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GEO-ENVIRONMENTAL

Preliminary (Geo-Environmental) Risk Assessment (PRA)

Project: Stockley Park, Uxbridge

Project No: EGE-25-06-13-01

Client: Howard Ward Associates

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Report Details

Project Name	Stockley Park, Uxbridge
Client	Howard Ward Associates
Service	Preliminary (Geo-Environmental) Risk Assessment (PRA)
Date of Issue	8th July 2025
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Author Details

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Quality Control

Revision	Date	Made by	Description
00	8th July 2025	PB	-

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1.0 Authorisation, Context and Purpose

1.1 Authorisation

Evolve Geo-Environmental Limited (EGE) was instructed by Howard Ward Associates (HWA, the 'Client') to undertake a Preliminary (Geo-Environmental) Risk Assessment (PRA) for Stockley Park, Uxbridge (the 'Site).

A Site Location Map is included as Figure I.

1.2 Context and Purpose

This Report has been undertaken in general accordance with:

- Guidance on Land Contamination: Risk Management pages of the GOV.UK web pages;
- The relevant requirements of the National Planning Policy Framework 2024 (NPPF) (paragraphs 187 & 196 - 201) National Planning Policy Framework - 15. Conserving and enhancing the natural environment - Guidance - GOV.UK (www.gov.uk); and
- The Planning Practice Guidance (Land Affected by Contamination) https://www.gov.uk/guidance/land-affected-by-contamination.

The purpose of this Report is to identify potential soil and groundwater issues beneath the Site associated with any plausible sources of contamination. In addition, this Report is designed to provide preliminary information for any possible geotechnical constraints/issues and likely foundation requirements.

1.3 Proposed Development and Planning

It is understood that the proposed development at the Site comprises demolition of the existing office buildings and redevelopment of two (2 no.) warehouse buildings (Unit 100 & 200) with office space. The warehouse area is proposed to comprise 5,697 m^2 and 4,909 m^2 while the office space will comprise 847 m^2 and 614 m^2 for Unit 100 and Unit 200, respectively.

A Proposed Site Plan is included as Drawing I.

At the time of writing this Report, no planning application relating to the proposed development was on the Borough of Hillingdon Council online planning portal.

1.4 Limitations

The EGE standard limitations are included as Appendix I. No specific on-Site limitations were encountered.

1.5 Scope of Works

The following Scope of Works was completed:

- Obtain and review Envirocheck ® Report (historical mapping and regulatory database information);
- Complete inspection of the Site;
- Review relevant planning applications, where available;
- Review third party reports provided by the Client or obtained via the Planning records, where available;

- Obtain a Contaminated Land Search information request from Borough of Hillingdon Council for the Site; and
- Provide a Report summarising the above information to formulate a conceptual Site model (CSM) identifying possible pollutant linkages in the context of the proposed development.

In providing this Assessment, in addition to the information detailed above, EGE has utilised the following freely available data sources:

- British Geological Survey (BGS) data;
- www.zeticauxo.com mapping;
- Free topographic maps, elevation, terrain (topographic-map.com);
- Mining Remediation Authority Map Viewer
- Search planning applications - Hillingdon Council Borough of Hillingdon Council online planning portal;
- Borough of Hillingdon Council Contaminated Land Register on their Contaminated Land Website (Contaminated land public register - Hillingdon Council);
- Google Earth ™;
- http://www.magic.defra.gov.uk/MagicMap.aspx mapping;
- Historic England, August 2020. Stockley Park: Business park Phase I and II, and country park and golf course. www.historicengland.org; and
- ULI Development Case Studies, Stockley Park Reference. C031002, Dated 2001.

1.6 Additional information Sources

EGE has been provided with the following drawings:

- UMC Architects, Proposed Site Layout, 1&2 Longwalk Road, Stockley Park, Uxbridge, Drawing No. 23517-UMC-ZZZZ-SI-DR-A-0601-P02, dated 13th November 2023 (Drawing I).

In addition to the above, EGE has been provided with the following information for the Site:

- Desk Study Report, by Hydrock Consultants Limited (Hydrock), at 1 Longwalk Road, Stockley Park, Reference: 13724-HYD-XX-XX-RP-GE-1000, Dated December 2022.

Furthermore, EGE has obtained the following information through the Borough of Hillingdon Councils online planning portal for developments in the surrounding Site area:

Prologis Park, West London:

- Stockley Park Phase 3 Pre-Development Environmental Site Investigation by Ove Arup and Partners Arup Geotechnics, dated February 1998;
- Stockley Park Phase 3 Geotechnical Interpretative Report by Arup Geotechnics, dated December 2000;
- Stockley Park Phase 3 (Dawleywood) Remediation Report by Arup, dated May 2001;
- Environmental Statement (ES) Volume 1: Stockley Park Phase 3 by WSP, dated June 2007;
- ES Volume 1: Main Text Stockley Park Phase 3 by Arup, dated September 2009;

- Appendix F [to ES 2009]: Ground Contamination Preliminary Risk Assessment Report, Stockley Park Phase 3, by Arup, dated September 2009;
- Stockley Park Phase 3 Land Quality Report by Arup, dated April 2014;
- Contamination and Geotechnical Appraisal Report by WSP, dated May 2014;
- Intrusive Ground Investigation Scope of Works by WSP, dated July 2014;
- Abnormal Cost Appraisal Report by WSP, dated August 2014;
- Ground Investigation Factual Report by Harrison Group Environmental Ltd (HGEL), dated September 2014;
- Preliminary Risk Assessment (Phase 1 Report) by WSP at Prologis Park West London, Reference: 70004909_V1.2-Re-Issue, Dated March 2015;
- Geo-Environmental Assessment, by WSP at Prologis Park West London, Reference: 70004909_V1.7-Re-Issue, Dated March 2015;
- Delineation of Asbestos in Landscaped Bunds by WSP at Prologis Park West London, Reference: 70004909_Asbestos Delineation, Dated March 2015;
- Remediation Method Statement & Options Appraisal, by WSP at Prologis Park West London, Reference: 70004909_RMS_Final_02, Dated October 2015;
- Remediation Validation Report, by WSP at Prologis Park West London, Reference: 70004909_VAL, Dated December 2016; and
- Ground Gas Remediation Strategy by Delta-Simons Environmental Consultants Limited at Prologis Park, West London, Reference: 18-0443.01 Dated April 2018.

<u>GSK Site, Stockley Park, Hillingdon</u>

- GSK Site, Stockley Park, Hillingdon, Geo-environmental – Preliminary Risk Assessment, by WSP, dated June 2020, ref 70062215-PRA;
- GSK Site, Stockley Park, Hillingdon, Phase 2 Geo-environmental and Geotechnical Assessment, by WSP, dated June 2020, ref 70062215-P2;
- Remediation Strategy, by WSP, at GSK Site, Stockley Park, Hillingdon, Reference: 70077417-REM, Dated July 2021; and
- Remediation Implementation Plan, By Crossfield Consulting, at Stockley Park, Iron Bridge Road N, West Drayton, Reference: CCL03466.CO23, Dated September 2021.

2.0 Site Details and Data Review

Information regarding the Site details, Site history and regulatory database information is provided with the following Sections.

2.1 Site Setting

Co-ordinates, Area and Elevation	▽ National Grid Reference (NGR) 507790, 180240 (centred); ▽ Approximately 2.42 Hectares (ha); and ▽ Site surface is circa 35.0 – 36.0 metres (m) above ordnance datum (AOD).
General Site Location	The Site is located approximately 1.0 km south-west of Hayes and approximately 3.5 km north of Heathrow Airport. A Site Location Map is included as Figure I.
Current Site Use and Walkover Information	A Site walkover was undertaken by an EGE representative on 23rd June 2025. A Relevant Features Plan is included as Figure II and the current Site layout can be seen within the 2024 1:10,000 OS Vector Map included within Appendix II (Envirocheck Report: 379502316_1_1). The Site comprised a parcel of land split north and south, into two commercial office plots: ▽ 1 Longwalk Road, Stockley Park; and ▽ 2 Longwalk Road, Stockley Park. The generally topography of the Site was noted to be flat and level with a short slope present from a high point on the north, down to the south along the boundary between the two plots. No evidence of bulk hydrocarbon storage was noted during the Site walkover, furthermore, no suspected asbestos containing materials were encountered at the Site. However, Given the age of the buildings located on-Site, asbestos containing materials may be present within their construction. Areas of localised hydrocarbon staining were present atop of the brick-weave car parking areas across the Site. <u>1 Longwalk Road, Stockley Park</u> The commercial office building was located in the central north-east of the Site, noted to comprised a two-storey suspected steel framed building with two symmetrical white clad wings complete with a central cylindrical glass reception. Soft landscaping and well-kept vegetation covered the eastern and northern areas of the plot whilst a water feature (Approx 4.0 x 4.0 m) was present in the north-eastern corner of the Site. The western, central and southern areas of the plot comprised car parking and road access off Longwalk Road, located in the south-eastern corner of the plot. An electricity sub-station and commercial bins storage area was located in the centre of the car park in the north-west of the Site.

	2 Longwalk Road, Stockley Park The commercial office building 2 Longwalk Road was located in the south-eastern quarter of the Site, noted to comprise a two-storey suspected steel framed building with a symmetrical and rectangular construction complete with a projecting central entrance block. The walls of the building were orange and light grey panels. The central roof section contained roof-mounted equipment and utilities. Soft landscaping and well-kept vegetation covered the northern, eastern and southern areas of the plot. The remaining areas across the plot comprised car parking and road access from Longwalk Road, located in the south-eastern corner of the Site. An electricity sub-station and commercial bins storage area was located in the centre of the car park in the south-west of the Site. At the time of the walkover, the building was undergoing a commercial rip-out. Associated skips were located adjacent to the electricity sub-station. The contents of the skip included; bin bags, cardboard, ceiling tiles, metal storage cupboards and plastics.
Adjacent Land use	The Site is bound by the following land uses: ▽ North – Bennetsfield Road with Stockley Park Golf Club beyond; ▽ East – Longwalk Road with a pond and the wider Stockley Park trading estate beyond; ▽ South – The wider Stockley Park trading estate; and ▽ West – Stockley Road with the wider Stockley Park trading estate beyond.
Proposed Development	It is understood that the proposed development at the Site comprises demolition of the existing office buildings and redevelopment of two (2 no.) warehouse buildings (Unit 100 & 200) with office space. The warehouse area is proposed to comprise 5,697 m2 and 4,909 m2 while the office space will comprise 847 m2 and 614 m2 for Unit 100 and Unit 200, respectively. A Proposed Site Plan is included as Drawing I. At the time of writing this Report, no planning application relating to the proposed development was on the Borough of Hillingdon Council online planning portal.
Geology	Reference to the British Geological Survey (BGS) online viewer and mapping BGS mapping (1:50,000 Sheet Number 269, Winsor) indicates the Site is underlain by superficial deposits of the Lynch Hill Gravel Member (sand and gravel). Thereafter, the Site is mapped as being underlain by bedrock of the London Clay Formation (clay, silt and sand). Furthermore, the Site is mapped on the British Geological Survey (BGS) online viewer and mapping BGS mapping as comprising 'Worked Ground – Void'. This likely relates to the open cast extraction of the superficial sands and gravels. Given the developed nature of the Site and mapped 'Worked Ground – Void', Made Ground is anticipated. Finally, the Site is mapped as being located

<table>
<tr><td></td><td>within an area of potentially infilled land (non-water) and as such the potential for deep Made Ground cannot be discounted at this stage.

A BGS recorded historical borehole is located approximately 60 m west of the Site (Reference. TQ08SE208, dated April 1979) recording the following generalised geological sequence:

▼ Made Ground: Dark grey sand and clay ‘fill’ with pockets of brown clay and occasional tile and clinker, to a depth of 1.75 m bgl, over;
▼ Very dense light brown angular to sub-rounded fine flint GRAVEL and coarse SAND with pockets of clay, to 3.00 m bgl, over;
▼ Firm orange brown mottled sandy CLAY with fine flint gravel, to 4.00 m bgl, over;
▼ Very dense light brown angular to sub-rounded coarse SAND and fine flint GRAVEL, to 7.20 m bgl, over;
▼ Boulder obstruction, to 7.50 m bgl, over;
▼ Firm to stiff orange brown mottled silty CLAY with occasional fine flint gravel, to 7.80 m bgl, over;
▼ Stiff blue grey fissured silty CLAY with silt dustings along fissures, to a maximum drilled depth of 10.00 m bgl, noted to comprise the London Clay Formation.</td></tr>
<tr><td>Hydrogeology</td><td>The Environment Agency classify the following:

▼ Superficial Deposits: Lynch Hill Gravel Member – Principal Aquifer; and
▼ Bedrock: London Clay Formation – Unproductive Strata.

The Site is not located within a Source Protection Zone (SPZ). Furthermore, no SPZs are located within 1.0 km from the Site.

There are 25 no. groundwater abstraction records within the Envirocheck report located within 1.0 km of the Site, summarised in the table below:
<table>
<tr><th>Groundwater Abstraction Location</th><th>Approximate Distance (m)</th><th>Abstraction Records No.</th><th>Type</th></tr>
<tr><td rowspan="2">Stockley Park Golf Club</td><td>180 - North-West</td><td>5</td><td rowspan="2">Golf courses: General Washing/Process Washing & Spray Irrigation</td></tr>
<tr><td>221 - North-West</td><td>1</td></tr>
<tr><td rowspan="2">Stockley Park (Phase 3) - Borehole A</td><td>262 - West</td><td>7</td><td>Business Parks: Make-Up or Top Up Water & Spray Irrigation</td></tr>
<tr><td>324 - South-West</td><td>1</td><td>Business Parks: Make-Up or Top Up Water</td></tr>
<tr><td>Unlined Lagoon Within Gravels At Stockley Park, Uxbridge</td><td>290 - South-East</td><td>1</td><td>Business Parks: Trickle Irrigation</td></tr>
</table></td></tr>
</table>

	Stockley Park, Uxbridge, Borehole A	435 / 478 East	10	Business Parks: Make-Up or Top Up Water & Spray Irrigation
Hydrology	The closest surface water feature is a pond located approximately 30 m east from the Site, furthermore, the Grand Union Canal is located approximately 225 m south. Three (3 no.) surface water abstractions are recorded within 1.0 km of the Site, approximately 260 m south and 348 m south, relating to mineral products extraction water and dust suppression from the Grand Union Canal. Groundwater within the BGS recorded historical borehole, located approximately 60 m west of the Site (Reference. TQ08SE208, dated April 1979) was noted to be between 1.78 and 1.85 m bgl.			

2.2 Site History

Historical mapping dated between 1868 and 2025 is provided with the Envirocheck ® Report (379502316_1_1) and is summarised below and reproduced as Appendix II.

Historical Map Summary - Site	From the earliest available map edition dated 1868, the Site comprised undeveloped land in likely agricultural use. The Site remained undeveloped until circa 1935 when two buildings are mapped in the south-western corner of the Site. By 1960, the buildings are no longer mapped and the Site is noted to comprise grassland / pasture with possible excavations also present. No changes are shown until 1975 when a wishbone shaped track is present on-Site, routed west / north-west to south-east. The Site is mapped as redeveloped by 1985, generally comprising the current Site layout; Two buildings, one in the north and one in the south, each with associated access, car parking, electrical sub-stations and public open space. Available historic satellite imagery dated 1945 to 2025 shows the car park for the northern building having comprised a construction compound in 2011 for the construction of two smaller outbuildings located along the northern boundary.
Historical Map Summary - Surrounding Area	Dating back to the earliest available map edition from 1868, the surrounding area of the Site was largely undeveloped and likely used for agricultural purposes. The Great Western Railway was located approximately 310 m to the south, and the Grand Junction Canal lay 235 m to the south-west. Four 'Brick Fields' were identified within 1.0 km of the Site, the closest being 410 m to the south-east. By 1895, both the size and number of brick pits in the surrounding area had increased. In addition, four gravel pits were recorded within 1.0 km, with the closest situated 260 m to the south-west. The Hillingdon Varnish Works had also been developed along the railway, 455 m to the south-west. By 1914, the brick and gravel pits had further expanded, with the closest located 25 m to the north-east and 140 m to the west, respectively.

