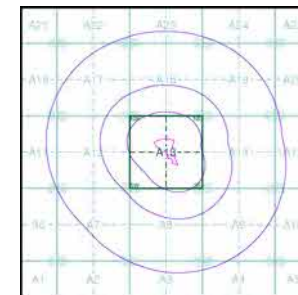
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
 Search Buffer (m): 1000

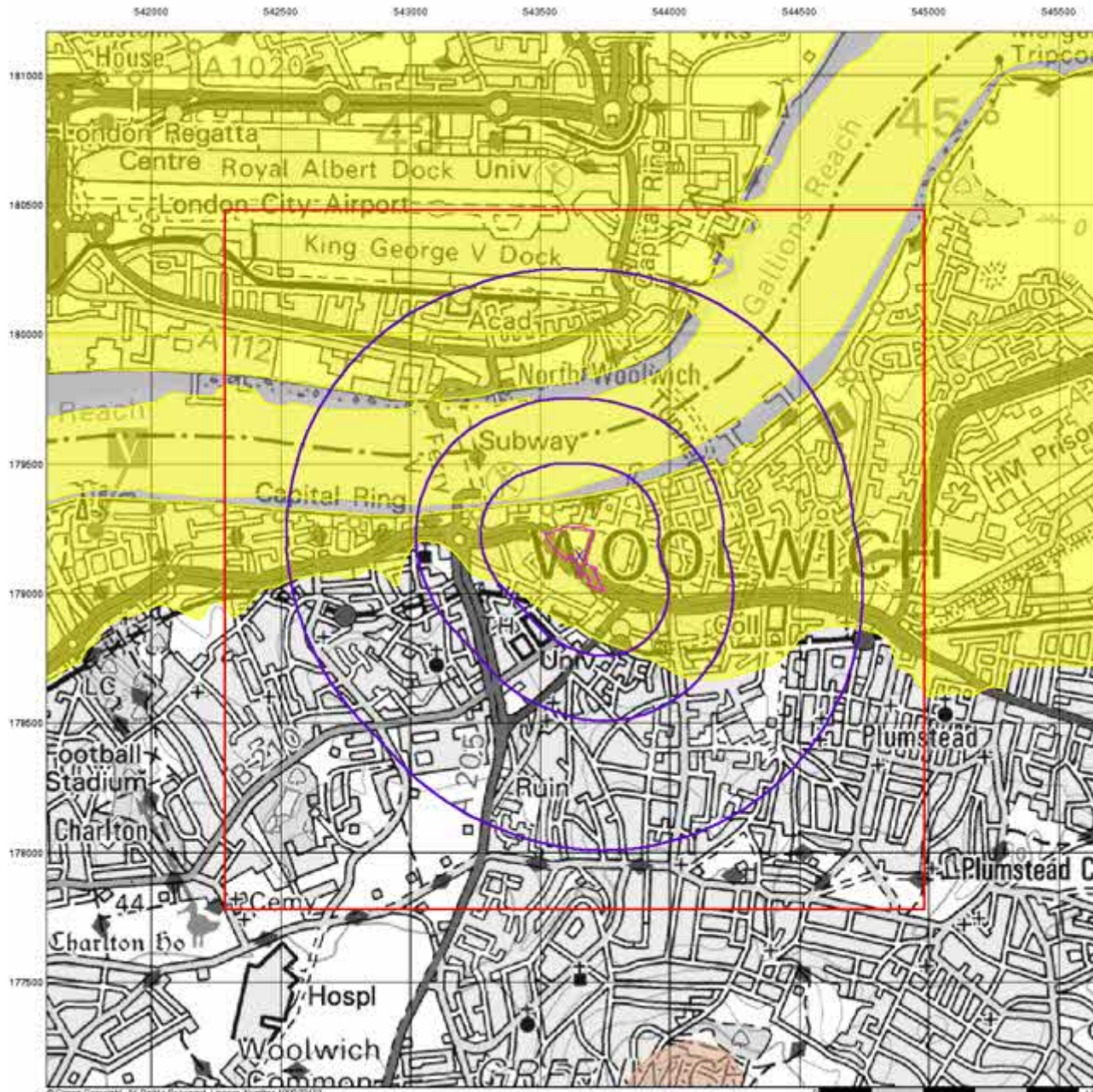
### Site Details

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## Superficial Aquifer Designation

### General

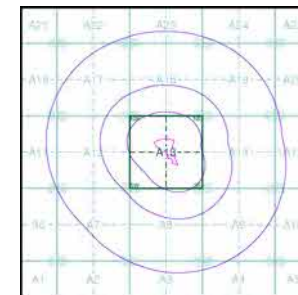
- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

### Agency and Hydrological

#### Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

### Site Sensitivity Context Map - Slice A



### Order Details

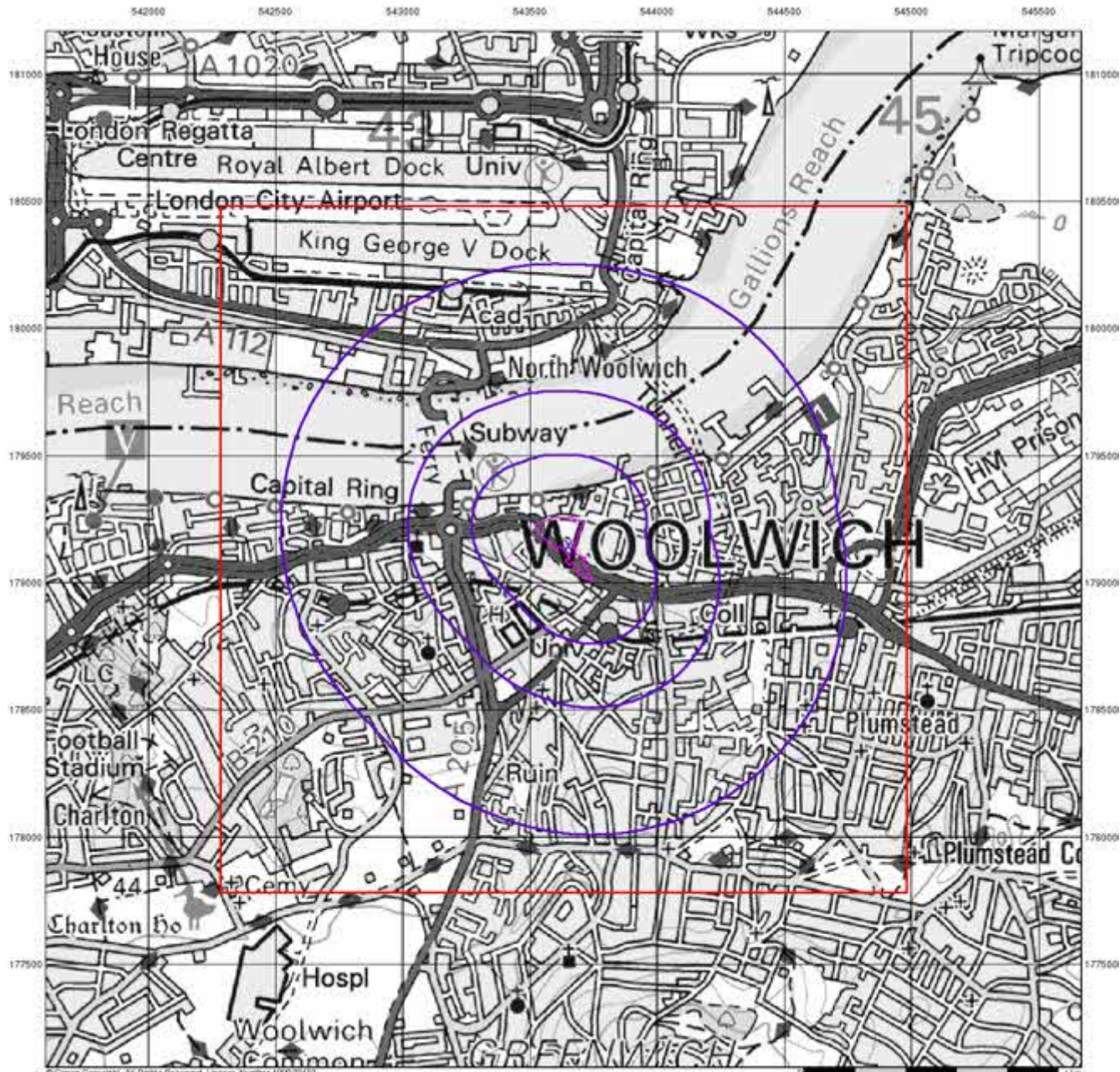
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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### Site Details

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## Source Protection Zones

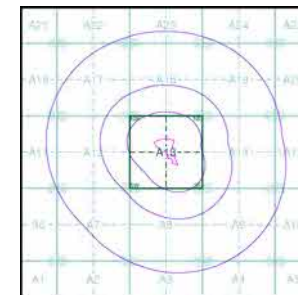
### General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point
-  Slice
-  Map ID

### Agency and Hydrological

-  Inner zone (Zone 1)
-  Inner zone - subsurface activity only (Zone 1c)
-  Outer zone (Zone 2)
-  Outer zone - subsurface activity only (Zone 2c)
-  Total catchment (Zone 3)
-  Total catchment - subsurface activity only (Zone 3c)
-  Special interest (Zone 4)

### Site Sensitivity Context Map - Slice A



### Order Details

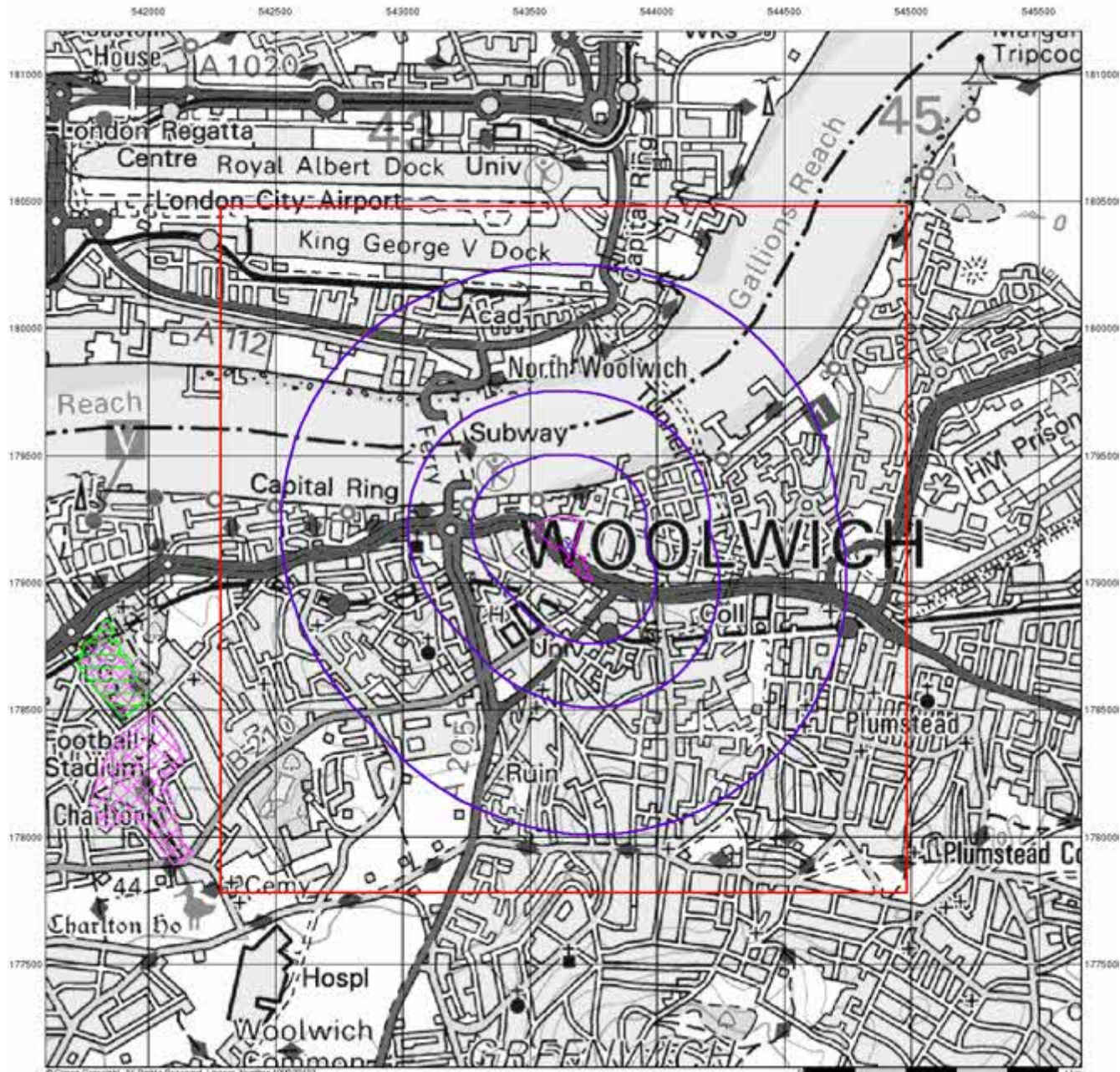
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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### Site Details

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## Sensitive Land Uses

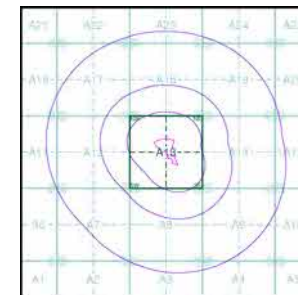
### General

-  Specified Site
-  Specified Buffer(s)
-  Bearing Reference Point
-  Slice
-  Map ID

### Sensitive Land Uses

-  Ancient Woodland
-  Area of Adopted Green Belt
-  Area of Unadopted Green Belt
-  Area of Outstanding Natural Beauty
-  Environmentally Sensitive Area
-  Forest Park
-  Local Nature Reserve
-  Marine Nature Reserve
-  National Nature Reserve
-  National Park
-  Nitrate Sensitive Area
-  Nitrate Vulnerable Zone
-  Ramsar Site
-  Site of Special Scientific Interest
-  Special Area of Conservation
-  Special Protection Area
-  World Heritage Sites

