Site Condition Report

Longcross Data Centre: SP3004SB

Date:	April 2024	**Issue:**	1
Reference:	10274458	**Status:**	Issue

Issuing office: Glasgow

DOCUMENT CONTROL

Issue	Date	Status	HDR Author	HDR Approval	Notes
1	12/04/2024	Issue	12/04/2024_MM	12/04/2024_NS	First issue

CONTENTS

Page No.

APPENDICES

1.0 INTRODUCTION

This Site Condition Report (SCR) or 'Site Baseline report' has been prepared by HDR on behalf of the operator, Ark Data Centres Limited (Ark) in support of the Environmental Permit (EP) application (ref: SP3004SB) for following installation:

Longcross Data Centre
Longcross Film Studios
Chobham Lane
Chertsey
KT16 0EE
Grid reference: SU 97896 65526

This SCR is intended to provide the Environment Agency (EA) with a description of the baseline conditions prior to permitted site operations commencing. The baseline data presented herein should be referred to upon surrender of the sites environmental permit (once issued) to demonstrate no deterioration of the land has occurred due to operations.

Ark as the legal operator is required to apply to the EA for an Environmental Permit because the total thermal capacity of the sites combustion plant exceeds the 50MW threshold stipulated in the regulations[1].

The extent of the land covered by this SCR and the Permit Application Area are shown on the plan in Appendix A.

This report has been prepared based on the information made available and the conditions at the time of writing. This report is only valid to the extent that the information provided is accurate and complete.

This SCR has been prepared in accordance with the EAs Site Condition Report H5 guidance for Applicants[2] with Sections 2-4 submitted within this report as part of the application for a permit.

Sections 5-8 are to be maintained during the life of the permit.

Sections 9-11 are to be completed if / when the permit is surrendered.

[1] The Environmental Permitting (England and Wales) Regulations 2016 (as amended)
[2] https://www.gov.uk/government/publications/environmental-permitting-h5-site-condition-report

2.0 BACKGROUND

2.1 Site details

Applicant	Ark Data Centres Limited (company #: 05656968)
Site name	Longcross Data Centre
Site address	Longcross Film Studios, Chobham Lane, Longcross, Chertsey, KT16 0EE
National grid reference	SU 97896 65526
Document reference and dates for Site Condition Report at permit application and surrender	Permit reference SP3004SB Permit issued: TBC Permit surrendered: TBC Appendix C - Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) (and the reports referenced within) Appendix D – Envirocheck Database results (third-party environmental mapping database)
Document references for site plans (including location and boundaries)	Appendix A - Site Plan and Emissions Points Appendix B – Site setting up plan

2.2 Site Setting

A plan of the site and immediate area is presented in Appendix B.

The site comprises the former Longcross Film Studios in Longcross, which is being redeveloped as a data centre campus comprising buildings for data processing and storage, an energy centre building, standby generators and fuel storage and a visitor reception centre. The site is located approx. 6km (3.373 miles) to the west of Chertsey, located to the north of the M3 motorway, south of the Reading to London Waterloo railway line, and to the east of Chobham Common. The Site lies wholly within Runnymede Borough and borders Surrey Heath Borough to the West.

The site is in a rural location; the area is an industrial estate predominantly made up of hardstanding and numerous buildings of varying style and height. There is also a newly built residential development in the surrounding area. Beyond the direct site boundaries, to the South and West (approx. 300m), is an area of heathland, Chobham Common which is classed as a Site of Special Scientific Interest (SSSI). Longcross train station is approximately 500m north of the site.

The Windlesham Formation and Bagshot Formation are classified as Secondary (A) Aquifers. There are no groundwater abstractions within a 1km radius of the site, and the site is not located within a Source Protection Zone for groundwater. The nearest surface water feature is an unnamed inland river approximately 180m west of the site. Based on the foregoing the site was considered to be of low to moderate environmental sensitivity.

Planning permission was originally granted for this development by the Runnymede Borough Council under planning reference RU.21/0780. Which at the time of writing had been granted subject to conditions.

2.3 Site activities

Under normal circumstances electricity to the Data Centre will be provided by an Independent Distribution Network Operator (IDNO), UK Power Distribution (UKPD). Reliability of the electricity supply is critical to a DC and as such current plans are to install x28 no. emergency standby generators (ESGs) to provide standby power in the event of an outage / failure in the electricity supply. The ESGs are on site solely to support the campus when the main electricity supply is not available.

The total rated thermal input of the 28 ESGs is approximately 224.25 MWth (Refer to Thermal Schedule v1 in supporting information). The location of the generators, fuel tanks, emissions points (flues / stacks) and surface water connections are shown in the Site plan found in Appendix A. The installation boundary encompasses the listed activities only.

Further details can be found in the Environmental Risk Assessment (ERA) and Non-technical summary (NTS) that accompanied the application for an Environmental Permit.

2.4 Site history

As per the Phase 2 site investigation report submitted with the application,

> *"Historical mapping indicated that the site was open, undeveloped woodland / scrubland for most of its history until structures were recorded on site on mapping editions from 2002 onwards. It is known from online research that the site was a military site long before this used for research and experiment relating to vehicles and tanks. Between 1941 and 2005 the site was used by various government military agencies until it became the Defence Evaluation & Research Agency site (DERA) and finally the Defence Logistics Organisation (DLO) Chertsey. The most recent use of the site was for the testing, evaluation and certification of the full range of British Army vehicles. It is understood that the site was later sold off and was then used by Longcross Film Studios."*

2.5 Site investigations and previous reports

The following site investigations have been completed and these are described and discussed in Appendix C "*Preliminary Assessment for The Environmental Permit*" (Colliers Sept 2023). The purpose of this assessment is to provide preliminary information on the soil and groundwater quality to support the application of an Industrial Emissions Directive (IED) permit. This report summarises the work carried out and the conclusions reached in the following reports which have been provided as supporting documents to this report):

1) Paragon, 2019. Phase 1 Environmental Risk Assessment. Reference 19.0415.
2) Paragon, 2019. Phase 2 Site Investigation. Reference 19.0415CBLSG
3) Paragon, 2020. Foundation Inspection Pit Report. Reference 20.0576CBKJH
4) Paragon, 2020. Phase 1 Environmental Risk Assessment. Reference: 20.0576/CB/KJH. Dated: 13 August 2020.
5) Paragon, 2020. Phase 2 Ground Investigation. Reference: 20.0576/CB/NW. Dated: 21 August 2020, updated 14 December 2020.
6) Paragon, 2020. Settlement Analysis Report. Reference: 20.0576. Dated: 21 October 2020.
7) Paragon, 2021. Asbestos Removal Statement and Verification Report. Reference: 211849/CB/LC. Dated: 28 October 2021.
8) Paragon, 2021. Delineation Report. Reference: 211187/Delineation Report. Dated: 17 July 2021.
9) Paragon, 2021. Environmental Report Review. Reference 20.1250CBED.
10) Paragon, 2021. Ground Investigation Report Reference 20.1250CBRM. Revision A

11) Paragon, 2021. Waste Management Report. Reference: 201250/CB/ED. Dated: 5 March 2021.
12) Paragon, 2021. Remediation Strategy. Reference 21.1187/CB/LC. Dated 16 July 2021.
13) Colliers, 2023. Water supply pipework assessment. Reference 211187/CB/WSPA. Dated 20 January 2023.

The site is being developed under a planning application and as part of the conditions, a verification report is required at the end of the project. It is understood that this report will summarise the management of environmental issues e.g. soil movement, remediation, management of unexpected contamination etc (where relevant). This report has not been completed yet as the project is still ongoing.

In addition to the above we have provided the EA Pre-application Conservation Screening Report and Maps in Appendix D.

2.6 Proposed monitoring

The Colliers report in Appendix C states the following:

> "*The conceptual site model has identified a low risk to groundwaters and surface waters given the direction of groundwater flow and distance to significant receptors as well as a low sensitivity of receptors. As such, it is considered that there is no source-pathway-receptor linkage from the use of the materials*".

The sole risk to soil and groundwater is regarded to be the use of liquid fuels such as diesel. The installation of boreholes to facilitate ongoing soil and groundwater monitoring is going to increase the risk to the environment as it will present a potential pathway to ground for pollutants e.g. in the unlikely event of a spillage.

To mitigate the risks of spillages and fuel entering the environment, the site has primary, secondary and tertiary containment systems, with leak detection in place along with comprehensive spill control SOPs and EOPs in place, to prevent pollution at source.

Given the above we are proposing that there is no requirement to complete ongoing soil and groundwater monitoring unless there is a pollution incident that warrants further investigation e.g. significant spillage which has led to pollution of the environment.

3.0 CONDITION OF THE LAND AT PERMIT ISSUE

Table 3.1 – Environmental setting

Condition area	Description
Geology Data sources: • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report. • Envirocheck database • Online geological mapping at www.bgs.ac.uk	The relevant British Geological Survey (BGS) online mapping information indicates the underlying geology of the site is a combination of Windlesham and Bagshot Formation (sand). A small part of the site is overlain by River Terrace Deposits (sand and gravel), the rest of the site has no superficial geology. The site is overlain with Landscaped Ground which is unclassified. Ground stability maps indicate that the site is very low risk for collapsible ground stability hazards, landslide ground stability hazards and shrinking or swelling clay ground stability hazards. The site is low/very low risk for running sand ground stability hazards. As per Appendix C, several ground investigations have been completed with multiple exploratory holes. Please refer to these investigations for more details of the underlying geology. British Geological Survey (BGS) mapping data records reviewed as part of the Phase 1 Assessment indicated that the site is underlain by the Lynch Hill Gravel, a Principal Aquifer of high permeability, over the London Clay Formation, which is classified as Unproductive Strata. An area of artificial ground was also indicated to be present onsite, which was considered to be part of the historical landfilling activities. During the subsequent Phase 2 Ground Investigation, the geology across the site comprised Made Ground beneath hardstanding that was a black, sandy gravel with brick, flint and clinker. The Made Ground was found to approximately 5.00mbgl and was underlain by Alluvium, Langley Silt, the Lynch Hill Gravels and the London Clay Formation.
Hydrogeology Data sources: • Aquifer designation mapping available at www.magic.gov.uk, • Envirocheck database	The Bedrock Aquifer Designation of the site is Secondary A aquifer. With the Superficial Aquifer Designation of the site classed as Secondary B aquifer. The Bedrock and Superficial aquifers are both classed as medium vulnerability. There are no groundwater abstractions within a 1km radius of the site, and the site is not located within a Source Protection Zone for groundwater. The nearest surface water feature is an unnamed inland river approximately 180m west of the site. The environmental maps indicate little historical flooding in the area.

Condition area	Description
Hydrology Data sources: • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report. • Environment Agency 'Check the long term flood risk for an area in England'	The EA's indicative flood maps indicate, the site is located in Flood Zone 1 which comprises land having less than 1 in 1000 annual probability of river or sea flooding (<0.1%), which allows all vulnerability's and uses on this land. The EA's Flood Warning Information shows indicative extent of flooding risk from rivers and the sea to be of minimal risk to the overall site. From the JBA 75-year return flood map there is a risk of an area of pluvial flooding approximately 50-200m to the east of the site. The 1000-year return flood map areas surrounding the site begin to show signs of small localised pluvial flooding. The maps do not indicate a risk of flooding from groundwater or surface water at the site. Approximately 1000m away the flood data map suggests a potential risk of extreme flooding of rivers or sea without defences. BGS flood GFS data suggests potential groundwater flooding situated below ground level to occur 500m from the site.
Ecological Designated Sites Data sources: • https://magic.defra.gov.uk/MagicMap.aspx • EA Pre-application Screening Report • Envirocheck database	The site sensitivity map shows that the site is located in a nitrate vulnerable zone and an area of adopted green belt. Around 100-250m to the south and west of the site is Chobham Common which is an area of heathland which is designated as a Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Special Protection Area (SPA) and Special Area of Conservation (SAC) in recognition of the plant and bird life it supports. There is also ancient woodland around 500m north of the site.

Table 3.2 – Pollution history:

Condition area	Description
Pollution incidents Data Sources • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report. • Envirocheck database	**Recorded Pollution Incidents:** There have been x3 pollution incidents to controlled waters, x1 within 500m and x2 within 500-1000m. **Contaminated Land Register Entries:** None within 1km of site. **Prosecutions or Enforcement Actions:** None within 1km of site.
Historical land-uses and associated contaminants Data Sources • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report. • Envirocheck database	A detailed site history is described in the Colliers report in Appendix C, as week as the Envirocheck database in this has been summarised below: • The historical map produced for the period of 1870 – 1871 indicate that land was a mixture of coniferous trees and rough grassland. Most of the trees were cleared between 1870 and 1998 until mainly rough grassland was left. • Between 1999 - 2006 the site and surrounding area was developed into an industrial estate with a range of different building types. The main building at the centre of the site was demolished between 2006-2020. • The historical data map shows that there is potentially contaminative land from historical industrial uses. • The surrounding area has supported various industrial and potentially contaminative land uses, including manufacturing and production, and the railway. • A landfill has been identified 450m northwest of the site. The record indicates that the landfill received industrial, commercial and household waste between 1960 and 1978.
Waste management facilities Data sources • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report. • Envirocheck database	**Active Landfill sites** None within 1km of site. **Historical Landfill sites:** A landfill has been identified 269m northwest of the site. The record indicates that the landfill received industrial, commercial and household waste between 1960 and 1978. **Licensed Waste Management Facilities:** None within 1km of site.

Condition area	Description
	Waste Treatment or waste disposal sites: None within 1km of site.
Environmental permits and relevant licences Data sources • Envirocheck database	**Licensed Industrial Activities (Part A (1))** None within 1km of site. **Licensed Pollutant Release (Part A (2)/B)** None within 1km of site. **Radioactive Substance Authorisations** None within 1km of site. **Licensed Discharges to Controlled Waters & Pollutant Release to Public Sewer** There are x8 listed sites with discharge consents within 251-500m of the site. **List 1 & List 2 Dangerous Substances** None within 1km of site. **Local Authority Air Pollution Control:** None within 1km of site. **Local Authority Pollution Prevention and Control:** None within 1km of site. **Local Authority Pollution Prevention and Control enforcements:** None within 1km of site.

Table 3 – Evidence of historical contamination

Condition area	Description
Evidence of Historical Contamination Data Source: • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report. • Envirocheck database	The Colliers report in Appendix C provides a summary of the evidence of historical contamination as well as an update on remediation works and the current conditions of the site; *"Following the demolition of the former buildings, the site has since been subject to several phases of investigation by Colliers. These assessments have been completed to support the redevelopment of the site. The assessments identified some degree of contamination within the soil and groundwater and as such, further assessments were completed. This included ground investigation and a delineation report around the identified asbestos contamination and, following this a Remediation Strategy was completed.* *The various investigations undertaken at the site in recent years have not identified any significant contamination in terms of metals, hydrocarbons or chemicals. However, some areas of asbestos contamination in the near surface Made Ground were identified. Detailed delineation work has reduced the known extent of the three hotspots to 10m3, 30m3 and 5m3 of materials that would be classified as Hazardous Waste. This was on account of the materials containing over 0.1% by weight of asbestos."* The 45m^3 of identified Hazardous Waste was removed from site during the site enabling works and was disposed to a licensed hazardous waste facility. Asbestos containing soils went to: Provectus Soils Management Facility, Rowley Regis, Birmingham, B65 9DS. Total weight recorded on the consignment notes is 73,380kg or ca. 73 tons

Table 4 – Baseline soil and groundwater reference data

Condition area	Description
Baseline soil and groundwater reference data Data sources • Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) And previous investigations referred to within this report.	Baseline soil and groundwater reference data is available in Appendix C: Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) and previous investigations referred to within this report.

Table 5 – Supporting information sources

Condition area	Description
Supporting information and sources	• Preliminary Assessment for The Environmental Permit (Colliers Sept 2023) and previous investigations referred to within this report. • Envirocheck database • EA Nature and Heritage screening

4.0 PERMITTED ACTIVITIES

Table 6 - Permitted activities

Permitted activities	The current plans for the site are to install 28 emergency standby generators (ESGs) and it therefore requires an Environmental Permit under Schedule 1, Section 1.1 Part A(1) for the 'burning any fuel in an appliance with a rated thermal input of 50 or more megawatts. The storage of fuel, associated pipework and surface water drainage network are considered Directly Associated Activities (DAA). The generators are intended to provide emergency power in the event of a grid power outage. Operation is to be limited to testing and maintenance. There is no capacity agreement or other voluntary operation planned.
Non-permitted activities undertaken	The installation boundary is limited to the permitted activities and Directly Associated Activities (DAA) only. The internal data halls, office space and cooling plant are not part of the permitted activities. In normal conditions these will operate using electricity provided by the national grid.
Document references for: • **plan showing activity layout; and** • **environmental risk assessment.**	• 'Site Plan & Emissions Points' • 'Environmental Risk Assessment v1' • 'Thermal Schedule v1'

5.0 CHANGES TO THE ACTIVITY

Have there been any changes to the activity boundary?	n/a
Have there been any changes to the permitted activities?	n/a
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	n/a
Checklist of supporting information	n/a

6.0 MEASURES TAKEN TO PROTECT LAND

Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.

Checklist of supporting information	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

7.0 POLLUTION INCIDENTS AND REMEDIATION

Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.

Checklist of supporting information	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

8.0 SOIL GAS AND WATER QUALITY MONITORING

Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.

Checklist of supporting information	• Description of soil gas and/or water monitoring undertaken (if any) • Monitoring results (including graphs)

9.0 DECOMMISSIONING AND REMOVAL OF POLLUTION RISK

Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.

Checklist of supporting information	• Site closure plan • List of potential sources of pollution risk • Investigation and remediation reports (where relevant)

10.0 REFERENCE DATA AND REMEDIATION

Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated.

If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.

Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)

11.0 STATEMENT OF SITE CONDITION

Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that:

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.

APPENDIX A

SITE PLAN AND EMISSIONS POINTS

Disclaimer:

Notes:

N

ARK OWNERSHIP BOUNDARY (4.015 Hectares)

KEY

1 - DC01 (PHASE 1)
2 - DC02 (PHASE 2)
3 - EXTERNAL PLANT GANTRY (NO ROOF)
4 - ENERGY CENTRE
5 - VISITOR RECEPTION CENTRE
6 - GENERATOR COMPOUND
7 - SUB-STATION
8a- SERVICE BAY (DC)
8b- SERVICE BAY (EC)
9 - CAR PARK
TOTAL OF 92 PARKING SPACES. INCLUSIVE OF 7 x DISABLED SPACES & 22 x SPACES WITH ELECTRIC CHARGING POINTS.
10 - LAY BY
11 - EXTERNAL PLANT
12 - VEHICULAR ENTRANCE
13 - VEHICULAR EXIT
14 - VEHICLE TURNING ZONE
15 - PEDESTRIAN ACCESS POINT
16 - ATTENUATION POND
17 - TEMPORARY 1MW SUBSTATION
18 - CYCLE SHELTER
19- ANCILLARY BLOCK

Site Boundary

EA permit boundary

Emission points

PROPOSED SURFACE WATER DRAINAGE - REFER TO HYDROCK INFORMATION

PROPOSED GATIC CHANNEL WITH EXTERNAL ACCESS BOX - REFER TO HYDROCK INFORMATION

SCALE
0 5 10 25m

Rev:	Notes:	Date:	Dwn:	Iss:
P03	EA permit boundary amended	23.06.2023	ML	HA
P02	For Information	19.06.2023	ML	HA
P01	For Information	17.03.2023	ML	HA

Suitability Code:
S4 - Suitable for Stage Approval

Client:

hale
ARCHITECTURE
22c Leathermarket Street, London, SE1 3HP

Project:
LONGCROSS DC CAMPUS

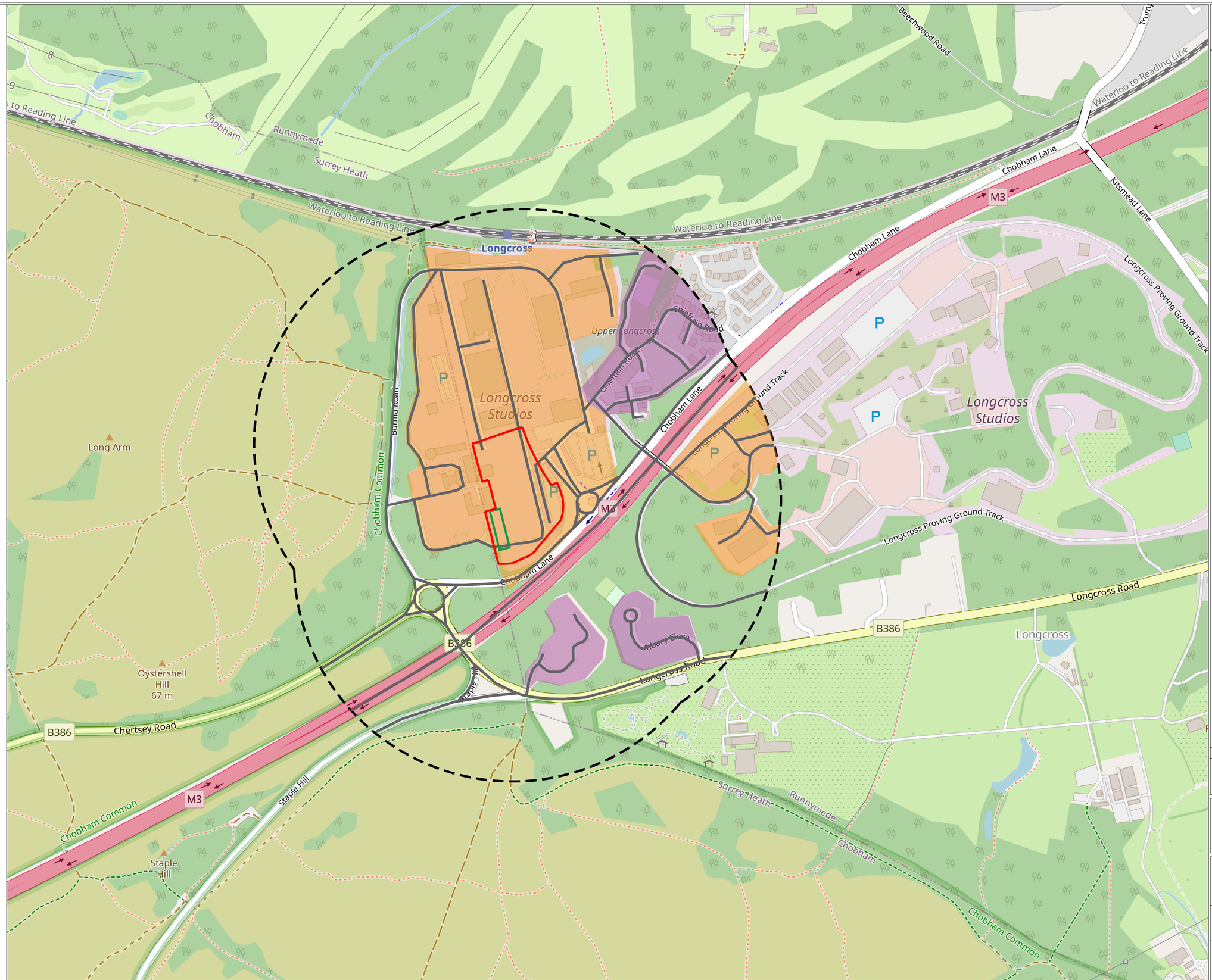
Drawing Title:
Site Plan

Project No:	Scale @ A1
21090	1:500

Drawing No:	Revision:
HAL-LC01-SW-00-DR-A-00500	P03

APPENDIX B

SITE SETTING PLAN



Disclaimer:

Notes:

- Site Boundary
- Environmental Permit Boundary
- Commercial/Industrial
- Residential
- Greenspace
- 500m buffer
- Local road network

Rev.	Notes:	Date:	Dwn:	Iss:
P01	For Information	11.07.2023	ML	HA

Suitability Code:
S4 - Suitable for Stage Approval

Client:

sweet PROJECTS

ARK DATA CENTRES

hale
ARCHITECTURE
22c Leathermarket Street, London, SE1 3HP

Project:
LONGCROSS DC CAMPUS

Drawing Title:
Environmental site settings

Project No:	Scale @ A1
21090	1:5000

Drawing No:	Revision:
HAL-LC01-SW-00-DR-A-00501	P01

APPENDIX C

PRELIMINARY ASSESSMENT FOR THE ENVIRONMENTAL PERMIT

21.1849/CW
15 September 2023

Lewis Rodgers
Ark Data Centres
30 Old Bailey
London
United Kingdom
EC4M 7AU

BY EMAIL ONLY

Dear Lewis

LONGCROSS STUDIOS - PRELIMINARY ASSESSMENT FOR THE ENVIRONMENTAL PERMIT

1.0 INTRODUCTION

This report presents the findings of a preliminary assessment for Longcross Film Studios, Chobham Lane, Longcross, Chertsey, KT16 0EE (Figure 1, Appendix 1).