	By 1935, a chemical works was present 335 m to the south-east. A white lead works had been established 670 m to the west, and a concrete works appeared 765 m west of the Site. Gravel and ballast pits to the west had also significantly expanded. A machine depot was recorded 770 m to the south-east, and a gramophone factory was located 1.07 km to the east. By 1960, the brick and gravel pits occupied much of the surrounding area, which was identified as rough pasture or grassland with excavations. By 1965, a piggery was mapped 55 m to the west. By 1967, further industrial development had occurred. A depot was present 145 m to the south-west, and a scrap metal yard was located 240 m to the south-west. A water body was recorded 20 m to the north. The former varnish works had been repurposed as a prefabricated panel works. A refuse tip was located 190 m to the south-east. A road reconstruction works and asphalt plant, including multiple tanks, was mapped 250 m to the south. Additionally, a plant depot with tanks was mapped 375 m to the south. A plastic works was situated 345 m to the south-east, and the gramophone factory had expanded, located 915 m to the south-east. A metal works was recorded 475 m to the south-east, while government offices and tanks appeared 495 m to the south. An RAF station was mapped 800 m to the south-west; however, buildings at this location had been mapped and unnamed since 1938. By 1987, the surrounding area had been redeveloped as the Stockley Park trading estate. The A408 flyover and Stockley Park Roundabout had been constructed immediately to the west. The previously mapped water feature 20 m to the north was shown as a small lake, with additional lakes mapped 30 m to the east. By 1990, an industrial park had been established 620 m to the west, on the former sites of the lead works, concrete plant, helical gear works, and printing works. Land to the north, north-east, and north-west–previously occupied by brick fields, gravel pits, and associated brick works–had become part of Stockley Park, and by 1999, this area had been developed into a golf course. By 2006, the former locations of the gramophone factory, metal works, depots, chemical works, asphalt plant, road reconstruction works, plastic works, and brick works had been redeveloped as the Adler and Wandford Industrial Estates, comprising unspecified works, factories, and warehouses. By 2009, the government offices had been redeveloped and renamed Heathrow Prologis Park. The RAF station site had also been redeveloped by this time and was occupied by residential developments. Thereafter, the surrounding Site are had largely remained consistent with that present to date.
Historical Information Review	According to Historic England (2020), Stockley Park had been quarried for sand and gravel from the underlying Lynch Hill Gravel Member since the 1800s. Beginning in 1912, refuse was transported from London via the Grand Union Canal to fill the voids left by excavation. As a result, the area now known as Stockley Park was used as a landfill throughout much of the 20th century. Landfilling ceased in 1984, after which a remediation project was initiated. According to UK Development Case Studies (2001), Arup Associates created a master plan for Stockley Park which involved moving more that 4 million cubic metres of landfill from the south of the park to the north, creating the landscape of the golf course. Thereafter, gravels from the eastern part of

	the park were used to create a building platform for the business park undertaken between 1984 and 1987. It was noted as being the largest earthworks project Europe had ever seen at the time. Further remedial actions were undertaken, such as, a complex system of clay buffers and drainage pipes diverts polluted groundwater from the site so that it can be properly treated, and methane produced on site is collected and burned off.

2.3 Regulatory Database Information

The following Regulatory database information is provided within the Envirocheck ® Report (379502316_1_1) and reproduced as Appendix III.

2.3.1 On-Site Records

The Site is noted as being located within a **BGS Recorded Mineral Site** relating to the former Stockley Gravel & Ballast Pits within the Lynch Hill Gravel Member. Furthermore, the Site is located within an area of **Potentially Infilled Land (Non-Water)** relating to the potential infilling of the former Stockley Gravel & Ballast Pits.

Five (5 no.) **Contemporary Trade Directory Entries** are recorded on-Site with one noted to be active relating to a soft drinks company. The inactive entries related to; Celgene (Pharmaceutical Manufacturers & Distributors) and Toys, Games & Sporting Goods - Manufacturers.

The Site is noted as being located within the London Borough of Hillingdon's **Area of Adopted Greenbelt**, as well as being located within the Colne And Guc (From Confluence With Chess To Ash) **Nitrate Vulnerable Zone**.

No other records are listed on the regulatory data for the Site.

2.3.2 Off-Site records

Pertinent off-Site records within 500 m are summarised as follows:

- Seven (7 no.) **Discharge Consents** located between 255 m south and 495 m south-east into the Grand Union Canal for the discharge of surface water and trade cooling water;
- One (1 no.) **Integrated Pollution Prevention And Control** located 380 m south, relating to Greencore Food To Go Limited for 'MCP' (Activity Code: AR01);
- Two (2 no.) **Local Authority Pollution Prevention and Controls** located 290 and 345 m south, relating to Hanson Aggregates West Drayton for Local Authority Air Pollution Control 'PG3/1Blending, packing, loading and use of bulk cement' and 'PG3/15 Mineral drying and roadstone coating processes';
- Ten (10 no.) **Pollution Incidents to Controlled Waters** located between 22 m north-west and 500 m south-east relating to Category 2 and 3 minor and significant incidents of oils and unknown sewage;
- One (1 no.) **BGS Recorded Landfill Sites** located 120 m north-west of the Site named Stockley Road Tip;
- Four (4 no.) **Historical Landfill Sites** located 30 m north, 120 m north-west, 230 m west and 400 m north, relating to Stockley Park (SP) East, SP West, Stockley Trident and SP land parcel 2,3,4,5,9. The accepted waste included included Inert, Industrial, Commercial, Household, Special Waste and Liquid Sludge;
- One (1 no.) **Licensed Waste Management Facilities - Boundaries** and two (2 no.) **Locations.** The boundaries relate to SP Land Parcels 2-5 & 9 located 400 m north, for

Landfills Taking Other Wastes (Construction, Demolition, Dredgings) and was noted to be inactive. The locations related to West Drayton Aggregates and Stockley Pines Golf Course 275 m south and 290 m north, respectively;

- Seven (7 no.) **Potentially Infilled Land (Non-Water)** located between 30 m north and 430 m east, relating to Unknown Filled Ground (Pit, quarry etc);
- Four (4 no.) **Potentially Infilled Land (Water)** located between 40 m south-west and 390 m north relating to Unknown Filled Ground (Pond, marsh, river, stream, dock etc);
- Five (5 no.) **Registered Landfill Sites** located between 200 m west and 440 m north;
    - SP Trident Site - The licence, issued on 1st August 1990 and now lapsed or cancelled. The site falls under the landfill category and was permitted a very large maximum input rate (equal to or greater than 250,000 tonnes per year). Authorised waste includes L.W.R.A. Category A - inert wastes and materials as per the 1988 Collection/Disposal Regulations. Prohibited wastes include glass, pottery, China, enamel, ceramic, mica, asbestos, putrescible waste, silica, and special wastes;
    - SP East – The licence, issued on 1st May 1985 and now lapsed or cancelled. Categorized as a landfill, the site had a very large permitted input rate (equal to or greater than 250,000 tonnes per year). Authorised wastes included asbestos from on-site excavation, domestic, commercial, and industrial waste from nominated excavation sites, and inert waste from construction/industrial sources. Prohibited wastes included clinical waste and special wastes not otherwise specified;
    - Goulds Green Road / SP West – Two licences relating to the same location, issued on 1st May 1979 and 1st June 1987 and now lapsed or cancelled. Classified as a landfill sites with a very large input capacity (250,000 tonnes or more per year). Authorised waste included asbestos from excavation, and previously deposited household, commercial, and industrial waste from Phase 3, with onsite disposal, Asbestos, Civic Amenity/Refuse Amenity Waste, Commercial Waste, Construction And Demolition Wastes Ind. Non-Haz. Inert, Non-Flammable, Ind. Non-Haz. Potentially Combustible, Iron Compounds, Paint Waste Water (Contaminated) Prohibited wastes included sewage sludge, clinical waste, notifiable wastes not otherwise specified, and special wastes not otherwise specified; and
    - SP Land Parcels 2/3/4/5 – The license issued on 5th October 1992 and now lapsed or cancelled. Categorized as a landfill, the site had a very large permitted input rate (equal to or greater than 250,000 tonnes per year). Authorised waste includes L.W.R.A. Category A - inert wastes and materials and sewage sludge. Prohibited wastes included clinical waste and special wastes not otherwise specified.
- One (1 no.) **Registered Waste Treatment or Disposal Sites** located 420 m south and issued on 1st October 1977 for a Medium input rate (Equal to or greater than 25,000 and less than 75,000 tonnes per year). The licence is now lapsed. Authorised waste includes commercial waste and Prohibited wastes included notifiable and special waste; and
- Forty-six (46 no.) **Contemporary Trade Directory Entries** located between 91 m east and 500 m south-west. Fourteen (14 no.) of the entries were noted as being active. The entries include a variety of businesses and services across multiple industries. In

transport and logistics, there are airfreight services, cargo handling services, freight forwarders, road haulage services, and distribution services. Automotive-related services feature prominently, such as used car dealers, car engine tuning and diagnostics, car body repairs, car paint and lacquer suppliers, commercial vehicle servicing and parts, garage services, and tyre dealers. The manufacturing and industrial sector includes cladding suppliers and installers, ready-mixed concrete and mortar providers, coating specialists, confectionery manufacturers, electronic component manufacturers and distributors, glass product manufacturers, medical and printing equipment manufacturers, photographic supplies producers, power transmission equipment suppliers, shop fittings manufacturers, temperature monitoring system manufacturers, and toy and sporting goods manufacturers. Engineering and technical services are represented by general and electronic engineers. In the pharmaceutical and healthcare sector, pharmaceutical manufacturers and distributors appear frequently. The list also features telecommunications equipment and systems providers, gas companies, cleaning and domestic services such as dry cleaners, and air conditioning and refrigeration contractors.

Other records (both potential sources and receptors) are listed, however, are not considered relevant to the Assessment of the Site in the context of the distance from the Site or time lapsed since the record entry date.

2.3.3 Radon

Reference to the Envirocheck report indicates the Site is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level).

No radon protective measures are necessary in the construction of new developments.

2.3.4 Geo-Hazards

The following Geo-Hazards are listed:

Ground Stability Hazard	Hazard Potential
Collapsible Ground Stability Hazards	Very Low.
Compressible Ground Stability Hazards	No Hazard. Moderate Hazard – 40 m north /120 m north-west, likely relating to landfill.
Ground Dissolution Stability Hazards	No Hazard.
Landslide Ground Stability Hazards	Very Low.
Running Sand Ground Stability Hazards	
Shrinking or Swelling Clay Ground Stability Hazards	No Hazard.

2.3.5 Mining

The Site does not lie within a *Development High Risk Area* as identified by the Coal Authority and as such, a formal Coal Mining Risk Assessment is not considered to be required. Furthermore, the Site is not located in a *Coal Mining Reporting Area* and no further works are considered to be required with respect to coal mining.

However, it should be noted that fourteen (14 no.) **BGS Recorded Mineral Sites** are located within 1.0 km, with one located on-Site. The on-Site entry relates to Stockley Gravel & Ballast Pits for the extraction of the Lynch Hill Gravel Member (River Thames Gravel). The off-Site entries, relate to the opencast and wharf extraction of silt (common clay & shale), sand & gravel and a rail depot for crushed rock, sand and gravel. The two rail depot entries are noted as still being active, located approximately 290 m south at West Drayton Rail Depot.

2.3.6 Part 2A of the Environmental Protection Act 1990

London Borough of Hillingdon Council list their Contaminated Land Register on their environment – contaminated land website (https://www.hillingdon.gov.uk/contaminated-land), in accordance with Part 2A of the Environmental Protection Act 1990. The register lists the below Sites as being classified as contaminated land;

- New Years Green Lane Landfill Site, New Years Green Lane, Harvil Road, Harefield.

The entry is located approximately 7.80 km north of the Site at its closest point and as such is not considered a plausible source of contamination.

London Borough of Hillingdon Council was contacted by EGE on the 18th June 2025 pertaining to any information held by the council relating to contaminated land.

The following response was received from London Borough of Hillingdon Council Environmental Protection Team (Contaminated Land):

1. *From our land contamination record, we can confirm that, the site is part of a bigger site on a former potential contaminated Land Use identified as Landfills: Landfill which is now partly removed ('clean' inert material) located at Stokley Park (East) for mixed waste between 1950 – 1989 with likely gas risk as well as also within 250m of landfill buffer.*
2. *[…] The site was used for deposition of mixed waste between 1950 – 1989.*
3. *Of all the 14 previous planning applications for the site that we have reviewed, only one application has a record of Phase 1 Investigation for Desk Study Report and copy of this is available through our planning website using the link: https://planning.hillingdon.gov.uk/OcellaWeb/planningSearch. The relevant planning application is: 37103/APP/2022/3110.*
4. *We are not aware of any associated pollution incidents on the site but as of 28th September 2005 when the site record was last updated, we can confirm there was an active gas protection measure in place but this was said will be switched off but we can't confirm if this has happened or not.*
5. *[…] The site has not been listed as a Part IIA Site (as per our website Contaminated Land) or listed as a priority site for contaminated land as part of the Councils contaminated land strategy. However, our land contamination record shows the site to be on a former potential contaminated Land Use identified as Landfills: Landfill which is now partly removed ('clean' inert material) as well as within 250m of landfill buffer. Therefore, any issue of contamination for the site will be address under a planning regime rather than under the Part IIA of the Environmental Protection Act 1990.*

A copy of the correspondence is included as Appendix IV.

2.4 Additional Data Sources

Additional data sources are summarised as follows:

Unexploded Ordnance (UXO) Risk	Based on available online mapping (www.zeticauxo.com) the Site is at a Low risk from UXO. A Stage 1 Preliminary Explosive Ordnance Risk Assessment was obtained and is provided as Appendix V, the findings of which are summarised as follows; ▽ *Ground Investigation – Explosive Ordnance (EO) poses a Low Risk to ground investigation works; and* ▽ *Post Ground Investigation Development - There is a potentially elevated likelihood of EO encounter during the proposed works.* As such, a Detailed UXO Report is not required for any ground investigation works subsequently undertaken at the Site, however, will be required for post ground investigation development works.
London Borough of Hillingdon Council Planning Records	<u>On-Site</u> An online search of the London Borough of Hillingdon planning records has identified fourteen (14 no.) planning applications as being located on-Site. The applications dated between 1989 and 2022, relating to; erection of buildings, discharge of conditions, erection of flagpoles, bicycle shelters, signs, lighting etc. One planning application (Reference. 37103/APP/2022/3110, dated October 2022) was for *'Refurbishment of existing office building (Use Class E), extension to form new front entrance with new green roof, replacement of existing facade, and associated landscaping, cycle parking, and ancillary works'* and included a Desk Study Report undertaken by Hydrock Consultants Limited (Hydrock, November 2022) which has been reviewed by EGE in Section 2.5 of this Report. The planning application was for the northern half of the Site only and was conditionally approved in August 2024. <u>Off-Site</u> It is noted that two commercial developments within 250 m of the Site have recently undergone redevelopment as follows: ▽ <u>Prologis Park, West London</u> Initial Planning Application Reference: 37977/APP/2017/1634, Dated May 2017 located approximately 245 m west – *'Section 73 application for variation of Conditions 5 (approved drawings), 6 (approved documents), 25 (insertion of mezzanine floors) and 27 (use as data centre) as attached to planning permission ref. 37977/APP/2015/1004 dated 14-12-2015: Hybrid Application for the phased comprehensive redevelopment of the site to provide an overall maximum gross floorspace of 45,000sqm of light industrial uses (Use Class B1c and/or Use Class B2) and/or storage and distribution uses (Use Class B8) and ancillary offices, together with servicing, parking, access roads and open space. Full planning permission is sought for Phase 1 containing 18,900sqm of floorspace in two buildings up to 16.2 metres in height (to ridge), together with associated highways works, open space, hard and soft landscaping, car parking and associated infrastructure. Outline planning permission is sought for Phase 2 for up to 26,100sqm of floorspace with all matters, except for access, reserved for later determination'.*

	As part of the development, a number of pertinent Geo-Environmental reports were obtained and have been reviewed in Section 2.5; ▼ GSK Site, Stockley Park, Hillingdon Initial Planning Application Reference: 39207/APP/2020/2188, dated July 2020 located approximately 60 m west - *'Redevelopment of the site to provide two industrial units providing industrial floorspace (Use Class B1c/B2/B8) and ancillary offices together with associated parking, access arrangements, landscaping and infrastructure'.* As part of the development, a number of pertinent Geo-Environmental reports were obtained and have been reviewed in Section 2.5.

2.5 Previous Reports

2.5.1 List of Reports

EGE has been provided with the following information for the Site:

- Desk Study Report, by Hydrock Consultants Limited (Hydrock), at 1 Longwalk Road, Stockley Park, Reference: 13724-HYD-XX-XX-RP-GE-1000, Dated December 2022.

Furthermore, EGE has obtained the following information through the Borough of Hillingdon Councils online planning portal for developments in the surrounding Site area;

Prologis Park, West London:

- Stockley Park Phase 3 Pre-Development Environmental Site Investigation by Ove Arup and Partners Arup Geotechnics, dated February 1998;
- Stockley Park Phase 3 Geotechnical Interpretative Report by Arup Geotechnics, dated December 2000;
- Stockley Park Phase 3 (Dawleywood) Remediation Report by Arup, dated May 2001;
- Environmental Statement (ES) Volume 1: Stockley Park Phase 3 by WSP, dated June 2007;
- ES Volume 1: Main Text Stockley Park Phase 3 by Arup, dated September 2009;
- Appendix F [to ES 2009]: Ground Contamination Preliminary Risk Assessment Report, Stockley Park Phase 3, by Arup, dated September 2009;
- Stockley Park Phase 3 Land Quality Report by Arup, dated April 2014;
- Contamination and Geotechnical Appraisal Report by WSP, dated May 2014;
- Intrusive Ground Investigation Scope of Works by WSP, dated July 2014;
- Abnormal Cost Appraisal Report by WSP, dated August 2014;
- Ground Investigation Factual Report by Harrison Group Environmental Ltd (HGEL), dated September 2014;
- Preliminary Risk Assessment (Phase 1 Report) by WSP at Prologis Park West London, Reference: 70004909_V1.2-Re-Issue, Dated March 2015;
- Geo-Environmental Assessment, by WSP at Prologis Park West London, Reference: 70004909_V1.7-Re-Issue, Dated March 2015;
- Delineation of Asbestos in Landscaped Bunds by WSP at Prologis Park West London, Reference: 70004909_Asbestos Delineation, Dated March 2015;

- Remediation Method Statement & Options Appraisal, by WSP at Prologis Park West London, Reference: 70004909_RMS_Final_02, Dated October 2015;
- Remediation Validation Report, by WSP at Prologis Park West London, Reference: 70004909_VAL, Dated December 2016; and
- Ground Gas Remediation Strategy by Delta-Simons Environmental Consultants Limited at Prologis Park, West London, Reference: 18-0443.01 Dated April 2018.