### Site Sensitivity Context Map - Slice A



### Order Details

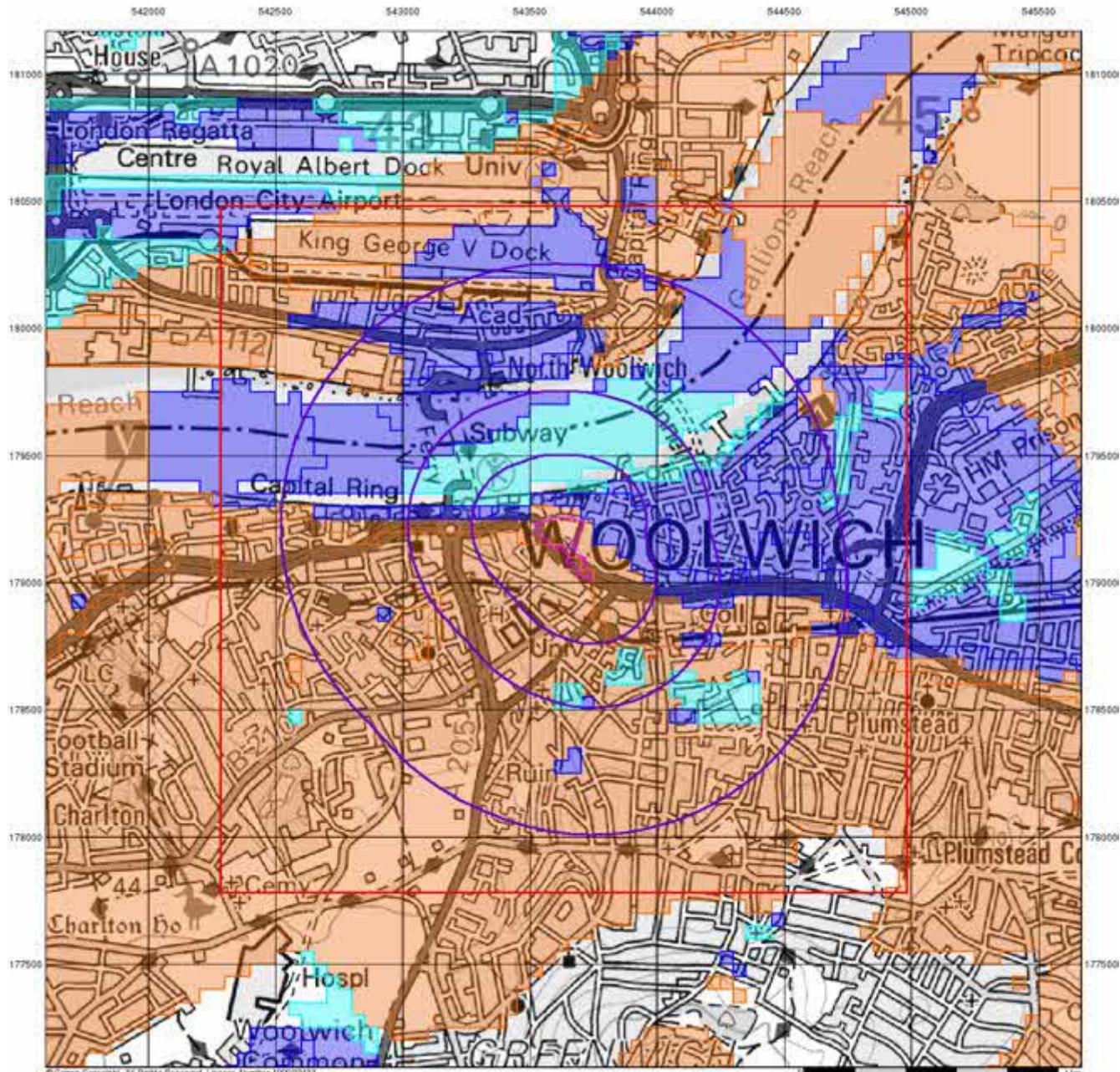
Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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### Site Details

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### BGS Flood GFS Data

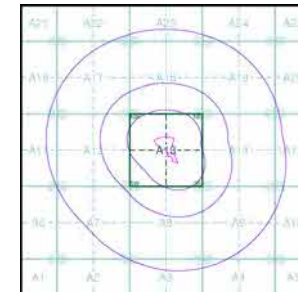
#### General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

#### Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

### Site Sensitivity Context Map - Slice A



### Order Details

Order Number: 322278804\_1\_1  
 Customer Ref: 2208001.001  
 National Grid Reference: 543650, 179150  
 Slice: A  
 Site Area (Ha): 2.18  
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Appendix D

Risk Methodologies and Evaluation



## Risk Evaluation

The qualitative assessment methodology presented in CIRIA publication C552 (2001) titled 'Contaminated Land Risk Assessment: A Guide to Good Practice' has been used by TEC for the basis of evaluating potential risk.

The method requires an assessment of the:

- magnitude of the probability or likelihood of the risk occurring (Table 1); and
- magnitude of the potential consequence or severity of the risk occurring (Table 2)

Table 1. Classification of Probability

Classification	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the short-term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.

Table 2. Classification of Consequence

Classification	Definition	Examples
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resource. (Note: Water Resources Act contains no scope for considering significance of pollution). Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organisation forming part of such ecosystem (note: the definitions of ecological systems within the draft circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
Medium	Chronic damage to human health ("significant harm" as defined in DETR, 2000). Pollution of sensitive water resources. (Note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem, or organism forming part of such ecosystem, (note: the definitions of ecological systems within draft circular on Contaminated Land, DETR, 2000).	Concentration of a contaminant from site exceeding the generic or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of a species within a designated nature reserve.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ("significant harm" as defined in the draft circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (for example foundation damage resulting in instability).
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc), easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discolouration of concrete.



The combination of the two factors is determined using Table 3 and the resulting level of risk is described in Table 4. The evaluation can be applied to each of the scenarios identified in the risk model and the overall risk assessed.

Table 3. Combination of Consequence with Probability

		Consequence			
		Severe	Medium	Mild	Minor
P R O B A B I L I T Y	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate/Low Risk
	Likely	High Risk	Moderate Risk	Moderate/Low Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate/Low Risk	Low Risk	Very Low Risk
	Unlikely	Moderate/Low Risk	Low Risk	Very Low Risk	Very Low Risk

Table 4. Description of risks and likely action required

Very High Risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short-term and are likely over the longer-term.
Moderate Risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the long-term.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Using the risk model the pollutant linkages are identified and a preliminary estimate of risk undertaken. If there is no pollutant linkage identified, then there is no risk. If the estimate of risk for all the linkages and exposure scenarios is very low at this stage then it is likely that no further assessment will be required.

Appendix E  
Exploratory Hole Logs



Well

Well

Well

Well

Well

Well

Well

Well



Well

Well

Well

Well

Appendix F  
Geochemical Certificates of Analysis



4041



Tweedie Evans Consulting Ltd  
The Old Chapel  
35a Southover  
Wells  
Somerset  
BA5 1UH

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## **Analytical Report Number : 23-64723**

<b>Project / Site name:</b>	RAR - Blocks D&K	<b>Samples received on:</b>	19/10/2023
<b>Your job number:</b>	2208001.002	<b>Samples instructed on/ Analysis started on:</b>	25/10/2023
<b>Your order number:</b>		<b>Analysis completed by:</b>	09/11/2023
<b>Report Issue Number:</b>	1	<b>Report issued on:</b>	09/11/2023
<b>Samples Analysed:</b>	12 soil samples		

Signed: 

  
Reporting Specialist  
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting  
leachates - 2 weeks from reporting  
waters - 2 weeks from reporting  
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 23-64723  
Project / Site name: RAR - Blocks D&K

Lab Sample Number	2856758			2856759			2856760			2856761			2856762		
Sample Reference	WS01			WS01			WS01			WS02			WS02		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	0.20			0.70			1.00			0.40			2.00		
Date Sampled	17/10/2023			17/10/2023			17/10/2023			17/10/2023			17/10/2023		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status												
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	0.01	NONE	13	12	14	6.3	14							
Total mass of sample received	kg	0.001	NONE	0.2	0.3	0.4	0.3	0.4							

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	JBH	JBH	JBH	JBH	JBH

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.9	7.6	8.2	8.4	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1200	1100	1100	1200	1100
Sulphide	mg/kg	1	MCERTS	2.7	4.6	5	28	8.3
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.7	2.2	2.1	1.3	1.7

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.15	0.07	< 0.05	0.12
Acenaphthylene	mg/kg	0.05	MCERTS	0.1	0.12	0.11	0.11	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.15	0.06	< 0.05	0.17
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.13	0.06	< 0.05	0.14
Phenanthrene	mg/kg	0.05	MCERTS	0.49	1.6	0.66	0.61	1.3
Anthracene	mg/kg	0.05	MCERTS	0.24	0.37	0.14	0.17	0.23
Fluoranthene	mg/kg	0.05	MCERTS	2.1	2.7	1.7	1.7	1.7
Pyrene	mg/kg	0.05	MCERTS	1.8	2.3	1.6	1.5	1.4
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.3	1.3	0.96	1	0.92
Chrysene	mg/kg	0.05	MCERTS	1.2	1.1	0.92	0.94	0.87
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.3	1.6	1.5	1.3	1.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.71	0.5	0.43	0.4	0.33
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.93	1.1	1	0.89	0.78
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.61	0.63	0.59	0.53	0.45
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.18	0.16	0.19	0.12	0.14
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.57	0.69	0.68	0.6	0.56
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

#### Total PAH

Total WAC-17 PAHs	mg/kg	0.85	NONE	11.6	14.5	10.6	9.85	10.4
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Analytical Report Number: 23-64723  
Project / Site name: RAR - Blocks D&K

Lab Sample Number			2856758	2856759	2856760	2856761	2856762
Sample Reference			WS01	WS01	WS01	WS02	WS02
Sample Number			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)			0.20	0.70	1.00	0.40	2.00
Date Sampled			17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023
Time Taken			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				

#### Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	12	14	14	17
Barium (aqua regia extractable)	mg/kg	1	MCERTS	90	98	120	99	160
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.58	0.58	0.7	0.84	0.74
Boron (water soluble)	mg/kg	0.2	MCERTS	1.3	1.4	1.2	0.3	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.6	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	18	26	22	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	51	53	79	54	110
Lead (aqua regia extractable)	mg/kg	1	MCERTS	150	200	420	220	840
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.7	0.8	0.4	2.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	14	24	18	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	29	30	35	35	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	130	180	91	150

#### Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

#### Petroleum Hydrocarbons

TPH C10 - C40 <sub>EH,CU,1D,TOTAL</sub>	mg/kg	10	MCERTS	22	17	32	51	26
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TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	9.5	< 8.0	15	< 8.0	8.1
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	NONE	11	< 10	16	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	< 10	13	23	11
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	NONE	11	13	16	31	13

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 23-64723  
Project / Site name: RAR - Blocks D&K

Lab Sample Number	2856763			2856764			2856765			2856766			2856767		
Sample Reference	WS02			WS03			WS03			WS03			WS04		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	3.00			0.30			0.50			0.70			0.30		
Date Sampled	17/10/2023			17/10/2023			17/10/2023			17/10/2023			17/10/2023		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status												
Stone Content	%	0.1	NONE	< 0.1	41	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	0.01	NONE	20	5.7	4.6	4.7	6.6							
Total mass of sample received	kg	0.001	NONE	0.5	0.3	0.3	0.4	0.3							

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Amosite- Loose Fibrous Debris	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	JBH	JBH	JBH	JBH	JBH

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	8.6	9.3	8.9	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	520	1000	1800	1400	1300
Sulphide	mg/kg	1	MCERTS	16	9.5	22	21	11
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.5	1.1	0.8	0.8	1.3

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.2	0.14	0.14	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.06	0.07	0.07	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	0.14	0.08	0.11	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	1.5	1.1	1.2	0.21
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.57	0.3	0.3	0.07
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	2.9	3.1	2.8	0.49
Pyrene	mg/kg	0.05	MCERTS	< 0.05	2.5	2.7	2.5	0.49
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	1.7	1.8	1.6	0.27
Chrysene	mg/kg	0.05	MCERTS	< 0.05	1.4	1.5	1.2	0.3
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	2	2.3	1.8	0.33
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.81	0.73	0.77	0.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	1.4	1.5	1.3	0.28
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.81	0.9	0.63	0.26
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.15	0.15	0.1	0.08
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.81	0.89	0.75	0.29
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	0.43

#### Total PAH

Total WAC-17 PAHs	mg/kg	0.85	NONE	< 0.85	16.8	17.2	15.3	3.7
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Analytical Report Number: 23-64723  
Project / Site name: RAR - Blocks D&K

Lab Sample Number				2856763	2856764	2856765	2856766	2856767
Sample Reference				WS02	WS03	WS03	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				3.00	0.30	0.50	0.70	0.30
Date Sampled				17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
<b>Heavy Metals / Metalloids</b>								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	26	50	13	10
Barium (aqua regia extractable)	mg/kg	1	MCERTS	130	79	78	75	58
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	1	0.58	0.6	0.55	0.59
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	0.6	0.7	0.6	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	36	18	18	17	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	80	360	120	100	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	780	240	160	130	52
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	1.5	0.8	0.6	0.4	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	37	25	23	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	52	29	32	29	27
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	86	200	110	120	67

**Monoaromatics & Oxygenates**

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

**Petroleum Hydrocarbons**

TPH C10 - C40 <sub>EH,CU,1D,TOTAL</sub>	mg/kg	10	MCERTS	< 10	41	33	73	25
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	mg/kg	0.02	NONE	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	< 8.0	15	< 8.0	13	9.2
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	NONE	< 10	16	< 10	14	< 10
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	mg/kg	0.01	NONE	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	mg/kg	0.05	NONE	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	15	19	38	13
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	NONE	< 10	23	26	47	13

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-64723  
Project / Site name: RAR - Blocks D&K

Lab Sample Number				2856768	2856769
Sample Reference				WS04	WS04
Sample Number				None Supplied	None Supplied
Depth (m)				0.60	1.00
Date Sampled				17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	51	36
Moisture Content	%	0.01	NONE	4	6.6
Total mass of sample received	kg	0.001	NONE	0.3	0.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile- Loose Fibres	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ

#### General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.6	9.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1700	2100
Sulphide	mg/kg	1	MCERTS	22	18
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.7	0.8

#### Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
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#### Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.06	0.12
Acenaphthylene	mg/kg	0.05	MCERTS	0.13	0.35
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	0.24
Fluorene	mg/kg	0.05	MCERTS	0.08	0.26
Phenanthrene	mg/kg	0.05	MCERTS	0.77	3
Anthracene	mg/kg	0.05	MCERTS	0.25	0.99
Fluoranthene	mg/kg	0.05	MCERTS	2	5.3
Pyrene	mg/kg	0.05	MCERTS	1.9	4.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.1	2.5
Chrysene	mg/kg	0.05	MCERTS	1.2	2.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.2	2.9
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.71	1.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1	2.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.74	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.17	0.41
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.8	1.5
Coronene	mg/kg	0.05	NONE	< 0.05	< 0.05