The site comprises the former Longcross Film Studios in Longcross, which is being redeveloped as a data centre campus comprising buildings for data storage, an energy centre building, standby generators and fuel storage and a visitor reception centre. Planning permission was originally granted for this development by the Runnymede Borough Council under planning reference RU.21/0780. Which at the time of writing had been granted subject to conditions.

The purpose of this assessment is to provide preliminary information on the soil and groundwater quality within the vicinity of the Longcross development to support the application of an Industrial Emissions Directive (IED) permit. It is understood that Hydrocarbons, Urea and Hydrotreated Vegetable Oil (HVO) are to be used as part of the proposed energy centre within the data centre campus system. The permit is being prepared by others and this report has been prepared to support its submission. Although construction activities are ongoing, which has meant there are limitations to the assessment, the report has been compiled to provide some degree of comfort of the ground conditions and groundwater quality at the site.

Following the initial phase of ground investigations in 2019, the enabling works and construction activities started. The enabling works involved the removal of obstructions/relic foundations. This was followed by the piling works which were completed by February 2022. The beams have been formed and the above ground construction works are currently being undertaken.

2.0 PREVIOUS WORKS

This report should be read in conjunction with the following reports, which are summarised in the subsequent background section.

- Paragon, 2020. Phase 1 Environmental Risk Assessment. Reference: 20.0576/CB/KJH. Dated: 13 August 2020.
- Paragon, 2020. Phase 2 Ground Investigation. Reference: 20.0576/CB/NW. Dated: 21 August 2020, updated 14 December 2020.
- Paragon, 2020. Settlement Analysis Report. Reference: 20.0576. Dated: 21 October 2020.
- Paragon, 2021. Waste Management Report. Reference: 201250/CB/ED. Dated: 5 March 2021.
- Paragon, 2021. Delineation Report. Reference: 211187/Delineation Report. Dated: 17 July 2021.
- Paragon, 2021. Asbestos Removal Statement and Verification Report. Reference: 211849/CB/LC. Dated: 28 October 2021.
- Paragon, 2021. Remediation Strategy. Reference 21.1187/CB/LC. Dated 16 July 2021.
- Colliers, 2023. Water supply pipework assessment. Reference 211187/CB/WSPA. Dated 20 January 2023.

3.0 SITE SETTING & BACKGROUND

Historical mapping indicated that the site was open, undeveloped woodland / scrubland for most of its history until structures were recorded on site on mapping editions from 2002 onwards. It is understood from anecdotal evidence that there was some informal landfilling on the wider film studios (off site). It is known from online research that the site was a military site long before this used for research and experiment relating to vehicles and tanks. Between 1941 and 2005 the site was used by various government military agencies until it became the Defence Evaluation & Research Agency site (DERA) and finally the Defence Logistics Organisation (DLO) Chertsey. The most recent use of the site was for the testing, evaluation and certification of the full range of British Army vehicles. It is understood that the site was later sold off and was then used by Longcross Film Studios.

The site is largely surrounded by undeveloped land / green belt and Chobham Common to the west. Longcross Station and railway are located to the north. The land to the east of the site were used for military use historically; there were also barracks buildings to the south.

Geology

From a review of British Geological Survey mapping, the geology below the subject site is reported to comprise the Windlesham Formation (Sand, Silt and Clay) and Bagshot Formation (Sand) which are both classified as Secondary (A) Aquifers of high permeability.

Environmental Setting
The surrounding area is predominantly occupied by commercial land use, with the M3 adjacent to the site to the south. The Windlesham Formation and Bagshot Formation are classified as Secondary (A) Aquifers. There are no groundwater abstractions within a 1km radius of the site, and the site is not located within a Source Protection Zone for groundwater. The nearest surface water feature is an unnamed inland river approximately 180m west of the site. Based on the foregoing the site was considered to be of low to moderate environmental sensitivity.

Conceptual Site Model (following completion of remedial works)
Following the demolition of the former buildings, the site has since been subject to several phases of investigation by Paragon. These assessments have been completed to support the redevelopment of the site. The assessments identified some degree of contamination within the soil and groundwater and as such, further assessments were completed. This included ground investigation and a delineation report around the identified asbestos contamination and, following this a Remediation Strategy was completed.

The various investigations undertaken at the site in recent years have not identified any significant contamination in terms of metals, hydrocarbons or chemicals. However, some areas of asbestos contamination in the near surface Made Ground were identified. Detailed delineation work has reduced the known extent of the three hotspots to 10m3, 30m3 and 5m3 of materials that would be classified as Hazardous Waste. This was on account of the materials containing over 0.1% by weight of asbestos.

Based on the foregoing, a conceptual site model has been prepared to reflect the current conditions of the site. This is presented in Table 1.

Table 1. Conceptual Site Model

Receptor	Potential sources	Pathways	Risk	Justification
Human Heath				
Construction and maintenance workers / Users of the site	Organic and metal contamination	Direct contact, ingestion, and inhalation via outdoor soils or translocated soil and dust indoors.	L	**Low Risk.** The results of the chemical analysis from the soil samples have identified the concentrations of contaminants tested were below the GAC and therefore do not present a risk to human health. In addition, asbestos was not identified onsite in the areas tested by the recent investigation. It is understood that previous areas of known asbestos contamination on site have been remediated by Crest Nicholson.

Receptor	Potential sources	Pathways	Risk	Justification
				Personal Protective Equipment (PPE) is recommended for construction workers, to ensure mitigation is in place for potentially previously unidentified contamination and to promote good hygiene practices. The risk to current wider users of the film studios from translocated particulates is low.
	Asbestos in Made Ground	Inhalation via outdoor soils or translocated soil and dust indoors.	L	**Low Risk.** There are a number of isolated but significant hotspots of asbestos contamination. These have the potential to generate airborne fibres if disturbed. A detailed programme of investigation and sampling has been undertaken to delineate the asbestos hotspots as accurately as possible.
	Ground gas	Inhalation, migration through granular and fractured soils into confined spaces.	L	**Low Risk.** The results of the gas monitoring have identified low concentrations of carbon dioxide across the site, and the concentration of methane was found below the limit of detection. The gas risk assessment determined that the site falls within CS1 whereby no gas protection measures are required. Personal Protective Equipment (PPE) and Risk Assessments and Method Statements would be required during construction to mitigate risks associated with specific construction activities.
Future site users including maintenance / landscape workers	Organic and metal contamination	Direct contact, ingestion, and inhalation of outdoor soils or translocated soil and dust indoors.	L	**Low Risk.** The results of the chemical analysis from the soil samples have identified the concentrations of contaminants tested were below the GAC and therefore do not present a risk to human health.

Receptor	Potential sources	Pathways	Risk	Justification
				Furthermore, it is envisaged that the landscaped areas will be dressed with imported topsoil to provide a suitable growth medium for vegetation. The topsoil will be subject to chemical analysis to ensure it is suitable for use. Personal Protective Equipment (PPE) is recommended for maintenance / landscape workers.
	Ground gas	Inhalation, migration through granular and fractured soils into confined spaces.	L	**Low Risk.** The results of the gas monitoring have identified low concentrations of carbon dioxide across the site, and the concentration of methane was found below the limit of detection. The gas risk assessment determined that the site falls within CS1 whereby no gas protection measures are required. Personal Protective Equipment (PPE) and Risk Assessments and Method Statements would be required to mitigate risks associated with construction activities such as working near plant/exhausts or confined spaces.
Property				
Site structures and services	TPH in site soils	Direct contact between soil and structures or services.	L	**Low Risk.** The results of the chemical analysis have identified the concentration of TPH within the soil and groundwater marginally exceeds the acceptable limits for water supply pipes. As such, barrier pipework may be required. As the exceedances were only found in two locations, discussions with the water provider should be made to understand their requirements.

Receptor	Potential sources	Pathways	Risk	Justification
				Furthermore the concrete design class has been determined to be DS-1, AC-1.
	Ground gas	Migration through granular and fractured soils into confined spaces.	L	**Low Risk.** The results of the gas monitoring has identified low concentrations of carbon dioxide and methane was identified below the limit of detection. The gas risk assessment determined the site falls within CS1 whereby no gas protection measures are required.
Offsite Residents (380m east)	Organic and metal contamination	Direct contact, ingestion, and inhalation of outdoor soils or translocated soil and dust indoors.	L	**Low Risk.** The results of the chemical analysis have identified the concentrations of contaminants tested were below the GAC and therefore do not present a risk to human health.
	Ground gas	Migration through granular and fractured soils into confined spaces.	L	**Low Risk.** The results of the gas monitoring has identified low concentrations of carbon dioxide and methane was identified below the limit of detection. The gas risk assessment determined the site falls within CS1 whereby no gas protection measures are required. As such, the risk to off-site properties is considered to be low.
Plants /Landscaping	Organic and metal contamination	Root contact and uptake	L	**Low Risk.** Although no significant contamination has been identified within the soils onsite, they may not provide a suitable growth medium for proposed areas of soft landscaping/planting. As such, it is anticipated that imported topsoil will be used to dress these areas.

Receptor	Potential sources	Pathways	Risk	Justification
Groundwater				
Secondary (A) Aquifer	Organic and metal contamination	Soil leaching and migration of potential soil contamination.	L	**Low Risk.** The results of the groundwater analysis have identified marginal exceedances of some heavy metals. Due to the absence of a groundwater abstraction, and as the site is not situated within a Source Protection Zone, the impacts are minimal. As such, there is a low risk associated with groundwater contamination.
Surface Water				
Unnamed Inland River (180m west)	Leachable metals and organic contamination	Soil leaching and migration into drains and sewers which discharge into the ditch.	L	**Low Risk.** The results of the groundwater analysis have identified marginal exceedances of some heavy metals. Due to the distance from the inland river, the receptor being up-gradient and likely groundwater flow being east, the impacts are minimal. As such, there is a low risk associated with groundwater contamination.

It is noted that verification reporting for the removal of asbestos materials has been compiled and verification of installation details for pipework has been documented.

Fieldwork

The intrusive investigation was specified by the client and was completed between 22 June 2020 and 7 July 2020 and comprised a total of 42 exploratory holes. This included:

- 7 boreholes drilled using a sonic drilling rig to a maximum depth of 35mbgl for geotechnical testing;
- 10 boreholes drilled using a windowless sampler drilling rig to a maximum depth of 5m for environmental and geotechnical testing;
- 9 CBR tests at 0.5mbgl;
- 12 Trial pits excavated using mechanical excavator (JCB 3CX);
- 4 Hand dug foundation inspection pits;
- Ground resistivity testing in the location of the deep boreholes;
- Geotechnical laboratory testing and geoenvironmental laboratory testing;
- 3 groundwater and ground gas monitoring visits from 17 installed monitoring wells.

In order to provide information across the former Longcross Film Studios following the demolition of the building in 2020 in areas that were previously inaccessible such as in building footprints and roads. Paragon returned to site to undertake the discovery strategy in 2021, primarily to identify and delineate asbestos in soils, groundwater samples were also collected and ground gas monitored. The fieldwork was undertaken between August 2019 to December 2020 and comprised:

- Excavation of 90 no. boreholes to a maximum depth of 3.00mbgl;
- Soil logging and sampling; and
- Collection of 2 no. groundwater samples from boreholes;
- 3 no. gas monitoring visits from 2 installed monitoring wells;

A delineation exercise was then undertaken, the intrusive investigation was completed during two phases of site work. Phase one was completed on 10 June 2021 and phase two was completed on 24 June 2021. The second phase was completed to further delineate areas where additional areas of asbestos were identified. The scope of works included:

- Excavation of 38 locations (27 in Area 1 and 11 in Area 2);
- Soil sampling from each location; and
- Chemical analysis including asbestos screen, identification and quantification (if asbestos is encountered).

The sampling strategy was limited during some phases of works due to the presence of live utilities, former buildings, obstructions and refusals.

The ground conditions encountered during the investigations at the site are referenced in Table 2 below.

Table 2. Ground Conditions

Depth From (min/max) mbgl [mOD]	Depth To (min/max) mbgl [mOD]	Soil Type	Description
Ground Level [51.35]	0.7 / 1.5 [50.65 / 49.55]	MADE GROUND / CONCRETE	MADE GROUND. Black, gravelly SAND. Gravel comprised fine to coarse angular to sub-rounded flint. Rare cobble of angular flint. Occasional roots.
0.7 [50.65]	1.2 [50.15]	TOPSOIL	TOPSOIL. Brown gravelly sand. Gravel comprised fine to coarse sub-angular to rounded flint. Occasional roots.
1.2 [50.15]	2.6 / 5.0 [48.75 / 46.35]	SAND / GRAVEL / SILT	Medium dense, orange brown and grey slightly gravelly silty SAND. Gravel comprised fine to coarse, sub-angular to angular flint. Sand is fine to coarse.

Depth From (min/max) mbgl [mOD]	Depth To (min/max) mbgl [mOD]	Soil Type	Description
2.6 [53.78]	5.2 [51.18]	CLAY	Very stiff, reddish brown silty CLAY. (BH01 only).
1.0 / 7.0 50.35 / 44.35]	3.0 / 8.4 [48.35 / 42.95]	SILT	Medium dense to dense, thinly laminated, grey and orange, sandy SILT.
1.4 / 9.0 [42.95 / 42.35]	14.1 / 19.5 [37.25 / 31.85]	SAND	Dense to very dense, orange, brown and grey slightly silty SAND. Sand is fine to coarse.
11.0 / 25.0 [40.35 / 26.35]	17.0 / 35.0 [34.35 / 16.35]	SAND	Very dense grey and black SAND. Sand is fine to coarse.
19.0 / 25.0 [32.35 / 26.35]	25 / 35.0 [26.35 / 16.35]	SAND / SILT / CLAY / SILTSTONE	Very dense, greenish grey and black SILT interbedded with siltstone, sand and clay.

Groundwater was not encountered during the excavation of the trial pits or drilling.

Groundwater samples were recovered from existing monitoring wells. The logs for the monitoring wells are presented in Appendix 3.

The readings obtained during monitoring are as follows. Prior to sampling the boreholes were purged where possible.

Table 3. Groundwater Monitoring Information

Borehole	Groundwater Level (mbg)			Water samples taken?
	15 January 2021	1 February 2021	8 February 2021	
WS06 2021	Dry	2.95 (damp at base)	Dry	Water sampling not possible
WS27 2021	Dry	2.15 (damp at base)	Dry	Water sampling not possible
WS06 2020	Dry	4.84	4.85	Water sampling not possible
WS09 2020	Dry	4.97	Dry	Water sampling not possible
WS10 2020	Dry	Dry	Dry	Water sampling not possible
BH05 2020	7.31	7.20	7.21	Water Sampling
BH06 2020	13.52	13.53	13.85	Water Sampling

The soil and groundwater samples were then submitted to i2 for chemical analysis under a comprehensive suite of testing which included pH, Total Organic Carbon (TOC), heavy metals, Polyaromatic Hydrocarbons (PAH), Total Petroleum Hydrocarbons Criteria Working Group (TPH-CWG), Volatile and Semi-Volatile Organic Compounds (VOC and SVOCs).

Results

The results from the soil samples have been compared to industry accepted screening values known as Generic Assessment Criteria (GAC) to determine the risks to human health. The GAC used in this investigation includes Category 4 Screening Levels and Suitable 4 Use Levels (C4SLs and S4ULs). The GAC selected is based on a commercial land use in line with the proposed development. The laboratory results and screening assessment are presented in Appendix 4.

A single marginal exceedance of Dibenz(a,h)anthracene was identified in WS66 at 0.2mbg where the concentration identified was 4.2mg/kg. The GAC is 3.6mg/kg.

No exceedances, above the GAC were identified of the contaminants tested from the natural strata.

The results of the asbestos identification found six samples contained asbestos and three had quantifications greater than the GAC, as shown in Table 4 below.

Table 4. Asbestos Results *(Made Ground Soils)*

Borehole	Description	Quantification (%)	GAC (mg/kg)	Exceedance?
WS71	Chrysotile- Hard/Cement Type Material	1.97	<0.001	Yes
WS73a	Chrysotile, Amosite, Crocidolite- Loose Fibres; Chrysotile, Amosite- Loose Fibrous Debris, Chrysotile- Hard/Cement Type Material	0.10	<0.001	Yes
WS72	Chrysotile- Loose Fibres	<0.001	<0.001	No
WS64	Chrysotile - Hard/Cement Type Material	4.02	<0.001	Yes
WS61a	Chrysotile	<0.001	<0.001	No
WS01	Chrysotile	<0.001	<0.001	No

Following the identification of the asbestos the areas of delineated asbestos were removed by Ark Data Centres.

Groundwater Analysis

Groundwater sampling was undertaken from BH05 and BH06 during the 2020 investigation.

The results from the groundwater analysis have been compared with the EQS for freshwater. The results identified marginal exceedances of the EQS (freshwater) for cadmium, copper, nickel, and zinc, as shown in Table 6 below.

Table 6. Groundwater Exceedance Summary

Contaminant	Concentration Range (µg/l)	Number of Samples	EQS (µg/l)	Exceedances
Cadmium (dissolved)	0.12 – 0.19	2	0.08	2 (BH05 and BH06)
Copper (dissolved)	1.0 – 1.1	2	1	2 (BH05 and BH06)
Nickel (dissolved)	20.0 – 28.0	2	4	2 (BH05 and BH06)
Zinc (dissolved)	8.9 – 20.0	2	10.9	1 (BH05)

The assessment identified marginal exceedances of the GAC for heavy metals with respect to inland surface waters, the conceptual site model concluded a low risk to Controlled Water receptors. As such, these are not considered to be significant and the risk to Controlled Water receptors remains low.

4.0 DISCUSSION

Based on the foregoing, there are no significant risks associated with the historical and current use of the site. As part of the daily operations of the proposed Energy Centre, it is understood that Hydrocarbons (diesel), Urea and Hydrotreated Vegetable Oil (HVO) are to be used. The conceptual site model has identified a low risk to groundwaters and surface waters given the direction of groundwater flow and distance to significant receptors as well as a low sensitivity of receptors. As such, it is considered that there is no source-pathway-receptor linkage from the use of the materials.

5.0 SUMMARY

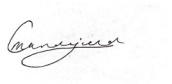
This report has presented the results of the soil and groundwater analysis completed at the former Longcross Film Studios to provide a summary of information held on the soil and groundwater quality within the vicinity of the proposed data campus centre to support the application of an IED permit.

Based on risk assessments completed for human health and Controlled Waters, the results of the chemical analysis of the soils and groundwater identified predominantly asbestos contamination, with a single exceedance of Poly Aromatic Hydrocarbons (PAH) in soils and heavy metals within groundwater above the GAC for inland surface waters. It was concluded that given that there are no sensitive potable abstractions within a 1km radius and the site is not within an SPZ, as such the risk to Controlled Water receptors was considered to be low.

As there were various limitations associated with the timing of this exercise, it is assumed that a series of boreholes will need to be installed in the area demised under the permit and a full baseline report will be provided at that stage. It is considered that baseline concentrations of Hydrocarbons, Urea, and HVO can be provided at that time. However, it is not considered that key contaminants will be present, and the use of Hydrocarbons, Urea, and HVO are all considered to be possible subject to the approval of the permit.

This report should be submitted to support the application for the permit.