GSK Site, Stockley Park, Hillingdon

- GSK Site, Stockley Park, Hillingdon, Geo-environmental – Preliminary Risk Assessment, by WSP, dated June 2020, ref 70062215-PRA;
- GSK Site, Stockley Park, Hillingdon, Phase 2 Geo-environmental and Geotechnical Assessment, by WSP, dated June 2020, ref 70062215-P2;
- Remediation Strategy, by WSP, at GSK Site, Stockley Park, Hillingdon, Reference: 70077417-REM, Dated July 2021; and
- Remediation Implementation Plan, By Crossfield Consulting, at Stockley Park, Iron Bridge Road N, West Drayton, Reference: CCL03466.CO23, Dated September 2021.

No reliance is assumed or inferred from these reports and their inclusion is added for informational purposes only.

2.5.2 Previous Report Review – On-Site

Desk Study Report, by Hydrock Consultants Limited (Hydrock), at 1 Longwalk Road, Stockley Park, Reference: 13724-HYD-XX-XX-RP-GE-1000, Dated December 2022.

A Desk Study Report was undertaken for 1 Longwalk Road, Stockley Park. The site constituted a parcel of land, comprising the northern half of the Site with an area of approximately 1.52 ha.

Context and Purpose

Hydrock was instructed by HTC acting for Royal 1 Longwalk Ltd to undertake a Desk Study Report for 1 Longwalk Road, Stockley Park in December 2022. The aim of the report was to formulate a preliminary Ground Model and an Initial Conceptual Site Model of the site to identify and make a preliminary assessment of any potential geo-environmental and geotechnical risks to the proposed internal refurbishment of the existing office and construction of a new atrium.

Site Description

The site was describes as a two-storey office block, associated car parking and roads. The building was noted to have been located in the east of the Site, constructed in the 1980's.

A smaller single-storey building measuring around 16m by 8m was located to the north of the main office building, possibly used for external storage.

A gas governor was situated to the north east of the main building. An electrical substation was located in the north west of the site, within the car park. Two electric vehicle charging points were situated on the eastern wall of the substation. A waste storage area was located in the centre of the car park, in the western side of the site. During the site walkover it was noted that a car battery had been disposed of behind the bins.

Previous Reports

Hydrock make reference to a previous report undertaken off-Site at 4 Longwalk Road in July 2014 (Evolve. July, 2014. Desk Study and Ground Investigation Report, 4 Longwalk Road, Stockley Park, Uxbridge, Middlesex. Ref. J14110, undertaken for ReAssure).

Limited details of the ground investigation were included within the report; however, it was noted that no evidence of contamination was encountered during the ground investigation.

Desk Study

The desk study and historical review identified the below as potential sources of contamination;

On-Site

- Imported backfill, associated with the former gravel pits located on the northern boundary of the site, possibly including elevated concentrations of metals, metalloids, asbestos fibres, Asbestos Containing Materials, PAH and petroleum hydrocarbons (S01);
- PCBs and oils from transformers in the gas and electricity sub-stations on site (S02);
- Ground gases (carbon dioxide and methane) from organic materials in the Made Ground (S03);
- Ground gases (carbon dioxide and methane) from organic materials in the historic landfill cells (S04);
- Hydrocarbon vapours from potential VOC and petroleum hydrocarbon spillages/leaks from vehicles in the car park (S05); and
- Asbestos within existing buildings (S06).

Off-Site

- Leachate from historic landfilled waste including household, commercial and industrial wastes located on the northern boundary (S07).
- Ground gases (carbon dioxide and methane) from organic materials in the backfill to the former landfill, now filled, located 100m north (S08).

Recommendations

The potential for contamination at the site was noted. As such, ground investigation was recommended.

2.5.3 Prologis Park Previous Reports Review – Off-Site

Remediation Method Statement & Options Appraisal, by WSP at Prologis Park West London, Reference: 70004909_RMS_Final_02, Dated October 2015

The Prologis Park, West London development is located approximately 245 m west of the Site within an area of Historical opencast quarrying and subsequent landfilling, formerly known as Stockley Trident Landfill. As part of the Prologis Park development, extensive site investigation / remediation was undertaken by others.

WSP was instructed by Prologis UK Ltd to undertake a Remediation Method Statement and Options Appraisal for the site in the context of a commercial end use, comprising up to 45,000 sqm of light industrial uses (Use Class B1c and / or Use Class B2) and / or storage and distribution uses (Use Class B8) and ancillary offices, together with servicing, parking, access roads and open space.

WSP provide a high-level review of the previous reports within their RMS for the site, which is included below for reference.

Previous Report Review:

- Stockley Park Phase 3 Pre-Development Environmental Site Investigation by Ove Arup and Partners Arup Geotechnics, dated February 1998:

  The report was designed to provide a consolidated history of the site and to present the results of the landfill reclamation works conducted between 1989 and 1991. The report was commissioned in order to confirm the suitability of the site for an intended commercial building and landscape design.

  - *Prior to the reclamation works, the site comprised a former brick-earth and gravel extraction pit (from late 19th century to 1935) which was subsequently in-filled from 1948 to 1961 with domestic and commercial wastes;*
  - *Reclamation works involved the preparation of the eastern half of the site for a commercial use and the western half to be returned to pastoral use. Arup reported that the landfill was removed between 1989 to 1991 and deposited at the north end of the Country Park Golf Course. A clay barrier was constructed to the north and west of the site to act as a barrier preventing ingress of ground gas and groundwater from the Golf Course site. A deep land drain was placed at the 'invert of a gravel filled passive gas vent constructed adjacent to the clay barrier on the golf course side at 29.3 m Ordnance Datum (OD)'. Leachate was pumped under licence to offsite public sewers to prevent leachate entering the site. The barrier extended 150 m along the western boundary to 'provide greater security against ingress of leachate or gas*
  - *Arup also recorded that the 'additional section of clay barrier' along the south of the site was constructed at this time*
  - *Arup also record that underground features and obstructions were removed and the resulting void was backfilled with approximately 750,000 m3 of 'inert' material. Arup record that the two ponds along the eastern boundary were constructed by providing a one metre thick compacted London Clay layer above the fill. The top 0.4 m of material in the western half of the site was not compacted*

  The site investigation undertaken by Arup in December 1997 comprised eight boreholes to the top of the London Clay and 15 trial pits to maximum depth of 3.4 m bgl. Soil samples collected during the investigation were analysed for contaminants of concern and reported 'no widespread or significant contamination of the soil using ICRCL and Dutch Intervention Values (DIV 1994) as guidelines'.

  Arup concluded that the 'inert' fill used in 1989-1991 was 'generally clean' and the groundwater quality was 'generally good' and not causing significant contamination. Concentrations of carbon dioxide and methane were below trigger levels.

- Stockley Park Phase 3 Geotechnical Interpretative Report by Arup Geotechnics, dated December 2000;

  The report assessed two historic ground investigations to provide information for the design of the foundation and infrastructure works associated with the Phase 3 development. Recommendations for the design of the foundations were based on the following information.

- *Site investigation by Wimpey Laboratories in 1982, which identified the presence of landfill materials from 6 to 10 m in thickness comprising domestic refuse on London Clay or thin lenses of sand and gravel all above the London Clay;*
- *Site investigations by Arup in 1991 on the southeast corner of the site recorded re-worked natural ground and construction wastes placed along the western edge of the site between 1965 and 1966*

The Arup report produced in 2000 described a site investigation undertaken between June and August 2000. Works comprised 15 No. boreholes to 40 m bgl and 43 trial pits to a maximum depth of 4.1 m bgl. Made Ground was recorded up to 12 m in thickness overlying London Clay. Gravels were only present in the south western corner. Contamination testing was limited to hydrocarbon species which were identified in one location TP22 and was further delineated.

A number of trial pits were located over the northern clay barrier. The trial pits identified the barrier to have a slope of approximately 1:4 (as opposed to a 1:2 slope design value given in an earlier Arup report (1998)). The gravel trench used to vent landfill gas was covered by a mound of clay soil and no leachate vents were encountered.

- Stockley Park Phase 3 Land Quality Report Arup, dated April 2014

The Arup Land Quality Report provided a summary of the site history and ground conditions for potential purchasers. The report included a summary of the earlier Arup reports described above and a site walkover. Arup stated that the site walkover did not reveal significant signs of ground contamination.

An updated Conceptual Site Model and risk assessment was undertaken with potential sources of contamination identified as:

- *Made Ground;*
- *Car-storage (point source contamination);*
- *Road salt storage;*
- *Electrical sub-stations; and*
- *Residual contamination from the remedial works that includes soil containing elevated levels of TPH.*

Arup concluded that the contamination risk was 'generally low assuming some mitigation during development' and recommended further site investigation in advance of proposed groundworks to allow for a contemporary assessment in accordance with current guidelines.

- Geo-Environmental Assessment, by WSP at Prologis Park West London, Reference: 70004909_V1.7-Re-Issue, Dated March 2015

The ground investigation was undertaken to assess the following Potential Areas of Concern (POAC): PAOC1 - Imported fill material; PAOC2 - Possible underground tank; PAOC3 - Disused wheel wash facility and former tank; PAOC4 - Void containing refuse/waste; PAOC5 - Electrical sub-station (north west); PAOC6 - Electrical sub-station (south west); PAOC7 - Raised mound; PAOC8 - Raised central building platform; PAOC9 - Gas vents; and PAOC10 - Clay cut off walls assessment.

A summary of the strata encountered during the 2014 investigation is presented below.

- *Made Ground (0.0 - 12.5 m bgl) - Generally described as sandy gravelly CLAY. Gravels included but were not limited to flint, brick, concrete, chalk and clinker. Inclusions of plastic, wood, geotextile, tile, glass and metal;*
- *Kempton Park Gravels (2.5 - 9.0 m bgl) - Predominantly sandy GRAVEL and GRAVEL. Gravels were flint (encountered in extreme west and east of the site only); and*
- *London Clay (3.3 - >15 m bgl) - CLAY with minor inclusions of sand and silt.*

A total of ten potential areas of concern were identified for further investigation. No evidence of notable contamination was recorded in the areas of the former underground tank, vehicle washing bays, previously recorded voids or the former sub-stations.

Soil analytical results have identified the presence of asbestos within the 750,000 cu.m of material imported during the reclamation of the site. The material used to construct the raised platform area and the two discrete mounds were similar in composition to those identified within infilled material across the remainder of the site.

Table 3.1 provides details of the potential sources of contamination and a summary of risk with respect to human health, controlled waters, soil gas in accumulation in structures and ingress of contaminants into potable water supply pipes.

Table 3.1 Sources of identified Contamination and Risk

Source Area	Review of Risk
Fill material imported during the reclamation works c750,000 cu.m	Soil chemical contaminant concentrations were below the relevant assessment criteria and therefore are not considered to pose a human health exposure risk. Within the development footprint, Asbestos Containing Material (ACM) was detected in approximately 20% of soil samples tested across the entire Site at all depths.

Source Area	Review of Risk
	Asbestos Containing Material (ACM) was also identified within the majority of the soil samples located in the landscaped areas within the upper 1 m. Elevated concentrations of Ammonium were detected throughout the groundwater at the Site. No distinguishable contaminant gradient was identified. Ammonium concentrations in soil leachate were also elevated in unsaturated soil across the site. Contaminants that may pose a risk to potable water supply pipes were not identified. Elevated concentrations of CO_2 were identified in two borehole locations only.
Retained Landscaped Areas	Asbestos Containing Material (ACM) was identified within the majority of the soil samples located in the landscaped areas within the upper 1 m. Contaminants that may pose a risk to potable water supply pipes were not identified.
Possible underground storage tank	No underground storage tanks were identified and no evidence of historical contamination was identified within the surrounding area.
Disused wheel wash facility	No evidence of soil contamination was identified within this area.
Void containing refuse/waste	No evidence of soil contamination was identified within this area.
Electrical sub-stations (north west and south west of site)	A slightly elevated concentration of PCB contamination was identified within the vicinity of the electrical sub-station within the north west section of the site. However, the exceedance was marginal, and is considered not to reqruie further assessment or remeidla works.
Fill material within raised mounds	The soils identified within these mounds were similar in composition to those identified within the remainder of the Site. No evidence of soil contamination was identified within this area.
Fill materials used to create the raised central building platform	The soils identified within the mounds were similar in composition to those identified within the remainder of the Site. No evidence of soil contamination was identified within this area.
Off-site leachate and gas from the adjacent landfill	Restrictions were imposed within the immediate vicinity of the Clay Barrier and thus ground investigation information in these areas is limited. However, soil, groundwater and soil gas concentrations are low in the exploratory hole closest to the Clay Barriers. Thus no direct evidence was obtained to suggest the Clay Barriers have been compromised.

The ACM present within fill materials was not considered to represent a risk to the commercial end use due to capping of the buildings and hardstanding. However, appropriate precautions were required for construction workers.

Only a limited number of trial pits were excavated within the landscaped areas on the western and southern boundaries of the site due to a 40 m exclusion zone imposed by Stockley Park Phase 3 Ltd and remained an area of potential uncertainty with respect to asbestos contamination.

Asbestos Containing Material (ACM) was identified within the majority of the soil samples located in the landscaped areas within the upper 1 m. The landscaped areas are covered in retained trees and approximately 12,000 m2 of open grassed areas. This area was subjected to further assessment.

An intrusive site investigation was completed by HGEL and overseen by WSP along the western and southern boundaries of the site on the 18th and 19th February 2015 in order to characterise the asbestos in soil contaminant risk. The works involved the excavation of 34 No. hand dug pits to maximum depth of 1.0 m bgl and collection of soil samples for chemical analysis. In all locations Made Ground was identified and generally comprised a topsoil of gravelly silty sand, over gravelly sandy clay. The gravel

component commonly recorded flint, concrete, brick, charcoal, glass, ceramics, metal and clinker as being present. A total of 37 No. soil samples were analysed for the presence of asbestos containing material, including a suspected fragment of bound asbestos cement. 18 No. soil samples were found to contain asbestos fibres, of which 12 No. recorded concentrations at < 0.001% w/w. The maximum recorded soil concentration was 0.005% (w/w) crocidolite in HP110 at 0.9 m bgl.

Suspected cement bound asbestos recorded at HP115 0.5 m bgl was confirmed to be cement bound asbestos (Chrysotile) upon laboratory identification.

It was noted that asbestos fibres were not detected in the corresponding soil sample at HP115 where the piece of cement bound asbestos was identified.

No visual or olfactory evidence of organic contamination was noted during the investigation.

It was noted that the groundwater beneath the site was impacted by ammonium and based on the previous reports and ground investigations, the following conclusions were drawn;

- *Leaching of unsaturated soils at the site is potentially adding to the concentration of ammonium in underlying groundwater, however, it is unlikely to be the sole source;*
- *The River Terrace Deposits in the surrounding area of the site have been extensively quarried/reworked and backfilled with Made Ground and landfill materials and is likely to provide additional external sources of ammonium;*
- *No designated aquifer unit is considered to be present which would represent a potential receptor (due to extensive gravel extraction);*
- *Based on the data obtained from the level loggers, the Grand Union Canal is not in hydraulic connection with the groundwater underlying the site and is not deemed to be at risk; and*
- *The presence of the Clay Barriers and the cohesive nature of the soils have retarded groundwater flow under the site and may have led to anoxic conditions naturally increasing the ammonium levels in groundwater at the site.*

Based on the above, it was considered that groundwater conditions do not present a material risk to surrounding controlled water receptors and further remedial works are not likely to result in improved groundwater conditions. Future redevelopment will effectively cap the site and reduce surface infiltration, removing ongoing leaching potential from the unsaturated soils. It should however be borne in mind that site conditions may remain conducive to natural generation of ammoniacal nitrogen following the redevelopment of the site.

Further confirmatory groundwater monitoring were recommended to support the redevelopment works.

Four rounds of ground gas monitoring were undertaken. The majority of monitoring results do not provide a gas screening value (GSV) that would suggest gas protection measures are required. However, based on elevated CO2 readings (>5% v/v) in two locations, namely BH07 and BH10S and the presence of substantial depths of fill material, it is considered prudent that the site is classified as Characteristic Situation 2 - Low Risk according to the CIRIA Ground Gas Risk Assessment Scheme (CIRIA C665).

Gas protection measures for office areas should be incorporated into the redevelopment design.

Previous Remedial Works Review

- *Stockley Park Phase 3 (Dawleywood) Remediation Report by Arup, dated May 2001;*

  Arup was commissioned to co-ordinate, supervise and subsequent intrusive investigations and subsequent remediation works of areas of contamination identified pre-2000.

  The ground remediation works were designed to remove hydrocarbon contamination, asbestos-cement board and underground structures.

  Arup described an area of hydrocarbon contamination that was identified in the southeastern portion of the site during excavation work for land drains.

  The hydrocarbon contamination was subsequently delineated in November 2000. Seven areas were identified, namely Area 1 and 2 (hydrocarbon contamination); Area 3 (UST); two hydrocarbon hotspots (Areas 4 and 7); and two underground concrete interceptor tanks (Areas 5 and 6).