#### Total PAH

Total WAC-17 PAHs	mg/kg	0.85	NONE	12.1	29.5
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Analytical Report Number: 23-64723  
Project / Site name: RAR - Blocks D&K

Lab Sample Number				2856768	2856769
Sample Reference				WS04	WS04
Sample Number				None Supplied	None Supplied
Depth (m)				0.60	1.00
Date Sampled				17/10/2023	17/10/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
<b>Heavy Metals / Metalloids</b>					
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	26
Barium (aqua regia extractable)	mg/kg	1	MCERTS	110	120
Beryllium (aqua regia extractable)	mg/kg	0.06	MCERTS	0.58	0.76
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	94	140
Lead (aqua regia extractable)	mg/kg	1	MCERTS	190	430
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	31	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	170

**Monoaromatics & Oxygenates**

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

**Petroleum Hydrocarbons**

TPH C10 - C40 <sub>EH,CU,1D,TOTAL</sub>	mg/kg	10	MCERTS	110	100
TPH-CWG - Aliphatic >EC5 - EC6 <sub>HS,1D,AL</sub>	mg/kg	0.02	NONE	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 <sub>HS,1D,AL</sub>	mg/kg	0.02	NONE	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 <sub>HS,1D,AL</sub>	mg/kg	0.05	NONE	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 <sub>EH,CU,1D,AL</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 <sub>EH,CU,1D,AL</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 <sub>EH,CU,1D,AL</sub>	mg/kg	8	MCERTS	17	29
TPH-CWG - Aliphatic (EC5 - EC35) <sub>EH,CU+HS,1D,AL</sub>	mg/kg	10	NONE	17	34
TPH-CWG - Aromatic >EC5 - EC7 <sub>HS,1D,AR</sub>	mg/kg	0.01	NONE	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 <sub>HS,1D,AR</sub>	mg/kg	0.01	NONE	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 <sub>HS,1D,AR</sub>	mg/kg	0.05	NONE	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 <sub>EH,CU,1D,AR</sub>	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 <sub>EH,CU,1D,AR</sub>	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	< 10	13
TPH-CWG - Aromatic >EC21 - EC35 <sub>EH,CU,1D,AR</sub>	mg/kg	10	MCERTS	40	34
TPH-CWG - Aromatic (EC5 - EC35) <sub>EH,CU+HS,1D,AR</sub>	mg/kg	10	NONE	48	48

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 23-64723  
 Project / Site name: RAR - Blocks D&K

\* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2856758	WS01	None Supplied	0.2	Brown loam and sand with gravel and vegetation.
2856759	WS01	None Supplied	0.7	Brown loam and sand with gravel and vegetation.
2856760	WS01	None Supplied	1	Brown loam and sand with gravel and vegetation.
2856761	WS02	None Supplied	0.4	Brown sandy loam with gravel and vegetation.
2856762	WS02	None Supplied	2	Brown clay and sand with gravel and brick.
2856763	WS02	None Supplied	3	Black clay and sand with gravel.
2856764	WS03	None Supplied	0.3	Brown sandy loam with stones and brick.
2856765	WS03	None Supplied	0.5	Brown sandy loam with gravel and vegetation.
2856766	WS03	None Supplied	0.7	Brown sandy loam with gravel and vegetation.
2856767	WS04	None Supplied	0.3	Brown sandy clay with gravel and vegetation.
2856768	WS04	None Supplied	0.6	Brown sandy loam with gravel and stones.
2856769	WS04	None Supplied	1	Brown sandy loam with gravel and stones.

Analytical Report Number : 23-64723  
Project / Site name: RAR - Blocks D&K

Water matrix abbreviations:  
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO <sub>4</sub> in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS

Analytical Report Number : 23-64723  
 Project / Site name: RAR - Blocks D&K

Water matrix abbreviations:  
 Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser.	L080-PL	W	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

## Information in Support of Analytical Results

### List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

## Sample Deviation Report



Analytical Report Number : 23-64723

Project / Site name: RAR - Blocks D&K


This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.


Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS01	None Supplied	S	2856758	c	Sulphide in soil	L010-PL	c
WS01	None Supplied	S	2856758	c	Total cyanide in soil	L080-PL	c
WS01	None Supplied	S	2856759	c	Sulphide in soil	L010-PL	c
WS01	None Supplied	S	2856759	c	Total cyanide in soil	L080-PL	c
WS01	None Supplied	S	2856760	c	Sulphide in soil	L010-PL	c
WS01	None Supplied	S	2856760	c	Total cyanide in soil	L080-PL	c
WS02	None Supplied	S	2856761	c	Sulphide in soil	L010-PL	c
WS02	None Supplied	S	2856761	c	Total cyanide in soil	L080-PL	c
WS02	None Supplied	S	2856762	c	Sulphide in soil	L010-PL	c
WS02	None Supplied	S	2856762	c	Total cyanide in soil	L080-PL	c
WS02	None Supplied	S	2856763	c	Sulphide in soil	L010-PL	c
WS02	None Supplied	S	2856763	c	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	2856764	c	Sulphide in soil	L010-PL	c
WS03	None Supplied	S	2856764	c	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	2856765	c	Sulphide in soil	L010-PL	c
WS03	None Supplied	S	2856765	c	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	2856766	c	Sulphide in soil	L010-PL	c
WS03	None Supplied	S	2856766	c	Total cyanide in soil	L080-PL	c
WS04	None Supplied	S	2856767	c	Sulphide in soil	L010-PL	c
WS04	None Supplied	S	2856767	c	Total cyanide in soil	L080-PL	c
WS04	None Supplied	S	2856768	c	Sulphide in soil	L010-PL	c
WS04	None Supplied	S	2856768	c	Total cyanide in soil	L080-PL	c
WS04	None Supplied	S	2856769	c	Sulphide in soil	L010-PL	c
WS04	None Supplied	S	2856769	c	Total cyanide in soil	L080-PL	c



Appendix G  
Geotechnical Laboratory Report

		<b>Saturation Moisture Content - Summary of Results</b> <b>Tested in accordance with BS1377 : Part 2 : 1990, clause 3.3 unless annotated otherwise.</b>									
Job No.		Project Name						Programme			
34318		RAR, Block D & K						Samples received		31/10/2023	
								Schedule received		01/11/2023	
Project No.		Client						Project started		02/11/2023	
2208001.001		TEC						Testing Started		14/11/2023	
Hole No.	Sample				Description	SMC %	NMC %	Bulk Density Mg/m3	Dry Density Mg/m3	Remarks - Sample size complies with BS1377:1990: Part 2 (Yes/No)	
	Ref	Top m	Base m	Type							
BH01	-	17.50	17.60	D	Off white slightly putty weakly intact CHALK core	35	34	1.87	1.39	No	
BH01	-	20.30	20.40	D	Off white slightly putty weakly intact CHALK core	31	30	1.92	1.47	Yes	
BH01	-	23.50	23.70	D	Off white slightly putty weakly intact CHALK core	31	31	1.92	1.47	Yes	
BH01	-	32.10	32.20	D	Off white slightly putty weakly intact CHALK core	30	29	1.94	1.50	No	
BH02	-	19.70	19.90	D	Off white intact CHALK core	30	29	1.94	1.50	Yes	
BH02	-	24.20	24.40	D	Off white intact CHALK core	30	29	1.92	1.49	Yes	
BH02	-	30.40	30.60	D	Off white intact CHALK core	29	29	1.97	1.52	Yes	
BH02	-	31.70	31.80	C	Off white intact CHALK core	29	29	1.96	1.51	Yes	
BH02	-	34.20	34.10	D	Off white intact CHALK core	31	31	1.92	1.47	Yes	
BH02	-	34.80	35.05	C	Off white intact CHALK core	31	31	1.92	1.47	Yes	

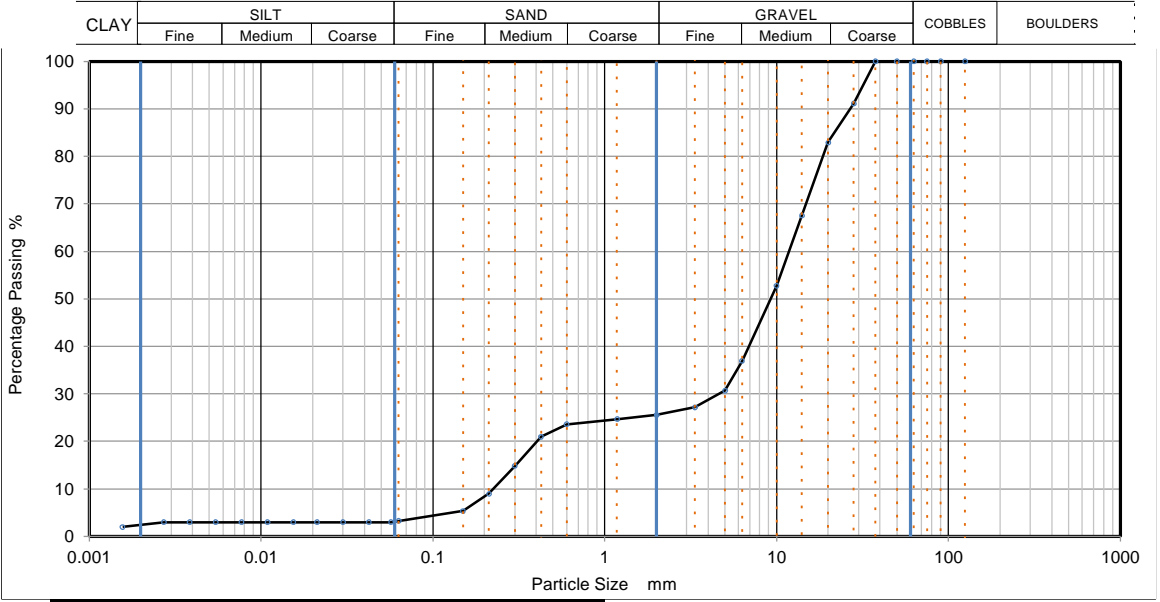
	<b>Test Report by K4 SOILS LABORATORY</b> <b>Unit 8 Olds Close Olds Approach</b> <b>Watford Herts WD18 9RU</b> <b>Tel: 01923 711 288 Email: James@k4soils.com</b>	<b>Checked and Approved</b>  <b>Initials</b> J.P  <b>Date:</b> 17/11/2023
	<i>These results only apply to the items tested. The report shall not be reproduced except in full without authority of the laboratory</i>	
	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)



## PARTICLE SIZE DISTRIBUTION

		Job Ref	34318		
		Borehole/Pit No.	BH01		
Site Name	RAR, Block D & K		Sample No.	-	
Project No.	2208001.001	Client	TEC	Depth Top	3.50 m
Soil Description	Orangish brown slightly silty slightly clayey very sandy GRAVEL (gravel is fmc and rounded to sub-angular)			Depth Base	3.70 m
				Sample Type	B
				Samples received	31/10/2023
				Schedules received	01/11/2023
Test Method	BS1377:Part 2: 1990, clause 9.0		Project started	02/11/2023	
				Date tested	14/11/2023

*These results only apply to the items tested*



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0570	3
90	100	0.0423	3
75	100	0.0299	3
63	100	0.0211	3
50	100	0.0154	3
37.5	100	0.0109	3
28	91	0.0077	3
20	83	0.0054	3
14	68	0.0038	3
10	53	0.0027	3
6.3	37	0.0016	2
5	31		
3.35	27		
2	26		
1.18	25		
0.6	24	Particle density (assumed)	
0.425	21	2.70	Mg/m3
0.3	15		
0.212	9		
0.15	5		
0.063	3		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	74.44
Sand	22.23
Silt	0.80
Clay	2.50

Grading Analysis		
D100	mm	
D60	mm	11.8
D30	mm	4.63
D10	mm	0.225
Uniformity Coefficient		52
Curvature Coefficient		8.1

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

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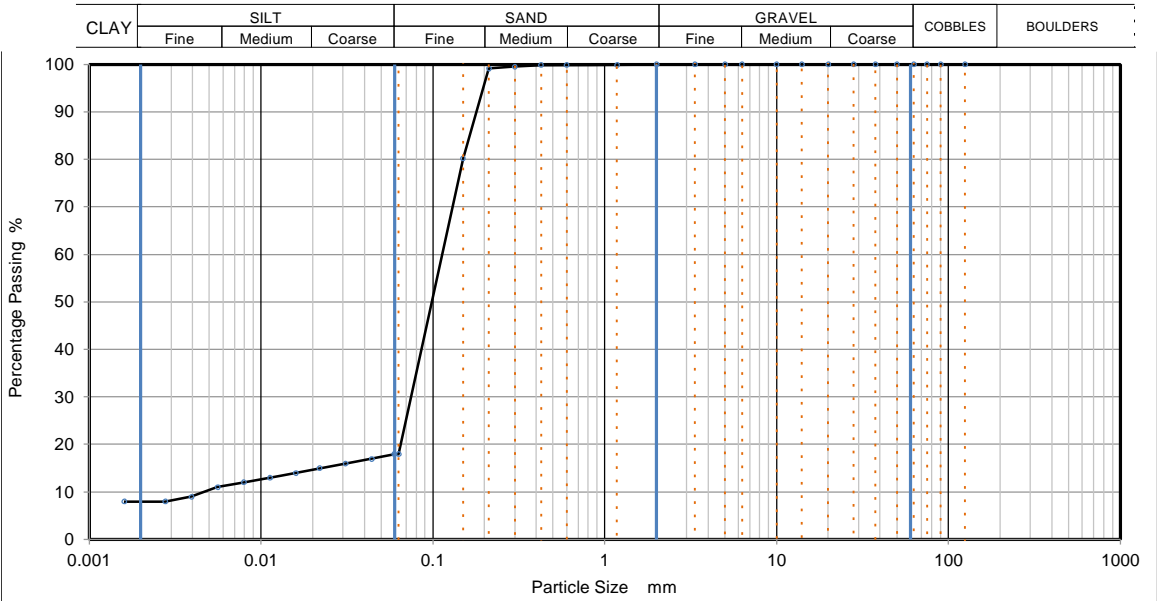
	<b>K4 Soils Laboratory</b> Unit 8, Olds Close, Watford, Herts, WD18 9RU Email: james@k4soils.com Tel: 01923 711288	Checked and Approved Initials: J.P Date: 17/11/2023
	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)