Yours sincerely



Charlie Manderfield BSc AMIEnvSci
Principal Geo-environmental Consultant
Colliers
M: 07721 628 651
E: Charlie.manderfield@colliers.com

Encs: Appendix 1 – Figures
Appendix 2 – Photographs
Appendix 3 – Borehole Logs
Appendix 4 – Chemical Results
Appendix 5 – Extent of Survey and Limitations

APPENDIX 1: FIGURES

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

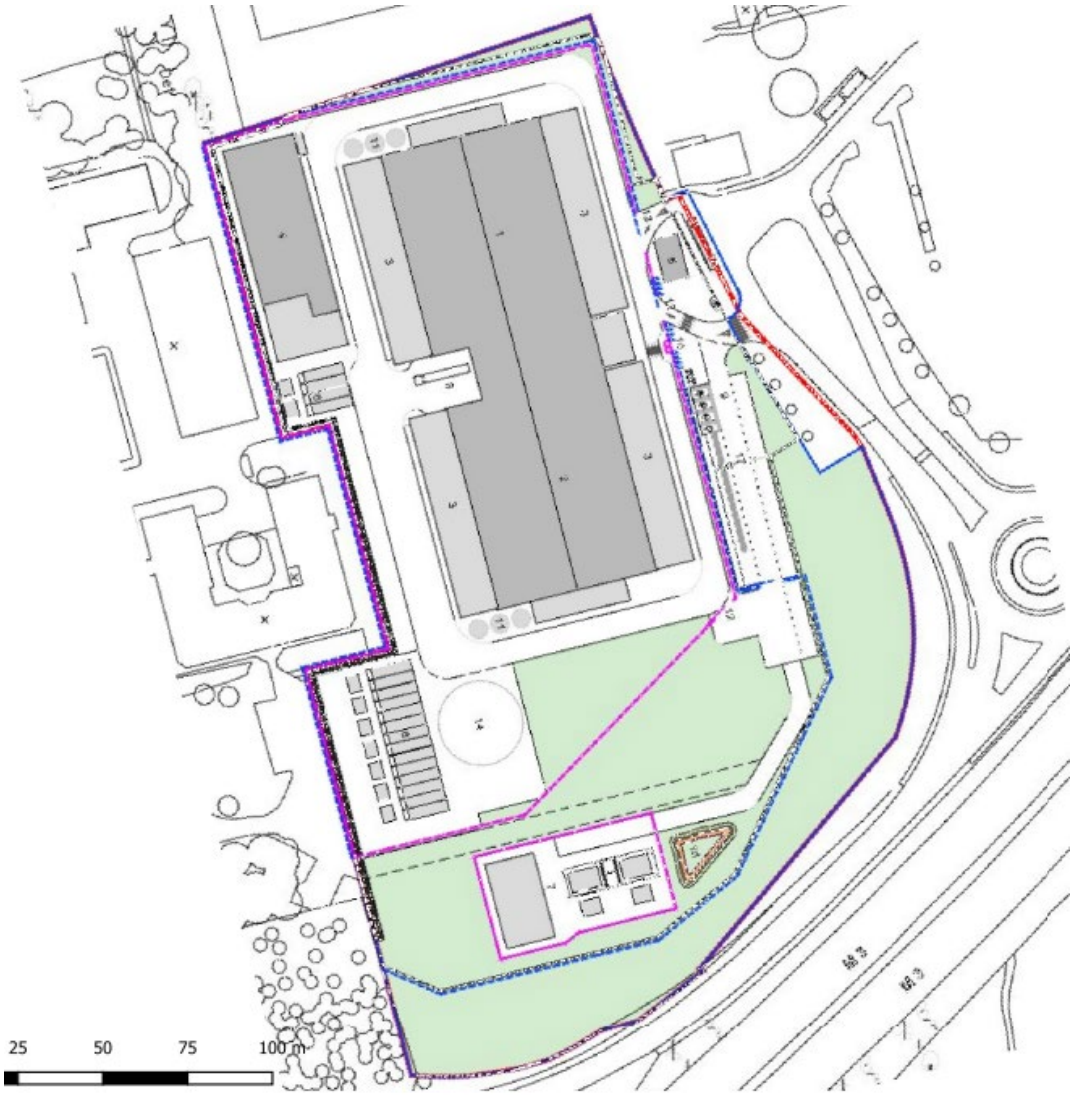
e: paragon.info@colliers.com
w: paragonbc.co.uk

Title: Site Location Plan

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk



Title: Proposed Development Plan

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

APPENDIX 2: PHOTOGRAPHS

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

01: Northern view of site

02: Low brick retaining wall

03: North of site

04: Raised concrete foundations

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

05: Site view

06: Soil Embankment

07: Site view

08: Asbestos Removal

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

APPENDIX 3: BOREHOLE LOGS

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH01**

Project Name:	Longcross Studios	**Co-ords:**	497785E - 165685N
Location:	Longcross	**Level (mAOD):**	56.38
Client:	HPF	**Dates:**	05/07/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
		0.00 - 1.00	B	5kg			Brown gravelly SAND with occasional roots. Gravel is fine to coarse of subangular to rounded flint. TOPSOIL
		1.00 - 1.45	D	1kg			
		1.20	SPT	N=14 (2,4/4,3,3,4)	1.20	55.18	Medium dense, brown and orange, gravelly SAND. Gravel is fine to coarse of subangular flint. Sand is fine to coarse.
		1.50 - 2.00	B	5kg			
		2.00 - 2.45	D	1kg	2.00	54.38	Firm to stiff, orangish brown, silty CLAY.
		2.00	SPT	N=16 (4,4/4,3,4,5)			
		2.40		HVP=60			
		2.50 - 3.00	B	5kg	2.60	53.78	Very stiff, reddish brown, silty CLAY.
		3.00 - 3.45	D	1kg			
		3.00 - 4.00	B	5kg			
		3.00	SPT	N=22 (4,4/5,5,6,6)			
		4.00 - 4.45	D	1kg			
		4.00	SPT	N=17 (3,3/4,4,5,4)			
		5.00 - 5.45	D	1kg			
		5.00	SPT	N=16 (3,3/4,3,4,5)	5.20	51.18	Medium dense to dense, grey, sandy, clayey SILT.
		5.20 - 5.50	B	5kg			
		6.00 - 6.45	D	1kg			*Recovered as wet between 6.00m and 8.00m bgl.*
		6.00	SPT	N=32 (5,7/7,8,8,9)			
		7.00	SPT	N=36 (7,8/8,9,9,10)			
		8.00 - 8.45	D	1kg			
		8.00	SPT	N=44 (7,10/11,10,11, 12)			
		8.50 - 9.00	B	5kg	8.40	47.98	Very dense, greenish grey, silty SAND. Sand is fine to coarse with occasional black grains (suspected mica).
		9.00 - 9.35	D	1kg			*Becoming orangish brown between 9.00m and 10.00m bgl.*
		9.00	SPT	N=50 (7,10/50 for 200mm)			
		9.50 - 10.00	B	5kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	30.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH01**

Project Name:	Longcross Studios	**Co-ords:**	497785E - 165685N
Location:	Longcross	**Level (mAOD):**	56.38
Client:	HPF	**Dates:**	05/07/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
							Very dense, greenish grey, silty SAND. Sand is fine to coarse with occasional black grains (suspected mica).
							Becoming brown from 10.00m bgl.
		10.50	SPT	50 (9,12/50 for 180mm)			
		10.80 - 11.00	B	5kg			
							Fine organic matter identified between 11.00m and 15.00m bgl.
		12.00 - 12.33	D	1kg			
		12.00	SPT	50 (10,12/50 for 175mm)			
		12.50 - 13.00	B	5kg			
		13.50 - 13.85	D	1kg			
		13.50	SPT	50 (8,14/50 for 200mm)			
		14.50 - 15.00	B	5kg			
		15.00 - 15.32	D	1kg			
		15.00	SPT	50 (25 for 140mm/50 for 180mm)			
		16.50 - 16.80	D	1kg			
		16.50 - 17.00	B	5kg			
		16.50	SPT	50 (25 for 140mm/50 for 155mm)			
		18.00 - 18.28	D	1kg			
		18.00	SPT	50 (25 for 130mm/50 for 150mm)			*Gravel of fine to coarse sub-angular flint between 18.00m and 18.20m bgl.*
		18.50 - 19.00	B	5kg			
		19.50	D	1kg	19.50	36.88	
		19.50	SPT	50 (25 for 80mm/50 for 145mm)			Very dense, orange and grey, fine to coarse SAND.
		20.00	D	1kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	30.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH01**

Project Name:	Longcross Studios	**Co-ords:**	497785E - 165685N
Location:	Longcross	**Level (mAOD):**	56.38
Client:	HPF	**Dates:**	05/07/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
							Very dense, orange and grey, fine to coarse SAND.
		20.50	D	1kg			
		21.00	D	1kg			
		21.00	SPT	50 (25 for 75mm/50 for 150mm)			
		21.50	D	1kg			
		22.00	D	1kg			
		22.50	D	1kg			
		22.50	SPT	50 (25 for 75mm/50 for 145mm)			
		23.00	D	1kg			*Becoming darker in colour from 23.00m bgl.*
		23.50	D	1kg			
		24.00	D	1kg			
		24.00	SPT	50 (25 for 70mm/50 for 120mm)			
		24.50	D	1kg			
		25.00	D	1kg	25.00	31.38	Very dense, blackish grey, coarse SAND.
		25.50	D	1kg			
		25.50	SPT	50 (25 for 60mm/50 for 110mm)			
		26.00	D	1kg			
		27.00	SPT	50 (25 for 75mm/50 for 130mm)			
		28.50	SPT	50 (25 for 70mm/50 for 110mm)			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	30.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH01**

Project Name:	Longcross Studios	**Co-ords:**	497785E - 165685N
Location:	Longcross	**Level (mAOD):**	56.38
Client:	HPF	**Dates:**	05/07/2020
		Weather:	Overcast

Project No.:	200576	
Rev.:	1.0	
Logged By:	CB	
Checked By:	AJ	

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		30.00	SPT	50 (25 for 50mm/50 for 90mm)	30.14	26.24	Very dense, blackish grey, coarse SAND.
							Borehole terminated at 30.14m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	30.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH02**

Project Name:	Longcross Studios	**Co-ords:**	497903E - 165609N
Location:	Longcross	**Level (mAOD):**	50.99
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
					0.20	50.79	Light orangish brown, silty SAND. Sand is fine. MADE GROUND
		0.50 - 0.60	B	5kg			Medium dense, orange, gravelly SAND. Gravel is angular to subangular of fine to coarse mixed lithologies.
		1.20	SPT	N=20 (3,4/4,5,5,6)			
					1.50	49.49	Medium dense to dense, orange brown and grey mottled, silty SAND. Sand is fine to coarse.
		2.00	SPT	N=25 (3,4/5,6,7,7)			
		2.50 - 3.00	B	5kg			
		3.00 - 3.40	B	5kg			*Gravel band between 3.00m and 3.40m bgl. Gravel is coarse sub-rounded flint.*
		3.00	SPT	N=24 (4,4/5,6,6,7)			
		4.00	SPT	N=26 (4,5/5,6,7,8)			*Light brown and grey between 4.00m and 5.00m bgl.*
		4.50 - 5.00	B	5kg			
		5.00	SPT	N=34 (5,6/7,8,9,10)			
		6.00	SPT	N=44 (6,8/9,11,12,12)			
		6.50 - 7.00	B	5kg			
		7.00	SPT	N=41 (6,8/8,9,11,13)	7.00	43.99	Dense, light grey, sandy, clayey SILT.
		7.50 - 8.00	B	5kg			
					7.70	43.29	Dense to very dense, grey, medium to coarse SAND.
		8.00	SPT	N=50 (7,9/50 for 280mm)			*Becoming mottled orange with occasional clay lenses between 8.00m and 9.00m bgl.*
		9.00	SPT	N=50 (6,7/50 for 250mm)			
		9.40 - 9.60	B	5kg			
		9.80 - 10.00	B	5kg			*Recovered as wet from 9.80m bgl.*

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	25.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)
17.00	20	16.00

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH02**

Sheet 2 of 3

Project Name:	Longcross Studios	**Co-ords:**	497903E - 165609N
Location:	Longcross	**Level (mAOD):**	50.99
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
		10.00	SPT	N=50 (9,11/50 for 240mm)			Dense to very dense, grey, medium to coarse SAND.
		10.50 - 11.00	B	5kg			
					11.00	39.99	Very dense, orange brown slightly clayey silty SAND. Sand is fine to coarse.
							Recovered as wet from 11.00m bgl.
		11.50 - 12.00	B	5kg			
		11.50	SPT	N=50 (8,10/50 for 230mm)			
							Clay lens between 12.00m and 12.30m bgl.
		12.50 - 13.00	B	5kg			
		13.00	SPT	N=50 (9,11/50 for 225mm)			
		14.50 - 15.00	B	5kg			
		14.50	SPT	50 (7,9/50 for 200mm)			
							Sand becomes coarse with black minerals (suspected mica) were observed between 15.00m and 16.00m bgl.
		15.50 - 16.00	B	5kg			
	▼	16.00	SPT	50 (6,9/50 for 185mm)			*Becoming greenish grey from 16.00m bgl.*
	▽						
		17.50 - 18.00	B	5kg			
		17.50	SPT	50 (8,12/50 for 180mm)			
							Recovered as wet between 18.00m and 19.00m bgl.
		18.50 - 19.00	B	5kg			
		19.00 - 19.40	B	5kg	19.00	31.99	Very dense, greenish grey and black SILT interbedded with siltstone, sand and very stiff clay.
		19.00	SPT	50 (10,12/50 for 165mm)			
		19.40 - 19.80	U				
							Shiny crystals (suspected selenite) observed from 19.00m bgl.
		20.00 - 20.40	U				

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	25.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
17.00	20	16.00

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH02**

Project Name:	Longcross Studios	**Co-ords:**	497903E - 165609N
Location:	Longcross	**Level (mAOD):**	50.99
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		20.40 - 20.80	B	5kg			Very dense, greenish grey and black SILT interbedded with siltstone, sand and very stiff clay.
		20.50	SPT	50 (25 for 110mm/50 for 155mm)			*Siltstone between 20.00m and 20.40m bgl.*
		21.50 - 22.00	B	5kg			*Sandy band (fine to coarse) between 20.80m and 22.00m bgl.*
		22.00	SPT	50 (25 for 80mm/50 for 150mm)			
		22.20 - 22.40	D	1kg			*Clay lens between 22.20m and 22.40m bgl.*
		22.30		HVP=80			
		22.50 - 23.00	B	5kg			
		23.50	SPT	50 (25 for 75mm/50 for 130mm)			*Recovered as wet between 23.00m and 24.00m bgl.*
		24.50 - 25.00	B	5kg			
		25.00	SPT	50 (25 for 75mm/50 for 90mm)	25.16	25.83	Borehole terminated at 25.16m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	25.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
17.00	20	16.00

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH03**

Project Name:	Longcross Studios	**Co-ords:**	497852E - 165604N
Location:	Longcross	**Level (mAOD):**	54.13
Client:	HPF	**Dates:**	29/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
		0.00 - 1.20	B	5kg			Brown gravelly SAND with occasional cobbles and rare root. Cobbles are angular of concrete and flint. Gravel is angular to subrounded of fine to coarse flint. TOPSOIL
					0.60	53.53	Soft to firm, greenish grey and orangish brown, very sandy, silty CLAY.
		1.00	SPT	N=11 (2,3/3,2,3,3)			
					1.20	52.93	Medium dense, green, brown and grey, slightly clayey SAND with occasional gravel. Gravel is angular to rounded of fine to coarse weak siltstone.
		2.00	SPT	N=21 (4,6/4,5,6,6)	1.90	52.23	Grey and white, SILT with occasional siltstone and orange clay lenses.
		2.50 - 3.00	B	5kg			
		3.00	SPT	N=22 (4,4/5,5,6,6)			
					3.30	50.83	Medium dense to very dense, orange and grey, slightly clayey, silty SAND with occasional gravel of weak siltstone. Sand is fine to coarse.
		4.00	SPT	N=38 (5,7/7,9,10,12)			
		4.50 - 5.00	B	5kg			
		5.00	SPT	N=50 (5,8/50 for 180mm)			
							Becoming grey from 5.80m bgl.
		6.00	SPT	N=40 (8,9/9,11,10,10)			
		6.50 - 7.00	B	5kg			
		7.00	SPT	50 (11,13/50 for 200mm)			*Becoming brownish grey from 7.00m bgl.*
		7.50 - 8.00	B	5kg			
		8.00	SPT	52 (10,16/52 for 180mm)			
		9.00	SPT	28 (25 for 100mm/28 for 160mm)			*Recovered as wet between 9.00m and 10.00m bgl.*
		9.50 - 10.00	B	5kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	21.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH03**

Project Name:	Longcross Studios	**Co-ords:**	497852E - 165604N	**Project No.:**	200576
Location:	Longcross	**Level (mAOD):**	54.13	**Rev.:**	1.0
Client:	HPF	**Dates:**	29/06/2020	**Logged By:**	CB
		Weather:	Overcast	**Checked By:**	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		10.50 - 11.00 10.50	B SPT	5kg 50 (11,13/50 for 175mm)			Medium dense to very dense, orange and grey, slightly clayey, silty SAND with occasional gravel of weak siltstone. Sand is fine to coarse.
							Black grains (suspected mica) between 11.00m and 13.00m bgl.
		12.00	SPT	50 (13,14/50 for 170mm)			
		12.50 - 13.00	B	5kg			
		13.50 - 14.00 13.50	B SPT	5kg 50 (10,14/50 for 185mm)			
		14.50 - 15.00	B	5kg			
		15.00	SPT	50 (25 for 125mm/50 for 165mm)	15.00	39.13	Very dense, blackish grey, fine to coarse SAND.
		15.50 - 16.00	B	5kg			
		16.50 - 17.00 16.50	B SPT	5kg 50 (25 for 130mm/50 for 180mm)			
		18.00 - 18.60 18.00	B SPT	5kg 49 (25 for 90mm/49 for 155mm)			*Silty lens between 18.00m and 18.60m bgl.*
		19.50 - 20.00 19.50	B SPT	5kg 50 (25 for 85mm/50 for 150mm)			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details			Chiselling Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)	Depth Top (m)	Depth Base (m)	Duration (hrs)
GL	21.00	200			

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH03**

Project Name:	Longcross Studios	**Co-ords:**	497852E - 165604N
Location:	Longcross	**Level (mAOD):**	54.13
Client:	HPF	**Dates:**	29/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
							Very dense, blackish grey, fine to coarse SAND.
		21.00	SPT	50 (25 for 80mm/50 for 150mm)	21.00	33.13	Very dense, greenish grey, brown and black, clayey, silty SAND, interbedded with siltstone, silt and clay.
		21.50 - 22.00	B	5kg			
		22.50 - 23.00	B	5kg			
		22.50	SPT	50 (25 for 80mm/50 for 95mm)			
		22.60		HVP=25			
		23.70 - 23.90	D	1kg			*Siltstone between 23.70m and 23.90m bgl.*
		23.80		HVP=90			*No longer clayey from 24.00m bgl.*
		24.50 - 24.70	D	1kg			
		25.50 - 26.00	B	5kg			
		25.50		HVP=25			
		25.50	SPT	50 (25 for 75mm/50 for 140mm)			
		26.50 - 27.00	B	5kg			
		26.50		HVP=20			
		27.00 - 27.38	D	1kg			
		27.00	SPT	50 (25 for 75mm/50 for 95mm)			
		28.50	D	1kg			
		28.50	SPT	50 (25 for 70mm/50 for 100mm)			
		29.00	D	1kg			
		29.50	D	1kg			
		30.00	D	1kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	21.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH03**

Project Name:	Longcross Studios	**Co-ords:**	497852E - 165604N
Location:	Longcross	**Level (mAOD):**	54.13
Client:	HPF	**Dates:**	29/06/2020
		Weather:	Overcast

Project No.:	200576	
Rev.:	1.0	
Logged By:	CB	
Checked By:	AJ	

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		30.00	SPT	50 (25 for 60mm/50 for 90mm)	30.15	23.98	Very dense, greenish grey, brown and black, clayey, silty SAND, interbedded with siltstone, silt and clay.
							Borehole terminated at 30.15m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	21.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH04**

Sheet 1 of 3

Project Name:	Longcross Studios	**Co-ords:**	497932E - 165523N
Location:	Longcross	**Level (mAOD):**	50.15
Client:	HPF	**Dates:**	28/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
							CONCRETE
		0.50 - 0.60	B	5kg	0.50	49.65	Medium dense, grey and orange silty SAND. Sand is fine to medium.
		1.20 - 1.65 1.20	D SPT	1kg N=32 (6,6/7,8,8,9)			
		1.50 - 1.60	B	5kg			*Slightly clayey from 1.50m bgl.*
		2.00	SPT	N=24 (3,4/5,6,6,7)	2.00	48.15	Soft to firm, slightly gravelly, sandy, silty CLAY. Gravel is angular of fine to coarse sandstone.
		2.20 2.30	D	1kg HVP=44	2.40	47.75	Medium dense to dense, light brown mottled orange, slightly silty SAND. Sand is fine.
							Recovered as wet from 2.40m bgl.
		2.80	D	1kg			
		3.00	SPT	N=29 (5,6/6,7,8,8)			
		3.50 - 4.00	B	5kg			
	▼	4.00	SPT	N=35 (6,7/8,8,9,10)	4.20	45.95	Dense, brown, coarse SAND with weak siltstone bands.
	▼	5.00	SPT	N=40 (7,8/9,9,10,12)			*Becoming silty from 5.00m bgl.*
	▽	5.20	D	1kg			*Weak siltstone between 5.00m and 5.30m bgl.*
		5.80	D	1kg	5.30	44.85	Dense, orange and light brown mottled, fine to coarse SAND with occasional gravel. Gravel is angular of fine to coarse weak sandstone.
		6.00	SPT	N=39 (6,8/8,9,10,12)	6.00	44.15	Dense to very dense, light brown slightly silty, clayey SAND. Sand is fine to coarse.
							Recovered as wet from 6.00m bgl.
		6.60	D	1kg			
		7.00	SPT	N=44 (8,9/9,10,12,13)			*No longer wet from 7.00m bgl.*
		7.50 - 8.00	B	5kg			
		8.00 - 8.45 8.00	D SPT	1kg N=40 (7,8/9,9,10,12)			
		9.00 - 9.45 9.00	D SPT	1kg N=46 (7,8/15,9,10,12)			
					10.00	40.15	

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
5.00	20	4.80
14.50	20	3.80

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH04**

Project Name:	Longcross Studios	**Co-ords:**	497932E - 165523N
Location:	Longcross	**Level (mAOD):**	50.15
Client:	HPF	**Dates:**	28/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		10.00	SPT	N=50 (7,8/50 for 290mm)			Very dense, light brown and slightly greenish grey, slightly silty, clayey SAND. Sand is fine to coarse.
		11.50 - 12.00	B	5kg			
		11.50	SPT	N=50 (8,9/50 for 250mm)			
		13.00	SPT	N=50 (7,11/50 for 225mm)			
		13.50 - 14.00	B	5kg			
	▽	14.50 - 15.00	B	5kg			
		14.50	SPT	50 (9,11/50 for 200mm)			
							Silty lenses between 15.00m and 15.70m bgl.
							Recovered as wet between 15.00m and 16.00m bgl.
					15.70	34.45	
		16.00	SPT	50 (25 for 140mm/50 for 170mm)			Very dense, greenish grey, brown and black, silty SAND, interbedded with siltstone, silt and clay.
		16.20	D	1kg			
		16.50 - 17.00	B	5kg			
		17.50 - 18.00	B	5kg			
		17.50	SPT	50 (25 for 100mm/50 for 165mm)			
		19.00	SPT	50 (25 for 80mm/50 for 100mm)			
		19.50 - 20.00	B	5kg			
		19.80	D	1kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
5.00	20	4.80
14.50	20	3.80