  Remedial target concentrations of 1,000 mg/kg for polycyclic aromatic hydrocarbons (PAH); 1,000 mg/kg for mineral oils / total petroleum hydrocarbons (TPH); 50 ppm for field based photo ionisation detector (PID) readings; and

  Arup state that 'dig and dump' was the preferred remediation option, with overburden removed and stockpiled onsite. Contaminated material and underground structures were removed to a licensed landfill (Norlands Lane Landfill, Egham Surrey). Verification was based on visual, olfactory and PID measurements to initially delineate the extent of material removal, with the collection of side wall and base samples for validation testing. Two samples that exceeded remediation validation criteria were left in-situ, on the basis that they were considered to be representative of 'tarmac' and TPH and PAH compounds were identified in a bound form that did not pose a risk to human health receptors.

  Arup recorded a total of 9,620 tonnes of mainly hydrocarbon impacted soil was excavated and removed from site. The contamination was generally encountered at a depth of 0.5 m bgl and extended to maximum depth of 2.4 m bgl. Arup recorded that the voids were backfilled with 'suitable material' from site won and offsite sources.

  In total, 36,000 litres of potentially contaminated groundwater was removed from Area 1 and deposited at the Thames Waste Management Camberley Treatment Plant. Liquid contained in the below ground tank was recorded as being disposed offsite as special waste. Arup record that within an earth bank along the southern boundary, a layer of hydrocarbon impacted material was identified between approximately 1.8 m and 2.1 m bgl. Soil samples were collected and recorded hydrocarbon levels between < 10 mg/kg and 2,300 mg/kg. No further remedial works were proposed in that area.

Conceptual Site Model

The following relevant pollutant linkages were included within Table 4.1 and noted as requiring remedial action;

Table 4-1 Relevant Pollutant Linkages that Require Remedial Action

Relevant Pollutant Linkage	Source	Pathway	Receptor	Assessment
RPL1	Asbestos Containing Material in Landscaped Areas within the Western and Southern section of the Site	Ingestion and Inhalation of contaminated soils and dusts generated from areas that are not covered by hardstand or other surface coverings. Inhalation of dusts from areas that are not covered by hardstand or other surface coverings.	Female Adult Worker (Age Class AC17)	**High** – Potential for ACM impacted soils in exposed areas to pose a risk to Human Health.
RPL2	Caqbon Dioxide qenerated from Made Ground	Inhalation of gas concentrations released from underlying Made Ground and building up in on-site structures to potentially asphyxiation limits.	Future Site Occupants	**Low to Medium** – Concentrations of Carbon dioxide have been identified across the site to exceed the 5.0% v/v trigger threshold requiring gas protection measures.
RPL3	Previously unidentified contamination within Landscaped Areas and within Topsoil to	Direct Contact and Ingestion with areas not covered with hardstanding.	Female Adult Worker (Age Class AC17)	**Low to Medium** – Potential for ingestion & direct contact wth previously unidentified contamination
	be re-used across the Site			
RPL4	Residual contamination within the shallow Made Ground	Ingress of contamiation through the walls of water supply pipes	Potable water supply for the Site	**Low** – Potential for TPH and Phenol ingress into potable water supply

Site Specific Remediation Strategy

Following a remediation options, constraints and appraisal, WSP outlined the Site-Specific Remediation Strategy;

- *RPL1: Centred on the respective exploratory location(s), the preferred remediation technology is for the excavation and removal ACM impacted material and emplacement under Buildings or Hardstanding.*

  The resultant voids will be back filled with a material that is chemically validated as suitable for use i.e. protective of human health, controlled waters and the wider environment.

  Alternatively should the Site formation level allow placement o a capillary break and Marker Layer (Orange Terram or similar) over the hotspots and placement on 600 mm of 'clean' imported soil is acceptable.

- *RPL2: The concentrations of carbon dioxide generated from underlying Made Ground pose a potential asphyxiation risk within the offices associated with each unit. concentrations. The Site has been classified as Gas Characteristic Situation 2, in accordance with CIRIA C665. As such a gas resistance membrane is will be required within office areas.*

  On this basis it is recommended that a 1200 g/DPM membrane is installed in accordance with BRE212/BRE414 in office areas. These measures should be confirmed with the Local Authority Building Control Officer in advance of construction.

- *RPL3: There is a potential for previously unidentified contamination to be encountered during the earthworks and piling operations on Site. A WSP Engineer will be on site*

during the earthworks and piling operations. Should visually or olfactory impacted material be encountered, excavation will be required, with the subsequent side walls and base of the excavation validated.

WSP will agree suitable remedial approach with the Local Authority.

The excavated material will be subject to complex sorting on Site under supervision and direction of WSP allowing for streams of material to be generated, comprising potentially suitable for re-use and material for disposal from site. The characterisation of material will be based on visual and olfactory evidence.

Material deemed unsuitable to be retained of Site will be removed to a suitably licenced facility. Remaining material will be re-used on Site following suitable chemical analysis.

The resultant voids will be backfilled with a material that is chemically validated as suitable for use i.e. protective of human health, controlled waters and the wider environment.

- *RPL4: At this stage and on the basis that locations of service utilities are not finalised it is recommended that suitable protection should be provide to the water supply from petroleum hydrocarbons and phenol*

Validation Reporting

Finally, these remedial works would be verified within a validation report, including as a minimum the following details;

- A summary of the information contained in the risk assessment reports along with the agreed redevelopment strategy and objectives;
- Details of all parties involved in the works;
- Laboratory validation test certificates;
- Details and quantities of excavated soils and soils re-used on site or disposed of off - site;
- Details of the validation data for imported soils if used on-site (at least three sets of analysis per source plus additional samples one every 100 m3 for areas of soft landscaping and one every 500 m3 under hardstanding;
- Records of all earthworks, excavations and sorting including as built drawings, photographs, quantities of materials; and
- Waste classification and management documentation.

Remediation Validation Report, by WSP at Prologis Park West London, Reference: 70004909_VAL, Dated December 2016

WSP / Parsons Brinckerhoff were instructed by Prologis UK Limited to undertake a validation report for the site in line with the Remediation Method Statement and Options Appraisal Report previously undertaken.

Verification Works

It was concluded that the site had been appropriately remediated as per the Remediation Method Statement and Options Appraisal Report;

- *WSP | Parsons Brinckerhoff attended site on 10 No. occasions during the earthworks to view the excavated material and supervise and validate the hotspots excavations;*

- *Areas of known contamination were excavated according to the specification provided in the RMS, validated and a suitable cover layer comprising a capillary break layer, marker layer and clean site won topsoil placed to ensure no exposure pathway to future site users;*
- *Previously unidentified contamination was encountered during the ground works along the Canal in the East of the Site. Visible fragments of asbestos sheeting were picked and a capillary break layer, marker layer and capping material placed to break the exposure pathway;*
- *Suitable Gas protection Measures appropriate to CS2 classification have been installed within the structures associated with the Phase 1 Development; and,*
- *Adequate protection of potable water supply has been provided through the installation of a barrier pipe mitigating the risk of any permeation from contamination within the Made Ground.*

Finally, it was noted that RPL2 and RPL4 were still outstanding for Phase 2 of the development and the validation of the gas protection membrane and installed potable water pipes would be covered under a separate report.

Ground Gas Remediation Strategy by Delta-Simons Environmental Consultants Limited at Prologis Park, West London, Reference: 18-0443.01 Dated April 2018

Delta-Simons Environmental Consultants Limited, undertook a Ground Gas Remediation Strategy Report for Prologis Park, West London to support the development of the site and the discharge of planning conditions.

Remediation Requirements

It was found that specific ground gas protection measures were not deemed necessaryin the main warehouse due to the large size of the proposed warehouse (circa 76,180 sq.ft in Unit 3A and 58,830 sq.ft in Unit 3B), suspended cast in-situ floor slabs, adoption of 1200-gauge membrane and ventilation from warehouse doors / openings.

The ground gas protection measures were to be installed in accordance with BS 8485:2015 and should score 2.5 points as per Table 4 (CS2/ Type D building with Type C enclosed spaces).

Ground gas remedial measures within the proposed light industrial / commercial development within enclosed ground floor spaces were required to comprise:

- A gas resistant membrane beneath enclosed ground floor spaces (e.g. offices) of the proposed development, installed beneath the suspended floor slab of the proposed development, meeting the requirements of Table 7 of BS 8485:2015 (2 pt); and
- Reinforced cast in-situ suspended floor slab, with minimal penetrations (1.5 pts).

Verification Requirements

It was recommended that the design, installation and verification of the gas protection measures is carried out by a suitably qualified and experienced specialist, independent of the Contractor.

Engineer's drawings confirming the inclusion of gas protection measures were to be provided to the Environmental Consultant for inclusion within the Verification Report.

The Contractor was required to provide verification certification / integrity testing as outlined in BS 8485:2015 and photographs of the installed gas protection measures, copies of which should be provided to the Environmental Consultant for inclusion within the Verification Report.

EGE Comments

While EGE has not been able to obtain the final verification report for Prologis Park West London, it is assumed that all remedial requirements were met as the site has been fully developed and is operational.

2.5.3 GSK Site, Stockley Park Previous Reports Review – Off-Site

GSK Site, Stockley Park, Hillingdon, Geo-environmental – Preliminary Risk Assessment, by WSP, dated June 2020, ref 70062215-PRA

WSP undertook a Geo-environmental – Preliminary Risk Assessment for a parcel of land located approximately 60 m west of the Site, comprising an area of approximately 6.3 ha. It is noted that the site is located within the Stockley Park historic quarrying / landfilling and subsequent remediation works as outlined by the Historic England Entry (2020).

Context and Setting

WSP was instructed by Prologis UK to undertake a Geo-Environmental Phase 1 Preliminary Risk Assessment at GSK Site, Stockley Park, Hillingdon to support the redevelopment of site to comprise two industrial units providing industrial floorspace (Uses Class B1c/B2/B8) and ancillary officers together with associated parking, access arrangements, landscaping and infrastructure.

Site Description

A site walkover was undertaken in February 2019 and was found to comprise the GSK offices, including four office buildings, car parking and soft landscaping. Two ponds were noted to be located adjacent to the eastern building line of the most northern GSK building and the second is located next to the central eastern Site boundary.

It was noted that the site was in use for pharmaceutical manufacture and distribution.

Three electrical sub-stations were located on-site.

Three 30,000 litres underground storage tanks (USTs) were noted on-site one associated with each building to power back-up generators (located on the roofs). The fill points are located adjacent to the USTs. Reportedly installed in the early 1990s and decommissioned in 2014, which comprised emptying the tanks of fuel and filling them with foam. Each backup generator was served by a dedicated above ground tank (AGTs), approximately 500 litres in capacity. Reportedly the day tanks were emptied at the same time as the USTs were decommissioned.

Desk Study Key Findings

As part of the PRA report, WSP reviewed the below report undertaken by Ramboll Environmental, with key comments included below for reference;

- 1-3 Iron Bridge Road, Stockley Park, Uxbridge, Middlesex, Phase 1 Environmental Review, by Ramboll Environmental, ref UK11-22552, dated 15 February 2016.

  The Ramboll Environ report indicates that in 2007, one of the fuel tanks (associated with building B10) was identified to be leaking resulting in impact to the surrounding soil. The tank and the surrounding soils were removed and a new tank and 'clean' soil installed. No documentation regarding the works was available for review by WSP.

Low to moderate risk of on-site migration of contamination from off-site sources. The potential for on-site migration of leachate and gas from landfill in the wider surrounds considered largely mitigated by the leachate collection systems installed to the north of Horton Road. Thames Water concluded leachate to be of sufficient quality to no longer require monitoring for disposal to its treatment works and that Hillingdon Council agreed as of 2014 that no further gas monitoring was required on the wider Stockley Park area; and Low to moderate potential for contamination on Site on basis of reported earthworks during construction.

The following potential sources of contamination were identified by WSP;

On-site:

- Historical Landfilling - Possibly site wide, although it was noted in the Ramboll Environmental Desk Study that the landfill beneath the three buildings on site has been removed and replaced with engineered stone to support building foundations;
- USTs and historical leaks;
- Historical Piggery - Northern half of site; and
- Made Ground associated with former buildings / development - Southern half of site.

Off-Site:

- Landfill - North and west (confirmed landfills), also areas of infilling to the west;
- Current and historical industrial activities - South and east

The Risk to human health was found to be 'low to moderate', risk to controlled waters found to be 'low' and risk to buildings and services found to be 'low' in the context of the commercial development and geo-environmental ground investigation was recommended.

GSK Site, Stockley Park, Hillingdon, Phase 2 Geo-environmental and Geotechnical Assessment, by WSP, dated June 2020, ref 70062215-P2

WSP undertook a Phase 2 Geo-environmental and Geotechnical Assessment for a parcel of land located approximately 60 m west of the Site, comprising an area of approximately 6.3 ha. It is noted that the site is located within the Stockley Park historic quarrying / landfilling and subsequent remediation works as outlined by the Historic England Entry (2020).

Context and Purpose

WSP was instructed by Prologis UK to undertake a Phase 2 Geo-environmental and Geotechnical Assessment at GSK Site, Stockley Park, Hillingdon to support the redevelopment of site to comprise two industrial units providing industrial floorspace (Use Class B1c/B2/B8) and ancillary officers together with associated parking, access arrangements, landscaping and infrastructure.

Site Description

No significant changes were made from the site walkover described in the PRA report.

Site Investigation and Summary of Findings

The Site investigations consisted of the following:

- Ground investigation carried out between 23 February and 10 March 2019;
- Installation of 50 mm diameter gas and groundwater monitoring wells in 14 locations;

- Four rounds of gas and groundwater level monitoring including two rounds of groundwater and surface water sampling;
- Chemical laboratory analysis of recovered soil, groundwater and surface water samples;
- Collection of soil samples for geotechnical laboratory testing

The key findings of the Site Investigation were as follows:

- The ground conditions encountered across the site were generally consistent with Council records and BGS geological maps for the area. The surface comprised block paving, underlain by an average of 0.31 m of granular subbase consisting of sand over limestone, a black geotextile membrane was observed in the majority of exploratory locations between the subbase and the underlying Made Ground.

  Made Ground was present throughout the Site and was underlain by reworked natural clay in eight exploratory holes. Where the full depth of the Made Ground was proven, the Lynch Hill Gravel Member was encountered in six locations, with an average thickness of 0.70 m. Langley Silt, in line with BGS mapping, was recorded in two locations in the southeast and two in the west, averaging 0.61 m in thickness.

  Groundwater was observed during the investigation as seepages or strikes within the Made Ground at seven locations, and at the top of the London Clay Formation in WS01. Groundwater monitoring subsequently identified water in 12 locations, with nine providing sufficient yield for sampling. A general southerly flow direction toward the Grand Union Canal was inferred; however, the data were inconclusive regarding the presence of a hydraulically continuous groundwater body beneath the Site. The cohesive nature of the Made Ground and the existence of a sheet pile wall along the canal likely limited lateral groundwater movement. These findings reflected similar conditions recorded at the adjacent Prologis Park: West London site, where a hydraulic disconnection from the canal had been demonstrated.

  One monitoring installation placed within the limited extent of the Lynch Hill Gravel Member did record groundwater. Although most of this aquifer unit had been removed from the Site, its designation as a Principal Aquifer warranted further risk assessment, which was addressed in Section 4.
- Three instances of visual and olfactory evidence of contamination were identified during the site investigation;
  - Strong hydrocarbon odour at 4.00 m bgl within the Lynch Hill Gravel Member in BH02;
  - Black leachate recorded between 3.00 m and 4.00 m bgl within Made Ground in WS04; and
  - Strong hydrocarbon odour and black staining between 2.40 m and 2.75 m bgl within the Made Ground in WS06.
- Two exceedances of the lead commercial GAC were recorded in Made Ground samples and asbestos was detected in three Made Ground soil samples. However, the risk of exposure to current and future Site users is considered to be low given the widespread presence of hardstanding in the proposed development;
- A summary of exceedances for leachate and groundwater results, when compared to the relevant GACs, is provided in Table 13 and Table 14, respectively.

Table 13 – Exceedances of UK DWS / WHO Guidelines in Soil Leachate Samples

Analyte	Maximum Concentration (µg/l)	DWS / WHO (µg/l)	No > DWS / WHO	Remarks
pH	10.97	10	1	Exceedance in WS02 at 1.00 m bgl (Made Ground).
Ammoniacal Nitrogen as NH_4	28,800*	500	4	Greatest concentration recorded in WS04 at 2.00 m bgl (Made Ground).
TPH Aromatic C10-C12	133	90	1	Exceedance in WS06 at 2.50 m bgl (Made Ground).
Benzo(a)pyrene	0.0189	0.01	3	Exceedances in WS02 at 1.00 m bgl, WS04 at 2.00 m bgl and WS06 at 2.50 m bgl (Made Ground).