## PARTICLE SIZE DISTRIBUTION

		Job Ref	34318		
		Borehole/Pit No.	BH01		
Site Name	RAR, Block D & K		Sample No.	-	
Project No.	2208001.001	Client	TEC	Depth Top	12.20 m
Soil Description	Greyish brown clayey silty SAND			Depth Base	12.40 m
				Sample Type	B
				Samples received	31/10/2023
				Schedules received	01/11/2023
Test Method	BS1377:Part 2: 1990, clause 9.0		Project started	02/11/2023	
				Date tested	14/11/2023

These results only apply to the items tested



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0594	18
90	100	0.0441	17
75	100	0.0310	16
63	100	0.0219	15
50	100	0.0160	14
37.5	100	0.0113	13
28	100	0.0079	12
20	100	0.0056	11
14	100	0.0039	9
10	100	0.0028	8
6.3	100	0.0016	8
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100	Particle density (assumed)	
0.425	100	2.70	Mg/m3
0.3	100		
0.212	99		
0.15	80		
0.063	18		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	81.99
Silt	10.30
Clay	7.70

Grading Analysis		
D100	mm	
D60	mm	0.113
D30	mm	0.0745
D10	mm	0.00471
Uniformity Coefficient		24
Curvature Coefficient		10

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

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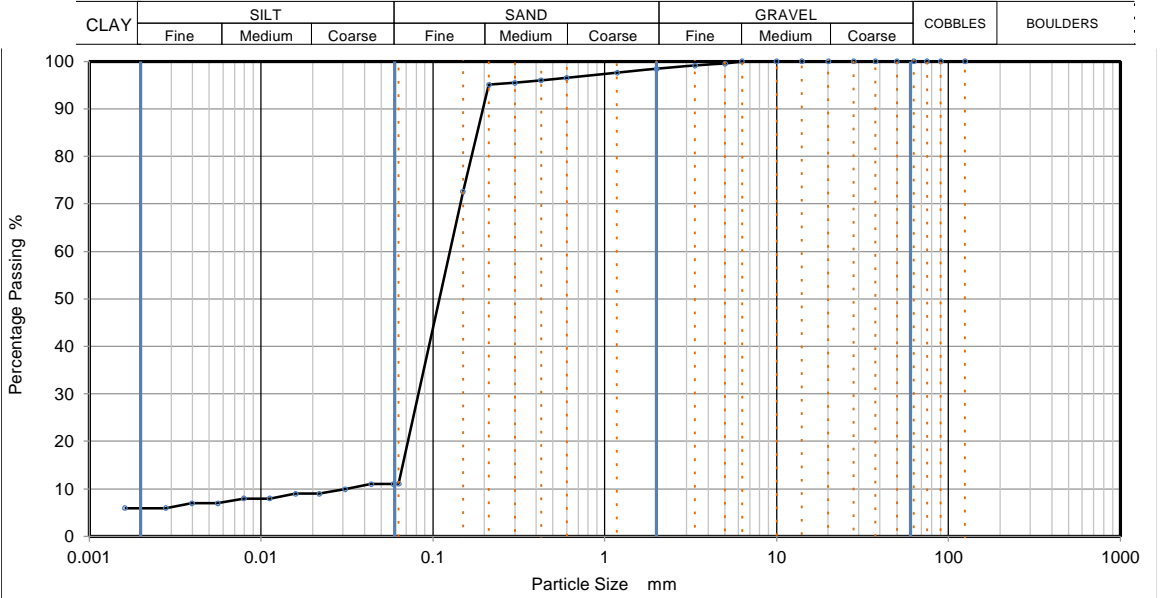
	<b>K4 Soils Laboratory</b> Unit 8, Olds Close, Watford, Herts, WD18 9RU Email: james@k4soils.com Tel: 01923 711288	Checked and Approved Initials: J.P Date: 17/11/2023
	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)	MSF-5-R3



## PARTICLE SIZE DISTRIBUTION

		Job Ref	34318		
		Borehole/Pit No.	BH01		
Site Name	RAR, Block D & K		Sample No.	-	
Project No.	2208001.001	Client	TEC	Depth Top	15.00 m
Soil Description	Orangish brown silty clayey SAND with rare fine gravel			Depth Base	15.20 m
				Sample Type	B
				Samples received	31/10/2023
				Schedules received	01/11/2023
Test Method	BS1377:Part 2: 1990, clause 9.0		Project started	02/11/2023	
			Date tested	14/11/2023	

*These results only apply to the items tested*



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0591	11
90	100	0.0438	11
75	100	0.0310	10
63	100	0.0218	9
50	100	0.0159	9
37.5	100	0.0112	8
28	100	0.0079	8
20	100	0.0056	7
14	100	0.0040	7
10	100	0.0028	6
6.3	100	0.0016	6
5	100		
3.35	99		
2	98		
1.18	98		
0.6	97	Particle density (assumed)	
0.425	96	2.70	Mg/m3
0.3	96		
0.212	95		
0.15	73		
0.063	11		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	1.61
Sand	87.24
Silt	4.80
Clay	6.40

Grading Analysis		
D100	mm	
D60	mm	0.126
D30	mm	0.0822
D10	mm	0.0306
Uniformity Coefficient		4.1
Curvature Coefficient		1.8

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

*NOTE: The report shall not be reproduced except in full without approval of the laboratory*



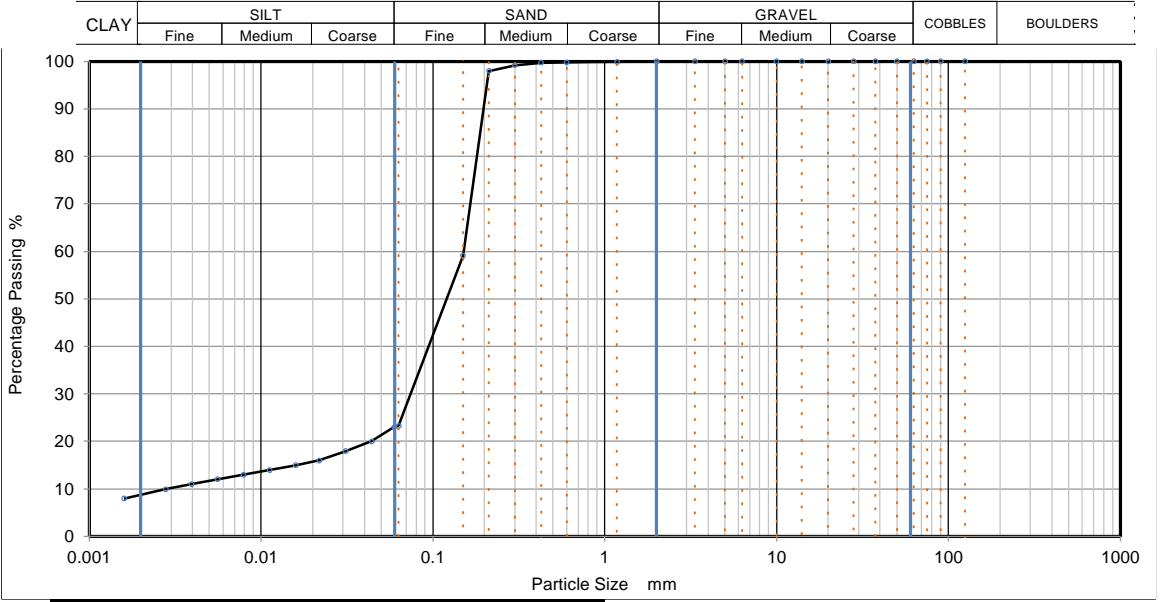
K4 Soils Laboratory  
Unit 8, Olds Close, Watford, Herts, WD18 9RU  
Email: james@k4soils.com  
Tel: 01923 711288

Checked and Approved  
Initials: J.P  
Date: 17/11/2023



## PARTICLE SIZE DISTRIBUTION

		Job Ref	34318				
		Borehole/Pit No.	BH02				
Site Name	RAR, Block D & K		Sample No.	-			
Project No.	2208001.001	Client	TEC	Depth Top	7.80	m	
Soil Description	Orangish brown clayey silty SAND			Depth Base	8.00	m	
				Sample Type	B		
				Samples received	31/10/2023		
				Schedules received	01/11/2023		
Test Method	BS1377:Part 2: 1990, clause 9.0			Project started	02/11/2023		
<i>These results only apply to the items tested</i>				Date tested	14/11/2023		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0597	23
90	100	0.0441	20
75	100	0.0310	18
63	100	0.0218	16
50	100	0.0159	15
37.5	100	0.0112	14
28	100	0.0079	13
20	100	0.0056	12
14	100	0.0039	11
10	100	0.0028	10
6.3	100	0.0016	8
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100	Particle density (assumed)	
0.425	100	2.70	Mg/m3
0.3	99		
0.212	98		
0.15	59		
0.063	23		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	76.73
Silt	14.40
Clay	8.90

Grading Analysis		
D100	mm	
D60	mm	0.151
D30	mm	0.0741
D10	mm	0.00298
Uniformity Coefficient		51
Curvature Coefficient		12

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

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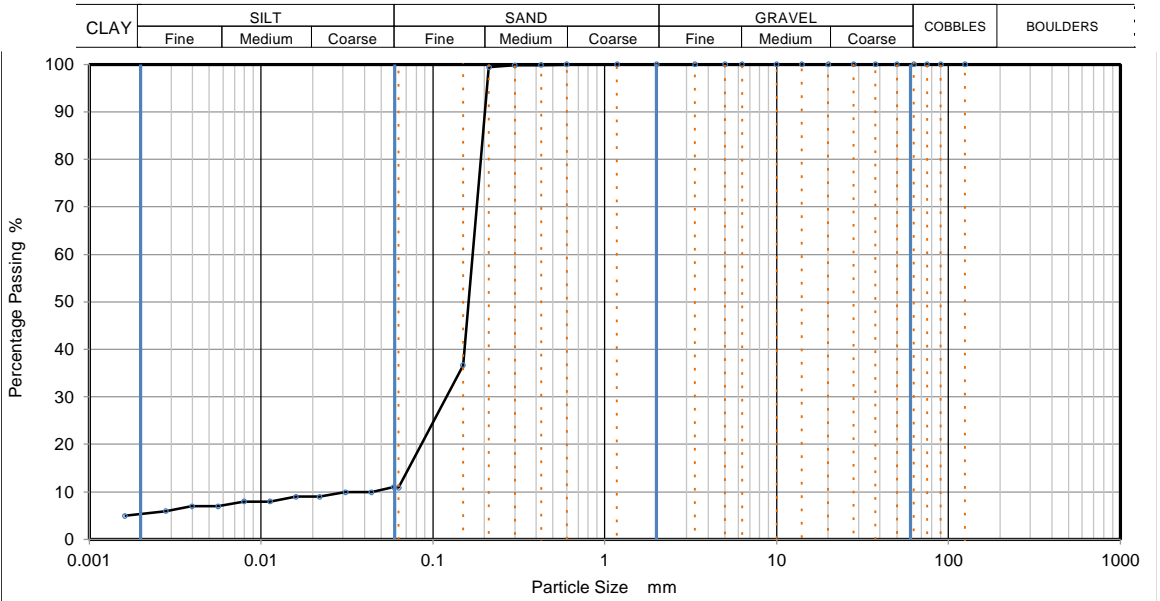
	<b>K4 Soils Laboratory</b> Unit 8, Olds Close, Watford, Herts, WD18 9RU Email: james@k4soils.com Tel: 01923 711288	Checked and Approved Initials: J.P Date: 17/11/2023	
	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)	MSF-5-R3



## PARTICLE SIZE DISTRIBUTION

		Job Ref	34318		
		Borehole/Pit No.	BH02		
Site Name	RAR, Block D & K		Sample No.	-	
Project No.	2208001.001	Client	TEC	Depth Top	11.20 m
Soil Description	Brown clayey silty SAND			Depth Base	11.40 m
				Sample Type	B
				Samples received	31/10/2023
				Schedules received	01/11/2023
Test Method	BS1377:Part 2: 1990, clause 9.0		Project started	02/11/2023	
			Date tested	14/11/2023	

*These results only apply to the items tested*



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0592	11
90	100	0.0439	10
75	100	0.0310	10
63	100	0.0219	9
50	100	0.0160	9
37.5	100	0.0113	8
28	100	0.0080	8
20	100	0.0056	7
14	100	0.0040	7
10	100	0.0028	6
6.3	100	0.0016	5
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100	Particle density (assumed)	
0.425	100	2.70	Mg/m3
0.3	100		
0.212	99		
0.15	37		
0.063	11		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	89.10
Silt	5.50
Clay	5.40

Grading Analysis		
D100	mm	
D60	mm	0.171
D30	mm	0.12
D10	mm	0.035
Uniformity Coefficient		4.9
Curvature Coefficient		2.4

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

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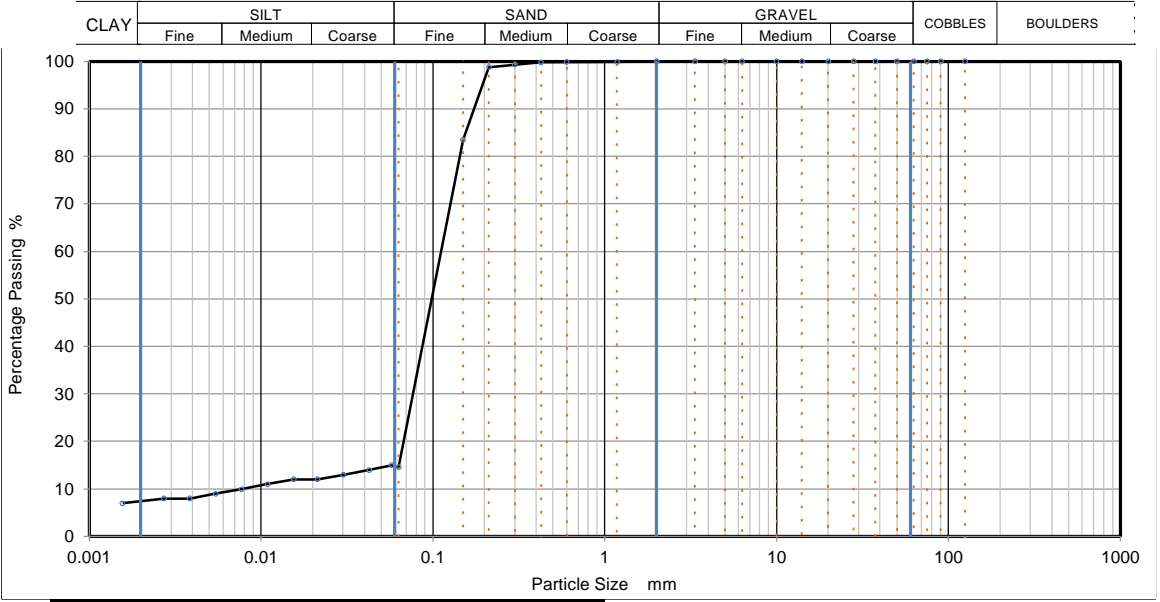
	<b>K4 Soils Laboratory</b> Unit 8, Olds Close, Watford, Herts, WD18 9RU Email: james@k4soils.com Tel: 01923 711288	Checked and Approved Initials: J.P Date: 17/11/2023
	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)