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH04**

Project Name:	Longcross Studios	**Co-ords:**	497932E - 165523N
Location:	Longcross	**Level (mAOD):**	50.15
Client:	HPF	**Dates:**	28/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
							Very dense, greenish grey, brown and black, silty SAND, interbedded with siltstone, silt and clay.
		20.50	SPT	50 (25 for 80mm/50 for 130mm)			
		21.50 - 22.00	B	5kg			*Recovered as wet between 21.50m and 21.60m bgl.*
		22.00	SPT	50 (25 for 75mm/50 for 90mm)			
		22.50	D	1kg			
		23.30	D	1kg			
		23.50	SPT	50 (25 for 60mm/50 for 80mm)			
		23.60 - 23.70	D	1kg			*Recovered as wet between 24.00m and 25.00m bgl.*
		24.50 - 24.60	D	1kg			
		24.60 - 25.00	B	5kg			
		25.00	SPT	50 (25 for 75mm/50 for 95mm)	25.17	24.98	Borehole terminated at 25.17m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
5.00	20	4.80
14.50	20	3.80

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH05**

Project Name:	Longcross Studios	**Co-ords:**	497864E - 165532N
Location:	Longcross	**Level (mAOD):**	51.35
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
							Brown, gravelly SAND with occasional cobbles and rare roots. Cobbles are of concrete and flint. Gravel is angular to subrounded of fine to coarse flint. TOPSOIL FILL
		0.70	D	1kg	0.60	50.75	Medium dense, light grey fine to coarse SAND.
		1.20 - 1.65	B	5kg	1.20	50.15	Medium dense to dense, thinly laminated, grey and orange, sandy SILT with occasional gravel. Gravel is angular of fine to coarse very weak siltstone.
		1.20	SPT	N=20 (3,4/4,5,5,6)			
		1.50 - 1.60	D	1kg			
		2.00 - 2.45	D	1kg			
		2.00	SPT	N=21 (3,4/4,5,6,6)			
		2.50 - 3.00	B	5kg			
		3.00 - 3.45	D	1kg			
		3.00	SPT	N=29 (5,5/6,7,8,8)			
		3.40 - 3.50	D	1kg			
		3.50 - 4.00	B	5kg			
		4.00 - 4.45	D	1kg			
		4.00	SPT	N=35 (5,6/8,8,9,10)			
		4.50 - 5.00	B	5kg			
		5.00 - 5.45	D	1kg	5.00	46.35	Dense to very dense, orange and brown slightly silty SAND. Sand is fine to coarse.
		5.00	SPT	N=36 (5,6/7,8,10,11)			
		5.60 - 5.70	D	1kg			
		6.00	SPT	N=35 (5,7/8,8,9,10)			
		7.00	SPT	N=43 (7,8/8,10,12,13)			
		7.50 - 8.00	B	5kg			
		8.00	SPT	N=45 (10,11/45 for 280mm)			
		9.00	SPT	N=50 (8,9/50 for 250mm)	9.00	42.35	Very dense, grey and orange mottled, slightly sandy SILT with occasional gravel. Gravel is angular of coarse very weak siltstone.
		9.50 - 9.60	D	1kg			
		9.60 - 10.00	B	5kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
21.00	20	17.00

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH05**

Project Name:	Longcross Studios	**Co-ords:**	497864E - 165532N
Location:	Longcross	**Level (mAOD):**	51.35
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
		10.00	SPT	N=50 (9,10/50 for 225mm)			Very dense, grey and orange mottled, slightly sandy SILT with occasional gravel. Gravel is angular of coarse very weak siltstone.
		10.50 - 10.70	D	1kg			
							Becoming brown and orange mottled from 11.00m bgl.
							Recovered as wet between 11.00m and 14.00m bgl.
		11.50	SPT	50 (8,11/50 for 180mm)			
		12.50 - 13.00	B	5kg			
		13.00 - 13.50	B	5kg			
		13.00	SPT	N=50 (7,10/50 for 225mm)			
					14.10	37.25	Very dense grey and black SAND. Sand is fine to coarse. Occasional black fragments of suspected lignite and mica.
		14.50 - 15.00	B	5kg			
		14.50	SPT	50 (10,13/50 for 170mm)			
							Recovered as wet between 15.00m to 16.00m bgl.
		16.00	SPT	50 (11,13/50 for 190mm)			
		17.50 - 18.00	D	1kg			
		17.50	SPT	50 (25 for 140mm/50 for 165mm)			
		19.00 - 19.20	B	5kg			
		19.00	SPT	50 (25 for 90mm/50 for 180mm)			*Black organic band 19.05 to 19.10m bgl.*
							Occasional silty bands between 19.20m and 19.30m bgl.
		19.50 - 20.00	B	5kg			
		20.00 - 20.40	B	5kg	20.00	31.35	

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
21.00	20	17.00

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No.
BH05
Sheet 3 of 4

Project Name:	Longcross Studios	**Co-ords:**	497864E - 165532N
Location:	Longcross	**Level (mAOD):**	51.35
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
							Very dense, greenish grey, brown and black, silty SAND interbedded with siltstone, silt and clay.
							Occasional silty bands between 20.00m and 20.40m bgl.
		20.50	SPT	50 (25 for 90mm/50 for 160mm)			
							Siltstone band between 20.80m and 21.00m bgl.
		21.50 - 21.70	B	5kg			
		21.80 - 21.90	D	1kg			
		22.00	SPT	50 (25 for 80mm/50 for 150mm)			*Clay band between 22.00m and 22.20m bgl.*
		23.50 - 24.00	B	5kg			
		23.50	SPT	50 (25 for 95mm/50 for 140mm)			
		24.00 - 24.10	D	1kg			
		24.50 - 24.60	D	1kg			
		25.00 - 25.10	D	1kg			
		25.00	SPT	50 (25 for 80mm/50 for 100mm)			
		25.50 - 25.60	D	1kg			
		26.00 - 26.10	D	1kg			
		26.50 - 26.60	D	1kg			
		26.50	SPT	50 (25 for 78mm/50 for 90mm)			
		27.00 - 27.10	D	1kg			
		27.50 - 27.60	D	1kg			
		28.00 - 28.10	D	1kg			
		28.00	SPT	50 (25 for 65mm/50 for 90mm)			
		28.50 - 28.60	D	1kg			
		29.00 - 29.10	D	1kg			
		29.50 - 29.60	D	1kg			
		29.50	SPT	50 (25 for 50mm/50 for 85mm)			
		30.00 - 30.10	D	1kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
21.00	20	17.00

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH05**

Project Name:	Longcross Studios	**Co-ords:**	497864E - 165532N
Location:	Longcross	**Level (mAOD):**	51.35
Client:	HPF	**Dates:**	30/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
							Very dense, greenish grey, brown and black, silty SAND interbedded with siltstone, silt and clay.
		30.50 - 30.60	D	1kg			
		31.00 - 31.10	D	1kg			
		31.00	SPT	50 (25 for 30mm/50 for 80mm)			
		31.50 - 31.60	D	1kg			
		32.00 - 32.10	D	1kg			
		32.50 - 32.60	D	1kg			
		32.50	SPT	50 (25 for 35mm/50 for 80mm)			
		33.00 - 33.10	D	1kg			
		33.50 - 33.60	D	1kg			
		34.00 - 34.10	D	1kg			
		34.50 - 34.60	D	1kg			
		35.00	SPT	50 (25 for 20mm/50 for 75mm)	35.10	16.25	Borehole terminated at 35.10m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)
21.00	20	17.00

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH06**

Project Name:	Longcross Studios	**Co-ords:**	497845E - 165456N
Location:	Longcross	**Level (mAOD):**	57.29
Client:	HPF	**Dates:**	24/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
		0.50	B	5kg			Black, gravelly SAND with occasional roots and rare cobbles. Cobbles are angular of flint. Gravel is angular to subangular of fine to coarse flint. sub-rounded flint. MADE GROUND
		1.20	SPT	N=7 (1,2/2,2,1,2)	1.20	56.09	
		1.50 - 2.00	B	5kg	1.50	55.79	Grey and black sandy GRAVEL. Gravel is angular of fine to coarse brick, clinker, ash, and flint. MADE GROUND
		2.00	SPT	N=23 (5,3/3,4,5,11)			Medium dense, brown and orange mottled, sandy GRAVEL. Gravel is subangular to angular of fine to coarse flint. *Recovered as wet and greenish brown between 2.00m and 3.00m bgl.*
		2.80		HVP=40	2.80	54.49	
		3.00	SPT	N=23 (3,4/5,6,5,7)			Firm, green, brown and orange, sandy, silty CLAY. *Recovered as wet between 3.00m and 3.50m bgl.*
		3.50 - 4.00	U				
		4.00	SPT	N=50 (2,5/50 for 240mm)			*Clay strength increasing with depth, hand vane cannot penetrate from 4.00m bgl.*
		4.50 - 5.00	U				
		5.00	SPT	50 (3,6/50 for 185mm)	5.00	52.29	Dense to very dense, orange, light brown, grey and white, sandy, clayey SILT, with occasional gravel. Gravel is coarse of weak siltstone.
		5.40 - 6.00	B	5kg			
		6.00	SPT	N=35 (4,6/8,8,9,10)			*Becoming greyish white between 6.00m and 7.00m bgl.*
		6.50 - 6.70	D	1kg			
		7.00	SPT	50 (9,16/50 for 105mm)			*Recovered as wet and orange mottling between 7.00m and 8.00m bgl.*
		7.50 - 8.00	B	5kg			
		8.00	SPT	50 (8,11/50 for 200mm)			
		8.50 - 8.70	D	1kg			
		9.00	SPT	50 (5,14/50 for 155mm)	9.00	48.29	Very dense, slightly clayey, silty SAND. Sand is fine to coarse.
		9.50 - 10.00	B	5kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH06**

Project Name:	Longcross Studios	**Co-ords:**	497845E - 165456N
Location:	Longcross	**Level (mAOD):**	57.29
Client:	HPF	**Dates:**	24/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		10.50	SPT	50 (7,15/50 for 160mm)			Very dense, slightly clayey, silty SAND. Sand is fine to coarse.
							Orange mottling between 11.00m and 12.00m bgl.
		11.50 - 12.00	B	5kg			
		12.00	SPT	50 (25 for 100mm/50 for 95mm)	12.00	45.29	Very dense, grey, silty SAND. Sand is fine to coarse with occasional black grains (suspected mica).
							Becoming orange brown between 12.50m and 13.00m bgl.
		13.50 - 14.00	B	5kg			
		13.50	SPT	50 (25 for 125mm/50 for 190mm)			
		15.00	SPT	50 (30 for 135mm/50 for 150mm)			
		16.50 - 17.00	B	5kg			
		16.50	SPT	50 (25 for 115mm/50 for 155mm)			
		18.00	SPT	50 (12,13/50 for 160mm)			
		18.50 - 18.60	D	1kg			
		18.60 - 19.00	B	5kg	18.60	38.69	Very dense, greyish black coarse SAND with occasional gravel. Gravel is coarse of lignite and black grains (suspected mica).
		19.50	SPT	50 (27 for 100mm/50 for 155mm)			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No.
BH06
Sheet 3 of 4

Project Name:	Longcross Studios	**Co-ords:**	497845E - 165456N
Location:	Longcross	**Level (mAOD):**	57.29
Client:	HPF	**Dates:**	24/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
		20.50 - 21.00	B	5kg			Very dense, greyish black coarse SAND with occasional gravel. Gravel is coarse of lignite and black grains (suspected mica).
		21.00	SPT	50 (25 for 95mm/50 for 160mm)			
		21.50 - 21.60	D	1kg			*Dark brown organic matter between 21.50m and 21.60m bgl.*
							Recovered as wet between 22.00m and 23.00m bgl.
		22.50 - 23.00	B	5kg			
		22.50	SPT	50 (25 for 85mm/50 for 160mm)			
		23.50 - 24.00	B	5kg			
		24.00	SPT	50 (25 for 90mm/50 for 155mm)			
		24.50 - 24.70	D	1kg			
		25.50	SPT	50 (25 for 80mm/50 for 150mm)	25.60	31.69	
		25.70 - 26.00	D	1kg			Very dense, grey and green, gravelly SAND with occasional white shell fragments. Gravel is angular of fine to medium mixed lithologies. Sand is fine to coarse.
		26.50 - 27.00	B	5kg			
		27.00	SPT	50 (25 for 90mm/50 for 125mm)			
		27.50 - 27.70	D	1kg			
		28.50 - 29.00	B	5kg			
		28.50	SPT	50 (25 for 80mm/50 for 155mm)			
		29.40 - 29.50	D	1kg			
		29.40 - 29.50	D	1kg			
		29.50 - 30.00	B	5kg			
		30.00 - 30.22	D	1kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH06**

Project Name:	Longcross Studios	**Co-ords:**	497845E - 165456N
Location:	Longcross	**Level (mAOD):**	57.29
Client:	HPF	**Dates:**	24/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)		Stratum Description
		Depth (m)	Type	Results				
		30.00	SPT	50 (25 for 80mm/50 for 150mm)	30.23	27.06		Very dense, grey and green, gravelly SAND with occasional white shell fragments. Gravel is angular of fine to medium mixed lithologies. Sand is fine to coarse.
								Borehole terminated at 30.23m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 74%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	24.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH07**

Sheet 1 of 3

Project Name:	Longcross Studios	**Co-ords:**	497862E - 165423N
Location:	Longcross	**Level (mAOD):**	50.18
Client:	HPF	**Dates:**	21/06/2020
		Weather:	Overcast

Project No.:	200576		
Rev.:	1.0		
Logged By:	CB		
Checked By:	AJ		

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
							Medium dense, yellowish orange, green SAND.
					1.00	49.18	
		1.20	SPT	N=25 (5,7/7,6,6,6)			Firm, green and light brown, sandy CLAY.
					1.30	48.88	
		1.60 - 1.70	D	1kg			Medium dense to dense, grey, orange and white, sandy, clayey SILT with occasional siltstone lenses.
		1.70 - 1.90	B	5kg			
		2.00	SPT	N=26 (5,6/6,7,6,7)			
		2.40 - 2.50	D	1kg			
		2.50 - 12.60	D	1kg			
		3.00	SPT	N=23 (6,6/5,5,6,7)			
		3.50 - 4.00	B	5kg			
		4.00	SPT	N=29 (7,6/7,8,8,6)			
		4.40 - 4.50	D	1kg			
		5.00	SPT	N=41 (9,8/9,10,10,12)			
		5.40 - 5.50	D	1kg			
		5.50 - 6.00	B	5kg			
		6.00	SPT	N=46 (10,12/12,11,11,12)	6.00	44.18	Dense to very dense, light brown slightly silty SAND. Sand is fine to coarse.
		6.70 - 6.80	D	1kg			
		7.00	SPT	N=53 (13,12/15,13,13,12)			
		7.40 - 7.80	B	5kg			
							Recovered as wet between 7.70m and 10.00m bgl.
		8.00	SPT	N=30 (5,6/8,7,7,8)			
		8.30 - 8.40	D	1kg			
		8.70 - 8.80	D	1kg			
		9.00	SPT	N=46 (10,10/11,12,12,11)			
							Becoming siltier from 9.00m bgl.
		9.50 - 10.00	B	5kg			

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details			Chiselling Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)	Depth Top (m)	Depth Base (m)	Duration (hrs)
GL	20.00	200			

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH07**

Project Name:	Longcross Studios	**Co-ords:**	497862E - 165423N
Location:	Longcross	**Level (mAOD):**	50.18
Client:	HPF	**Dates:**	21/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
		10.00	SPT	N=48 (12,12/12,11,13 ,12)			Dense to very dense, light brown slightly silty SAND. Sand is fine to coarse.
		10.50 - 11.00	B	5kg	10.50	39.68	Very dense, blackish grey coarse SAND.
		11.00 - 11.20	D	1kg			*Silty lens between 11.00 and 11.50m.*
		11.50	SPT	50 (2,17/50 for 90mm)			
		11.80 - 12.00	D	1kg			
		12.60 - 13.00	B	5kg			
		13.00	SPT	50 (20,5/50 for 80mm)			
		13.50	D	1kg			
		14.00 - 14.20	D	1kg			
		14.50 - 14.70	D	1kg			
		14.50	SPT	50 (25,0/50 for 72mm)			
		15.00 - 15.20	D	1kg			
		16.00	SPT	50 (19,6/50 for 78mm)			
		16.50 - 16.70	D	1kg			
		16.70 - 16.80	D	1kg			
		17.00 - 17.20	D	1kg	17.00	33.18	Very dense, greenish grey, brown and black, silty SAND, interbedded with siltstone, silt and clay with shiny grains throughout (suspected selenite).
		18.00 - 18.20	D	1kg			*Clay lenses between 18.00m and 18.50m.*
		19.00 - 19.50	B	5kg			
		19.00	SPT	50 (25 for 90mm/50 for 100mm)			
		19.80 - 20.20	D	1kg			*Becoming silty from 19.80m bgl.*

Continued on next sheet

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details

Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	20.00	200

Water Strike

Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details

Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Borehole Log

ver. 0.5

Borehole No. **BH07**

Project Name:	Longcross Studios	**Co-ords:**	497862E - 165423N
Location:	Longcross	**Level (mAOD):**	50.18
Client:	HPF	**Dates:**	21/06/2020
		Weather:	Overcast

Project No.:	200576
Rev.:	1.0
Logged By:	CB
Checked By:	AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
		Depth (m)	Type	Results			
							Very dense, greenish grey, brown and black, silty SAND, interbedded with siltstone, silt and clay with shiny grains throughout (suspected selenite).
		20.50	SPT	50 (25 for 80mm/50 for 90mm)			*Recovered as wet between 20.50m and 21.50m bgl.*
		21.00 - 21.50	D	1kg			
		22.00 - 22.50	D	1kg			
		22.00	SPT	50 (25 for 75mm/50 for 85mm)			*Recovered as wet between 22.50m and 23.50m bgl.*
		23.00 - 23.20	D	1kg			
		23.50	SPT	50 (25 for 50mm/50 for 75mm)			
		24.00 - 24.50	D	1kg			
		25.00 - 25.10	D	1kg			
		25.00 - 25.50	D	1kg	25.12	25.06	
		25.00	SPT	50 (25 for 45mm/50 for 75mm)			Borehole terminated at 25.12m.

Remarks:

Borehole terminated at target depth.

SPT Energy Ratio: 81%

Casing Details		
Depth Top (m)	Depth Base (m)	Diameter (mm)
GL	20.00	200

Water Strike		
Depth Strike (m)	Time Elapsed (min)	Water Level (m)

Chiselling Details		
Depth Top (m)	Depth Base (m)	Duration (hrs)

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR12

Sheet 1 of 1

Project Name:	Longcross Studios	**Level (mAOD):**	50.06	**Date:**	22/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497920E - 165411N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
						Dark brown, black and grey sandy, silty GRAVEL with rare cobbles. Cobbles are angular of concrete. Gravel is subangular to subrounded of fine to coarse brick rubble, tarmacadam, wood, glass and tile. Sand is fine to coarse. MADE GROUND
				0.70	49.36	Greyish green, silty SAND. Sand is fine.
				0.80	49.26	Black, silty SAND. Sand fine. Possible organic odour.
				0.85	49.21	Light grey, silty SAND. Sand is fine.
				1.00	49.06	Trial Pit terminated at 1.00m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR11

Project Name:	Longcross Studios	**Level (mAOD):**	51.40	**Date:**	25/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497919E - 165459N		

Project No. 200576

Logged By

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.15	51.25	CONCRETE with steel rebar. MADE GROUND Light brown, grey and orange, clayey, silty SAND.
				0.97	50.43	Trial Pit terminated at 0.97m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR10

Sheet 1 of 1

Project Name: Longcross Studios	**Level (mAOD):** 54.78	**Date:** 24/06/2020	**Project No.** 200576
Location: Longcross	**Weather:** Hot and sunny.		**Logged By** CB
Client: HPF	**Co-ords:** 497864E - 165458N		**Checked By** AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.04	54.74	PAVING SLAB. MADE GROUND
				0.30	54.48	Light brown, orange and grey gravelly SAND. Gravels are coarse of subrounded to subrounded flint and concrete. Sand is fine. MADE GROUND
				0.50	54.28	CONCRETE. SUB-BASE
				0.80	53.98	Brown, grey and green, clayey, silty SAND. Sand is fine. Trial Pit terminated at 0.80m.

1
2
3
4
5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR09

Sheet 1 of 1

Project Name: Longcross Studios	**Level (mAOD):** 51.46	**Date:** 28/06/2020	**Project No.** 200576
Location: Longcross	**Weather:** Hot and sunny.		**Logged By** CB
Client: HPF	**Co-ords:** 497893E - 165557N		**Checked By** AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.25	51.21	CONCRETE with steel rebar. MADE GROUND
				0.35	51.11	Black, gravelly SAND. SUB-BASE Friable, thinly laminated, grey and orange, sandy SILT. Sand is fine.
	1.00	ES	5kg			
						Becoming slightly clayey with depth and occasional medium to coarse, subangular gravels of siltstone present from 1.50m bgl.
				1.90	49.56	
	2.00	ES	5kg			Medium dense, grey mottled orange, silty SAND. Sand is fine to coarse.
				2.50	48.96	Trial Pit terminated at 2.50m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR08B

Sheet 1 of 1

Project Name: Longcross Studios	**Level (mAOD):** 51.46	**Date:** 28/06/2020	**Project No.** 200576
Location: Longcross	**Weather:** Hot and sunny.		**Logged By** CB
Client: HPF	**Co-ords:** 497929E - 165472N		**Checked By** AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.05	51.41	BRICK - edge of old building line. MADE GROUND
						Reinforced (5mm steel rebar) CONCRETE underlain by grey, GRAVEL (sub-base) and a black membrane.
				0.35	51.11	MADE GROUND
						Medium dense, light brown mottled orange, silty SAND. Sand is fine to medium.
				1.20	50.26	Trial Pit terminated at 1.20m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR08A

Sheet 1 of 1

Project Name:	Longcross Studios	**Level (mAOD):**	51.46	**Date:**	28/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497929E - 165472N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.25	51.21	CONCRETE slab. MADE GROUND
				0.50	50.96	Reinforced (5mm steel rebar) CONCRETE underlain by grey, GRAVEL (sub-base) and a black membrane. MADE GROUND
▼	1.00	D	1kg			Medium dense, light brown mottled orange, silty SAND. Sand is fine to medium.
				1.20	50.26	Trial Pit terminated at 1.20m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
0.70	Water seepage at 0.70m bgl.