**Ammoniacal nitrogen concentrations converted based on pH and temperature where appropriate.*

Table 14 – Exceedances of UK DWS / WHO Guidelines in Groundwater Samples

Analyte	Maximum Concentration (µg/l)	DWS / WHO (µg/l)	No > DWS / WHO	Remarks
Ammoniacal Nitrogen as NH_4	60,600*	500	18	Maximum concentrations recorded in WS04.
Arsenic	19.8	10	3	Exceedances in BH01 in both monitoring rounds and WS11 in round 1 only.
Boron	1,230	1,000	1	Exceedance in WS04 in round 1.
Barium	1,260	700	1	Exceedance in WS04 in round 1.
Nickel	38.4	20	2	Exceedances in WS08 in both monitoring rounds.
TPH Aromatic C16-C21	121	90	1	Exceedance in WS04 in round 1.
TPH Aromatic C21-C35	445	90	1	Exceedance in WS04 in round 1.
Benzo(a)pyrene	15.2	0.01	6	Maximum concentrations in WS04
Sum of four PAHs**	47.94	0.1	3	Exceedance in WS04 in both rounds and BH01 in round 2.

- The exceedances were found to represent a low risk to the underlying Principal Aquifer in the context of the site setting and historical context of the site.

- The risk from identified relevant GAC exceedances to surface water GACs from soil leachate and groundwater samples were assessed to be low in the context of the site setting, historical context and sheeting piling of the Grand Union Canal. Furthermore, upstream gradient samples were typically found to be higher than the downstream gradient samples;
- Following the four rounds of ground gas monitoring, a maximum flow rate of 0.1 l/hr, a maximum carbon dioxide concentration of 13.80% v/v and a maximum methane concentration of 7.8% v/v, were recorded. As such, a Characteristic Situation 2 (Low Risk) was recommended with associated gas protection measures, although two further rounds of monitoring were recommended to be undertaken;
- PID readings during the ground gas monitoring was typically recorded as <0.1 ppm however a maximum concentration for 22.6 ppm was recorded. The risk posed from hydrocarbon odours on-site was considered to be low;

Recommendations

- *Additional ground investigation and subsequent monitoring beneath the footprint of existing buildings following demolition;*
- *The ancillary fuel pipes are decommissioned (unless previously completed at the time of reported UST decommissioning) and the USTs and pipes removed, along with the excavation of visually and olfactory contaminated material and validation sampling;*
- *Installation of ground gas protection measures in new buildings;*
- *Provision of a capping layer (minimum 300 mm thick) in areas of soft landscaping;*
- *Completion of a potable water pipe assessment where pipes are to be laid within Made Ground materials once the development layout has been finalised; and,*
- *Production of a Remediation Strategy (RS) detailing the above remediation requirements.*

Remediation Strategy, by WSP, at GSK Site, Stockley Park, Hillingdon, Reference: 70077417-REM, Dated July 2021;

WSP undertook a Remediation Strategy for a parcel of land located approximately 60 m west of the Site, comprising an area of approximately 6.3 ha. It is noted that the site is located within the Stockley Park historic quarrying / landfilling and subsequent remediation works as outlined by the Historic England Entry (2020).

Context and Purpose

WSP was instructed by Prologis UK to undertake a Remediation Strategy at GSK Site, Stockley Park, Hillingdon to support the redevelopment of site to comprise two industrial units providing industrial floorspace (Use Class B1c/B2/B8) and ancillary officers together with associated parking, access arrangements, landscaping and infrastructure.

Three previous reports were mentioned as sources of information for the remediation strategy (PRA 2019, P2 GEA, 2019 and GQRA, 2021) but were not publicly available through Borough of Hillingdon planning portal.

Summary of Remedial Objective (Per Relevant Pollutant Linkage (RPL)):

- RCL1: Free Asbestos Fibres in Soil

This related to the protection of construction workers, future site users, and adjacent land users. During excavation (particularly drainage works), control measures were recommended including source removal of arisings, appropriate PPE/RPE, and air monitoring. A pathway break in soft landscaped areas was also advised to limit exposure risks.

- RCL2: Metals in Made Ground Soils

  Control measures were required in line with CDM Regulations during localised earthworks and other infrastructure installations. These measures aimed to protect site workers and future users, with pathway breaks in soft landscaped zones recommended to interrupt contaminant migration.

- RCL3: Hydrocarbons (linked to 3 USTs and other on-site hotspots)

  CDM-compliant control measures were to be applied during excavation. Decommissioning and removal of USTs was to be carried out following good practice, overseen by a suitably qualified person. Excavated contaminated soils required validation and possible off-site treatment or disposal. These works were recommended during demolition or earthworks phases.

- RCL4: Soil Gases from Made Ground and Infilled Material (on/off-site)

  To protect both current and future users, especially within new structures, gas protection measures were advised. These included controls to prevent gas migration and the recommendation for further ground gas and vapour monitoring to confirm the need for protection systems.

- RCL5: Aggressive Contaminants (e.g., sulphates, hydrocarbons)

  To safeguard below-ground construction materials such as concrete and drainage systems, an assessment of concrete durability in aggressive ground conditions was recommended. The potential need for barrier pipe systems was to be considered, subject to statutory authority agreement.

In addition to the above measures, a hotspot protocol was implemented in the event that any unexpected contamination be encountered during the development.

Remediation Implementation Plan, By Crossfield Consulting, at Stockley Park, Iron Bridge Road N, West Drayton, Reference: CCL03466.CO23, Dated September 2021

It is understood that Winvic Construction Limited were awarded the construction contract of the proposed development.

Crossfield Consulting Limited was commissioned, by Winvic Construction Limited, to prepare a Remediation Implementation Plan to detail how the remediation works that were identified by WSP will be undertaken and including details of how the works will be verified so that a Remediation Verification Report could subsequently be prepared.

While no verification report was available for review on the Borough of Hillingdon planning portal at the time of writing this Report.

3.0 Preliminary Conceptual Site Model (CSM)

A Conceptual Site Model (CSM) represents the relationships between contaminant sources, pathways and receptors, to support the identification and assessment of Potential Contaminant Linkages (PCL).

3.1 Potential Sources of Contamination

On-Site

- Relict contamination from historical opencast quarrying and subsequent landfilling. Although it is noted that a large scale remediation and removal of landfill beneath the site was undertaken (Historic England (2020) & UK Development Case Studies (2001)) - potential for asbestos, hydrocarbons, PAHs, metals and hazardous ground gas;
- Potential deep Made Ground associated with the historical development across the Site including the infilling of gravels to create a building platform for the business park (UK Development Case Studies (2001)) - potential for asbestos, hydrocarbons, PAHs, metals and hazardous ground gas;
- Potential contamination from the electrical sub-stations present – potential for asbestos, hydrocarbons, PAHs, metals and PCBs;
- Contaminants from the Sites current and historical car park use, including contaminants from minor leaks and spills, from vehicles – potential for metals and hydrocarbons;
- Potential asbestos within buildings present on-Site; and
- Potential unrecorded/ un-mapped sources

Off-Site

- Relict contamination from widespread historical opencast quarrying and subsequent landfilling in the surrounding Site area. Although it is noted that a large-scale remediation and removal of landfill beneath the site was undertaken with landfilled material relocated north and redeveloped in to the golf course (Historic England (2020) & UK Development Case Studies (2001)) - potential for asbestos, hydrocarbons, PAHs, metals and hazardous ground gas;
- USTs and historical leaks off-Site to the west located within the GSK Site, Stockley Park site – potential for hydrocarbons, PAHs and hazardous ground gas; and
- Elevated concentrations of soil & groundwater contaminants and hazardous ground gas identified across the Stockley Park site areas to the west as part of third-party investigations - asbestos, hydrocarbons, PAHs, metals and hazardous ground gas.

3.2 Identified Potential Receptors

Relevant potential receptors are considered to include:

- Construction workers;
- Third parties during construction (adjacent Site users);
- Future Site users and maintenance workers;
- The superficial Lynch Hill Gravel Member – Principal Aquifer (if present, following historical opencast quarrying)

- The pond located pond located approximately 30 m east from the Site and the Grand Union Canal is located 225 m south.
- The Built Environment (new buildings and infrastructure / utilities).

The underlying London Clay Formation bedrock is classified as Unproductive Strata by the EA and as such is not considered to be a plausible receptor.

3.3 Potential Pathways

The potential pathways are considered to be as follows:

- Direct contact, ingestion or inhalation of soil bound contaminants / dust during or following redevelopment;
- Inhalation of organic vapours associated with contamination;
- Migration of ground gas / vapours into on-Site buildings causing asphyxiation or risk of explosion;
- Leaching of contamination into groundwater followed by migration of groundwater to the wider groundwater environment; and
- Direct contact between aggressive ground conditions and new infrastructure.

Source	Pathway(s)	Receptor(s)	Risk Ratings	Justification & Mitigation (if required)
On-Site Relict contamination from historical opencast quarrying and subsequent landfilling. Deep Made Ground associated with the historical development across the Site including the infilling of gravels to create a building platform. The electrical sub-stations present Car park use - minor leaks and spills, from vehicles Asbestos within buildings. Unrecorded/ un-mapped sources **Off-Site** Relict contamination from historical opencast quarrying	Direct contact/ ingestion and inhalation of dust, vapours and asbestos fibres.	Future Site users. Groundworkers during the redevelopment or during any sub-surface maintenance works.	**Low to Moderate Risk**	The potential for significant and widespread soil contamination is considered to be Low to Moderate due to the potential for relict contamination from historical quarrying and subsequent landfilling, however, it is noted that a large scale remediation project was undertaken to create the building platform which the current office buildings are located upon. Other potential sources of contamination on-Site include the potential for deep Made Ground, the electrical sub-stations, car park use, asbestos within buildings and the off-Site potential sources. It is recommended that environmental investigation is undertaken across the Site at the time of any geotechnical assessment to confirm the soil conditions and risk to the identified receptors. A 'hotspot' protocol should be in place during the redevelopment for ground workers to act upon should suspected contamination be identified. The Site is largely to be occupied by hardstanding, minimising the risk of direct exposure to any below ground soil contamination. However, soft landscaped areas are proposed at the Site and it is likely that a clean cover system of suitable for use topsoil will be required. Dust suppression may be required during the development groundworks. Groundworkers should use appropriate personal protective equipment (PPE) and maintain good standards of hygiene to be protected from any soil contamination which may be present. Asbestos has been identified in the surrounding Site area by a third-party investigation, as well as the potential for asbestos within buildings on Site, as such all groundworkers will need to prepare suitable RAMs and PPE/RPE, where required, under their obligations with CAR2012.

and subsequent landfilling USTs and historical leaks off-Site to the west located within the GSK Site Elevated concentrations of soil & groundwater contaminants and hazardous ground gas identified across the Stockley Park site areas to the west as part of third-party investigations	Leaching of contamination into groundwater. Vertical and lateral migration of contamination through permeable deposits below the Site, including potential on-Site soakaway.	Principal Aquifer (Lynch Hill Gravel Member – if present) Ponds located 30 m east and the Grand Union Canal located 225 m south	**Low to Moderate Risk**	The potential for significant and widespread groundwater contamination is considered to be Low to Moderate due to the potential for relict contamination from historical quarrying and subsequent landfilling, however, it is noted that a large scale remediation project was undertaken to create the building platform which the current office buildings are located upon. Furthermore, other potential sources of contamination on-Site include the potential for deep Made Ground, the electrical sub-stations, car park use, asbestos within buildings and the off-Site potential sources. Whilst the Site is mapped with a Principal Aquifer in relation to the underlying superficial deposits, the Site lies within Stockley Park which is a remediated opencast quarry / landfill, as such, the groundwater sensitivity of the immediate surround area is considered to be low. Furthermore, elevated concentrations of contaminants have been identified in ground water off-Site by third-parties but still within the remediated Stockley Park area. The Site is not located within a Source Protection Zone (SPZ). Furthermore, no SPZs are located within 1.0 km from the Site. There are 25 no. groundwater abstraction and 3 no. surface water abstractions records within the Envirocheck report located within 1.0 km of the Site, however, none are related to potable water. It is however, recommended that environmental investigation is undertaken across the Site to confirm the ground conditions and risk to the identified receptors, with validatory groundwater sampling to support likely Environment Agency (EA) requirements.
	Direct infiltration in water supply pipes.	Service conduits.	**Moderate Risk**	Potential sources of contamination have been identified and it is recommended that environmental investigation is undertaken across the Site to confirm soil conditions and risk to service conduits. Thereafter, the findings of any environmental investigation at the Site should be provided to the Local Water Provider who will confirm any requirements for upgraded water supply pipes, if new installations are required as part of the new development. Should new potable water installations be required,

				upgraded water pipes should be anticipated at this stage given the developed nature of the Site.
Hazardous ground gas (**on-Site** deep Made Ground and potential landfill, **Off-Site** deep Made Ground and Landfilling)	Accumulation of gas in enclosed spaces and sub-floor voids.	Buildings and future Site users.	**Moderate Risk**	Potential sources of ground gases have been identified (**on-Site** deep Made Ground and potential landfill, **Off-Site** deep Made Ground and Landfilling). It is understood that ground gas protection measures have been installed in the surrounding Site area as identified by third-parties. It is recommended that ground gas monitoring is undertaken across the Site as part of any ground investigation. Vigilance is required during groundworks for any suspect ground conditions, such as deep Made Ground, organic or deleterious materials and organic contamination which may present a potential source of hazardous ground gas.
Radon	Accumulation of radon in enclosed spaces and sub-floor voids.		**Very Low Risk**	Reference to the Envirocheck report indicates the Site is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). No radon protective measures are necessary in the construction of new developments.
Potential for asbestos within buildings present on-Site	Inhalation of asbestos fibres.	Groundworkers during the redevelopment or during any sub-surface maintenance works.	**Moderate Risk**	A pre-demolition asbestos survey should be carried out by an appropriately experienced and qualified asbestos surveyor.

Risk Definitions are provided as Appendix VI.

4.0 Conclusions and Recommendations

On the basis of the Assessment the following conclusions and recommendations can be made.

Soils	The potential for significant and widespread soil contamination is considered to be **Low to Moderate** due to the potential for relict contamination from historical quarrying and subsequent landfilling, however, it is noted that a large-scale remediation project was undertaken to create the building platform which the current office buildings are located upon. Furthermore, other potential sources of contamination on-Site include the potential for deep Made Ground, the electrical sub-stations, car park use, asbestos within buildings and the off-Site potential sources. It is recommended that environmental investigation is undertaken across the Site at the time of any geotechnical assessment to confirm the soil conditions and risk to the identified receptors. A 'hotspot' protocol should be in place during the redevelopment for ground workers to act upon should suspected contamination be identified. Dust suppression may be required during the development groundworks. The Site is largely to be occupied by hardstanding, minimising the risk of direct exposure to any below ground soil contamination. However, soft landscaped areas are proposed at the Site and it is likely that a clean cover system of suitable for use topsoil will be required. Groundworkers should use appropriate personal protective equipment (PPE) and maintain good standards of hygiene to be protected from any soil contamination which may be present. Asbestos has been identified in the surrounding Site area by a third-party investigation, as well as the potential for asbestos within buildings on Site, as such all groundworkers will need to prepare suitable RAMs and PPE/RPE, where required, under their obligations with CAR2012.
Groundwater	The potential for significant and widespread groundwater contamination is considered to be **Low to Moderate** due to the potential for relict contamination from historical quarrying and subsequent landfilling, however, it is noted that a large scale remediation project was undertaken to create the building platform which the current office buildings are located upon. Furthermore, other potential sources of contamination on-Site include the potential for deep Made Ground, the electrical sub-stations, car park use, asbestos within buildings and the off-Site potential sources. Whilst the Site is mapped with a Principal Aquifer in relation to the underlying superficial deposits, the Site lies within Stockley Park which is a remediated opencast quarry / landfill, as such, the groundwater sensitivity of the immediate surround area is considered to be low. Furthermore, elevated concentrations of contaminants have been identified in ground water off-Site but still within the remediated Stockley Park area by third-parties. The Site is not located within a Source Protection Zone (SPZ). Furthermore, no SPZs are located within 1.0 km from the Site. There are 25 no. groundwater abstraction and 3 no. surface water abstractions records within the Envirocheck report located within 1.0 km of the Site, however, none are related to potable water.

	It is however, recommended that environmental investigation is undertaken across the Site to confirm the ground conditions and risk to the identified receptors, with validatory groundwater sampling to support likely Environment Agency (EA) requirements.
Ground Gas	The potential for ground gases/vapours to impact the proposed development is considered to be **Moderate.** A Ground Gas risk assessment will be required for the Site.
Radon	Reference to the Envirocheck report indicates the Site is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). No radon protective measures are necessary in the construction of new developments.
Potable Water Pipes	Potential sources of contamination have been identified and it is recommended that environmental investigation is undertaken across the Site to confirm soil conditions and risk to service conduits. Thereafter, the findings of any environmental investigation at the Site should be provided to the Local Water Provider who will confirm any requirements for upgraded water supply pipes, if new installations are required as part of the new development. Should new potable water installations be required, upgraded water pipes should be anticipated at this stage given the developed nature of the Site.
Geotechnical Considerations and Foundations	Reference to the British Geological Survey (BGS) online viewer and mapping BGS mapping (1:50,000 Sheet Number 269, Winsor) indicates the Site is underlain by superficial deposits of the Lynch Hill Gravel Member (sand and gravel). Thereafter, the Site is mapped as being underlain by bedrock of the London Clay Formation (clay, silt and sand). Furthermore, the Site is mapped on the British Geological Survey (BGS) online viewer and mapping BGS mapping as comprising 'Worked Ground – Void'. This likely relates to the open cast extraction of the superficial sands and gravels. Given the developed nature of the Site, Made Ground is anticipated. Finally, the Site is mapped as being located within an area of potentially infilled land (non-water) and as such the potential for deep Made Ground cannot be discounted at this stage. Groundwater within the BGS recorded historical borehole, located approximately 60 m west of the Site (Reference. TQ08SE208, dated April 1979) was noted to be between 1.78 and 1.85 m bgl. The specific geotechnical constraints and preliminary foundation considerations are as follows: ▽ Traditional foundations may be unsuitable given that the Site is noted be underlain by reworked ground and / or landfilled materials; ▽ Potential for deep Made Ground, given the historical opencast quarrying, landfilling and remediation works on-Site; ▽ Potential for chemical attack on concrete from the Made Ground; and ▽ Given the Site is likely underlain by Made Ground, traditional soakaways are unlikely to be feasible form of surface water dispoal;

Recommendations	On the basis of the above, the following recommendations are made: ▽ Environmental investigation across the Site to confirm the presence of any shallow soil and groundwater contamination and the associated risk to Human Health and Controlled Waters; ▽ Geotechnical investigation is required to inform foundation design. The geotechnical investigation should include deep boreholes for pile design purposes; ▽ Ground gas monitoring; ▽ A 'hotspot' protocol should be in place during the redevelopment for ground workers to act upon should suspected contamination be identified; ▽ Groundworkers should use appropriate personal protective equipment (PPE) and maintain good standards of hygiene, including undertaking RAMS in accordance with their obligations under CAR2012; ▽ Dust suppression may be required during the development groundworks; ▽ This Report should be provided to the local water provider to support any new potable water connection, if required; and ▽ An asbestos survey should be undertaken by an appropriately qualified and experienced asbestos surveyor.