## PARTICLE SIZE DISTRIBUTION

		Job Ref	34318		
		Borehole/Pit No.	BH02		
Site Name	RAR, Block D & K		Sample No.	-	
Project No.	2208001.001	Client	TEC	Depth Top	15.30 m
Soil Description	Greyish brown clayey silty SAND			Depth Base	15.40 m
				Sample Type	B
				Samples received	31/10/2023
				Schedules received	01/11/2023
Test Method	BS1377:Part 2: 1990, clause 9.0		Project started	02/11/2023	
				Date tested	14/11/2023

*These results only apply to the items tested*



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.0574	15
90	100	0.0426	14
75	100	0.0301	13
63	100	0.0212	12
50	100	0.0155	12
37.5	100	0.0109	11
28	100	0.0077	10
20	100	0.0054	9
14	100	0.0038	8
10	100	0.0027	8
6.3	100	0.0016	7
5	100		
3.35	100		
2	100		
1.18	100		
0.6	100	Particle density (assumed)	
0.425	100	2.70	Mg/m3
0.3	99		
0.212	99		
0.15	84		
0.063	15		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	0.00
Sand	85.40
Silt	7.30
Clay	7.30

Grading Analysis		
D100	mm	
D60	mm	0.112
D30	mm	0.0765
D10	mm	0.00774
Uniformity Coefficient		14
Curvature Coefficient		6.8

Remarks  
Preparation and testing in accordance with BS1377 unless noted below

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	2519	Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)





## Determination of shear strength using the Small Shear Box Apparatus

				Job Ref	34318
				Borehole/Pit No.	BH01
Site Name	RAR, Block D & K			Sample No.	-
Soil Description	Light brown slightly clayey silty SAND with orange clayey lumps			Depth m	5.50-5.20
				Sample Type	B
Project No.	2208001.001	Client	TEC	Sample received	31/10/2023
				Schedule received	01/11/2023
Test Method	BS1377 : Part 7 : 1990, clause 4			Date test started	13/11/2023
				Date completed	14/11/2023

Preparation Details

Tamped in @ NMC

Test Condition

Submerged

Particle Density

assumed

2.67 Mg/m<sup>3</sup>

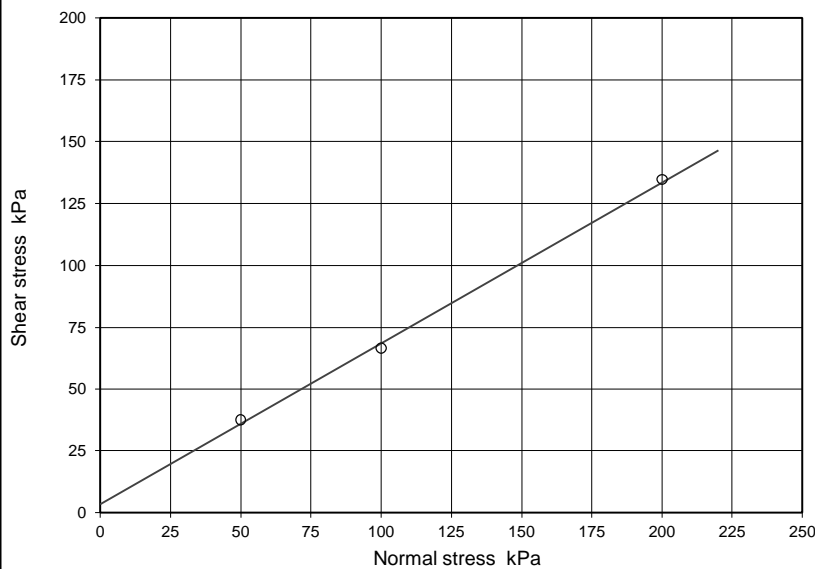
**Specimen Details**

Test No.

		1	2	3				
Initial	Height	20.0	20.0	20.0				mm
	Bulk Density	1.42	1.42	1.43				Mg/m <sup>3</sup>
	Moisture Content	4.0	4.0	4.0				%
	Dry density	1.37	1.37	1.38				Mg/m <sup>3</sup>
	Voids ratio	0.949	0.949	0.935				
	Degree of Saturation	11	11	11				%
Consolidation	Consolidation / Normal Stress applied	<b>50</b>	<b>100</b>	<b>200</b>				kPa
	Change in height during consolidation*	-0.971	-1.060	-1.354				mm
	Voids ratio after consolidation	0.854	0.846	0.804				
After test	Final Moisture content	27	27	27				

**Shearing stage(s)**

Rate of displacement	Peak	0.01500	0.01500	0.01500				mm/min
	Residual							mm/min
Peak values, (o)	Relative horizontal displacement	6.22	4.39	7.05				mm
	Shear stress	37.6	66.5	134.7				kPa
	Vertical Movement at peak shear stress*	-1.47	-1.38	-1.81				mm
Residual values, (x)	No. of traverses ( including peak run )	1	1	1				
	Relative horizontal displacement							mm
	Shear stress							kPa
	Vertical movement at residual shear stress*							mm



**Shear Strength Parameters**

Peak strength, (o)		Regression	Manual
c'	kPa	3.5	-
Ø'	degrees	33	-

Residual strength, (x)			
c'R	kPa	[ 0.0 ]	-
Ø'R	degrees	[ ]	-

Remarks :

Sheet 1 of 2



**K4 SOILS LABORATORY**  
 Unit 8 Olds Close Olds Approach Watford Herts WD18 9RU  
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**Checked and Approved**  
 Initials K.P.  
 Date 17/11/2023

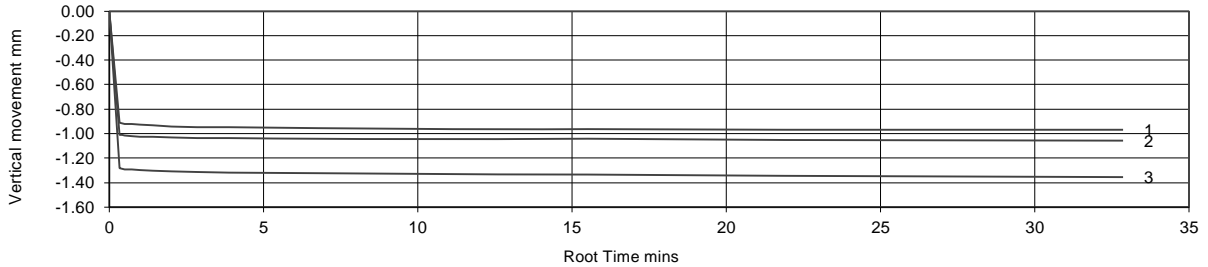


### Determination of shear strength using the Small Shear Box Apparatus

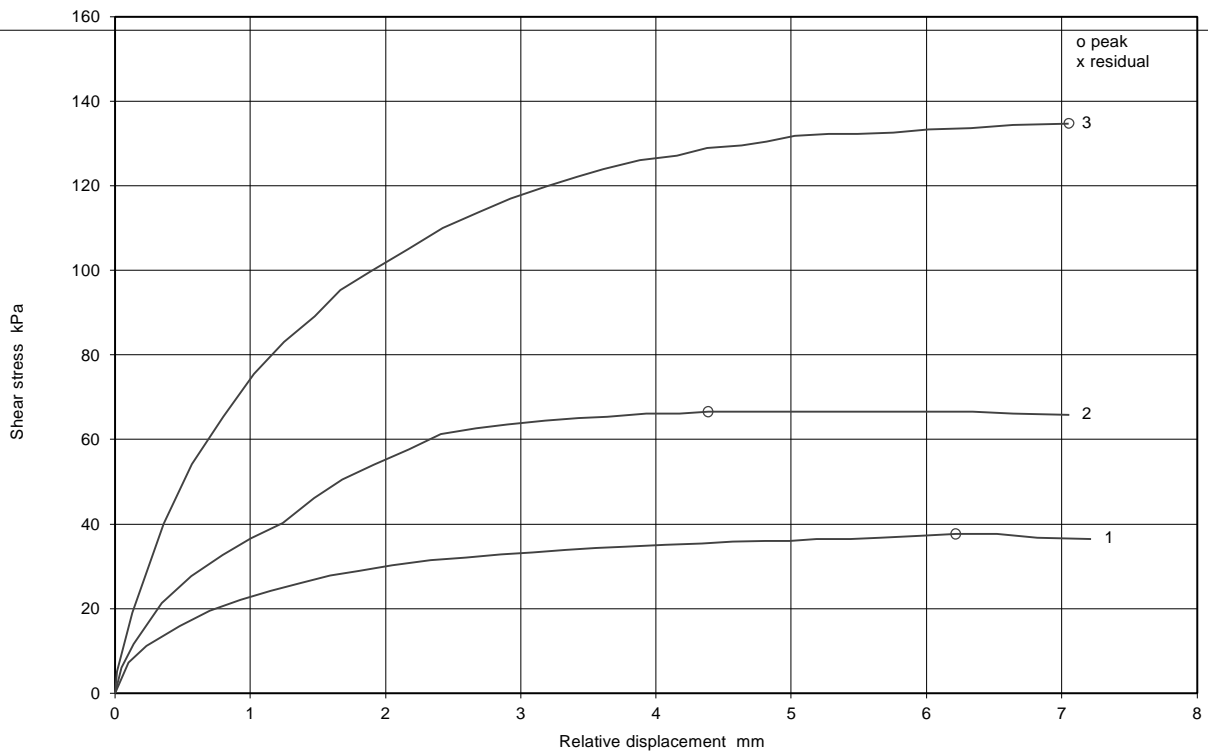
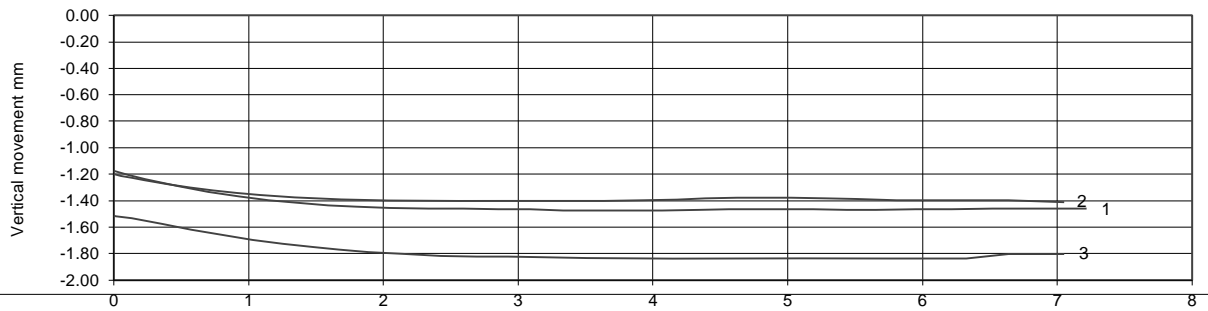
Job Ref	34318
Borehole/Pit No.	BH01
Sample No.	-
Depth m	5.00-5.20
Sample Type	B
Date of Test	13/11/2023

Site Name	RAR, Block D & K		
Soil Description	Light brown slightly clayey silty SAND with orange clayey lumps		
Project No.	2208001.001	Client	TEC

#### Consolidation stage(s)



#### Shearing stage(s)



\*Note : Vertical movement/change in height is recorded as negative for reduced height (settlement) and positive for increased height (swell).

Sheet 2 of 2



**K4 SOILS LABORATORY** Unit 8 Olds Close  
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 Initials K.P.  
 Date 17/11/2023



## Determination of shear strength using the Small Shear Box Apparatus

				Job Ref	34318
				Borehole/Pit No.	BH02
Site Name	RAR, Block D & K			Sample No.	-
Soil Description	Brown slightly clayey gravelly SAND (gravel is fmc and rounded to sub-angular)			Depth m	4.40-4.60
				Sample Type	B
Project No.	2208001.001	Client	TEC	Sample received	31/10/2023
				Schedule received	01/11/2023
Test Method	BS1377 : Part 7 : 1990, clause 4			Date test started	15/11/2023
				Date completed	16/11/2023
Preparation Details		Tampered in @ NMC			

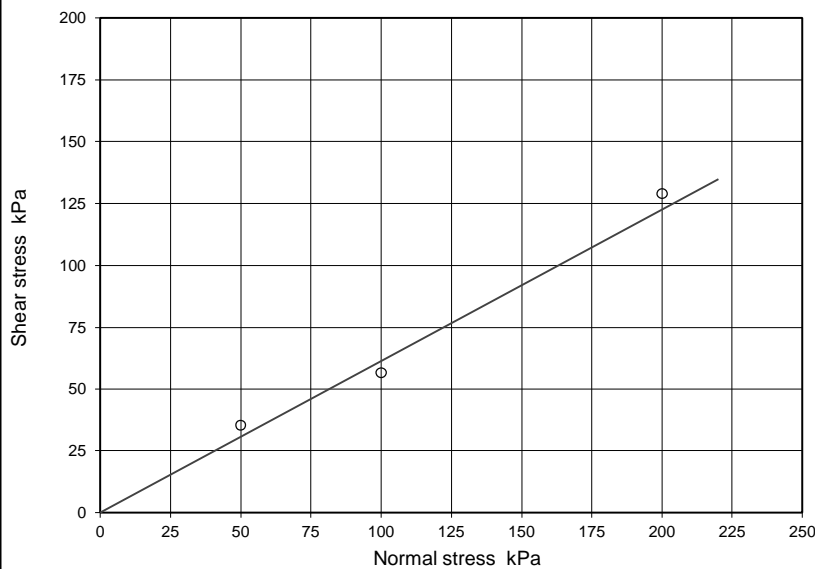
Test Condition                      Submerged                      Particle Density                      assumed                      2.66 Mg/m<sup>3</sup>