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR07

Sheet 1 of 1

Project Name:	Longcross Studios	**Level (mAOD):**	48.85	**Date:**	22/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497968E - 165544N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)		Stratum Description
	Depth (m)	Type	Results				
							Dark brown, grey and orange, sandy, silty GRAVEL. Gravel is subangular to subrounded of fine to coarse tarmacadam, brick, slate and flint. Sand is fine to coarse. MADE GROUND
				0.40	48.45		Light grey, green, brown and orange mottled, clayey, silty SAND. Sand is fine.
				0.70	48.15		Trial Pit terminated at 0.70m.

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR06

Project Name:	Longcross Studios	**Level (mAOD):**	50.20	**Date:**	24/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497865E - 165524N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
						CONCRETE sub-base. MADE GROUND
				0.30	49.90	
						Grey, brown and orange, sandy GRAVEL. Gravel is subangular to subrounded of fine to coarse, concrete and brick rubble. Sand is fine. MADE GROUND
				0.50	49.70	Light brownish orange, silty SAND.
				0.90	49.30	Trial Pit terminated at 0.90m.

1
2
3
4
5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR05

Sheet 1 of 1

Project Name: Longcross Studios	**Level (mAOD):** 51.31	**Date:** 25/06/2020	**Project No.** 200576
Location: Longcross	**Weather:** Hot and sunny.		**Logged By**
Client: HPF	**Co-ords:** 497910E - 165575N		**Checked By** AJ

Water Strike	Samples & In Situ Testing: Depth (m)	Type	Results	Depth (mbgl)	Level (mAOD)	Stratum Description
				0.15	51.16	CONCRETE with steel rebar.
						MADE GROUND
				0.30	51.01	Light grey, sandy GRAVEL. Gravel is subrounded to subangular of fine to coarse flint and concrete. Sand is fine.
						MADE GROUND
				0.60	50.71	Light brown, grey and orange mottled, clayey, silty SAND. Sand is fine.
						Trial Pit terminated at 0.60m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR04

Sheet 1 of 1

Project Name: Longcross Studios	**Level (mAOD):** 51.44	**Date:** 22/06/2020	**Project No.** 200576
Location: Longcross	**Weather:** Hot and sunny.		**Logged By** CB
Client: HPF	**Co-ords:** 497860E - 165578N		**Checked By** AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
						CONCRETE sub-base.
						MADE GROUND
						Rebar encountered at 0.10m bgl.
				0.30	51.14	*Green membrane encountered at 0.30m bgl.*
						Grey, brown and orange, sandy GRAVEL. Gravel is subangular to subrounded of fine to coarse tarmacadam, concrete and brick rubble. Sand is fine.
				0.50	50.94	MADE GROUND
						Light orange, grey and cream mottled, silty SAND. Sand is fine.
				1.10	50.34	Trial Pit terminated at 1.10m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR03

Sheet 1 of 1

Project Name:	Longcross Studios	**Level (mAOD):**	51.09	**Date:**	22/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497888E - 165625N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)		Stratum Description
	Depth (m)	Type	Results				
				0.20	50.89		CONCRETE sub-base. (No rebar present). MADE GROUND
				0.50	50.59		Light orangish brown, silty SAND. Sand is fine. Trial Pit terminated at 0.50m.

1
2
3
4
5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR02

Sheet 1 of 1

Project Name:	Longcross Studios	**Level (mAOD):**	50.02	**Date:**	24/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497830E - 165621N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.04	49.98	TARMACADAM MADE GROUND
				0.26	49.76	CONCRETE with steel rebar. MADE GROUND
						Sandy GRAVEL. Gravel is subangular to subrounded of coarse brick, concrete and flint. Sand is fine. MADE GROUND
				0.60	49.42	Grey, blue and brown mottled, silty CLAY.
				0.95	49.07	Trial Pit terminated at 0.95m.

1
2
3
4
5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Trial Pit Log

ver. 1.1

Trial Pit No. TR01

Sheet 1 of 1

Project Name:	Longcross Studios	**Level (mAOD):**	50.17	**Date:**	28/06/2020
Location:	Longcross	**Weather:**	Hot and sunny.		
Client:	HPF	**Co-ords:**	497899E - 165644N		

Project No. 200576

Logged By CB

Checked By AJ

Water Strike	Samples & In Situ Testing			Depth (mbgl)	Level (mAOD)	Stratum Description
	Depth (m)	Type	Results			
				0.10	50.07	MACADAM MADE GROUND
	0.25	ES	5kg	0.25	49.92	CONCRETE with steel rebar. MADE GROUND
				0.35	49.82	Brown, sandy GRAVEL. Gravel is medium to cobble sized of brick, macadam, concrete. Sand is medium to coarse. MADE GROUND
				0.50	49.67	Black, gravelly SAND. Gravel is medium to coarse of brick and concrete. Sand is medium to coarse. Slightly ashy. MADE GROUND
	1.00	ES	5kg			Medium dense, light brownish orange, silty SAND with occasional lenses of cream / light grey silt. Sand is fine to coarse.
	1.50	ES	5kg			*Becoming mottled orange from 1.70m bgl.*
				2.80	47.37	Trial Pit terminated at 2.80m.

1 2 3 4 5

Water Strike

Depth Strike (mbgl)	Remarks
	Dry

Stability:
Stable

Remarks:

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS01
Sheet 1 of 2

Project Name:	Longcross Studios	Co-ords:	497887E - 165423N
Location:	Longcross	Level (m AOD):	50.23
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
					0.15	50.08	Dark brown, gravelly SAND with frequent roots. Gravels are fine to medium, subangular to subrounded brick. Sand is medium to coarse. TOPSOIL
							Orangish brown, sandy GRAVEL with rare cobbles. Cobbles are angular of brick. Gravel is medium to coarse of brick. Sand is medium to coarse. MADE GROUND
		0.50	ES		0.50	49.73	
					0.60	49.63	Dark black, gravelly SAND. Gravel is fine to medium, subangular to subrounded brick. Sand is medium to coarse. MADE GROUND
							Medium dense, orangish brown, silty SAND. Sand is medium. SUSPECTED REWORKED NATURAL DEPOSITS
		1.00	ES				
		1.00	SPT	N=12 (4,3/2,4,3,3)			
					1.50	48.73	Green and light brown sandy CLAY with rare gravel. Gravel is angular to subangular of fine to medium flint.
					1.70	48.53	Medium dense, pale yellowish brown, very silty, locally clayey, fine to medium SAND with rare gravel. Gravel is fine to medium flint. *Becoming mottled orange from 1.80m bgl.*
		2.00	ES		2.00	48.23	Medium dense, light brown and orange mottled, silty SAND. Sand is fine.
		2.00	SPT	N=11 (2,3/2,3,3,3)			
		3.00	ES				
		3.00	SPT	N=12 (4,2/2,3,4,3)			
		3.50	ES				
		4.00	SPT	N=10 (2,1/2,2,3,3)			
		4.50	ES				
		5.00	SPT	N=26 (3,4/6,5,7,8)			

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS01
Sheet 2 of 2

Project Name:	Longcross Studios	Co-ords:	497887E - 165423N
Location:	Longcross	Level (m AOD):	50.23
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							Medium dense, light brown and orange mottled, silty SAND. Sand is fine.
					5.45	44.78	Window Sample terminated at 5.45m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike

Depth Strike	Remarks
	Dry

Casing Details

Depth Base	Diameter

Sample Sleeve Runs

Depth Top (m)	Depth Base (m)	Diameter (mm)
1.00	2.00	87
2.00	3.00	77
3.00	4.00	67
4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS02
Sheet 1 of 2

Project Name:	Longcross Studios	Co-ords:	497988E - 165495N
Location:	Longcross	Level (m AOD):	48.61
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							Dark brown silty SAND with frequent roots. TOPSOIL
					0.15	48.46	Dark brownish grey, gravelly SAND with rare cobbles. Cobbles are angular of brick. Gravel is medium to coarse, angular to sub angular of brick, coal and clinker. Sand is medium to coarse. Roots present. MADE GROUND
		0.50	ES		0.50	48.11	*Becoming ashy from 0.50m bgl.*
					0.60	48.01	Dark grey to black, gravelly SAND. Gravels are subangular to subrounded of fine to medium, brick. Sand is medium to coarse. MADE GROUND
		1.00	SPT	N=7 (3,2/2,2,1,2)			Very dark grey, sandy CLAY with rare gravel. Gravel is subrounded to rounded of medium to coarse flint and rare brick gravels. Slight organic odour. SUSPECTED REWORKED NATURAL DEPOSITS
		1.40	ES				
					1.50	47.11	Medium dense to dense, green and grey mottled, silty, locally clayey, fine to medium SAND with rare fine to medium flint gravel.
							Clayey from 1.80m to 2.00m bgl.
		2.00	SPT	N=18 (3,3/4,4,5,5)			
		3.00	ES				*Less silty from 3.00m bgl.*
		3.00	SPT	N=25 (3,5/6,5,7,7)			
		3.50	ES				
		4.00	SPT	N=41 (3,4/8,9,12,12)			
		4.50	ES				
		5.00	SPT	N=32 (4,5/6,7,9,10)			

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS02
Sheet 2 of 2

Project Name:	Longcross Studios	Co-ords:	497988E - 165495N
Location:	Longcross	Level (m AOD):	48.61
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							Medium dense to dense, green and grey mottled, silty, locally clayey, fine to medium SAND with rare fine to medium flint gravel.
					5.45	43.16	Window Sample terminated at 5.45m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS03
Sheet 1 of 1

Project Name:	Longcross Studios	Co-ords:	497962E - 165578N
Location:	Longcross	Level (m AOD):	48.82
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							Dark grey, sandy, silty GRAVEL. Gravel is subangular to subrounded of fine to coarse tarmacadam, brick and flint. Sand is fine. MADE GROUND
					0.20	48.62	Brown, orange, grey and blue mottled silty clayey SAND. Sand is fine.
					0.25	48.57	Light brown and orange mottled, clayey, silty SAND. Sand is fine.
					0.40	48.42	Cream and light orange, silty SAND. Sand is fine.
		1.00	SPT	N=21 (2,4/4,4,5,8)			
					1.10	47.72	Medium dense, light brown and orange mottled, clayey, silty SAND. Sand is fine.
					1.25	47.57	Very dense, cream to light orange, silty SAND. Sand is fine.
		2.00	SPT	N=71 (6,10/13,20,15,23)			
					2.45	46.37	Window Sample terminated at 2.45m.

1
2
3
4
5

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at 2.45m bgl due to refusal.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			0.00	1.00	87
				1.00	2.00	77

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS04
Sheet 1 of 1

Project Name:	Longcross Studios	Co-ords:	497944E - 165582N
Location:	Longcross	Level (m AOD):	49.29
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							MACADAM MADE GROUND
					0.20	49.09	
		0.30	ES		0.25	49.04	Dark brown, gravelly SAND. SUB-BASE
							Orange sandy GRAVEL with occasional coal fragments and slightly ashy. Gravels are subangular of coarse to cobble sized brick. Sand is medium to coarse. MADE GROUND
					0.50	48.79	Medium dense brown, orange, grey and blue mottled clayey, silty SAND. Sand is fine.
		1.00	SPT	N=15 (3,3/3,4,4,4)			
					1.20	48.09	Dense to very dense, orange SAND. Sand is fine.
		1.50	ES				
		2.00	SPT	N=32 (3,4/6,6,8,12)			
							Becoming more orange with depth from 2.20m bgl.
		2.50	ES				
		2.80	SPT	N=65 (6,11/12,13,18,22)			
					3.25	46.04	Window Sample terminated at 3.25m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at 3.25m bgl due to refusal.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS05
Sheet 1 of 1

Project Name:	Longcross Studios	Co-ords:	497874E - 165607N
Location:	Longcross	Level (m AOD):	52.82
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
					0.15	52.67	CONCRETE slab. MADE GROUND
					0.30	52.52	Grey, gravelly SAND. SUB-BASE
					0.50	52.32	Orange COBBLES. Cobbles are subangular to subrounded of red brick. MADE GROUND
		1.00	SPT	N=17 (3,3/3,4,4,6)			Medium dense, light yellow, silty SAND with occasional gravel. Gravel is subangular to subrounded of fine to medium flint. Sand is fine.
					1.20	51.62	Medium dense, light brown, silty SAND. Sand is fine.
		2.00	SPT	N=15 (2,3/4,3,4,4)			
					2.10	50.72	Medium dense to dense, light orangish brown, silty SAND. Sand is fine.
		3.00	SPT	N=30 (6,6/6,7,7,10)			
					3.50	49.32	Dense to very dense, light grey and cream silty SAND. Sand is fine.
		4.00	SPT	N=50 (5,9/10,10,15, 15)			
					4.60	48.22	Window Sample terminated at 4.60m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at 4.60m bgl due to refusal.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			0.00	1.00	87
				1.00	2.00	77
				2.00	3.00	67
				3.00	4.00	57
				4.00	5.00	47

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS06
Sheet 1 of 2

Project Name:	Longcross Studios	Co-ords:	497869E - 165606N
Location:	Longcross	Level (m AOD):	52.78
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
					0.15	52.63	CONCRETE slab. MADE GROUND
					0.30	52.48	Grey, gravelly SAND. SUB-BASE
					0.90	51.88	Light grey, sandy GRAVEL. Gravel is subangular to subrounded of concrete and flint. Sand is fine. MADE GROUND
		1.00	SPT	N=16 (2,2/3,3,4,6)	1.40	51.38	Medium dense, light greyish green clayey, silty SAND. Sand is fine.
		2.00	SPT	N=17 (3,3/4,4,4,5)	2.10	50.68	Medium dense, light grey, silty SAND. Sand is fine.
		3.00	SPT	N=26 (2,4/6,6,6,8)	3.50	49.28	Medium dense to dense, light orangish brown, silty SAND. Sand is fine.
		4.00	SPT	N=35 (3,4/6,9,9,11)	5.00	47.78	Dense, light grey and cream, silty SAND. Sand is fine.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			0.00	1.00	87
				1.00	2.00	77
				2.00	3.00	67
				3.00	4.00	57
				4.00	5.00	47

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS06
Sheet 2 of 2

Project Name:	Longcross Studios	Co-ords:	497869E - 165606N
Location:	Longcross	Level (m AOD):	52.78
Client:	HPF	Date:	22/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m AOD)		Stratum Description
		Depth(m)	Type	Results				
		5.00	SPT	N=41 (3,6/7,7,14,13)				Window Sample terminated at 5.45m.

6
7
8
9
10

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			0.00	1.00	87
				1.00	2.00	77
				2.00	3.00	67
				3.00	4.00	57
				4.00	5.00	47

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS07
Sheet 1 of 2

Project Name:	Longcross Studios	Co-ords:	497836E - 165490N
Location:	Longcross	Level (m AOD):	57.78
Client:	HPF	Date:	23/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
		0.50	ES				Dark brown gravelly SAND with frequent roots and rare cobbles. Gravel is subangular to subrounded of fine to medium brick, concrete, clinker and flint. Sand is fine to medium. Matrix is ashy. TOPSOIL FILL
		1.00	ES				
		1.00	SPT	N=5 (1,2/2,1,1,1)			
					1.30	56.48	Loose to medium dense, brown and orange mottled, sandy GRAVEL of subangular to angular, fine to coarse, flint.
		1.50	ES		1.50	56.28	Medium dense, green, brown and orange, silty, locally clayey, SAND with rare gravel. Gravel is angular to subangular of fine to medium flint.
							Very silty from 1.70m to 1.80m bgl.
		2.00	SPT	N=26 (2,7/8,7,5,6)			*Slightly damp from 2.00m bgl.*
		2.50	ES				
							Frequent gravel from 2.90m to 3.00m bgl.
		3.00	SPT	N=10 (2,4/3,2,3,2)	3.00	54.78	Soft to firm, green, brown and orange, sandy, silty CLAY. Sand is fine to medium.
		3.50	ES				
		4.00	SPT	N=17 (2,2/3,4,5,5)			
		4.50	ES		4.50	53.28	Medium dense, greenish grey, slightly clayey, silty SAND. Sand is medium to coarse.
		5.00	SPT	N=24 (4,4/5,5,7,7)	5.00	52.78	

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS07
Sheet 2 of 2

Project Name:	Longcross Studios	Co-ords:	497836E - 165490N
Location:	Longcross	Level (m AOD):	57.78
Client:	HPF	Date:	23/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							Window Sample terminated at 5.45m.

6
7
8
9
10

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS08
Sheet 1 of 1

Project Name:	Longcross Studios	Co-ords:	497786E - 165690N
Location:	Longcross	Level (m AOD):	56.68
Client:	HPF	Date:	23/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
		0.50	ES				Dark brown gravelly SAND with frequent roots and rare cobbles. Cobbles are subangular to subrounded of mixed lithologies. Gravel is subangular to subrounded of fine to medium brick, concrete and flint. Sand is fine to medium. TOPSOIL FILL
		1.00	SPT	N=9 (2,1/2,2,2,3)			
					1.20	55.48	Firm to stiff, green, brown and orange, sandy, silty CLAY. Sand is fine to medium.
		1.50	ES				
		2.00	SPT	N=10 (1,2/2,2,3,3)			
		2.50	ES				
		3.00	SPT	N=11 (2,2/2,2,3,4)	3.00	53.68	Medium dense, reddish brown and grey SILT with partings of very light grey fine sand.
		3.50	ES				
		4.00	SPT	N=18 (2,3/3,4,5,6)			
					4.20	52.48	Medium dense, very light grey, silty SAND.
		4.50	ES				
					5.00	51.68	Window Sample terminated at 5.00m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS09
Sheet 1 of 2

Project Name:	Longcross Studios	Co-ords:	497917E - 165471N
Location:	Longcross	Level (m AOD):	51.46
Client:	HPF	Date:	23/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							CONCRETE with steel rebar. MADE GROUND
					0.20	51.26	Orangish brown, gravelly SAND. SUB-BASE
					0.40	51.06	Medium dense, orangish brown, silty, SAND. Sand is fine to coarse.
		0.50	ES				
		1.00	SPT	N=20 (2,3/4,5,5,6)			
					1.40	50.06	Medium dense, thinly laminated, grey and orange, sandy SILT. Sand is fine.
		1.50	ES				
		2.00	SPT	N=25 (3,7/8,7,5,5)			
							Becoming very sandy from 2.10m bgl.
					2.20	49.26	Medium dense, orange and brown mottled, silty SAND. Sand is medium to coarse.
		2.50	ES				
		3.00	SPT	N=14 (4,3/3,4,3,4)			
		3.50	ES				
		4.00	SPT	N=15 (3,3/3,4,3,5)			
		4.50	ES				
		5.00	SPT	N=26 (3,5/6,6,7,7)			

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS09
Sheet 2 of 2

Project Name:	Longcross Studios	Co-ords:	497917E - 165471N
Location:	Longcross	Level (m AOD):	51.46
Client:	HPF	Date:	23/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

Well / Backfill	Water Strikes	Sample and In Situ Testing: Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							Medium dense, orange and brown mottled, silty SAND. Sand is medium to coarse.
					5.45	46.01	Window Sample terminated at 5.45m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57

The Harlequin Building, 65 Southwark Street,
London, SE1 0HR
email: CharlieKnox@paragonbc.co.uk
web: www.paragonbc.co.uk
tel: 020 7125 0112

Window Sample Log

ver. 2.0

Window Sample No.
WS10
Sheet 1 of 1

Project Name:	Longcross Studios	Co-ords:	497900E - 165557N
Location:	Longcross	Level (m AOD):	51.45
Client:	HPF	Date:	23/06/2020
		Weather:	Hot and sunny.

Project No.: 200576
Logged By: CB
Checked By: AJ

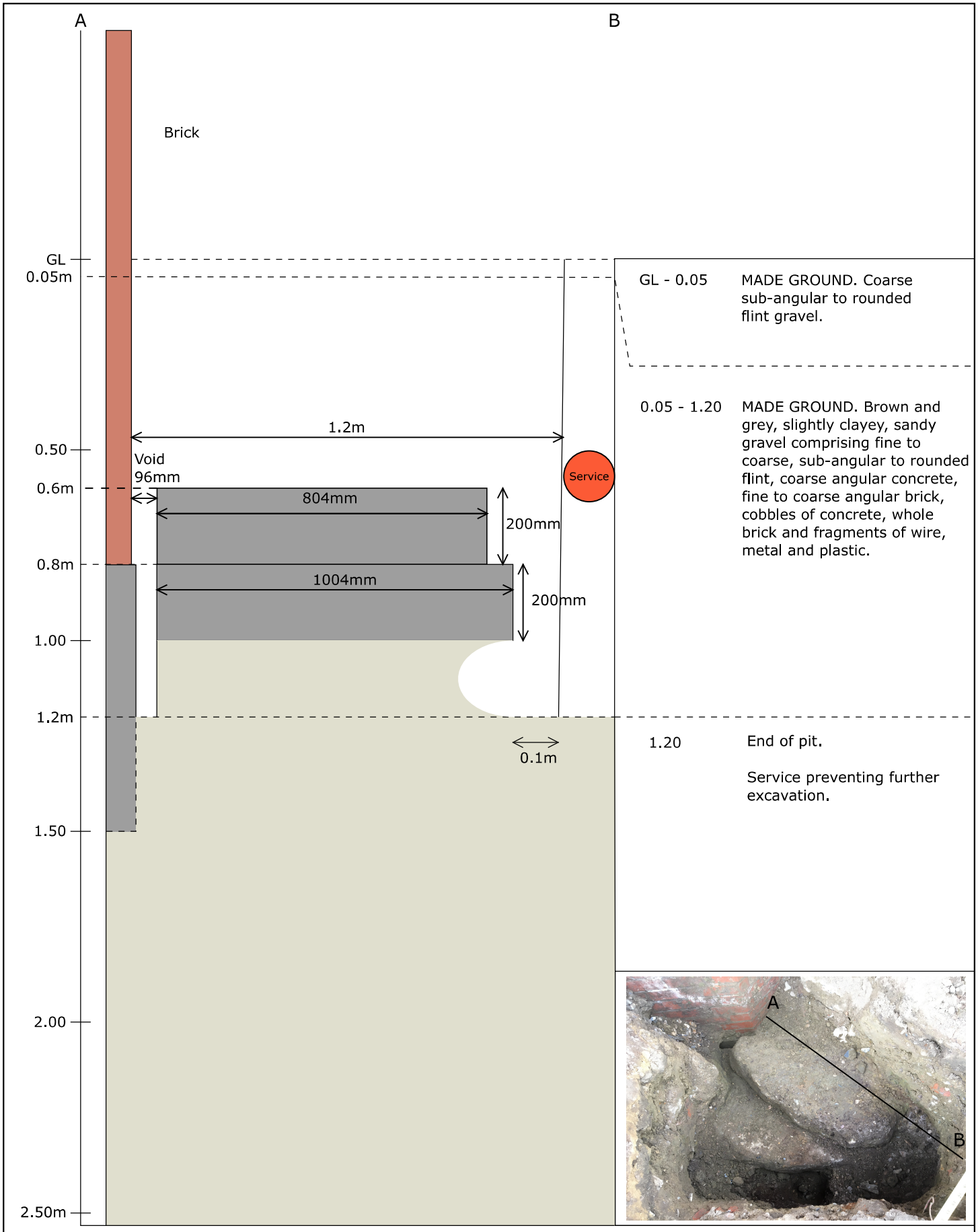
Well / Backfill	Water Strikes	Sample and In Situ Testing Depth(m)	Type	Results	Depth (m)	Level (m AOD)	Stratum Description
							CONCRETE with steel rebar. MADE GROUND
					0.20	51.25	Orangish brown, gravelly SAND. SUB-BASE
					0.45	51.00	Medium dense to very dense, grey mottled orange, silty SAND. Sand is fine to coarse.
		1.00 1.00	ES SPT	N=22 (3,5/5,5,6,6)			
							Becoming very silty from 1.30m bgl.
		2.00 2.00	ES SPT	N=27 (3,4/6,6,7,8)			
		3.00 3.00	ES SPT	N=30 (4,5/6,7,7,10)			
		4.00 4.00	ES SPT	N=35 (6,7/7,8,9,11)			
							Silt between 4.20m and 4.30m bgl.
		4.80	SPT	50 (3,20/50 for 170mm)			
					5.00	46.45	Window Sample terminated at 5.00m.