Drawings

evolve
GEO-ENVIRONMENTAL

Drawing I – Proposed Site Layout (Drawing No. 23517-UMC-ZZZZ-SI-DR-A-0601-P02)

evolve
GEO-ENVIRONMENTAL

- Dimensions are in millimeters, unless stated otherwise.
- Scaling of this drawing is not recommended.
- It is the recipients responsibility to print this document to the correct scale.
- All relevant drawings and specifications should be read in conjunction with this drawing.

N

Schedule of Accommodation

Total GIA	-	**130,180 ft²**	**(12,094 m²)**
Total GEA	-	**135,097 ft²**	**(12,551 m²)**
Site Area	-	6.24 acres	2.53 ha
Site Density GIA	-		47.87%
Site Density GEA	-		49.68%
Unit 100			
Warehouse Area	-	61,322 ft²	(5,697 m²)
Office Area (incl. GF core)	-	9,407 ft²	(874 m²)
Unit 100 GIA	-	**70,729 ft²**	**(6,571 m²)**
Unit 100 GEA	-	**74,066 ft²**	**(6,881 m²)**
Unit 200			
Warehouse Area	-	52,841 ft²	(4,909 m²)
Office Area (incl. GF core)	-	6,610 ft²	(614 m²)
Unit 200 GIA	-	**59,451 ft²**	**(5,523 m²)**
Unit 200 GEA	-	**61,031 ft²**	**(5,670 m²)**

22 No. Car Parking
Offices
Unit 100
12.5m Clear Internal Height
35000
6 No. Dock Loading Doors
40000
47 No. Car Parking
Offices
Unit 200
12.5m Clear Internal Height
35000
5 No. Dock Loading Doors
42000
45 No. Car Parking

10m SCALE 1:500

P01	Initial Issue		NL AJL	13/11/23
rev	amendments	by	ckd	date

1&2 Longwalk Road, Stockley Park, Uxbridge

Site Layout

LOD 1	LOI 1

ZINC

umc architects

RIBA PoW Stage:	0 - Strategic Definition
Document Suitability:	S1
Drawn / Checked:	NL / AJL
Date:	13/11/2023
Scale:	1:500 A1
UMC Project Number:	23517
Document Reference:	Drawing no: Revision:
23517 - UMC - ZZZZ - SI - DR - A	0601 P02

Figures

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Figure I – Site Location Plan

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Figure No.	Fig I - Site Location Map
Project Name	Stockley Park, Uxbridge
Client	Howard Ward Associates
Service	Preliminary (Geo-Environmental) Risk Assessment (PRA)
Date of Issue	July 2025
Project number	EGE-25-06-13-01

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Figure II – Relevant Features Plan

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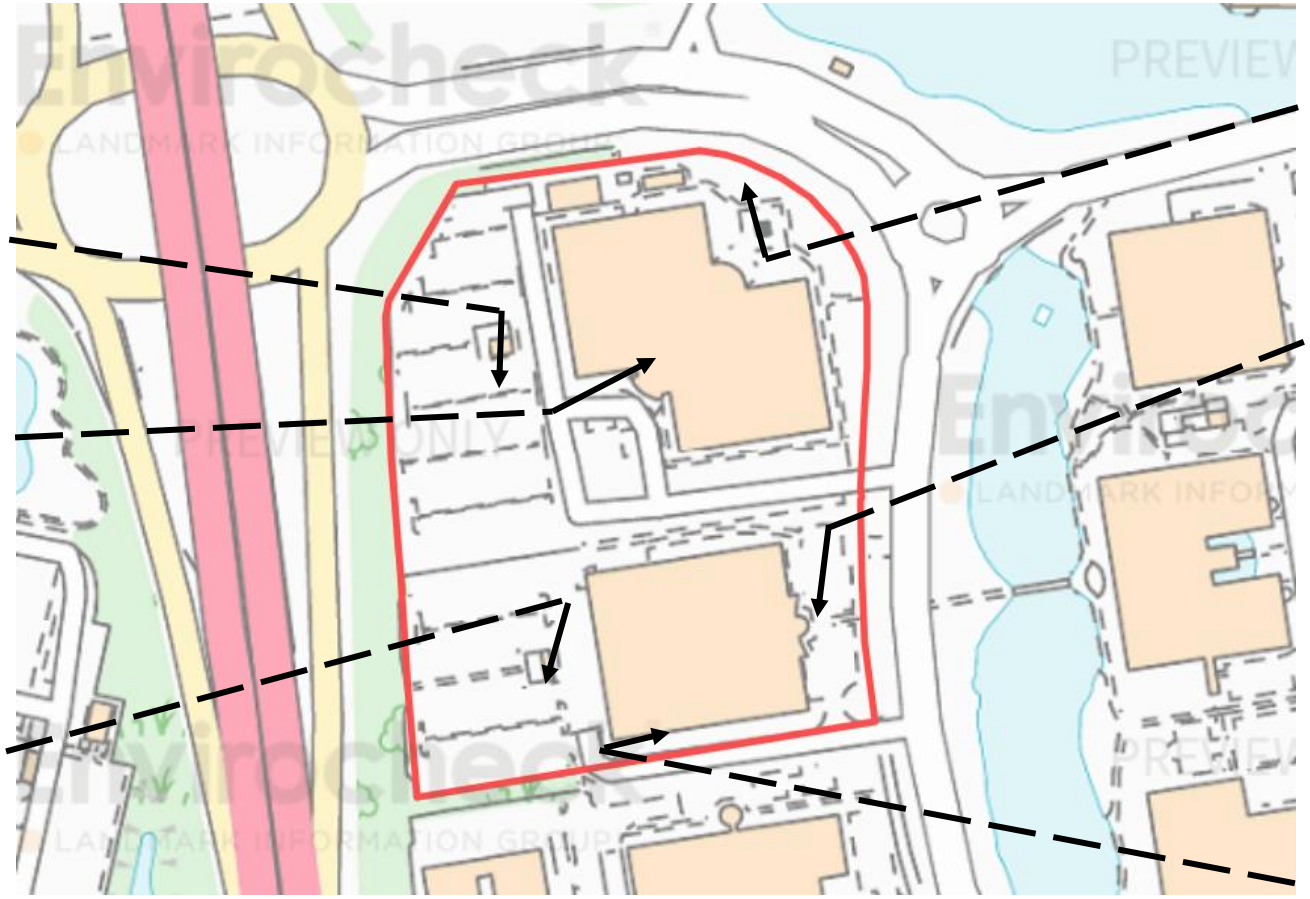
PH01: View of northern sub-station.

PH02: View of northern office building.

PH03: View of skip and southern sub-station.

NORTH



PH04: View of water feature.

PH05: View of southern office building.

PH06: View of southern office building.

Figure No. and Title	Figure II - Relevant Feature Plan
Project Name	Stockley Park, Uxbridge
Client	Howard Ward Associates
Service	Preliminary (Geo-Environmental) Risk Assessment (PRA)
Date of Issue	July 2025
Project number	EGE-25-06-13-01

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Appendices

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Appendix I – Standard Limitations

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Limitations

The conclusions and recommendations made in this Report are limited to those that can be made based on the findings of the investigation and in the context of the proposed development.

Where comments are made based on information obtained from third parties, EGE assumes that all third party information is true and correct. No independent action has been undertaken to validate the findings of third parties, unless specifically stated.

This Report has been prepared in accordance with our understanding of current best practice. However changes to best practice, guidance or legislation may necessitate revision of this Report after the date of issue.

EGE has prepared this Report for the sole use and reliance of the Client, in accordance with our Standard Conditions and Limitations issued with the proposal. This Report may not be used or relied upon by any unauthorised third party without the explicit written agreement of EGE. Third parties use the information at their own risk.

Appendix II – Historical Mapping

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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
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
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
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
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	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Mud
Sand
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

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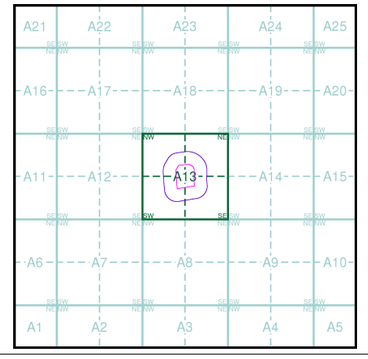
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Middlesex	1:10,560	1868	3
Buckinghamshire	1:10,560	1881	4
Middlesex	1:10,560	1897	5
Buckinghamshire	1:10,560	1900	6
Middlesex	1:10,560	1919 - 1920	7
Middlesex	1:10,560	1920	8
Buckinghamshire	1:10,560	1932	9
Middlesex	1:10,560	1935	10
Middlesex	1:10,560	1938	11
Middlesex	1:10,560	1938	12
Historical Aerial Photography	1:10,560	1948	13
Historical Aerial Photography	1:10,560	1948	14
Ordnance Survey Plan	1:10,000	1960	15
Ordnance Survey Plan	1:10,000	1965	16
Ordnance Survey Plan	1:10,000	1970	17
Ordnance Survey Plan	1:10,000	1975 - 1977	18
London	1:25,000	1985	19
Ordnance Survey Plan	1:10,000	1989	20
Ordnance Survey Plan	1:10,000	1990	21
10K Raster Mapping	1:10,000	1999	22
10K Raster Mapping	1:10,000	2006	23
VectorMap Local	1:10,000	2024	24

Historical Map - Slice A



Order Details

Order Number: 379502316_1_1
Customer Ref: Uxbridge
National Grid Reference: 507790, 180240
Slice: A
Site Area (Ha): 2.42
Search Buffer (m): 1000

Site Details

1&2, Longwalk Road, Stockley Park, UXBRIDGE, UB11 1BA

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

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
- Subway Entrance
- Fireproof Building
- Prominent Fireproof Building
- Non-fireproof Building
- Non-fireproof Building (non-dwelling)
- Factory, mill, and flour mill, with chimneys
- Factory, mill, and flour mill, without chimneys
- Power Station, drawn to scale
- Hydroelectric Power Station
- Radio Station, drawn to scale
- Telephone Station, drawn to scale
- Abandoned Open-pit Mine or Quarry
- Open-pit Salt Mine
- Pit
- Oil Deposit or Well
- Oil Seepage
- Tailings Pile
- Fuel Storage Tanks
- Natural Gas Tank
- 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

243,8 — Values for prominent elevations

186.0 — Numbers for spot elevations, depth soundings, contour lines, etc.

0,2 — Velocity of the current, width of river bed, depth of river

Fractional terms: length and capacity of bridges; depth of fords and condition of the river bottom; height of forest and the diameter of trees

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
- Subway Entrance
- Partly Demolished Buildings
- Demolished Buildings
- Built-Up Area with Fireproof Buildings Predominant
- Built-Up Area with Non-Fireproof Buildings Predominant
- Individual Fireproof Building
- Prominent Industrial Building
- Individual Dwelling, Fireproof
- Ruins of an Individual Dwelling
- Factory or Mill Chimney
- Factory or Mill with Chimney
- Factory or Mill without Chimney
- Mine or Open Pit Mine
- Operating Shaft or Mine
- Non-Operating Shaft or Mine
- Salt Mine
- Tailings Pile
- Pit
- Stone Quarry
- Gas Pump or Service Station
- Fuel Storage or Natural Gas Tank
- Oil or Natural Gas Derrick
- Small Hydroelectric Power Station
- Power Station
- Transformer Station
- Cemetery
- Burial Mound (height in metres)
- Triangulation Point on Burial Mound
- Triangulation Point
- Bench Mark
- Bench Mark (monumented)
- Telegraph Office
- Telephone Station
- Radio Station
- Radio Tower
- Airfield or Seaplane Base
- Landing Strip
- Main Highway
- Highway under Construction
- Improved Dirt Road (former truck road)
- Double-track Railroad with First Class Station
- Dismantled Railroad
- Railroad Under Construction
- Shore Embankment
- River or Ditch with Embankment
- Well
- Water Reservoir or Rain Water Pit
- Spring
- Isobath with value
- Heavy (Index) Contour Line
- Contour Line and Value
- Half Contour Line
- Spot Elevation Value
- Coniferous
- Deciduous
- Mixed
- Scrub

Key to Numbers on Mapping

TQ08_London

No.	Description
133	Factory (Plastics)

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Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Middlesex	1:10,560	1868	3
Buckinghamshire	1:10,560	1881	4
Middlesex	1:10,560	1897	5
Buckinghamshire	1:10,560	1900	6
Middlesex	1:10,560	1919 - 1920	7
Middlesex	1:10,560	1920	8
Buckinghamshire	1:10,560	1932	9
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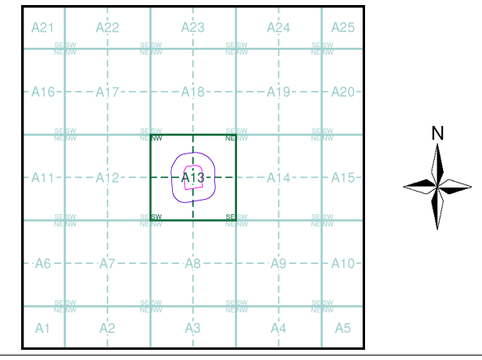
Ordnance Survey Plan	1:10,000	1975 - 1977	18
London	1:25,000	1985	19
Ordnance Survey Plan	1:10,000	1989	20
Ordnance Survey Plan	1:10,000	1990	21
10K Raster Mapping	1:10,000	1999	22
10K Raster Mapping	1:10,000	2006	23
VectorMap Local	1:10,000	2024	24

Russian Map - Slice A



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Customer Ref: Uxbridge
National Grid Reference: 507790, 180240
Slice: A
Site Area (Ha): 2.42
Search Buffer (m): 1000

Site Details

1&2, Longwalk Road, Stockley Park, UXBRIDGE, UB11 1BA

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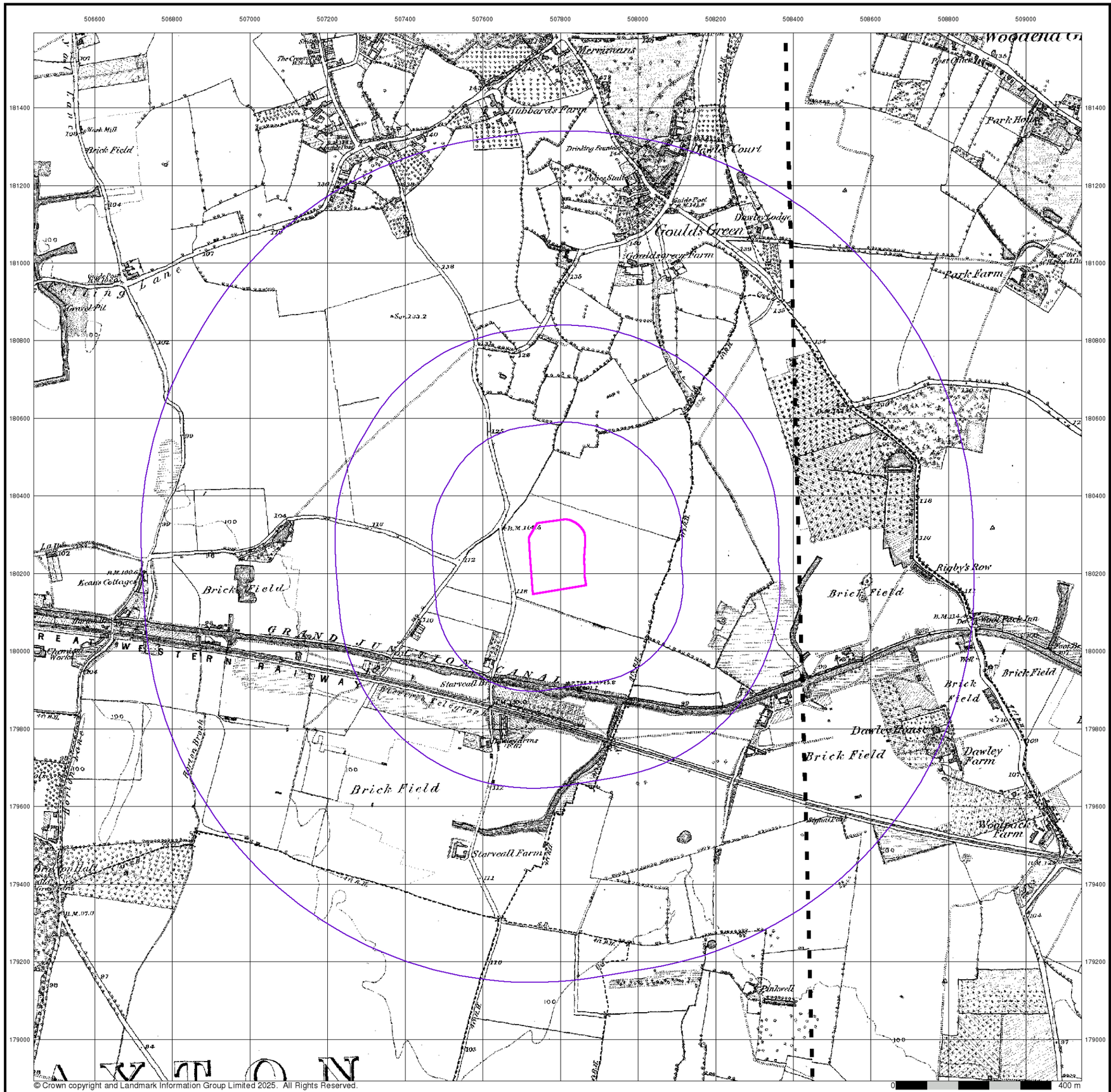