### Specimen Details

		Test No.	1	2	3			
Initial	Height		20.0	20.0	20.0			mm
	Bulk Density		1.83	1.82	1.82			Mg/m <sup>3</sup>
	Moisture Content		11	11	11			%
	Dry density		1.64	1.64	1.64			Mg/m <sup>3</sup>
	Voids ratio		0.622	0.622	0.622			
	Degree of Saturation		48	48	48			%
Consolidation	Consolidation / Normal Stress applied		<b>50</b>	<b>100</b>	<b>200</b>			kPa
	Change in height during consolidation*		-0.773	-1.068	-1.299			mm
	Voids ratio after consolidation		0.559	0.535	0.517			
After test	Final Moisture content		21	21	20			

### Shearing stage(s)

Rate of displacement	Peak	0.01500	0.01500	0.01500				mm/min
	Residual							mm/min
Peak values, (o)	Relative horizontal displacement	5.95	6.13	7.34				mm
	Shear stress	35.4	56.5	128.9				kPa
	Vertical Movement at peak shear stress*	-1.06	-1.60	-1.71				mm
Residual values, (x)	No. of traverses ( including peak run )							
	Relative horizontal displacement							mm
	Shear stress							kPa
	Vertical movement at residual shear stress*							mm



### Shear Strength Parameters

Peak strength, (o)		Regression	Manual
c'	kPa	[-0.8]	0
Ø'	degrees	[32.5]	31.5

Residual strength, (x)			
c'R	kPa	[0.0]	-
Ø'R	degrees	[ ]	-

Remarks :

Sheet 1 of 2



**K4 SOILS LABORATORY**  
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Approved Signatories: K.Phaure (Tech.Mgr) J.Phaure (Lab.Mgr)

**Checked and Approved**  
 Initials                      K.P.  
 Date                              17/11/2023

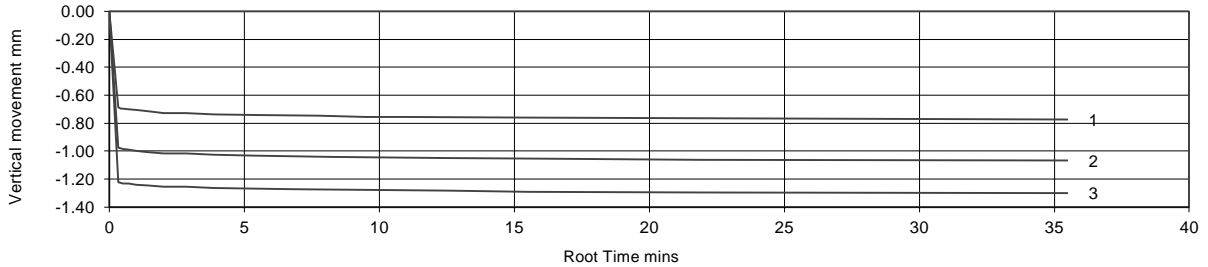
MSF-5-R14 (Rev. 0)



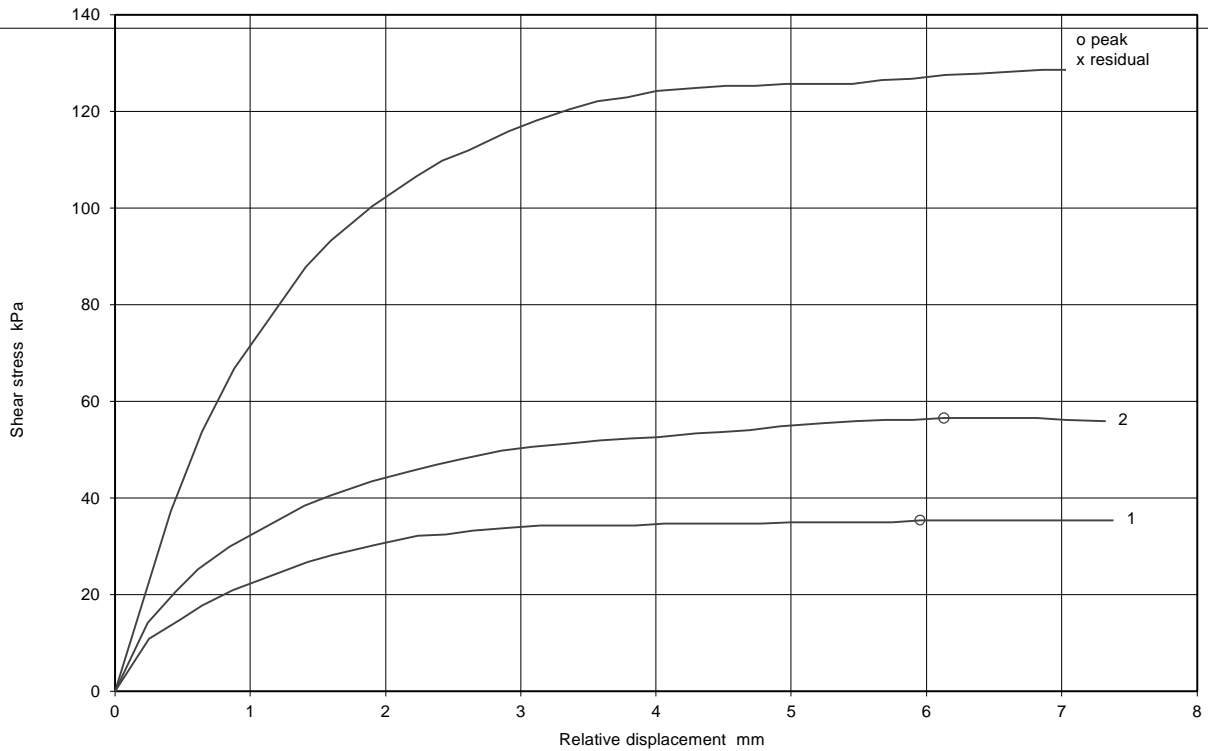
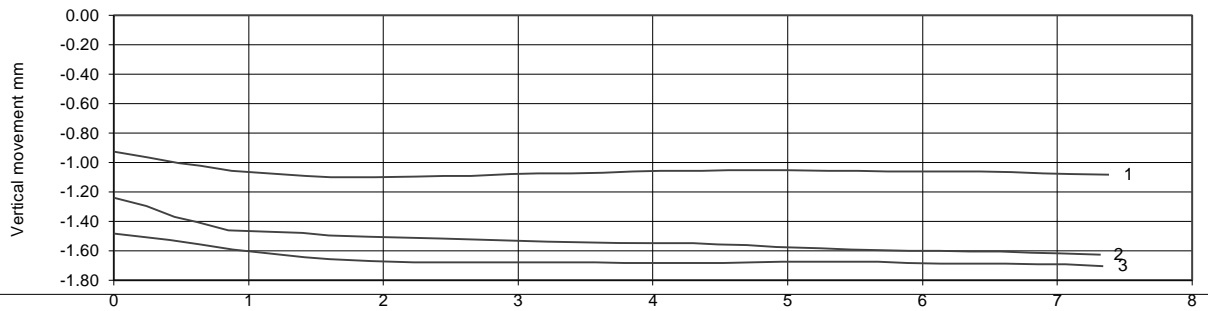
### Determination of shear strength using the Small Shear Box Apparatus

Job Ref	34318				
Borehole/Pit No.	BH02				
Site Name	RAR, Block D & K		Sample No.	-	
Soil Description	Brown slightly clayey gravelly SAND (gravel is fmc and rounded to sub-angular)		Depth m	4.40-4.60	
			Sample Type	B	
Project No.	2208001.001	Client	TEC	Date of Test	15/11/2023

#### Consolidation stage(s)



#### Shearing stage(s)



\*Note : Vertical movement/change in height is recorded as negative for reduced height (settlement) and positive for increased height (swell).

Sheet 2 of 2



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 Initials K.P.  
 Date 17/11/2023



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[cs@elab-uk.co.uk](mailto:cs@elab-uk.co.uk)  
[info@elab-uk.co.uk](mailto:info@elab-uk.co.uk)

---

**THE ENVIRONMENTAL LABORATORY LTD**

---

**Analytical Report Number:** 23-50864

**Issue:** 1

**Date of Issue:** 07/11/2023

**Contact:** [REDACTED]

**Customer Details:** TEC  
The Old Chapel  
35A Southover  
Wells  
SomersetBA5 1UH

**Quotation No:** Q22-03427

**Order No:** 2208001.001

**Customer Reference:** 2208001.001

**Date Received:** 31/10/2023

**Date Approved:** 07/11/2023

**Details:** RAR - Blocks D & K

**Approved by:** [REDACTED]

Ben Rees, Customer Services Assistant

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Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)

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## Sample Summary

Report No.: 23-50864, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
343896	BH01 3.00	04/10/2023	31/10/2023	Sand	
343897	BH01 5.50	05/10/2023	31/10/2023	Sand	
343898	BH01 18.00	09/10/2023	31/10/2023	Chalk	
343899	BH01 25.00	10/10/2023	31/10/2023	Chalk	
343900	BH02 15.00	17/10/2023	31/10/2023	Sand	
343901	BH02 20.00	18/10/2023	31/10/2023	Chalk	



# Results Summary

2683

Report No.: 23-50864, issue number 1

ELAB Reference	343896	343897	343898	343899	343900	343901
Customer Reference						
Sample ID						
Sample Type	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sample Location	BH01	BH01	BH01	BH01	BH02	BH02
Sample Depth (m)	3.00	5.50	18.00	25.00	15.00	20.00
Sampling Date	04/10/2023	05/10/2023	09/10/2023	10/10/2023	17/10/2023	18/10/2023

Determinand	Codes	Units	LOD						
<b>Soil sample preparation parameters</b>									
Moisture Content	N	%	0.1	14.2	14.7	20.9	17.7	19.5	21.6
Material removed	N	%	0.1	8.7	< 0.1	9.5	46.2	< 0.1	18.7
Description of Inert material removed	N		0	Stones	None	Stones	Stones	None	Stones
<b>Metals</b>									
Water Soluble Magnesium	N	mg/l	0.1	0.4	< 0.1	0.2	0.2	0.4	0.1
<b>Anions</b>									
Water Soluble Chloride	M	mg/l	20	< 20	< 20	^ 21	^ 26	32	^ 42
Water Soluble Nitrate	U	mg/l	20	< 20	< 20	34	32	20	35
Water Soluble Sulphate	M	mg/l	20	92	69	^ 61	^ 35	63	^ 31
<b>Inorganics</b>									
Total Sulphur	N	%	0.01	0.05	0.08	0.03	0.03	0.04	0.03
Acid Soluble Sulphate (SO4)	U	%	0.02	0.11	0.22	0.08	0.06	0.07	0.06
<b>Miscellaneous</b>									
pH	M	pH units	0.1	8.6	8.1	^ 8.8	^ 8.7	8.2	^ 8.6



## Method Summary

Report No.: 23-50864, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
<b>Soil</b>					
pH	M	Air dried sample	02/11/2023	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	06/11/2023	115	Ion Chromatography
W. Sol Metals	N	Air dried sample	03/11/2023	300	ICPMS
Water soluble anions	M	Air dried sample	01/11/2023	172	Ion Chromatography
Total organic carbon/Total sulphur	N	Air dried sample	01/11/2023	216	IR

Tests marked N are not UKAS accredited



## Report Information

Report No.: 23-50864, issue number 1

### Key

---

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"
LOD	<p>LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.</p> <p>Soil sample results are expressed on an air dried basis (dried at &lt; 30°C), and are uncorrected for inert material removed.</p> <p>ELAB are unable to provide an interpretation or opinion on the content of this report. The results relate only to the sample received.</p> <p>PCB congener results may include any coeluting PCBs</p> <p>Uncertainty of measurement for the determinands tested are available upon request Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.</p>

### Deviation Codes

---

a	No date of sampling supplied
b	No time of sampling supplied (Waters Only)
c	Sample not received in appropriate containers
d	Sample not received in cooled condition
e	The container has been incorrectly filled
f	Sample age exceeds stability time (sampling to receipt)
g	Sample age exceeds stability time (sampling to analysis)

Where a sample has a deviation code, the applicable test result may be invalid.

### Sample Retention and Disposal

---

All soil samples will be retained for a period of one month  
 All water samples will be retained for 7 days following the date of the test report  
 Charges may apply to extended sample storage