Remarks:

Hand excavated pit to 1.20m bgl.

Window sample terminated at target depth.

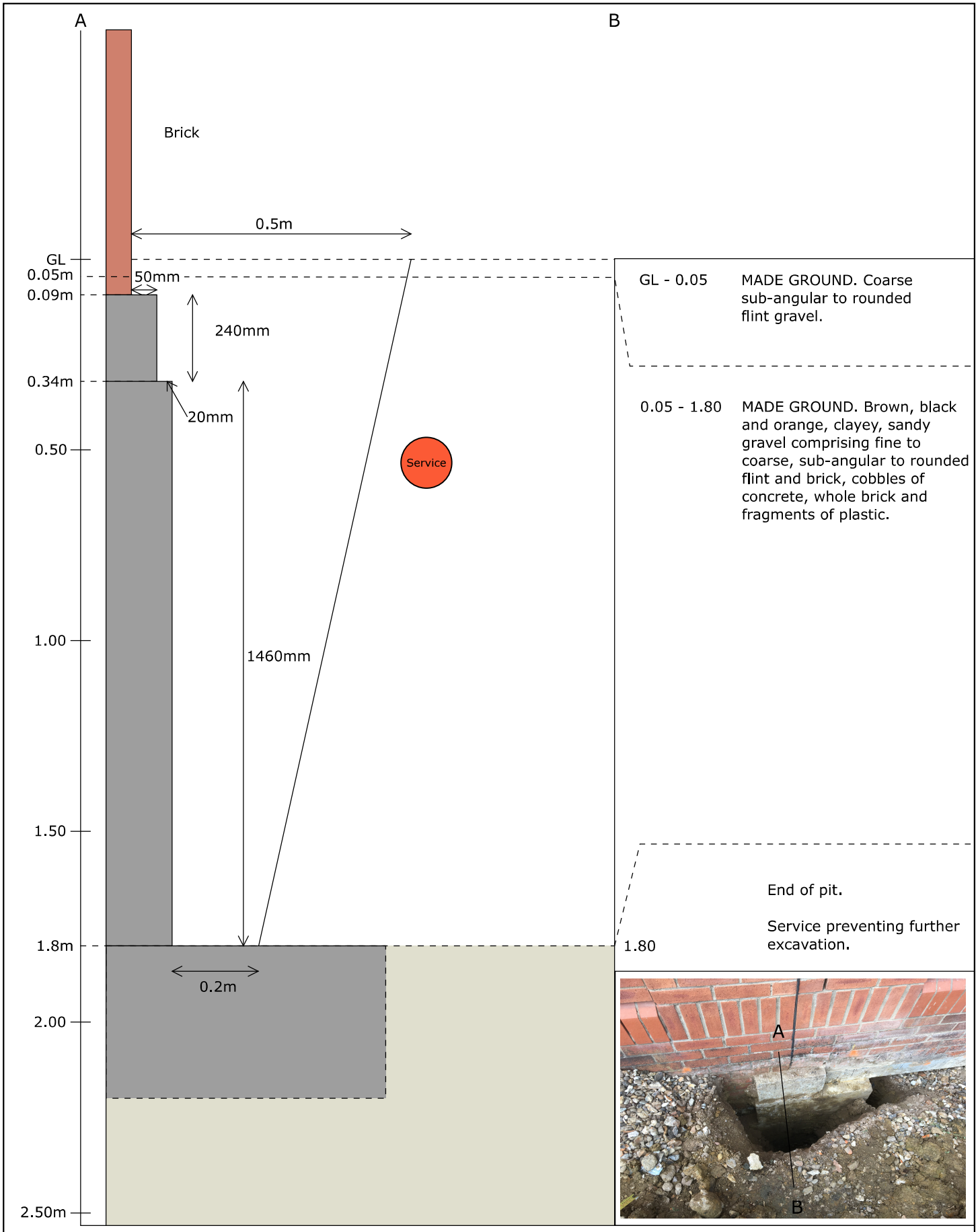
Water Strike		Casing Details		Sample Sleeve Runs		
Depth Strike	Remarks	Depth Base	Diameter	Depth Top (m)	Depth Base (m)	Diameter (mm)
	Dry			1.00	2.00	87
				2.00	3.00	77
				3.00	4.00	67
				4.00	5.00	57



building & project consultants

Paragon Building Consultancy
The Harlequin Building
65 Southwark Street
London
SE1 0HR
0207125 0112
www.paragonbc.co.uk

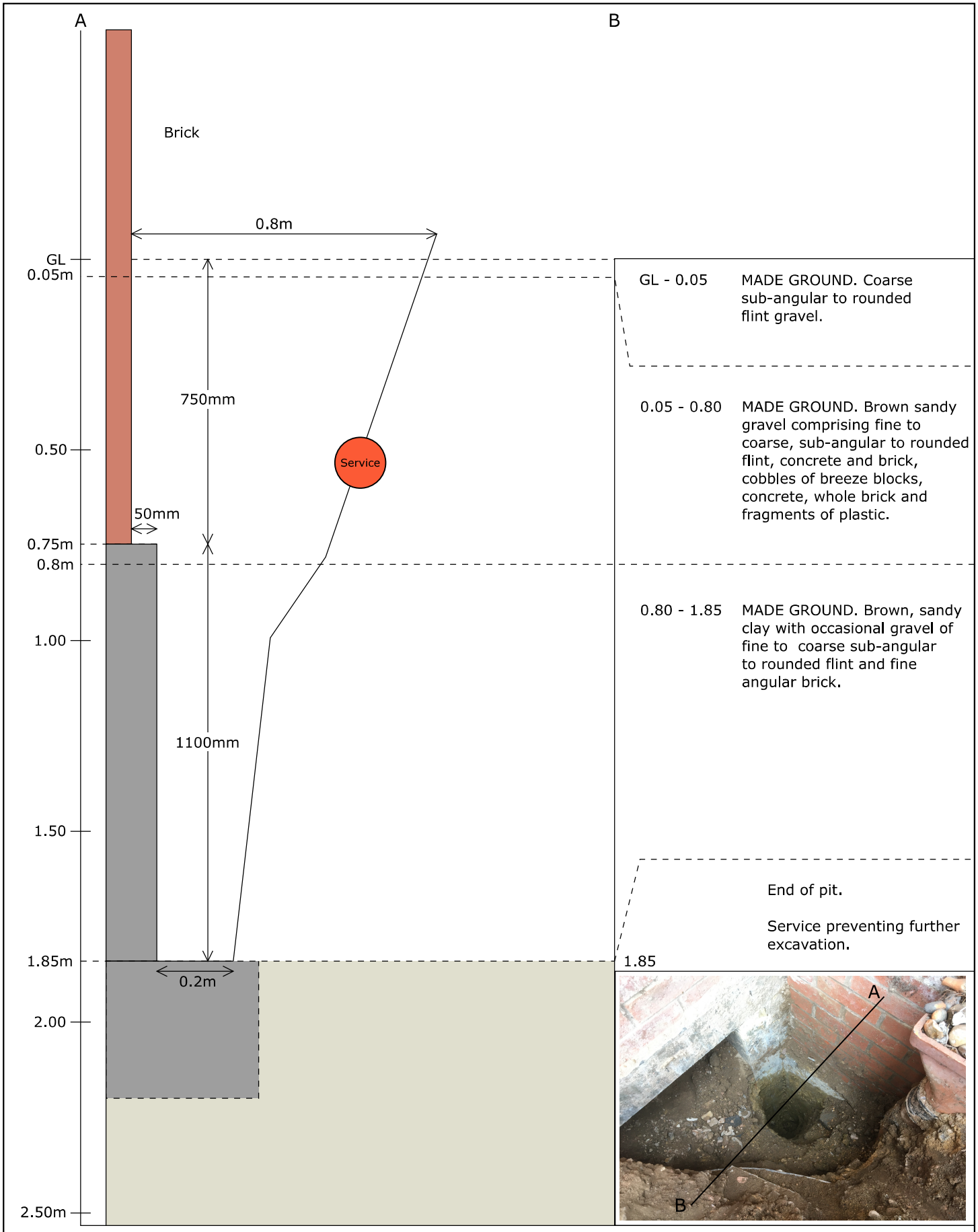
Project	Drawing Number
Longcross Studios	1
Drawing Title	**Date**
HDP 1	17/07/2020



building & project consultants

Paragon Building Consultancy
The Harlequin Building
65 Southwark Street
London
SE1 0HR
0207125 0112
www.paragonbc.co.uk

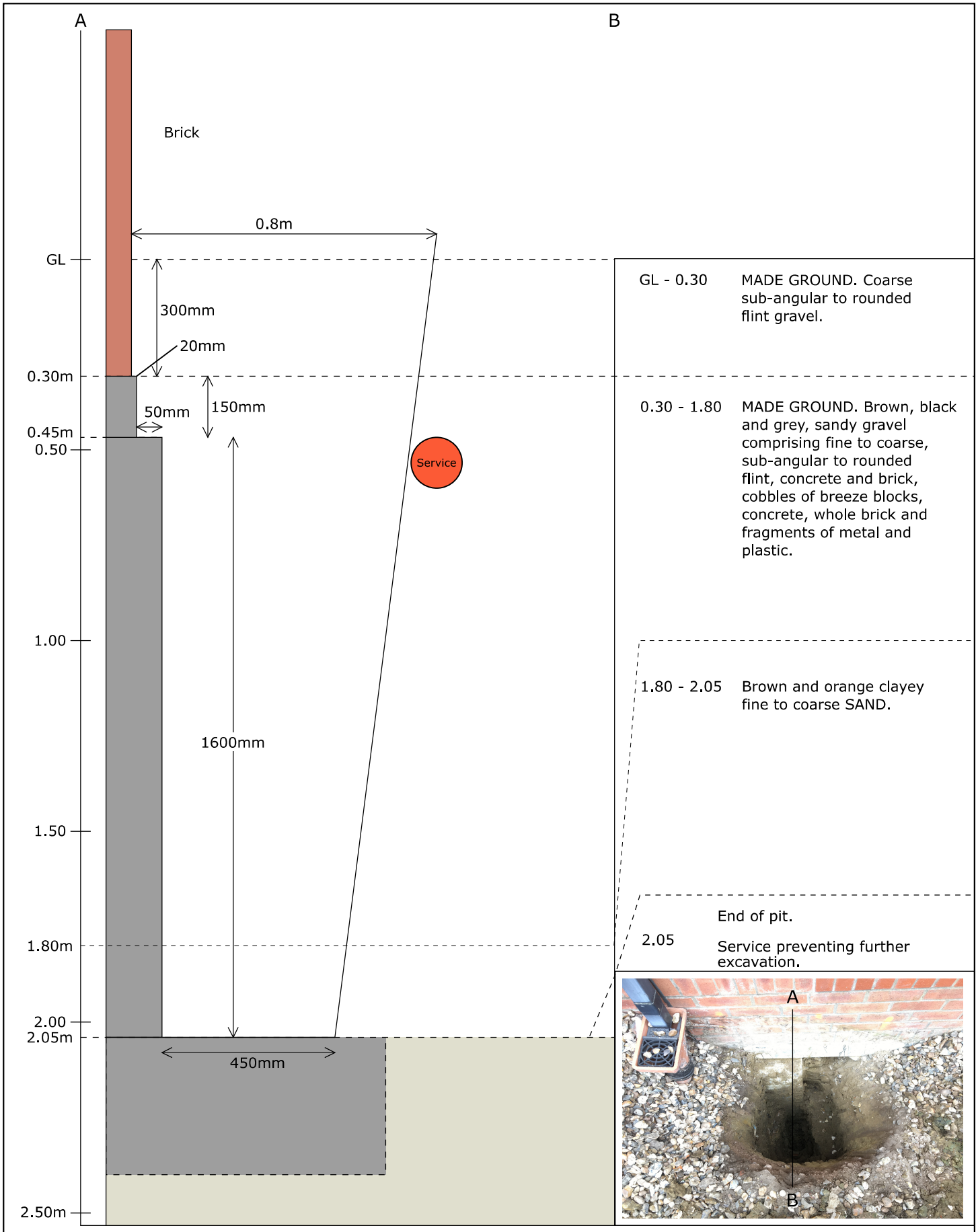
Project	Drawing Number
Longcross Studios	2
Drawing Title	**Date**
HDP 2	17/07/2020



building & project consultants

Paragon Building Consultancy
The Harlequin Building
65 Southwark Street
London
SE1 0HR
0207125 0112
www.paragonbc.co.uk

Project	Drawing Number
Longcross Studios	3
Drawing Title	**Date**
HDP 3	17/07/2020



building & project consultants

Paragon Building Consultancy
The Harlequin Building
65 Southwark Street
London
SE1 0HR
0207125 0112
www.paragonbc.co.uk

Project	Drawing Number
Longcross Studios	4
Drawing Title	**Date**
HDP 4	17/07/2020

APPENDIX 4: CHEMICAL RESULTS

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

Matt Griffiths
Your Environment
Chilgrove Business Centre
Chilgrove Park Road
Chilgrove
Chichester
West Sussex
PO18 9HU

DETS Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 19-08042

Site Reference:	Longcross
Project / Job Ref:	YE7150
Order No:	None Supplied
Sample Receipt Date:	06/06/2019
Sample Scheduled Date:	06/06/2019
Report Issue Number:	1
Reporting Date:	13/06/2019

Authorised by:

Dave Ashworth
Deputy Quality Manager

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 19-08042	**Date Sampled**	31/05/19	30/05/19	30/05/19	30/05/19	30/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	HP01	HP02	HP04b	HP04c	WS03
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.15	0.20	0.80	0.70
Reporting Date: 13/06/2019	**DETS Sample No**	413106	413107	413108	413109	413111

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	**ISO17025**	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Sample Matrix (S)	Material Type	N/a	NONE					
Asbestos Type (S)	PLM Result	N/a	**ISO17025**					
pH	pH Units	N/a	**MCERTS**	8.0	6.4	5.2	6.3	7.6
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	**MCERTS**	46	< 10	< 10	< 10	32
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	**MCERTS**	0.05	< 0.01	< 0.01	< 0.01	0.03
Organic Matter	%	< 0.1	**MCERTS**	1	2.3	0.8	2	1.1
Arsenic (As)	mg/kg	< 2	**MCERTS**	7	5	7	4	3
Cadmium (Cd)	mg/kg	< 0.2	**MCERTS**	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	**MCERTS**	15	10	36	12	7
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	**MCERTS**	25	7	< 4	6	9
Lead (Pb)	mg/kg	< 3	**MCERTS**	45	21	10	21	55
Mercury (Hg)	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	**MCERTS**	7	4	8	4	6
Selenium (Se)	mg/kg	< 3	NONE	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	**MCERTS**	64	36	30	63	27
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C
Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 19-08042	**Date Sampled**	30/05/19	29/05/19			
Your Environment	**Time Sampled**	None Supplied	None Supplied			
Site Reference: Longcross	**TP / BH No**	WS05	WS10			
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied			
Order No: None Supplied	**Depth (m)**	0.30	0.30			
Reporting Date: 13/06/2019	**DETS Sample No**	413112	413118			

Determinand	**Unit**	**RL**	**Accreditation**					
Asbestos Screen (S)	N/a	N/a	**ISO17025**	Detected	Not Detected			
Sample Matrix (S)	Material Type	N/a	NONE	Amosite present in microscopic AIB				
Asbestos Type (S)	PLM Result	N/a	**ISO17025**	Amosite				
pH	pH Units	N/a	**MCERTS**	7.5	5.3			
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2			
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	**MCERTS**	< 10	11			
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	**MCERTS**	< 0.01	0.01			
Organic Matter	%	< 0.1	**MCERTS**	2.9	2.2			
Arsenic (As)	mg/kg	< 2	**MCERTS**	7	5			
Cadmium (Cd)	mg/kg	< 0.2	**MCERTS**	< 0.2	< 0.2			
Chromium (Cr)	mg/kg	< 2	**MCERTS**	17	20			
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2			
Copper (Cu)	mg/kg	< 4	**MCERTS**	18	5			
Lead (Pb)	mg/kg	< 3	**MCERTS**	47	9			
Mercury (Hg)	mg/kg	< 1	NONE	< 1	< 1			
Nickel (Ni)	mg/kg	< 3	**MCERTS**	6	5			
Selenium (Se)	mg/kg	< 3	NONE	< 3	< 3			
Zinc (Zn)	mg/kg	< 3	**MCERTS**	103	25			
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C
Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 19-08042	**Date Sampled**	31/05/19	30/05/19	30/05/19	30/05/19	30/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	HP01	HP02	HP04b	HP04c	WS03
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.15	0.20	0.80	0.70
Reporting Date: 13/06/2019	**DETS Sample No**	413106	413107	413108	413109	413111

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	0.55	0.31	< 0.1	0.51	0.56
Anthracene	mg/kg	< 0.1	MCERTS	0.16	< 0.1	< 0.1	0.12	0.12
Fluoranthene	mg/kg	< 0.1	MCERTS	1.91	1.01	< 0.1	1.10	0.80
Pyrene	mg/kg	< 0.1	MCERTS	1.66	0.92	< 0.1	0.93	0.74
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	1.17	0.72	< 0.1	0.65	0.56
Chrysene	mg/kg	< 0.1	MCERTS	1.03	0.50	< 0.1	0.45	0.35
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	1.76	0.82	< 0.1	0.71	0.64
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.60	0.33	< 0.1	0.30	0.29
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	1.35	0.67	< 0.1	0.59	0.53
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	1.08	0.55	< 0.1	0.44	0.44
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	0.18	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.91	0.44	< 0.1	0.32	0.32
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	12.4	6.3	< 1.6	6.1	5.4

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{o}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 19-08042	**Date Sampled**	30/05/19	29/05/19			
Your Environment	**Time Sampled**	None Supplied	None Supplied			
Site Reference: Longcross	**TP / BH No**	WS05	WS10			
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied			
Order No: None Supplied	**Depth (m)**	0.30	0.30			
Reporting Date: 13/06/2019	**DETS Sample No**	413112	413118			

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Acenaphthene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluorene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Phenanthrene	mg/kg	< 0.1	MCERTS	0.55	< 0.1			
Anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Fluoranthene	mg/kg	< 0.1	MCERTS	0.97	< 0.1			
Pyrene	mg/kg	< 0.1	MCERTS	0.82	0.17			
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	0.51	< 0.1			
Chrysene	mg/kg	< 0.1	MCERTS	0.44	< 0.1			
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	0.68	0.21			
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	0.28	< 0.1			
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	0.54	0.19			
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	0.40	< 0.1			
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1			
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	0.30	< 0.1			
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	5.5	< 1.6			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{o}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 19-08042	**Date Sampled**	31/05/19	30/05/19	30/05/19	30/05/19	30/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	HP01	HP02	HP04b	HP04c	WS03
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.15	0.20	0.80	0.70
Reporting Date: 13/06/2019	**DETS Sample No**	413106	413107	413108	413109	413111

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10	< 10	< 10	< 10
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21	< 21	< 21	< 21
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	9	4	< 3	7	8
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	70	34	< 10	63	38
Aromatic (C5 - C35)	mg/kg	< 21	NONE	79	39	< 21	70	45
Total >C5 - C35	mg/kg	< 42	NONE	79	< 42	< 42	70	45

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 19-08042	**Date Sampled**	30/05/19	29/05/19			
Your Environment	**Time Sampled**	None Supplied	None Supplied			
Site Reference: Longcross	**TP / BH No**	WS05	WS10			
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied			
Order No: None Supplied	**Depth (m)**	0.30	0.30			
Reporting Date: 13/06/2019	**DETS Sample No**	413112	413118			

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01			
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05			
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2			
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2			
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3			
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	< 3			
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	< 10			
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	< 21			
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01			
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05			
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2			
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	5	< 3			
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	29	< 10			
Aromatic (C5 - C35)	mg/kg	< 21	NONE	33	< 21			
Total >C5 - C35	mg/kg	< 42	NONE	< 42	< 42			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 19-08042	**Date Sampled**	31/05/19	30/05/19	30/05/19	30/05/19	30/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	HP01	HP02	HP04b	HP04c	WS03
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.15	0.20	0.80	0.70
Reporting Date: 13/06/2019	**DETS Sample No**	413106	413107	413108	413109	413111

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 19-08042	**Date Sampled**	30/05/19	29/05/19			
Your Environment	**Time Sampled**	None Supplied	None Supplied			
Site Reference: Longcross	**TP / BH No**	WS05	WS10			
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied			
Order No: None Supplied	**Depth (m)**	0.30	0.30			
Reporting Date: 13/06/2019	**DETS Sample No**	413112	413118			