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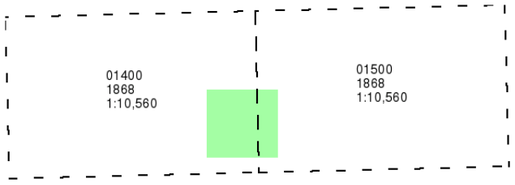
Middlesex

Published 1868

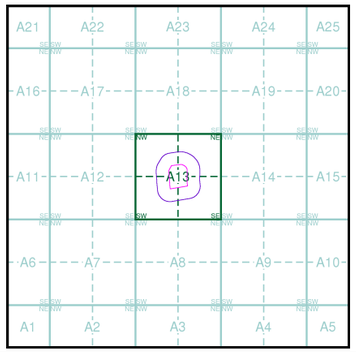
Source map scale - 1:10,560

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



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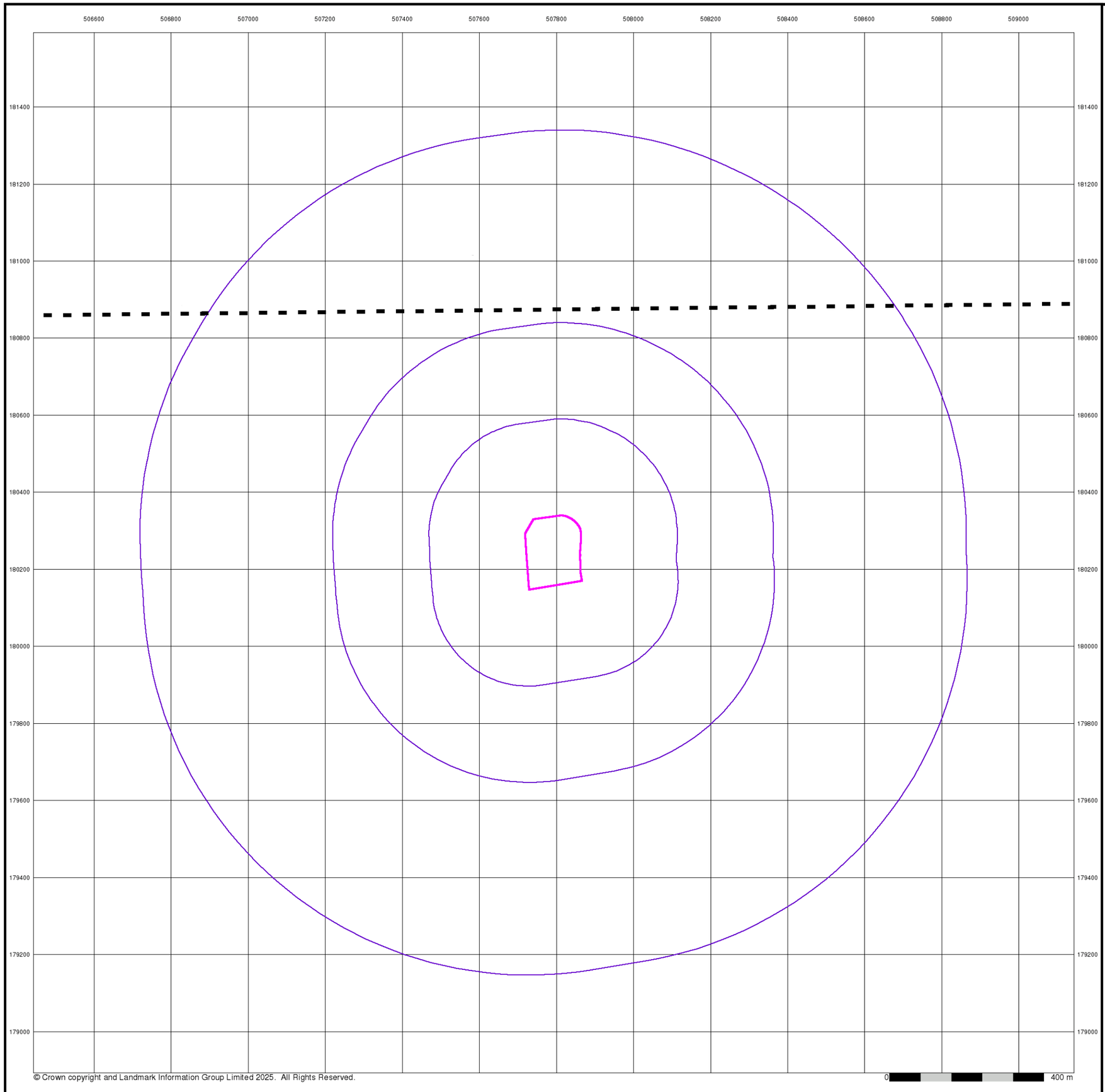

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Buckinghamshire

Published 1881

Source map scale - 1:10,560

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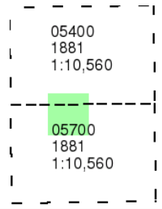
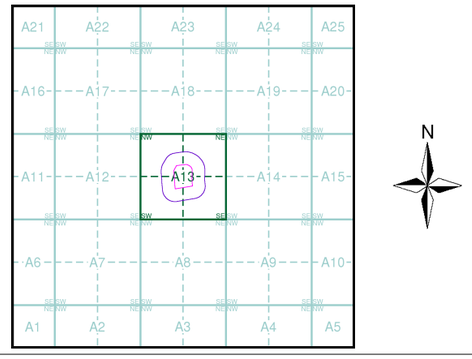


Historical Map - Slice A



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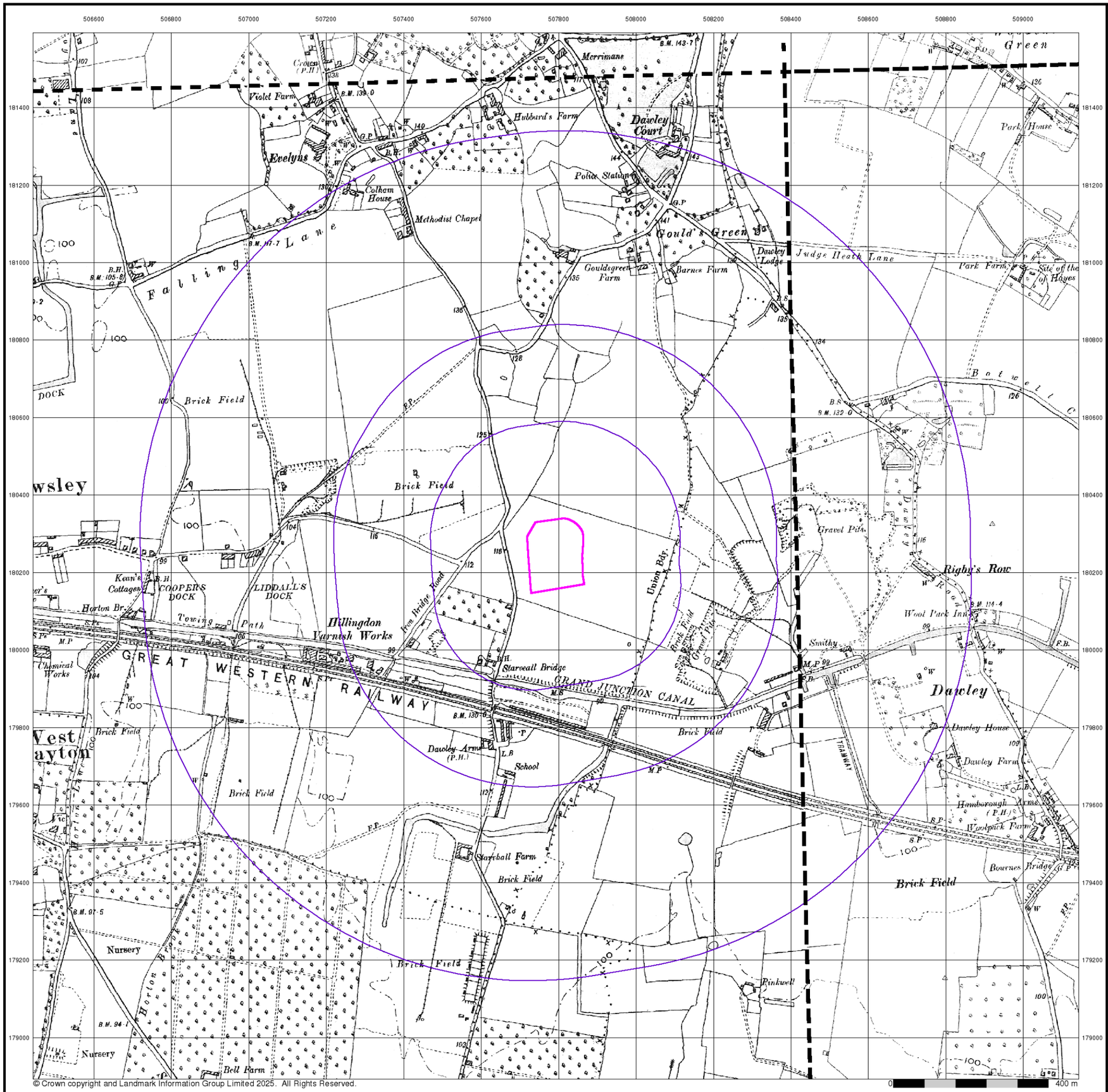

Middlesex

Published 1897

Source map scale - 1:10,560

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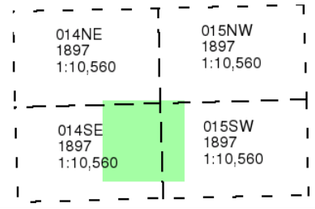
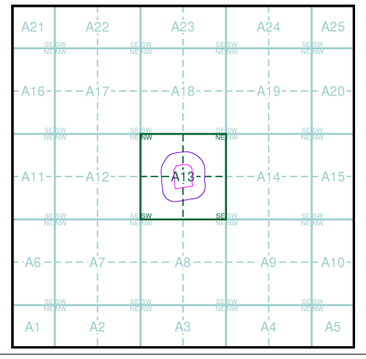


Historical Map - Slice A



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National Grid Reference:	507790, 180240
Slice:	A
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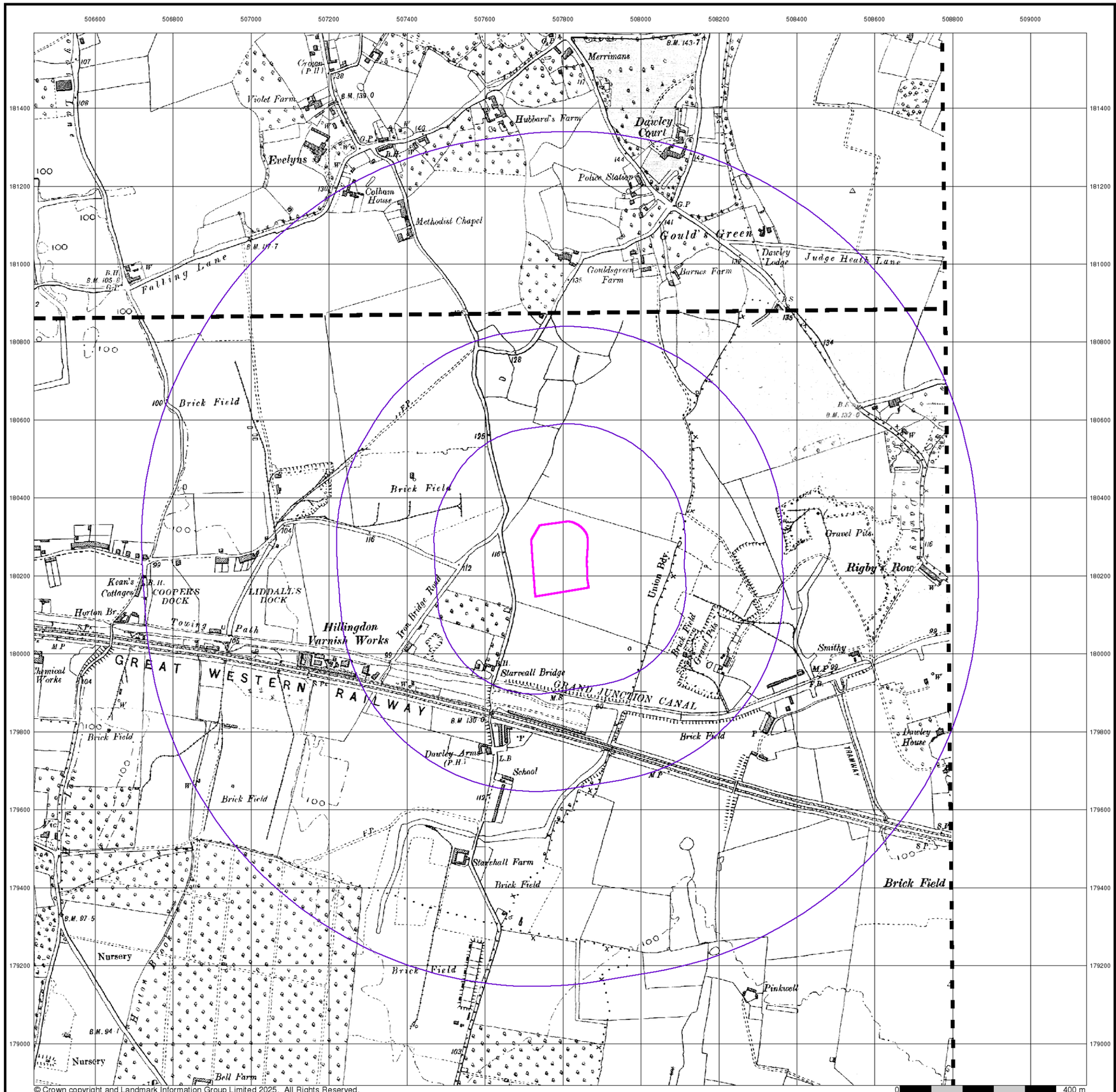

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Buckinghamshire

Published 1900

Source map scale - 1:10,560

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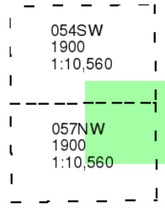
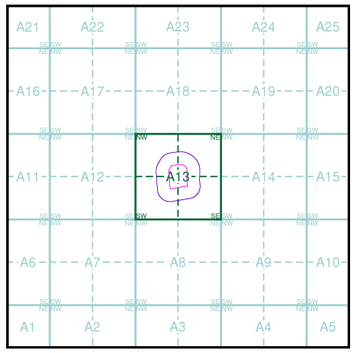


Historical Map - Slice A



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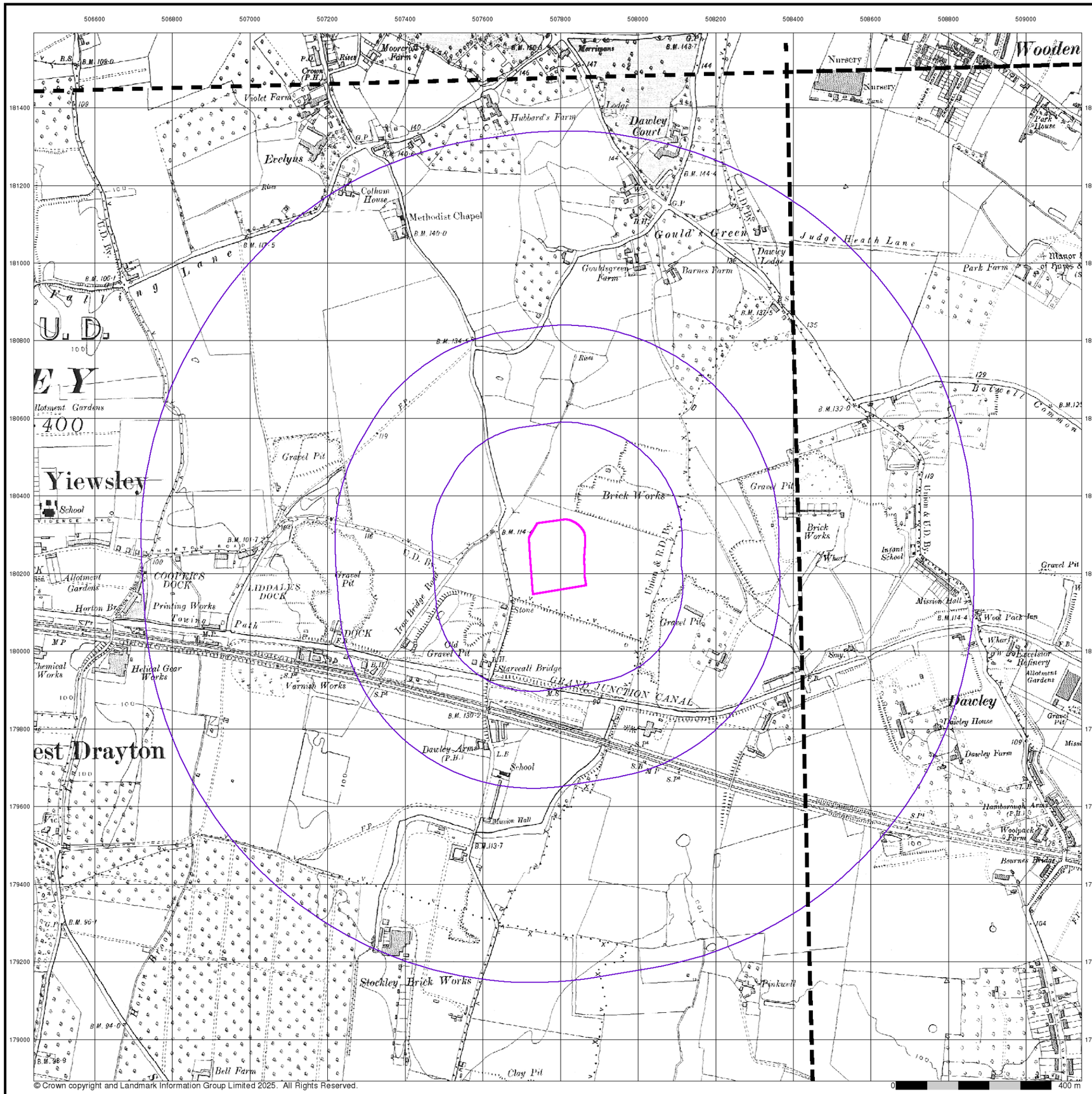

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Middlesex

Published 1919 - 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.