### TPH Classification - HWOL Acronym System

---

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Appendix H

Generic Quantitative Risk Assessment: Human Health

Project Number: 2208001.001		Lab Sample Number	2856758	2856759	2856760	2856761	2856762	2856763	2856764	2856765	2856766	2856767	2856768	2856769
Project Name: Royal Arsenal Riverside, Blocks D&K		Sample Reference	WS01	WS01	WS01	WS02	WS02	WS02	WS03	WS03	WS03	WS04	WS04	WS04
Site End Use: Residential without homegrown produce	GAC (mg/kg)	Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
		Depth (m)	0.20	0.70	1.00	0.40	2.00	3.00	0.30	0.50	0.70	0.30	0.60	1.00
		Date Sampled	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023	17/10/2023
Determinand		1	2	3	4	5								
Arsenic	40 <sup>(1)</sup>	mg/kg	11.00	12.00	14.00	14.00	17.00	17.00	26.00	50.00	13.00	10.00	15.00	26.00
Boron	11000 <sup>(3)</sup>	mg/kg	1.30	1.40	1.20	0.30	0.80	1.70	0.60	0.70	0.60	0.90	0.40	0.70
Cadmium	150 <sup>(1)</sup>	mg/kg	< 0.2	< 0.2	1.60	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (total)	910 <sup>(3)</sup>	mg/kg	18.00	18.00	26.00	22.00	17.00	36.00	18.00	18.00	17.00	20.00	18.00	27.00
Chromium (VI)	21 <sup>(1)</sup>	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Copper	7100 <sup>(3)</sup>	mg/kg	51.00	53.00	79.00	54.00	110.00	80.00	360.00	120.00	100.00	22.00	94.00	140.00
Lead	310 <sup>(1)</sup>	mg/kg	150.00	200.00	420.00	220.00	840.00	780.00	240.00	160.00	130.00	52.00	190.00	430.00
Mercury	40 <sup>(2-6)</sup>	mg/kg	0.50	0.70	0.80	0.40	2.70	1.50	0.80	0.60	0.40	< 0.3	0.50	0.70
Nickel	130 <sup>(2-6)</sup>	mg/kg	13.00	14.00	24.00	18.00	17.00	25.00	37.00	25.00	23.00	11.00	16.00	22.00
Selenium	350 <sup>(2-6)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc	40000 <sup>(3)</sup>	mg/kg	130.00	130.00	180.00	91.00	150.00	86.00	200.00	110.00	120.00	67.00	110.00	170.00
Beryllium	1.7 <sup>(3)</sup>	mg/kg	0.58	0.58	0.70	0.84	0.74	1.00	0.58	0.60	0.55	0.59	0.58	0.76
Vanadium	1200 <sup>(3)</sup>	mg/kg	29.00	30.00	35.00	35.00	39.00	52.00	29.00	32.00	29.00	27.00	31.00	44.00
Barium	1300 <sup>(4)</sup>	mg/kg	90.00	98.00	120.00	99.00	160.00	130.00	79.00	78.00	75.00	58.00	110.00	120.00
Cyanide (Total)	20 <sup>(5)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Phenol (Monohydric)	440 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphide	-	mg/kg	2.70	4.60	5.00	28.00	8.30	16.00	9.50	22.00	21.00	11.00	22.00	18.00
Total Organic Carbon (TOC)	-	%	2.70	2.20	2.10	1.30	1.70	1.50	1.10	0.80	0.80	1.30	0.70	0.80
Naphthalene	2.3 <sup>(3)</sup>	mg/kg	< 0.05	0.15	0.07	< 0.05	0.12	< 0.05	< 0.05	0.07	< 0.05	< 0.05	0.06	0.12
Acenaphthylene	2900 <sup>(3)</sup>	mg/kg	0.10	0.12	0.11	0.11	< 0.05	< 0.05	0.20	0.14	0.14	< 0.05	0.13	0.35
Acenaphthene	3000 <sup>(3)</sup>	mg/kg	< 0.05	0.15	0.06	< 0.05	0.17	< 0.05	0.06	0.07	0.07	< 0.05	< 0.05	0.24
Fluorene	2800 <sup>(3)</sup>	mg/kg	< 0.05	0.13	0.06	< 0.05	0.14	< 0.05	0.14	0.08	0.11	< 0.05	0.08	0.26
Phenanthrene	1300 <sup>(3)</sup>	mg/kg	0.49	1.60	0.66	0.61	1.30	< 0.05	1.50	1.10	1.20	0.21	0.77	3.00
Anthracene	31000 <sup>(3)</sup>	mg/kg	0.24	0.37	0.14	0.17	0.23	< 0.05	0.57	0.30	0.30	0.07	0.25	0.99
Fluoranthene	1500 <sup>(3)</sup>	mg/kg	2.10	2.70	1.70	1.70	1.70	< 0.05	2.90	3.10	2.80	0.49	2.00	5.30
Pyrene	3700 <sup>(3)</sup>	mg/kg	1.80	2.30	1.60	1.50	1.40	< 0.05	2.50	2.70	2.50	0.49	1.90	4.50
Benzo(a)anthracene	11 <sup>(3)</sup>	mg/kg	1.30	1.30	0.96	1.00	0.92	< 0.05	1.70	1.80	1.60	0.27	1.10	2.50
Chrysene	30 <sup>(3)</sup>	mg/kg	1.20	1.10	0.92	0.94	0.87	< 0.05	1.40	1.50	1.20	0.30	1.20	2.70
Benzo(b)fluoranthene	3.9 <sup>(3)</sup>	mg/kg	1.30	1.60	1.50	1.30	1.30	< 0.05	2.00	2.30	1.80	0.33	1.20	2.90
Benzo(k)fluoranthene	110 <sup>(3)</sup>	mg/kg	0.71	0.50	0.43	0.40	0.33	< 0.05	0.81	0.73	0.77	0.20	0.71	1.10
Benzo(a)pyrene	3.2 <sup>(3)</sup>	mg/kg	0.93	1.10	1.00	0.89	0.78	< 0.05	1.40	1.50	1.30	0.28	1.00	2.20
Indeno(1,2,3-cd)pyrene	45 <sup>(3)</sup>	mg/kg	0.61	0.63	0.59	0.53	0.45	< 0.05	0.81	0.90	0.63	0.26	0.74	1.50
Dibenz(a,h)anthracene	0.31 <sup>(3)</sup>	mg/kg	0.18	0.16	0.19	0.12	0.14	< 0.05	0.15	0.15	0.10	0.08	0.17	0.41
Benzo(ghi)perylene	360 <sup>(3)</sup>	mg/kg	0.57	0.69	0.68	0.60	0.56	< 0.05	0.81	0.89	0.75	0.29	0.80	1.50
Speciated Total EPA-16 PAHs	-	mg/kg	11.60	14.50	10.60	9.85	10.40	< 0.85	16.80	17.20	15.30	3.70		
Benzene	0.38 <sup>(3)</sup>	µg/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	880 <sup>(3)</sup>	µg/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	83 <sup>(3)</sup>	µg/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	79 <sup>(3)</sup>	µg/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-xylene	88 <sup>(3)</sup>	µg/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	73 <sup>(4)</sup>	µg/kg	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TPH Aliphatic C5 - C6	42 <sup>(3)</sup>	mg/kg	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH Aliphatic C6 - C8	100 <sup>(3)</sup>	mg/kg	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
TPH Aliphatic C8 - C10	27 <sup>(3)</sup>	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH Aliphatic C10 - C12	130 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH Aliphatic C12 - C16	1100 <sup>(3)</sup>	mg/kg	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH Aliphatic C16 - C21	65000 <sup>(3)</sup>	mg/kg	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH Aliphatic C21 - C35	65000 <sup>(3)</sup>	mg/kg	9.50	< 8.0	15.00	< 8.0	8.10	< 8.0	15.00	< 8.0	13.00	9.20	17.00	29.00
TPH Aromatic C5 - C7	370 <sup>(3)</sup>	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH Aromatic C7 - C8	860 <sup>(3)</sup>	mg/kg	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
TPH Aromatic C8 - C10	47 <sup>(3)</sup>	mg/kg	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
TPH Aromatic C10 - C12	250 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH Aromatic C12 - C16	1800 <sup>(3)</sup>	mg/kg	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH Aromatic C16 - C21	1900 <sup>(3)</sup>	mg/kg	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	13.00
TPH Aromatic C21 - C35	1900 <sup>(3)</sup>	mg/kg	< 10	< 10	13.00	23.00	11.00	< 10	15.00	19.00	38.00	13.00	40.00	34.00

Notes:

<sup>(1)</sup> DEFRA C4SLs (2014)<sup>(2)</sup> Environment Agency SGVs (2009)<sup>(3)</sup> LQM/ClEH S4ULs (2015)<sup>(4)</sup> CL-AIRE, AGS & EIS (2009)<sup>(5)</sup> Dutch Intervention Value for free cyanide (VROM 2000)

\*All GACs based on a sandy soil and Soil Organic Matter (SOM) of 1% where applicable.

Concentration does not exceed GAC

Concentration exceeds GAC

No set GAC



Project Number: 2208001.001		Lab Sample Number	550931	550932	550933	550934	550935	550936	550937	550938
Project Name: Royal Arsenal Riverside - Block K (May 2016)		Sample Reference	WS01	WS03	WS04	WS04	WS05	WS06	WS07	WS08
Site End Use:	GAC (mg/kg)	Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Residential without homegrown produce		Depth (m)	0.40-0.50	0.30-0.40	0.10-0.20	0.80-0.90	0.50-0.60	0.80-1.00	0.50-0.60	0.40-0.50
		Date Sampled	02/03/2016	03/03/2016	03/03/2016	03/03/2016	03/03/2016	04/03/2016	04/03/2016	04/03/2016
Determinand			1	2	3	4	5			
Arsenic	40 <sup>(1)</sup>	mg/kg	6.9	8.0	9.1	29	4.6	11	9.3	24
Boron	11000 <sup>(3)</sup>	mg/kg	1.4	1.4	1.0	1.7	< 0.2	0.5	0.8	1.5
Cadmium	150 <sup>(1)</sup>	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (total)	910 <sup>(3)</sup>	mg/kg	14	18	24	31	9.4	21	9.2	24
Chromium (VI)	21 <sup>(1)</sup>	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Copper	7100 <sup>(3)</sup>	mg/kg	20	120	37	85	33	40	120	53
Lead	310 <sup>(1)</sup>	mg/kg	66	160	150	300	110	270	290	230
Mercury	40 <sup>(2-6)</sup>	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.6	< 0.3
Nickel	130 <sup>(2-6)</sup>	mg/kg	11	14	18	44	8.3	22	11	19
Selenium	350 <sup>(2-6)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc	40000 <sup>(3)</sup>	mg/kg	32	110	150	17	25	53	72	110
Beryllium	1.7 <sup>(3)</sup>	mg/kg	0.4	0.5	0.7	0.4	0.3	1.3	0.6	0.4
Vanadium	1200 <sup>(3)</sup>	mg/kg	26	28	37	69	18	49	34	28
Barium	1300 <sup>(4)</sup>	mg/kg	27	76	190	100	33	74	220	140
Cyanide (Total)	20 <sup>(5)</sup>	mg/kg	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Phenol (Monohydric)	440 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphide	-	mg/kg	< 1.0	5.0	18	130	< 1.0	< 1.0	1.1	13
Total Organic Carbon (TOC)	-	%	< 0.1	0.5	1.1	0.3	0.2	< 0.1	0.9	0.8
Naphthalene	2.3 <sup>(3)</sup>	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	2900 <sup>(3)</sup>	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.19
Acenaphthene	3000 <sup>(3)</sup>	mg/kg	< 0.10	< 0.10	0.40	< 0.10	< 0.10	< 0.10	< 0.10	0.44
Fluorene	2800 <sup>(3)</sup>	mg/kg	< 0.10	< 0.10	0.23	< 0.10	< 0.10	< 0.10	< 0.10	0.34
Phenanthrene	1300 <sup>(3)</sup>	mg/kg	< 0.10	0.42	2.8	< 0.10	0.64	< 0.10	< 0.10	3.8
Anthracene	31000 <sup>(3)</sup>	mg/kg	< 0.10	0.18	0.68	< 0.10	0.31	< 0.10	< 0.10	1.4
Fluoranthene	1500 <sup>(3)</sup>	mg/kg	< 0.10	1.1	4.3	< 0.10	2.0	< 0.10	< 0.10	7.9
Pyrene	3700 <sup>(3)</sup>	mg/kg	< 0.10	1.3	3.8	< 0.10	1.8	< 0.10	< 0.10	7.2
Benzo(a)anthracene	11 <sup>(3)</sup>	mg/kg	< 0.10	0.69	1.9	< 0.10	0.97	< 0.10	< 0.10	3.4
Chrysene	30 <sup>(3)</sup>	mg/kg	< 0.05	0.63	1.9	< 0.05	0.86	< 0.05	< 0.05	3.6
Benzo(b)fluoranthene	3.9 <sup>(3)</sup>	mg/kg	< 0.10	0.62	1.8	< 0.10	0.93	< 0.10	< 0.10	3.0
Benzo(k)fluoranthene	110 <sup>(3)</sup>	mg/kg	< 0.10	0.48	1.1	< 0.10	0.61	< 0.10	< 0.10	2.2
Benzo(a)pyrene	3.2 <sup>(3)</sup>	mg/kg	< 0.10	0.58	1.7	< 0.10	0.88	< 0.10	< 0.10	3.0
Indeno(1,2,3-cd)pyrene	45 <sup>(3)</sup>	mg/kg	< 0.10	0.37	1.0	< 0.10	0.45	< 0.10	< 0.10	1.5
Dibenz(a,h)anthracene	0.31 <sup>(3)</sup>	mg/kg	< 0.10	< 0.10	0.23	< 0.10	< 0.10	< 0.10	< 0.10	0.27
Benzo(ghi)perylene	360 <sup>(3)</sup>	mg/kg	< 0.05	0.46	1.4	< 0.05	0.45	< 0.05	< 0.05	1.8
Speciated Total EPA-16 PAHs	-	mg/kg	< 1.60	6.78	23.2	< 1.60	10.1	< 1.60	< 1.60	40.0
Benzene	0.38 <sup>(3)</sup>	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	880 <sup>(3)</sup>	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	83 <sup>(3)</sup>	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	79 <sup>(3)</sup>	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	88 <sup>(3)</sup>	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	73 <sup>(4)</sup>	µg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH Aliphatic C5 - C6	42 <sup>(3)</sup>	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH Aliphatic C6 - C8	100 <sup>(3)</sup>	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH Aliphatic C8 - C10	27 <sup>(3)</sup>	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH Aliphatic C10 - C12	130 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	12	< 1.0	< 1.0	< 1.0	1.5
TPH Aliphatic C12 - C16	1100 <sup>(3)</sup>	mg/kg	< 2.0	3.6	3.7	17	< 2.0	< 2.0	< 2.0	26
TPH Aliphatic C16 - C21	65000 <sup>(3)</sup>	mg/kg	< 8.0	34	17	10	< 8.0	< 8.0	< 8.0	45
TPH Aliphatic C21 - C35	65000 <sup>(3)</sup>	mg/kg	< 8.0	210	97	8.5	< 8.0	< 8.0	< 8.0	310
TPH Aromatic C5 - C7	370 <sup>(3)</sup>	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH Aromatic C7 - C8	860 <sup>(3)</sup>	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH Aromatic C8 - C10	47 <sup>(3)</sup>	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH Aromatic C10 - C12	250 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	1.6	2.3	< 1.0	< 1.0	< 1.0	2.2
TPH Aromatic C12 - C16	1800 <sup>(3)</sup>	mg/kg	< 2.0	< 2.0	6.1	3.0	< 2.0	< 2.0	< 2.0	10
TPH Aromatic C16 - C21	1900 <sup>(3)</sup>	mg/kg	< 10	17	33	< 10	< 10	< 10	< 10	45
TPH Aromatic C21 - C35	1900 <sup>(3)</sup>	mg/kg	< 10	99	94	< 10	14	< 10	< 10	170
Total PCBs		mg/kg	-	< 0.012	-	-	-	< 0.012	-	< 0.012

Notes:  
<sup>(1)</sup> DEFRA C4SLs (2014)  
<sup>(2)</sup> Environment Agency SGVs (2009)  
<sup>(3)</sup> LQM/CIH S4ULs (2015)  
<sup>(4)</sup> CL-AIRE, AGS & EIS (2009)  
<sup>(5)</sup> Dutch Intervention Value for free cyanide (VROM 2000)  
 \*All GACs based on a sandy soil and Soil Organic Matter (SOM) of 1% where applicable.