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2			
Toluene	ug/kg	< 5	MCERTS	< 5	< 5			
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2			
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2			
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2			
MTBE	ug/kg	< 5	MCERTS	< 5	< 5			

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

DETS Ltd
1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Waste Acceptance Criteria Analytical Certificate - BS EN 12457/3

DETS Report No: 19-08042		**Date Sampled**	30/05/19	**Landfill Waste Acceptance Criteria Limits**		
Your Environment		**Time Sampled**	None Supplied	**Inert Waste Landfill**	**Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Site Reference: Longcross		**TP / BH No**	HP04b			
Project / Job Ref: YE7150		**Additional Refs**	None Supplied			
Order No: None Supplied		**Depth (m)**	0.20			
Reporting Date: 13/06/2019		**DETS Sample No**	413108			
Determinand	**Unit**	**MDL**				
TOC[MU]	%	< 0.1	0.5	3%	5%	6%
Loss on Ignition	%	< 0.01	2.50	--	--	10%
BTEX[MU]	mg/kg	< 0.05	< 0.05	6	--	--
Sum of PCBs	mg/kg	< 0.1	< 0.1	1	--	--
Mineral Oil[MU]	mg/kg	< 10	< 10	500	--	--
Total PAH[MU]	mg/kg	< 1.7	< 1.7	100	--	--
pH[MU]	pH Units	N/a	5.2	--	>6	--
Acid Neutralisation Capacity	mol/kg (+/-)	< 1	< 1	--	To be evaluated	To be evaluated

Eluate Analysis	**2:1 mg/l**	**8:1 mg/l**		**Cumulative 10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)**		
Arsenic[U]	< 0.01	< 0.01		< 0.2	0.5	2	25
Barium[U]	< 0.02	< 0.02		< 0.1	20	100	300
Cadmium[U]	< 0.0005	< 0.0005		< 0.02	0.04	1	5
Chromium[U]	< 0.005	< 0.005		< 0.20	0.5	10	70
Copper[U]	< 0.01	< 0.01		< 0.5	2	50	100
Mercury[U]	< 0.005	< 0.005		< 0.01	0.01	0.2	2
Molybdenum[U]	0.001	< 0.001		< 0.1	0.5	10	30
Nickel[U]	< 0.007	< 0.007		< 0.2	0.4	10	40
Lead[U]	< 0.005	< 0.005		< 0.2	0.5	10	50
Antimony[U]	< 0.006	< 0.006		< 0.06	0.06	0.7	5
Selenium[U]	< 0.005	< 0.005		< 0.1	0.1	0.5	7
Zinc[U]	< 0.005	< 0.005		< 0.2	4	50	200
Chloride[U]	2	2		19	800	15000	25000
Fluoride[U]	< 0.5	< 0.5		< 1	10	150	500
Sulphate[U]	2	1		< 20	1000	20000	50000
TDS	22	20		201	4000	60000	100000
Phenol Index	< 0.01	< 0.01		< 0.5	1	-	-
DOC	12.3	7		73.7	500	800	1000
Leach Test Information							
Sample Mass (kg)	0.20						
Dry Matter (%)	87.1						
Moisture (%)	14.8						
Stage 1							
Volume Eluate L2 (litres)	0.32						
Filtered Eluate VE1 (litres)	0.13						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and DETS Ltd cannot be held responsible for any discrepencies with current legislation
M Denotes MCERTS accredited test
U Denotes ISO17025 accredited test

DETS Ltd
1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Waste Acceptance Criteria Analytical Certificate - BS EN 12457/3

DETS Report No: 19-08042		**Date Sampled**	29/05/19			**Landfill Waste Acceptance Criteria Limits**		
Your Environment		**Time Sampled**	None Supplied			**Inert Waste Landfill**	**Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Site Reference: Longcross		**TP / BH No**	WS10					
Project / Job Ref: YE7150		**Additional Refs**	None Supplied					
Order No: None Supplied		**Depth (m)**	0.30					
Reporting Date: 13/06/2019		**DETS Sample No**	413118					
Determinand	**Unit**	**MDL**						
TOC[MU]	%	< 0.1	1.3			3%	5%	6%
Loss on Ignition	%	< 0.01	2.70			--	--	10%
BTEX[MU]	mg/kg	< 0.05	< 0.05			6	--	--
Sum of PCBs	mg/kg	< 0.1	< 0.1			1	--	--
Mineral Oil[MU]	mg/kg	< 10	< 10			500	--	--
Total PAH[MU]	mg/kg	< 1.7	< 1.7			100	--	--
pH[MU]	pH Units	N/a	5.3			--	>6	--
Acid Neutralisation Capacity	mol/kg (+/-)	< 1	< 1			--	To be evaluated	To be evaluated

Eluate Analysis	**2:1 mg/l**	**8:1 mg/l**		**Cumulative 10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)**		
Arsenic[U]	< 0.01	< 0.01		< 0.2	0.5	2	25
Barium[U]	< 0.02	< 0.02		< 0.1	20	100	300
Cadmium[U]	< 0.0005	< 0.0005		< 0.02	0.04	1	5
Chromium[U]	< 0.005	< 0.005		< 0.20	0.5	10	70
Copper[U]	< 0.01	< 0.01		< 0.5	2	50	100
Mercury[U]	< 0.005	< 0.005		< 0.01	0.01	0.2	2
Molybdenum[U]	< 0.001	< 0.001		< 0.1	0.5	10	30
Nickel[U]	< 0.007	< 0.007		< 0.2	0.4	10	40
Lead[U]	< 0.005	< 0.005		< 0.2	0.5	10	50
Antimony[U]	< 0.006	< 0.006		< 0.06	0.06	0.7	5
Selenium[U]	< 0.005	< 0.005		< 0.1	0.1	0.5	7
Zinc[U]	0.006	< 0.005		< 0.2	4	50	200
Chloride[U]	3	1		< 12	800	15000	25000
Fluoride[U]	< 0.5	< 0.5		< 1	10	150	500
Sulphate[U]	3	< 1		< 20	1000	20000	50000
TDS	26	29		288	4000	60000	100000
Phenol Index	0.02	< 0.01		< 0.5	1	-	-
DOC	10.7	11.1		111	500	800	1000
Leach Test Information							
Sample Mass (kg)	0.19						
Dry Matter (%)	90.6						
Moisture (%)	10.4						
Stage 1							
Volume Eluate L2 (litres)	0.33						
Filtered Eluate VE1 (litres)	0.11						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and DETS Ltd cannot be held responsible for any discrepencies with current legislation
M Denotes MCERTS accredited test
U Denotes ISO17025 accredited test

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

UKAS TESTING
4480

Bulk Analysis Certificate						
DETS Report No: 19-08042	**Date Sampled**	30/05/19				
Your Environment	**Time Sampled**	None Supplied				
Site Reference: Longcross	**TP / BH No**	WS05 - ACM				
Project / Job Ref: YE7150	**Additional Refs**	None Supplied				
Order No: None Supplied	**Depth (m)**	0.30				
Reporting Date: 13/06/2019	**DETS Sample No**	413113				

Determinand	**Unit**	**RL**	**Accreditation**					
Asbestos Type (S)	PLM Result	N/a	**ISO17025**	Chrysotile/Amosite				
Sample Matrix (S)	Material Type	N/a	NONE	Board				

The samples have been examined to identify the presence of asbestiform minerals by polarising light microscopy and dispersion staining technique to In-House Procedures QTSE600 Determination of Asbestos in Bulk Materials; Asbestos in Soils/Sediments (fibre screening and identification) that is in accordance with the Health and Safety Executive HSG 248 Appendix 2.

This report refers to samples as received, and QTS Environmental Ltd, takes no responsibility for the accuracy or competence of sampling by others.

The material description shall be regarded as tentative and is not included in our scope of UKAS Accreditation.

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.

RL: Reporting Limit

Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 19-08042	
Your Environment	
Site Reference: Longcross	
Project / Job Ref: YE7150	
Order No: None Supplied	
Reporting Date: 13/06/2019	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
413106	HP01	None Supplied	0.50	12	Brown loamy sand with stones
413107	HP02	None Supplied	0.15	6.1	Brown loamy sand with stones and vegetation
413108	HP04b	None Supplied	0.20	12.9	Brown loamy sand
413109	HP04c	None Supplied	0.80	6.5	Brown loamy sand with stones and vegetation
413111	WS03	None Supplied	0.70	3.6	Brown loamy sand with stones and concrete
413112	WS05	None Supplied	0.30	5.6	Brown loamy sand with stones and vegetation
413118	WS10	None Supplied	0.30	9.4	Brown loamy sand with vegetation and brick

Moisture content is part of procedure E003 & is not an accredited test
Insufficient Sample I/S
Unsuitable Sample U/S

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 19-08042
Your Environment
Site Reference: Longcross
Project / Job Ref: YE7150
Order No: None Supplied
Reporting Date: 13/06/2019

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10 C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

Matt Griffiths
Your Environment
Chilgrove Business Centre
Chilgrove Park Road
Chilgrove
Chichester
West Sussex
PO18 9HU

DETS Ltd
Unit 1
Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Kent
ME17 2JN
t: 01622 850410

DETS Report No: 19-08088

Site Reference:	Longcross
Project / Job Ref:	YE7150
Order No:	None Supplied
Sample Receipt Date:	07/06/2019
Sample Scheduled Date:	07/06/2019
Report Issue Number:	1
Reporting Date:	13/06/2019

Authorised by:

Dave Ashworth
Deputy Quality Manager

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate						
DETS Report No: 19-08088	**Date Sampled**	30/05/19	30/05/19	31/05/19	29/05/19	29/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	WS01	WS06	WS07a	WS08	WS09
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.30	0.30	0.30	1.00
Reporting Date: 13/06/2019	**DETS Sample No**	413333	413334	413335	413336	413337

Determinand	Unit	RL	Accreditation					
Asbestos Screen (S)	N/a	N/a	ISO17025	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
pH	pH Units	N/a	MCERTS	9.6	7.8	9.6	8.4	5.1
Total Cyanide	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
W/S Sulphate as SO_4 (2:1)	mg/l	< 10	MCERTS	51	28	59	1230	83
W/S Sulphate as SO_4 (2:1)	g/l	< 0.01	MCERTS	0.05	0.03	0.06	1.23	0.08
Organic Matter	%	< 0.1	MCERTS	0.8	1.3	0.2	0.6	0.5
Arsenic (As)	mg/kg	< 2	MCERTS	8	9	< 2	9	8
Cadmium (Cd)	mg/kg	< 0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (Cr)	mg/kg	< 2	MCERTS	13	16	4	18	15
Chromium (hexavalent)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2
Copper (Cu)	mg/kg	< 4	MCERTS	7	9	< 4	11	5
Lead (Pb)	mg/kg	< 3	MCERTS	10	17	8	27	8
Mercury (Hg)	mg/kg	< 1	NONE	< 1	< 1	< 1	< 1	< 1
Nickel (Ni)	mg/kg	< 3	MCERTS	7	11	< 3	9	5
Selenium (Se)	mg/kg	< 3	NONE	< 3	< 3	< 3	< 3	< 3
Zinc (Zn)	mg/kg	< 3	MCERTS	26	34	5	849	34
Total Phenols (monohydric)	mg/kg	< 2	NONE	< 2	< 2	< 2	< 2	< 2

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30°C
Subcontracted analysis (S)

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Speciated PAHs						
DETS Report No: 19-08088	**Date Sampled**	30/05/19	30/05/19	31/05/19	29/05/19	29/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	WS01	WS06	WS07a	WS08	WS09
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.30	0.30	0.30	1.00
Reporting Date: 13/06/2019	**DETS Sample No**	413333	413334	413335	413336	413337

Determinand	Unit	RL	Accreditation					
Naphthalene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	0.22	< 0.1
Acenaphthylene	mg/kg	< 0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthene	mg/kg	< 0.1	MCERTS	0.31	< 0.1	< 0.1	< 0.1	< 0.1
Fluorene	mg/kg	< 0.1	MCERTS	0.31	< 0.1	< 0.1	< 0.1	< 0.1
Phenanthrene	mg/kg	< 0.1	MCERTS	2.46	< 0.1	0.14	0.39	< 0.1
Anthracene	mg/kg	< 0.1	MCERTS	0.71	< 0.1	< 0.1	< 0.1	< 0.1
Fluoranthene	mg/kg	< 0.1	MCERTS	5.78	0.11	0.19	0.92	< 0.1
Pyrene	mg/kg	< 0.1	MCERTS	4.24	< 0.1	0.14	0.81	< 0.1
Benzo(a)anthracene	mg/kg	< 0.1	MCERTS	2.63	< 0.1	< 0.1	0.50	< 0.1
Chrysene	mg/kg	< 0.1	MCERTS	2.38	< 0.1	< 0.1	0.56	< 0.1
Benzo(b)fluoranthene	mg/kg	< 0.1	MCERTS	3.32	0.20	< 0.1	0.73	< 0.1
Benzo(k)fluoranthene	mg/kg	< 0.1	MCERTS	1.08	< 0.1	< 0.1	0.24	< 0.1
Benzo(a)pyrene	mg/kg	< 0.1	MCERTS	2.33	0.11	< 0.1	0.49	< 0.1
Indeno(1,2,3-cd)pyrene	mg/kg	< 0.1	MCERTS	1.57	0.12	< 0.1	0.31	< 0.1
Dibenz(a,h)anthracene	mg/kg	< 0.1	MCERTS	0.34	< 0.1	< 0.1	< 0.1	< 0.1
Benzo(ghi)perylene	mg/kg	< 0.1	MCERTS	1.40	0.13	< 0.1	0.28	< 0.1
Total EPA-16 PAHs	mg/kg	< 1.6	MCERTS	28.9	< 1.6	< 1.6	5.5	< 1.6

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{o}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - TPH CWG Banded						
DETS Report No: 19-08088	**Date Sampled**	30/05/19	30/05/19	31/05/19	29/05/19	29/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	WS01	WS06	WS07a	WS08	WS09
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.30	0.30	0.30	1.00
Reporting Date: 13/06/2019	**DETS Sample No**	413333	413334	413335	413336	413337

Determinand	Unit	RL	Accreditation					
Aliphatic >C5 - C6	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >C6 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aliphatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aliphatic >C12 - C16	mg/kg	< 3	MCERTS	< 3	< 3	< 3	< 3	< 3
Aliphatic >C16 - C21	mg/kg	< 3	MCERTS	< 3	3	< 3	< 3	< 3
Aliphatic >C21 - C34	mg/kg	< 10	MCERTS	< 10	339	86	< 10	< 10
Aliphatic (C5 - C34)	mg/kg	< 21	NONE	< 21	342	86	< 21	< 21
Aromatic >C5 - C7	mg/kg	< 0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C7 - C8	mg/kg	< 0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aromatic >C8 - C10	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C10 - C12	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C12 - C16	mg/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Aromatic >C16 - C21	mg/kg	< 3	MCERTS	14	< 3	< 3	< 3	< 3
Aromatic >C21 - C35	mg/kg	< 10	MCERTS	64	105	13	< 10	< 10
Aromatic (C5 - C35)	mg/kg	< 21	NONE	79	105	< 21	< 21	< 21
Total >C5 - C35	mg/kg	< 42	NONE	79	447	99	< 42	< 42

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - BTEX / MTBE						
DETS Report No: 19-08088	**Date Sampled**	30/05/19	30/05/19	31/05/19	29/05/19	29/05/19
Your Environment	**Time Sampled**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Site Reference: Longcross	**TP / BH No**	WS01	WS06	WS07a	WS08	WS09
Project / Job Ref: YE7150	**Additional Refs**	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Order No: None Supplied	**Depth (m)**	0.50	0.30	0.30	0.30	1.00
Reporting Date: 13/06/2019	**DETS Sample No**	413333	413334	413335	413336	413337

Determinand	Unit	RL	Accreditation					
Benzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
Toluene	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5
Ethylbenzene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
p & m-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
o-xylene	ug/kg	< 2	MCERTS	< 2	< 2	< 2	< 2	< 2
MTBE	ug/kg	< 5	MCERTS	< 5	< 5	< 5	< 5	< 5

Analytical results are expressed on a dry weight basis where samples are assisted-dried at less than 30^{O}C

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

Soil Analysis Certificate - Sample Descriptions	
DETS Report No: 19-08088	
Your Environment	
Site Reference: Longcross	
Project / Job Ref: YE7150	
Order No: None Supplied	
Reporting Date: 13/06/2019	

DETS Sample No	TP / BH No	Additional Refs	Depth (m)	Moisture Content (%)	Sample Matrix Description
413333	WS01	None Supplied	0.50	7.2	Brown loamy sand with stones and concrete
413334	WS06	None Supplied	0.30	6.5	Brown loamy sand with stones and concrete
413335	WS07a	None Supplied	0.30	14.6	Beige sandy clay
413336	WS08	None Supplied	0.30	8.7	Brown loamy sand with brick and concrete
413337	WS09	None Supplied	1.00	7.1	Brown loamy sand with stones

Moisture content is part of procedure E003 & is not an accredited test
Insufficient Sample I/S
Unsuitable Sample U/S

DETS Ltd
Unit 1, Rose Lane Industrial Estate
Rose Lane
Lenham Heath
Maidstone
Kent ME17 2JN
Tel : 01622 850410

4480

Soil Analysis Certificate - Methodology & Miscellaneous Information
DETS Report No: 19-08088
Your Environment
Site Reference: Longcross
Project / Job Ref: YE7150
Order No: None Supplied
Reporting Date: 13/06/2019

Matrix	Analysed On	Determinand	Brief Method Description	Method No
Soil	D	Boron - Water Soluble	Determination of water soluble boron in soil by 2:1 hot water extract followed by ICP-OES	E012
Soil	AR	BTEX	Determination of BTEX by headspace GC-MS	E001
Soil	D	Cations	Determination of cations in soil by aqua-regia digestion followed by ICP-OES	E002
Soil	D	Chloride - Water Soluble (2:1)	Determination of chloride by extraction with water & analysed by ion chromatography	E009
Soil	AR	Chromium - Hexavalent	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry	E016
Soil	AR	Cyanide - Complex	Determination of complex cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Free	Determination of free cyanide by distillation followed by colorimetry	E015
Soil	AR	Cyanide - Total	Determination of total cyanide by distillation followed by colorimetry	E015
Soil	D	Cyclohexane Extractable Matter (CEM)	Gravimetrically determined through extraction with cyclohexane	E011
Soil	AR	Diesel Range Organics (C10 - C24)	Determination of hexane/acetone extractable hydrocarbons by GC-FID	E004
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of saturated calcium sulphate followed by electrometric measurement	E022
Soil	AR	Electrical Conductivity	Determination of electrical conductivity by addition of water followed by electrometric measurement	E023
Soil	D	Elemental Sulphur	Determination of elemental sulphur by solvent extraction followed by GC-MS	E020
Soil	AR	EPH (C10 – C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH Product ID	Determination of acetone/hexane extractable hydrocarbons by GC-FID	E004
Soil	AR	EPH TEXAS (C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C40)	Determination of acetone/hexane extractable hydrocarbons by GC-FID for C8 to C40. C6 to C8 by headspace GC-MS	E004
Soil	D	Fluoride - Water Soluble	Determination of Fluoride by extraction with water & analysed by ion chromatography	E009
Soil	D	FOC (Fraction Organic Carbon)	Determination of fraction of organic carbon by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	D	Loss on Ignition @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	E019
Soil	D	Magnesium - Water Soluble	Determination of water soluble magnesium by extraction with water followed by ICP-OES	E025
Soil	D	Metals	Determination of metals by aqua-regia digestion followed by ICP-OES	E002
Soil	AR	Mineral Oil (C10 - C40)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge	E004
Soil	AR	Moisture Content	Moisture content; determined gravimetrically	E003
Soil	D	Nitrate - Water Soluble (2:1)	Determination of nitrate by extraction with water & analysed by ion chromatography	E009
Soil	D	Organic Matter	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	PAH - Speciated (EPA 16)	Determination of PAH compounds by extraction in acetone and hexane followed by GC-MS with the use of surrogate and internal standards	E005
Soil	AR	PCB - 7 Congeners	Determination of PCB by extraction with acetone and hexane followed by GC-MS	E008
Soil	D	Petroleum Ether Extract (PEE)	Gravimetrically determined through extraction with petroleum ether	E011
Soil	AR	pH	Determination of pH by addition of water followed by electrometric measurement	E007
Soil	AR	Phenols - Total (monohydric)	Determination of phenols by distillation followed by colorimetry	E021
Soil	D	Phosphate - Water Soluble (2:1)	Determination of phosphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Total	Determination of total sulphate by extraction with 10% HCl followed by ICP-OES	E013
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of sulphate by extraction with water & analysed by ion chromatography	E009
Soil	D	Sulphate (as SO4) - Water Soluble (2:1)	Determination of water soluble sulphate by extraction with water followed by ICP-OES	E014
Soil	AR	Sulphide	Determination of sulphide by distillation followed by colorimetry	E018
Soil	D	Sulphur - Total	Determination of total sulphur by extraction with aqua-regia followed by ICP-OES	E024
Soil	AR	SVOC	Determination of semi-volatile organic compounds by extraction in acetone and hexane followed by GC-MS	E006
Soil	AR	Thiocyanate (as SCN)	Determination of thiocyanate by extraction in caustic soda followed by acidification followed by addition of ferric nitrate followed by colorimetry	E017
Soil	D	Toluene Extractable Matter (TEM)	Gravimetrically determined through extraction with toluene	E011
Soil	D	Total Organic Carbon (TOC)	Determination of organic matter by oxidising with potassium dichromate followed by titration with iron (II) sulphate	E010
Soil	AR	TPH CWG (ali: C5- C6, C6-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C34, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C35. C5 to C8 by headspace GC-MS	E004
Soil	AR	TPH LQM (ali: C5-C6, C6-C8, C8-C10, C10 C12, C12-C16, C16-C35, C35-C44, aro: C5-C7, C7-C8, C8-C10, C10-C12, C12-C16, C16-C21, C21-C35, C35-C44)	Determination of hexane/acetone extractable hydrocarbons by GC-FID fractionating with SPE cartridge for C8 to C44. C5 to C8 by headspace GC-MS	E004
Soil	AR	VOCs	Determination of volatile organic compounds by headspace GC-MS	E001
Soil	AR	VPH (C6-C8 & C8-C10)	Determination of hydrocarbons C6-C8 by headspace GC-MS & C8-C10 by GC-FID	E001

D Dried
AR As Received

Charlie Knox
Paragon New Homes Ltd
The Harlequin Building
65 Southwark Street
London
SE1 0HR

e: charlieknox@paragonbc.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-16622

Replaces Analytical Report Number : 20-16622, issue no. 1

Client references/information amended.