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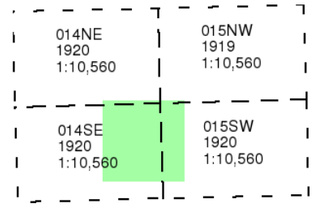
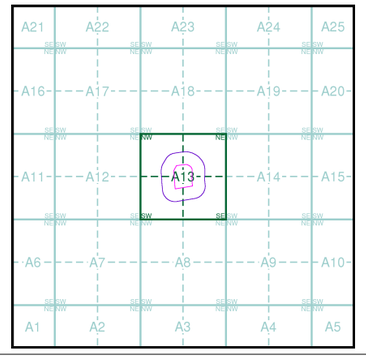


Historical Map - Slice A



Order Details

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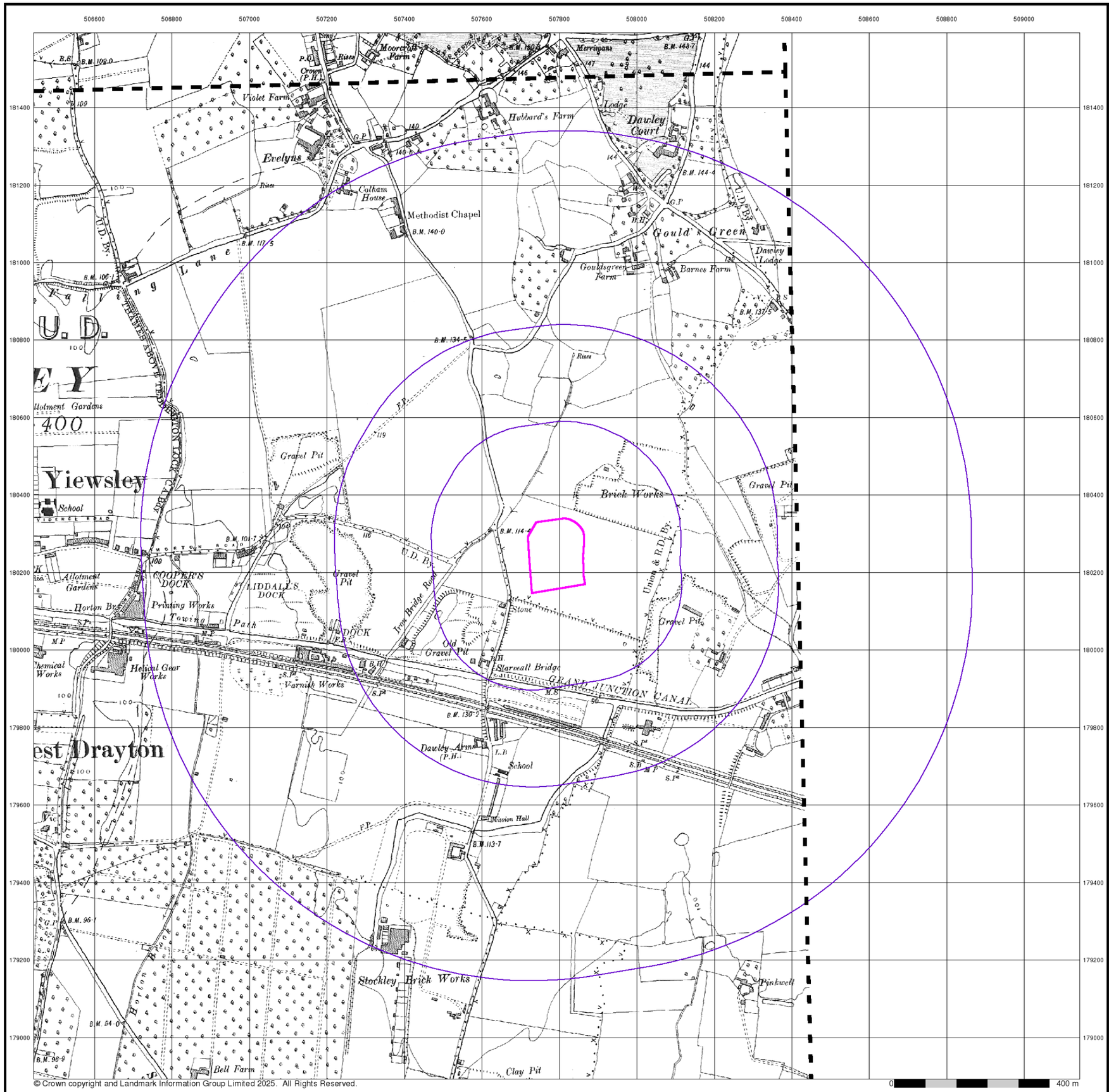
Customer Ref:	Uxbridge
National Grid Reference:	507790, 180240
Slice:	A
Site Area (Ha):	2.42
Search Buffer (m):	1000

Site Details

1&2, Longwalk Road, Stockley Park, UXBRIDGE, UB11 1BA

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



evolve
GEO-ENVIRONMENTAL

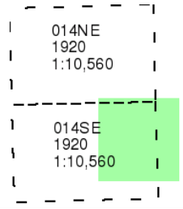
Middlesex

Published 1920

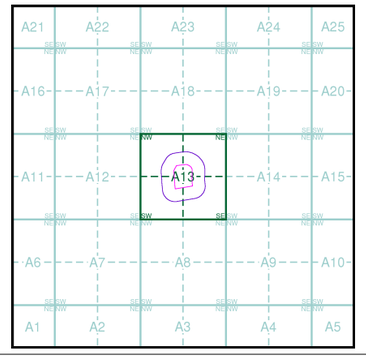
Source map scale - 1:10,560

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



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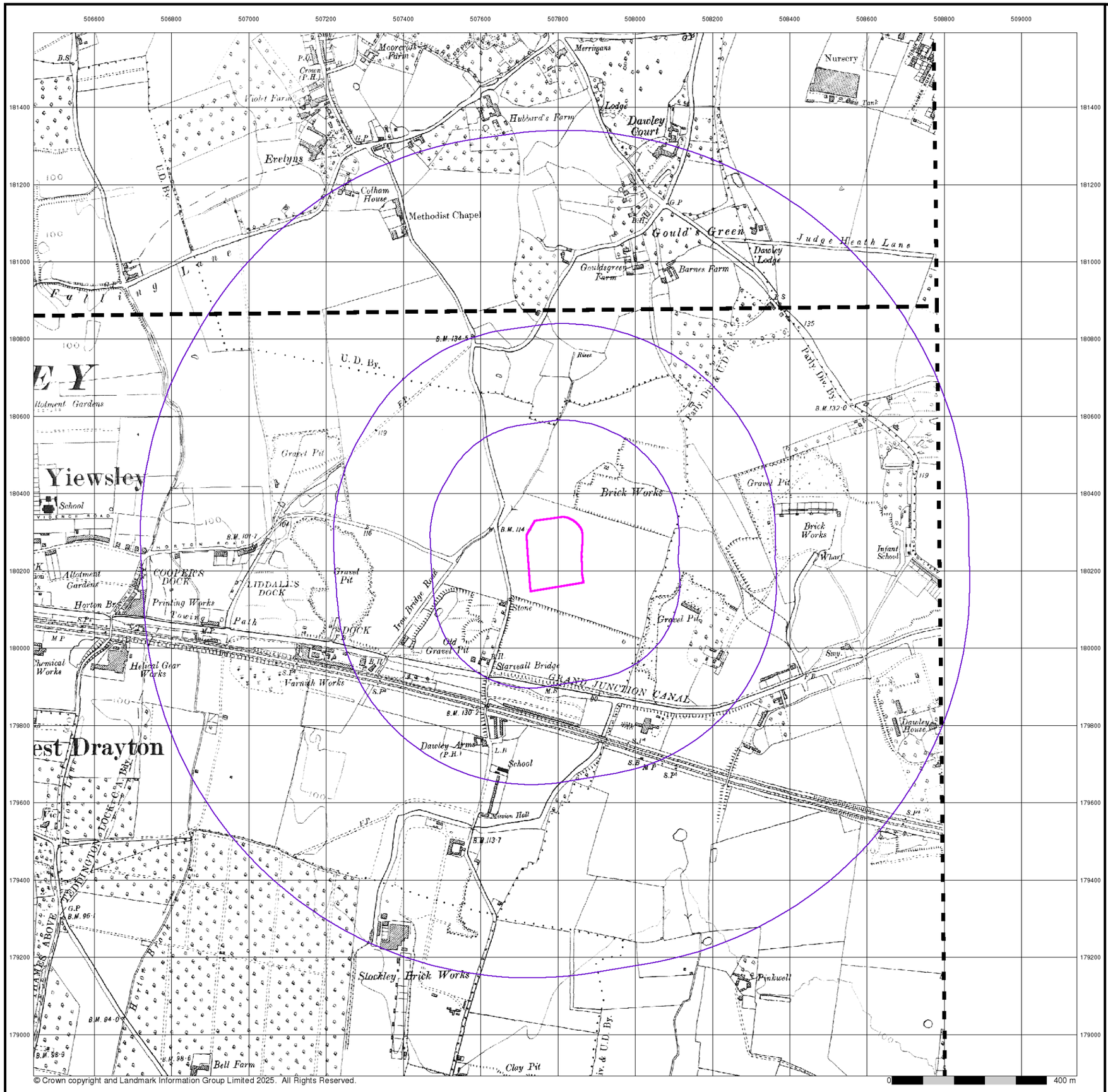

evolve
GEO-ENVIRONMENTAL

Buckinghamshire

Published 1932

Source map scale - 1:10,560

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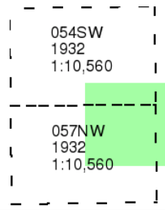
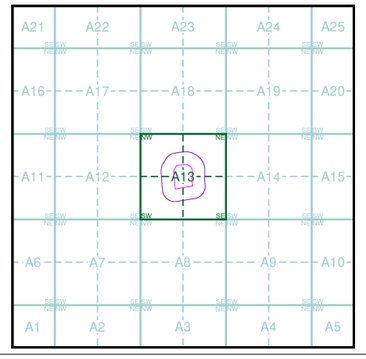


Historical Map - Slice A



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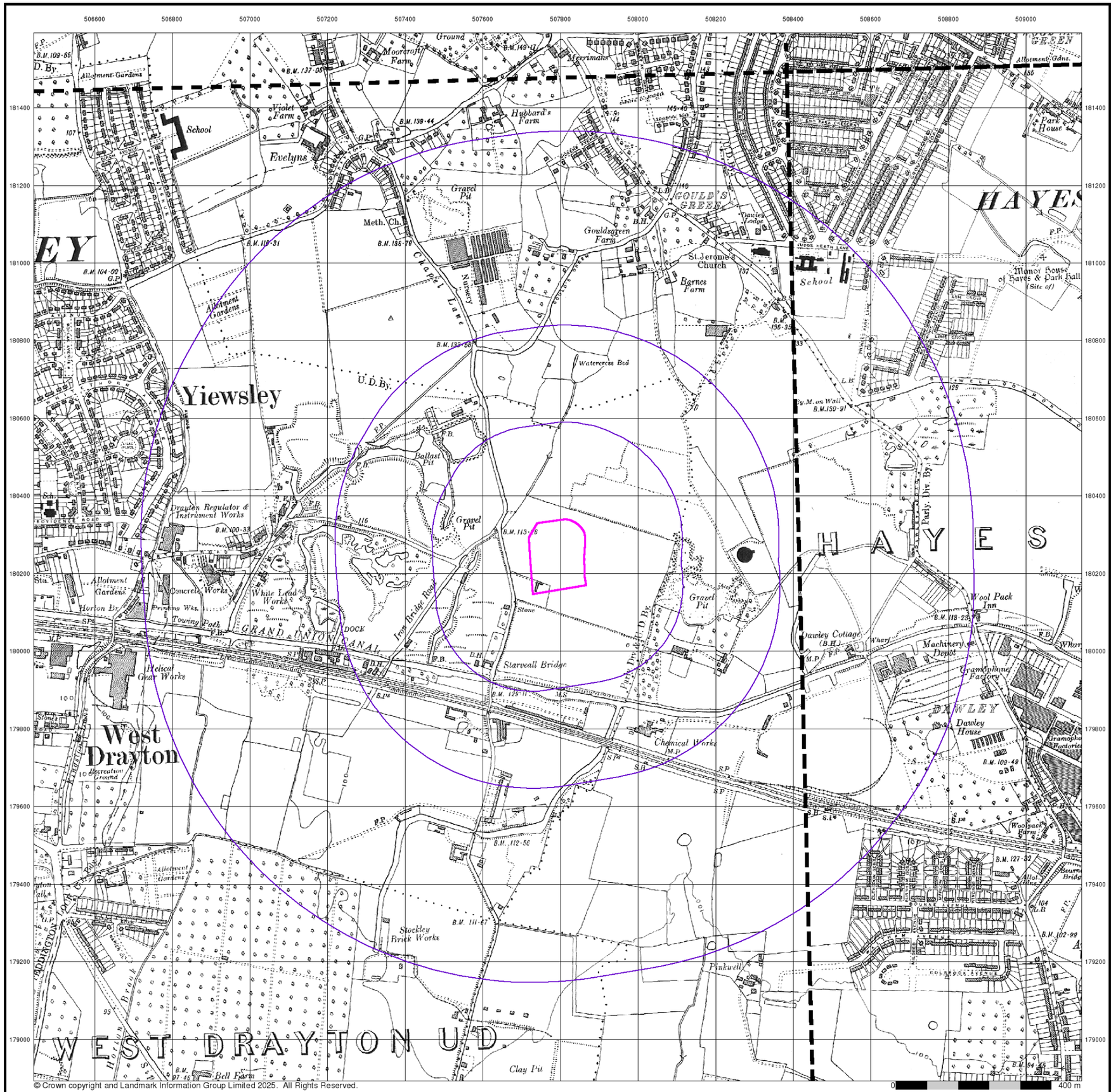

evolve
GEO-ENVIRONMENTAL

Middlesex

Published 1935

Source map scale - 1:10,560

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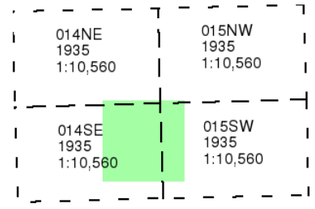
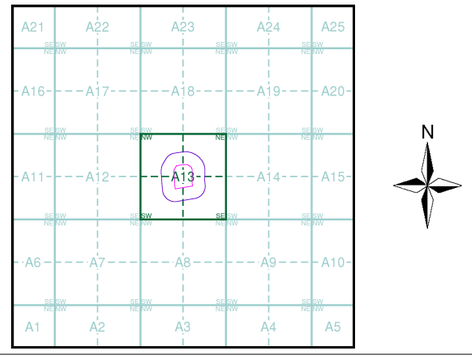


Historical Map - Slice A



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