Concentration does not exceed GAC  
 Concentration exceeds GAC  
 No set GAC



Project Number: 2208001.001		Lab Sample Number	871614	871615	871616	871617	871618	871619	871620
Project Name: Royal Arsenal Riverside - Linear Park (February 2018)		Sample Reference	TH01	TH01	TH02	TH02	TH03	TH04	TH04
Site End Use:	GAC (mg/kg)	Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Residential without homegrown produce		Depth (m)	0.30	0.70	1.60	2.80	0.85	0.50	1.50
		Date Sample	05/12/2017	05/12/2017	05/12/2017	05/12/2017	05/12/2017	05/12/2017	05/12/2017
Determinand			1	2	3	4	5		
Arsenic	40 <sup>(1)</sup>	mg/kg	20	12	8.3	8.1	12	6.5	8.9
Boron	11000 <sup>(2)</sup>	mg/kg	2.7	1.9	1.0	0.9	1.9	1.7	1.2
Cadmium	150 <sup>(1)</sup>	mg/kg	< 0.2	< 0.2	0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (total)	910 <sup>(3)</sup>	mg/kg	22	20	15	17	17	20	26
Chromium (VI)	21 <sup>(1)</sup>	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Copper	7100 <sup>(3)</sup>	mg/kg	28	82	40	22	110	69	300
Lead	310 <sup>(1)</sup>	mg/kg	74	260	170	150	320	110	240
Mercury	40 <sup>(2-6)</sup>	mg/kg	0.6	0.8	< 0.3	< 0.3	1.5	0.5	1.1
Nickel	130 <sup>(2-6)</sup>	mg/kg	13	15	14	9.8	15	14	25
Selenium	350 <sup>(2-6)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc	40000 <sup>(3)</sup>	mg/kg	88	160	210	31	140	82	220
Beryllium	1.7 <sup>(3)</sup>	mg/kg	0.54	0.54	0.27	0.32	0.48	0.39	< 0.06
Vanadium	1200 <sup>(3)</sup>	mg/kg	26	29	24	22	31	26	59
Barium	1300 <sup>(4)</sup>	mg/kg	55	110	74	87	190	84	80
Cyanide (Total)	20 <sup>(5)</sup>	mg/kg	1	< 1	< 1	< 1	< 1	< 1	< 1
Phenol (Monohydric)	440 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Sulphide	-	mg/kg	1.2	6.9	2.0	< 1.0	2.0	6.4	8.2
Total Organic Carbon (TOC)	-	%	2.0	1.2	0.6	0.3	0.6	1.6	1.2
Naphthalene	2.3 <sup>(3)</sup>	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.71
Acenaphthylene	2900 <sup>(3)</sup>	mg/kg	< 0.05	0.15	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	3000 <sup>(3)</sup>	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	2800 <sup>(3)</sup>	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	1300 <sup>(3)</sup>	mg/kg	0.44	1.2	0.20	< 0.05	1.0	0.68	4.2
Anthracene	31000 <sup>(3)</sup>	mg/kg	0.17	0.31	< 0.05	< 0.05	0.14	0.16	0.35
Fluoranthene	1500 <sup>(3)</sup>	mg/kg	1.5	3.4	0.46	< 0.05	1.7	1.5	4.4
Pyrene	3700 <sup>(3)</sup>	mg/kg	1.6	3.1	0.48	< 0.05	1.5	1.4	3.3
Benzo(a)anthracene	11 <sup>(3)</sup>	mg/kg	0.99	2.1	0.34	< 0.05	0.97	1.1	1.8
Chrysene	30 <sup>(3)</sup>	mg/kg	0.89	1.9	0.29	< 0.05	0.83	0.77	1.5
Benzo(b)fluoranthene	3.9 <sup>(3)</sup>	mg/kg	0.86	1.8	0.31	< 0.05	0.84	1.2	1.4
Benzo(k)fluoranthene	110 <sup>(3)</sup>	mg/kg	0.86	1.4	0.33	< 0.05	0.76	0.72	1.5
Benzo(a)pyrene	3.2 <sup>(3)</sup>	mg/kg	0.94	2.5	0.41	< 0.05	0.93	0.90	1.8
Indeno(1,2,3-cd)pyrene	45 <sup>(3)</sup>	mg/kg	0.38	1.2	< 0.05	< 0.05	0.41	0.45	0.87
Dibenz(a,h)anthracene	0.31 <sup>(3)</sup>	mg/kg	< 0.05	0.32	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	360 <sup>(3)</sup>	mg/kg	0.57	1.3	< 0.05	< 0.05	0.47	0.54	0.98
Speciated Total EPA-16 PAHs	-	mg/kg	9.23	20.8	2.82	< 0.80	9.66	9.39	22.8
Benzene	0.38 <sup>(3)</sup>	ug/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	880 <sup>(3)</sup>	ug/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	83 <sup>(3)</sup>	ug/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	79 <sup>(3)</sup>	ug/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	88 <sup>(3)</sup>	ug/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	73 <sup>(4)</sup>	ug/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH Aliphatic C5 - C6	42 <sup>(3)</sup>	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH Aliphatic C6 - C8	100 <sup>(3)</sup>	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH Aliphatic C8 - C10	27 <sup>(3)</sup>	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH Aliphatic C10 - C12	130 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH Aliphatic C12 - C16	1100 <sup>(3)</sup>	mg/kg	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH Aliphatic C16 - C21	65000 <sup>(3)</sup>	mg/kg	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH Aliphatic C21 - C35	65000 <sup>(3)</sup>	mg/kg	< 8.0	< 8.0	23	< 8.0	< 8.0	< 8.0	140
TPH Aromatic C5 - C7	370 <sup>(3)</sup>	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH Aromatic C7 - C8	860 <sup>(3)</sup>	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH Aromatic C8 - C10	47 <sup>(3)</sup>	mg/kg	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH Aromatic C10 - C12	250 <sup>(3)</sup>	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH Aromatic C12 - C16	1800 <sup>(3)</sup>	mg/kg	< 2.0	< 2.0	2.7	< 2.0	3.3	< 2.0	8.2
TPH Aromatic C16 - C21	1900 <sup>(3)</sup>	mg/kg	< 10	13	12	< 10	< 10	< 10	31
TPH Aromatic C21 - C35	1900 <sup>(3)</sup>	mg/kg	< 10	65	73	< 10	40	12	270

Notes:

- <sup>(1)</sup> DEFRA C4SLs (2014)
  - <sup>(2)</sup> Environment Agency SGVs (2009)
  - <sup>(3)</sup> LQM/CIH S4ULs (2015)
  - <sup>(4)</sup> CL-AIRE, AGS & EIS (2009)
  - <sup>(5)</sup> Dutch Intervention Value for free cyanide (VROM 2000)
- \*All GACs based on a sandy soil and Soil Organic Matter (SOM) of 1% where applicable.

Concentration does not exceed GAC  
 Concentration exceeds GAC  
 No set GAC

Appendix I

Regulatory Correspondence

## Caroline Moule

---

**From:** [REDACTED]  
**Sent:** 13 December 2023 14:19  
**To:** [REDACTED]  
**Subject:** Site Land at Maribor Park, New Warren Lane, London, SE18 6NF. T- 101995

Hi Amy,

Sorry for the delay been dealing with conflicting priorities.

Regarding your search request: **Site Land at Maribor Park, New Warren Lane, London, SE18 6NF.**

Please note, this Department does not hold comprehensive land data sets; and cannot provide definitive assurances, as to contaminative status for parts of the Borough; which site-specific intrusive reports could produce; and can only provide indicative information based on currently available data held; and you may have to extend your enquiry with other Agencies.

In response to your queries raised, please see responses in blue listed below:

1. Pre-license landfill sites within 500m of the subject site, including:
  - license holder
  - location of landfill/grid reference
  - nature of fill material
  - dates of operation
  - details of any leachate/landfill gas problems

Not aware of any records of pre-licensed landfill sites within 500m. Please note however, the Environment Agency (EA) may hold more detailed records, please see: <http://maps.environment-agency.gov.uk/wiyby>

2. Pollution incidents/known areas of contaminated land within 500m of the subject site, including:
  - location/grid reference
  - previous uses
  - nature/source of pollution
  - any further details

Regarding pollution incidents not aware of any incidents; however, it is advised that the EA are contacted – who may have records of any pollution incidents.

3. Part B APC authorisations within 500m of the subject site, including:
  - authorisation holder
  - location/grid reference
  - nature of authorisation

Regarding Part B APC Sites within the general area a Full list of Part B processes can be found on following link: -  
[http://www.royalgreenwich.gov.uk/downloads/file/477/permitted\\_processes\\_in\\_greenwich\\_feb\\_2011](http://www.royalgreenwich.gov.uk/downloads/file/477/permitted_processes_in_greenwich_feb_2011)

4. Private water supplies within 500m of the subject site, including:
  - location/grid reference
  - details of source and abstraction purpose

Private Water Supplies. Not aware of records of private water supplies in the area. Regarding water supplies and controlled waters – it is advisable to contact the Environment Agency and Thames Water who may have more detailed records.

5. Storage of Petroleum Hydrocarbons.

Storage of Petroleum Hydrocarbons. We do not hold this information. Aware however of the following but not current status: Storage of petroleum hydrocarbons:

Former Petrol Filling Station (closed) –128 Woolwich High St- Tanks may still be in place.

Former Petrol Filling Station (closed) - Bereford St opposite Macbean St. Tanks may still in place.

Would advise the Petroleum Officer at the LFEPA is contacted –who may have more records.

6. Records of any previous Site Investigations on or in close proximity to the site.

Please see response Point 10.

7. Records of any unexploded ordnance in the site area

I can confirm that the general area was subject to heavy bombing in WWII, as next to the Royal Arsenal Munitions Site –plus associated ordnance development in the general has been undertaken historically. You would need to conduct a ‘site specific’ UXO and ordnance survey to ascertain its status.

8. Any known problems with ground gas in the site area.

Not aware of any specific issues - but being near the river and underlying alluvium beds, sometimes methane levels can be elevated - again you would need to conduct a ‘site specific’ gas survey to ascertain its status and characterise the gas regime.

9. Any potential issues regarding naturally elevated contaminant concentrations

The area as outlined above may have been subject to activities relating to the munitions industry; and you would need to conduct a ‘site specific’ intrusive survey to ascertain its status and characterise the regime for CoC – Please see response Point 10.

10. Any other information held by your authority which may have an impact upon the contaminative status of the site

Please note - with regards to the above site, I can advise that we have not identified it as contaminated land under Part 2A of the Environmental Protection Act 1990; however, as we are yet to prioritise sites, I cannot confirm whether action will be taken in the future that may alter its status.

I can confirm however, we will not be taking action at the site you have listed, at this point in time.

With regards to the general history of the site, which covers an extensive area; I understand the following (from limited records):

The site is near to the Royal Arsenal Complex a former MoD site (covering a large area of land from Woolwich to Thamesmead), with a history of ordnance production, testing and associated industries and engineering works - with a resultant legacy of widespread contamination. It closed in 1967 and ceased to be a military establishment in 1994. A detailed site investigation was carried out on behalf of the London Development Agency. On a site wide basis, the investigation identified varying levels of heavy metals in the made ground. No groundwater impacts were identified.

Based on the results of the investigation, a remediation strategy was submitted to and approved by the Council (I understand carried out by (Campbell Reith).The strategy was based on soil washing



material to a depth of 1.5 metres around retained buildings. These works represented the first stage of remediation.

Maribor Park appears to have been a park area for a considerable period of time, but in view of the above only a site-specific intrusive survey would provide its actual status.  
*(unfortunately, this is all the information I could find).*

**Please note, as stated many parts of the general area near the site listed have been remediated and developed via the Planning system; and it's possible that the Royal Borough of Greenwich (RBG) Planning Department – may have some other records attaining to your search enquiry – which can provide further information.**

Please note, many of the reports are subject to Commercial Copyright, but can be viewed on the Planning Portal.

To view the RBG Planning Portal for relevant documentation, please use the following link:  
<https://planning.royalgreenwich.gov.uk/online-applications/>

**Of particular interest please refer to the following Applications:**

The Warren Masterplan (incl Riverside, Teardrop and Royal Arsenal West sites) Planning Ref 08/1121/O; 13/0117/O Warren Masterplan – Environmental Statement Chapter 6 on link below includes numerous reports covering the Warren area – including desk study (Scott Wilson) and sampling information on Riverside 'park area' (1998/9) with site investigation reports in appendices 6.1-6.8; also Planning Ref: 12/1168/F, and 14/3268/SD.

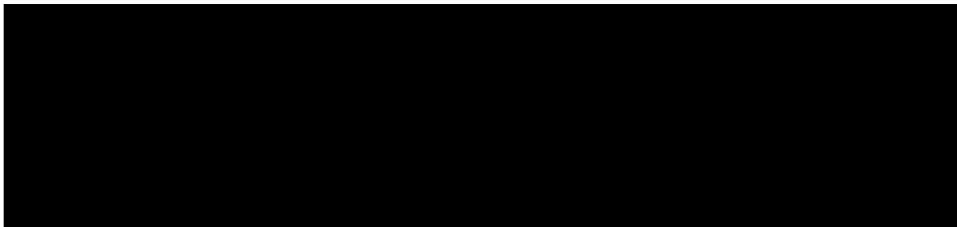
Also of interest: Land at 81-88 BERESFORD STREET, WOOLWICH, SE1817/0186/SD 12/1938/SD; 12/1810/SD; 12/0740/SD.

Also: 22/2554/SD Submission of details pursuant to discharge Condition 22 (Remediation Strategy) of planning permission 21/2055/F dated 15/03/2022. |BUILDING 10, ROYAL ARSENAL RIVERSIDE, WOOLWICH, SE18 6GD

22/2552/SD Submission of details pursuant to discharge Condition 30 (Verification Report) of planning permission 16/2807/F dated 24/03/2017. |Building 10, Building 11 and Royal Carriage Square, Station Way, Royal Arsenal Riverside Woolwich, SE18 6GT. Please note this Application Includes Verification Report by Tweedie Evans Consulting Limited (TEC) - July 2022.

Hope the above is of help.

Kind Regards



✉ 4<sup>th</sup> floor The Woolwich Centre, 35 Wellington Street, London SE18 6HQ

🌐 [www.royalgreenwich.gov.uk](http://www.royalgreenwich.gov.uk)

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