Project / Site name:	Longcross	**Samples received on:**	24/06/2020
Your job number:	200576	**Sample instructed/ Analysis started on:**	28/06/2020
Your order number:	200576_CK	**Analysis completed by:**	09/07/2020
Report Issue Number:	2	**Report issued on:**	09/07/2020
Samples Analysed:	18 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546973	1546974	1546975	1546976	1546977
Sample Reference				WS1	WS1	WS2	WS3	WS4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	2.00	0.50	0.30	0.50
Date Sampled				23/06/2020	23/06/2020	23/06/2020	23/06/2020	23/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	5.4	9.0	6.0	11	8.3
Total mass of sample received	kg	0.001	NONE	0.70	0.70	0.70	0.70	0.70
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	8.5	7.7	8.0	6.1	8.8
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	50	MCERTS	810	110	280	240	720
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.14	0.0078	0.058	0.084	0.30
Sulphide	mg/kg	1	MCERTS	13	1.5	< 1.0	< 1.0	3.9
Organic Matter	%	0.1	MCERTS	6.3	0.3	1.2	0.3	0.8
Total Organic Carbon (TOC)	%	0.1	MCERTS	3.6	0.2	0.7	0.2	0.5
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.23	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.26	< 0.05	< 0.05	< 0.05	1.9
Phenanthrene	mg/kg	0.05	MCERTS	2.0	< 0.05	0.53	0.30	5.4
Anthracene	mg/kg	0.05	MCERTS	0.56	< 0.05	0.31	0.11	2.4
Fluoranthene	mg/kg	0.05	MCERTS	3.5	< 0.05	2.5	0.60	12
Pyrene	mg/kg	0.05	MCERTS	3.6	< 0.05	2.3	0.48	8.0
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.8	< 0.05	2.0	0.34	4.9
Chrysene	mg/kg	0.05	MCERTS	1.7	< 0.05	1.5	0.30	5.0
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	2.1	< 0.05	2.6	0.29	4.1
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	1.4	< 0.05	1.3	0.25	2.4
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.7	< 0.05	1.7	0.26	3.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.78	< 0.05	1.2	< 0.05	1.5
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.26	< 0.05	0.58
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	< 0.05	1.3	< 0.05	1.6
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	20.7	< 0.80	17.5	2.93	53.1
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.0	1.9	9.1	5.3	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	< 0.2	< 0.2	0.4	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	17	20	30	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	31	21	7.1	10
Lead (aqua regia extractable)	mg/kg	1	MCERTS	44	10	33	7.2	35
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	9.2	11	6.5	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	86	17	56	15	47

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546973	1546974	1546975	1546976	1546977
Sample Reference				WS1	WS1	WS2	WS3	WS4
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	2.00	0.50	0.30	0.50
Date Sampled				23/06/2020	23/06/2020	23/06/2020	23/06/2020	23/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	3800	< 10	90	< 10	640
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.8	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	25	< 2.0	< 2.0	< 2.0	62
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	83	< 8.0	< 8.0	< 8.0	87
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	560	< 8.0	< 8.0	< 8.0	49
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	670	< 10	< 10	< 10	200
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	1.9	< 1.0	< 1.0	< 1.0	2.9
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	28	< 2.0	2.8	< 2.0	64
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	170	< 10	16	< 10	160
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	1600	< 10	72	< 10	220
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	1800	< 10	90	< 10	440

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546978	1546979	1546980	1546981	1546982
Sample Reference				WS5	WS6	WS6	WS7	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	0.70	4.00	0.50	2.5
Date Sampled				23/06/2020	23/06/2020	23/06/2020	23/06/2020	23/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	10	16	9.3	2.5	11
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	4.5	7.7	8.7	9.2	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	50	MCERTS	160	250	1500	380	59
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.064	0.10	0.054	0.082	0.0090
Sulphide	mg/kg	1	MCERTS	3.9	< 1.0	1.4	1.0	2.3
Organic Matter	%	0.1	MCERTS	0.2	0.2	0.2	2.0	0.4
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.1	0.1	< 0.1	1.2	0.3
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	2.3	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.67	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	3.5	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	3.4	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	2.4	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.9	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	2.3	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.9	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.90	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.25	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.1	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	21.7	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.4	4.9	3.1	7.0	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.5	< 0.2	0.5	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	38	26	16	18	33
Copper (aqua regia extractable)	mg/kg	1	MCERTS	4.2	5.3	4.5	59	4.3
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.8	6.3	8.1	17	4.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	6.1	4.4	15	8.5
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	26	13	5.2	29	13

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546978	1546979	1546980	1546981	1546982
Sample Reference				WS5	WS6	WS6	WS7	WS7
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	0.70	4.00	0.50	2.5
Date Sampled				23/06/2020	23/06/2020	23/06/2020	23/06/2020	23/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	73	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	2.1	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	6.3	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	20	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	45	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	73	< 10

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546983	1546984	1546985	1546986	1546987
Sample Reference				WS8	WS8	WS9	WS9	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.50	1.50	3.50	1.00
Date Sampled				23/06/2020	23/06/2020	23/06/2020	23/06/2020	23/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	5.1	9.3	11	7.4	16
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.0	1.0	1.0
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	5.2	4.3	4.6	5.5	4.7
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO_4	mg/kg	50	MCERTS	190	290	150	220	250
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.020	0.045	0.048	0.035	0.067
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	1.0
Organic Matter	%	0.1	MCERTS	1.6	0.3	0.2	0.2	0.2
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.9	0.2	0.1	0.1	0.1
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.1	51	7.0	2.1	2.0
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.7	< 0.2	0.3	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	57	27	13	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	5.1	18	5.2	7.6	6.4
Lead (aqua regia extractable)	mg/kg	1	MCERTS	6.3	19	6.5	5.8	6.6
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	19	7.6	4.9	7.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	8.5	38	14	5.1	3.3

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546983	1546984	1546985	1546986	1546987
Sample Reference				WS8	WS8	WS9	WS9	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	1.50	1.50	3.50	1.00
Date Sampled				23/06/2020	23/06/2020	23/06/2020	23/06/2020	23/06/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546988	1546989	1546990		
Sample Reference				WS10	TR03	TR12		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				2.00	0.30	0.80		
Date Sampled				23/06/2020	23/06/2020	23/06/2020		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1		
Moisture Content	%	N/A	NONE	11	8.9	14		
Total mass of sample received	kg	0.001	NONE	1.0	1.0	1.5		
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected		
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	5.0	5.1	7.5		
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1		
Total Sulphate as SO_4	mg/kg	50	MCERTS	240	250	2400		
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.029	0.045	1.4		
Sulphide	mg/kg	1	MCERTS	< 1.0	< 1.0	91		
Organic Matter	%	0.1	MCERTS	0.2	0.2	5.5		
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.1	0.1	3.2		
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05		
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.25		
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.0		
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.59		
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	3.4		
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	3.0		
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.0		
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.8		
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.6		
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.2		
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3		
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.68		
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.27		
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.82		
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80	18.9		
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	17	12		
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.4	0.9		
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2		
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	26	38		
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	13	120		
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.3	6.4	50		
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.0	9.0	68		
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	8.3	< 1.0	< 1.0		
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	6.3	22	150		

Analytical Report Number: 20-16622

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1546988	1546989	1546990		
Sample Reference				WS10	TR03	TR12		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				2.00	0.30	0.80		
Date Sampled				23/06/2020	23/06/2020	23/06/2020		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		

Petroleum Hydrocarbons

TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10	43		
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0		
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0		
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0		
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10		
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001	< 0.001		
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0		
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10		
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	34		
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	43		

Analytical Report Number : 20-16622

Project / Site name: Longcross

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1546973	WS1	None Supplied	0.50	Brown loam and clay with gravel and vegetation.
1546974	WS1	None Supplied	2.00	Brown sand with gravel.
1546975	WS2	None Supplied	0.50	Brown loam and clay with gravel and vegetation.
1546976	WS3	None Supplied	0.30	Brown sand.
1546977	WS4	None Supplied	0.50	Brown sand with brick.
1546978	WS5	None Supplied	1.00	Brown sand.
1546979	WS6	None Supplied	0.70	Grey sand.
1546980	WS6	None Supplied	4.00	Brown sand.
1546981	WS7	None Supplied	0.50	Brown sand with gravel.
1546982	WS7	None Supplied	2.5	Brown sand.
1546983	WS8	None Supplied	0.50	Brown sand with gravel.
1546984	WS8	None Supplied	1.50	Brown clay.
1546985	WS9	None Supplied	1.50	Brown clay.
1546986	WS9	None Supplied	3.50	Brown sand.
1546987	WS10	None Supplied	1.00	Brown sand.
1546988	WS10	None Supplied	2.00	Brown sand.
1546989	TR03	None Supplied	0.30	Brown sand with gravel.
1546990	TR12	None Supplied	0.80	Grey sand with gravel.

Analytical Report Number : 20-16622

Project / Site name: Longcross

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 20-16622

Project / Site name: Longcross

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Charlie Knox
Paragon New Homes Ltd
The Harlequin Building
65 Southwark Street
London
SE1 0HR

e: charlieknox@paragonbc.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-17560

Project / Site name:	Longcross	**Samples received on:**	30/06/2020
Your job number:	200576	**Sample instructed/ Analysis started on:**	01/07/2020
Your order number:	200576_CK	**Analysis completed by:**	10/07/2020
Report Issue Number:	1	**Report issued on:**	10/07/2020
Samples Analysed:	2 soil samples		

Signed: Karolina Marek

Karolina Marek
PL Head of Reporting Team

For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

Analytical Report Number: 20-17560

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1551916	1551917			
Sample Reference				TR01	TR01			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.25	1.00-1.50			
Date Sampled				29/06/2020	29/06/2020			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1			
Moisture Content	%	N/A	NONE	11	11			
Total mass of sample received	kg	0.001	NONE	1.0	1.0			
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected			
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.7	4.9			
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1			
Total Sulphate as SO_4	mg/kg	50	MCERTS	580	330			
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.10	0.040			
Sulphide	mg/kg	1	MCERTS	2.5	< 1.0			
Organic Matter	%	0.1	MCERTS	0.6	0.1			
Total Organic Carbon (TOC)	%	0.1	MCERTS	0.3	< 0.1			
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0			
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.06	< 0.05			
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	< 0.80	< 0.80			
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.5	2.3			
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	0.4			
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	11			
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	6.3			
Lead (aqua regia extractable)	mg/kg	1	MCERTS	72	7.8			
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	3.5			
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0			
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	26	7.7			

Analytical Report Number: 20-17560

Project / Site name: Longcross
Your Order No: 200576_CK

Lab Sample Number				1551916	1551917			
Sample Reference				TR01	TR01			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.25	1.00-1.50			
Date Sampled				29/06/2020	29/06/2020			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0			
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0			
Petroleum Hydrocarbons								
TPH C10 - C40	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.001	MCERTS	< 0.001	< 0.001			
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001			
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001			
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0			
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0			
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0			
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0			
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.001	MCERTS	< 0.001	< 0.001			
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.001	MCERTS	< 0.001	< 0.001			
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.001	MCERTS	< 0.001	< 0.001			
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0			
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0			
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10			

Analytical Report Number : 20-17560

Project / Site name: Longcross

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

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

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1551916	TR01	None Supplied	0.25	Brown sand with gravel and brick.
1551917	TR01	None Supplied	1.00-1.50	Light brown sand.

Analytical Report Number : 20-17560

Project / Site name: Longcross

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS

Analytical Report Number : 20-17560

Project / Site name: Longcross

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Charlie Knox
Paragon New Homes Ltd
The Harlequin Building
65 Southwark Street
London
SE1 0HR

e: charlieknox@paragonbc.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-18271

Project / Site name:	Longcross	**Samples received on:**	08/07/2020
Your job number:	200576	**Sample instructed/ Analysis started on:**	09/07/2020
Your order number:	200576	**Analysis completed by:**	17/07/2020
Report Issue Number:	1	**Report issued on:**	17/07/2020
Samples Analysed:	1 water sample		

Signed: A. Czerwińska

Agnieszka Czerwińska

Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

Analytical Report Number: 20-18271

Project / Site name: Longcross

Your Order No: 200576

Lab Sample Number				1555833				
Sample Reference				BH05				
Sample Number				None Supplied				
Depth (m)				7.07				
Date Sampled				07/07/2020				
Time Taken				1315				
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	6.3				
Total Cyanide	µg/l	10	ISO 17025	< 10				
Sulphate as SO_4	µg/l	45	ISO 17025	20000				
Sulphide	µg/l	5	NONE	< 5.0				
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	2.06				
Hardness - Total	mgCaCO3/l	1	ISO 17025	314				
Total Phenols								
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10				
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01				
Fluorene	µg/l	0.01	ISO 17025	< 0.01				
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01				
Anthracene	µg/l	0.01	ISO 17025	< 0.01				
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Pyrene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01				
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16				
Heavy Metals / Metalloids								
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.24				
Boron (dissolved)	µg/l	10	ISO 17025	51				
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.19				
Calcium (dissolved)	mg/l	0.012	ISO 17025	96				
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Copper (dissolved)	µg/l	0.5	ISO 17025	1.1				
Lead (dissolved)	µg/l	0.2	ISO 17025	0.5				
Magnesium (dissolved)	mg/l	0.005	ISO 17025	18				
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05				
Nickel (dissolved)	µg/l	0.5	ISO 17025	28				
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.7				
Zinc (dissolved)	µg/l	0.5	ISO 17025	20				
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0				
Toluene	µg/l	1	ISO 17025	< 1.0				
Ethylbenzene	µg/l	1	ISO 17025	< 1.0				
p & m-xylene	µg/l	1	ISO 17025	< 1.0				
o-xylene	µg/l	1	ISO 17025	< 1.0				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0				

Analytical Report Number: 20-18271

Project / Site name: Longcross

Your Order No: 200576

Lab Sample Number				1555833				
Sample Reference				BH05				
Sample Number				None Supplied				
Depth (m)				7.07				
Date Sampled				07/07/2020				
Time Taken				1315				
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Petroleum Hydrocarbons								
TPH1 (C10 - C40)	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10				

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 20-18271

Project / Site name: Longcross

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Charlie Knox
Paragon New Homes Ltd
7 Swallow Place
London
W1B 2AG

e: charlieknox@paragonbc.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-19675

Project / Site name:	Longcross	**Samples received on:**	16/07/2020
Your job number:	200576	**Sample instructed/ Analysis started on:**	16/07/2020
Your order number:	200576	**Analysis completed by:**	27/07/2020
Report Issue Number:	1	**Report issued on:**	27/07/2020
Samples Analysed:	1 water sample		

Signed: A. Czerwińska

Agnieszka Czerwińska

Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

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

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

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

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

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

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

Analytical Report Number: 20-19675

Project / Site name: Longcross

Your Order No: 200576

Lab Sample Number				1564112				
Sample Reference				BH06				
Sample Number				None Supplied				
Depth (m)				13.53				
Date Sampled				15/07/2020				
Time Taken				None Supplied				
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
General Inorganics								
pH	pH Units	N/A	ISO 17025	6.1				
Total Cyanide	µg/l	10	ISO 17025	< 10				
Sulphate as SO_4	µg/l	45	ISO 17025	18700				
Sulphide	µg/l	5	NONE	< 5.0				
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	1.99				
Hardness - Total	mgCaCO3/l	1	ISO 17025	234				
Total Phenols								
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10				
Speciated PAHs								
Naphthalene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01				
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01				
Fluorene	µg/l	0.01	ISO 17025	< 0.01				
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01				
Anthracene	µg/l	0.01	ISO 17025	< 0.01				
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Pyrene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Chrysene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01				
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01				
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01				
Total PAH								
Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16				
Heavy Metals / Metalloids								
Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.35				
Boron (dissolved)	µg/l	10	ISO 17025	53				
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.12				
Calcium (dissolved)	mg/l	0.012	ISO 17025	70				
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Copper (dissolved)	µg/l	0.5	ISO 17025	1.0				
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2				
Magnesium (dissolved)	mg/l	0.005	ISO 17025	14				
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05				
Nickel (dissolved)	µg/l	0.5	ISO 17025	20				
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.6				
Zinc (dissolved)	µg/l	0.5	ISO 17025	8.9				

Analytical Report Number: 20-19675

Project / Site name: Longcross

Your Order No: 200576

Lab Sample Number				1564112				
Sample Reference				BH06				
Sample Number				None Supplied				
Depth (m)				13.53				
Date Sampled				15/07/2020				
Time Taken				None Supplied				
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics & Oxygenates								
Benzene	µg/l	1	ISO 17025	< 1.0				
Toluene	µg/l	1	ISO 17025	< 1.0				
Ethylbenzene	µg/l	1	ISO 17025	< 1.0				
p & m-xylene	µg/l	1	ISO 17025	< 1.0				
o-xylene	µg/l	1	ISO 17025	< 1.0				
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0				
Petroleum Hydrocarbons								
TPH1 (C10 - C40)	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C5 - C6	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C6 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C5 - C7	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C7 - C8	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C8 - C10	µg/l	1	ISO 17025	< 1.0				
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10				
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10				

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 20-19675

Project / Site name: Longcross

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Boron in water	Determination of boron in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM	L039-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW, PrW.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total Hardness of water	Determination of hardness in waters by calculation from calcium and magnesium. Accredited Matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L045-PL	W	ISO 17025
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser. Accredited matrices: SW PW GW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Waste Classification Report

482NQ-GDZXC-6U3GJ

Job name

YE7150

Description/Comments

Project

YE7150

Site

Longcross

Related Documents

#	Name	Description
None		

Waste Stream Template

QTS Poplar

Classified by

Name:
Mathew Griffiths
Date:
Jun 2019
Telephone:
01243 787150

Company:
YourEnvironment

Report

Created by: Mathew Griffiths
Created date: 13 Jun 2019 15:38 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01	0.5	Potentially Hazardous	HP 3(i)	3
2	WS06	0.3	Potentially Hazardous	HP 3(i)	6
3	WS07a	0.3	Potentially Hazardous	HP 3(i)	9
4	WS08	0.3	Hazardous	HP 7	12
5	WS09	1	Non Hazardous		15
6	HP01	0.5	Potentially Hazardous	HP 3(i)	17
7	HP02	0.15	Non Hazardous		20
8	HP04b	0.2	Non Hazardous		22
9	HP04c	0.8	Potentially Hazardous	HP 3(i)	24
10	WS03	0.7	Potentially Hazardous	HP 3(i)	27
11	WS05	0.3	Non Hazardous		30

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
12	WS10	0.3	Non Hazardous		32

Classification of sample: WS01

Potentially Hazardous Waste
Classified as **17 05 04** or **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS01 (MG)
Sample Depth:
0.5 m
Moisture content:
7.2%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing hazardous substances)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00737%)

Determinands

Moisture content: 7.2% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		9.6 pH		9.6 pH	9.6 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.853 mg/kg	0.000985 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		13 mg/kg	1.462	17.724 mg/kg	0.00177 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		7 mg/kg	1.126	7.352 mg/kg	0.000735 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	10 mg/kg	1.56	14.551 mg/kg	0.000933 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		7 mg/kg	1.579	10.314 mg/kg	0.00103 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<3 mg/kg	2.554	<7.661 mg/kg	<0.000766 %		<**LOD**
11		zinc { zinc chromate } 024-007-00-3		26 mg/kg	2.774	67.283 mg/kg	0.00673 %	✓	
12		phenol 604-001-00-2 / 203-632-7 / 108-95-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
13		TPH (C6 to C40) petroleum group TPH		79 mg/kg		73.694 mg/kg	0.00737 %	✓	
14		naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
15		acenaphthylene 205-917-1 / 208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
16		acenaphthene 201-469-6 / 83-32-9		0.31 mg/kg		0.289 mg/kg	0.0000289 %	✓	
17		fluorene 201-695-5 / 86-73-7		0.31 mg/kg		0.289 mg/kg	0.0000289 %	✓	
18		phenanthrene 201-581-5 / 85-01-8		2.46 mg/kg		2.295 mg/kg	0.000229 %	✓	
19		anthracene 204-371-1 / 120-12-7		0.71 mg/kg		0.662 mg/kg	0.0000662 %	✓	
20		fluoranthene 205-912-4 / 206-44-0		5.78 mg/kg		5.392 mg/kg	0.000539 %	✓	
21		pyrene 204-927-3 / 129-00-0		4.24 mg/kg		3.955 mg/kg	0.000396 %	✓	
22		benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		2.63 mg/kg		2.453 mg/kg	0.000245 %	✓	
23		chrysene 601-048-00-0 / 205-923-4 / 218-01-9		2.38 mg/kg		2.22 mg/kg	0.000222 %	✓	
24		benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		3.32 mg/kg		3.097 mg/kg	0.00031 %	✓	
25		benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		1.08 mg/kg		1.007 mg/kg	0.000101 %	✓	
26		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		2.33 mg/kg		2.174 mg/kg	0.000217 %	✓	
27		indeno[123-cd]pyrene 205-893-2 / 193-39-5		1.57 mg/kg		1.465 mg/kg	0.000146 %	✓	
28		dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.34 mg/kg		0.317 mg/kg	0.0000317 %	✓	
29		benzo[ghi]perylene 205-883-8 / 191-24-2		1.4 mg/kg		1.306 mg/kg	0.000131 %	✓	
30		benzene 601-020-00-8 / 200-753-7 / 71-43-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
31		toluene 601-021-00-3 / 203-625-9 / 108-88-3		<5 mg/kg		<5 mg/kg	<0.0005 %		<**LOD**
32		ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
33		xylene 601-022-00-9 / 202-422-2 [1], 203-396-5 [2], 203-576-3 [3], 215-535-7 [4] / 95-47-6 [1], 106-42-3 [2], 108-38-3 [3], 1330-20-7 [4]		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
						Total:	0.0249 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Potentially Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06

Potentially Hazardous Waste
Classified as **17 05 04** or **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS06 (NAT)
Sample Depth:
0.3 m
Moisture content:
6.5%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing hazardous substances)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.042%)

Determinands

Moisture content: 6.5% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.8 pH		7.8 pH	7.8 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9 mg/kg	1.32	11.158 mg/kg	0.00112 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		16 mg/kg	1.462	21.958 mg/kg	0.0022 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9 mg/kg	1.126	9.515 mg/kg	0.000951 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.898 mg/kg	0.0016 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		11 mg/kg	1.579	16.314 mg/kg	0.00163 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<LOD
		034-002-00-8											
11		zinc { zinc chromate }				34	mg/kg	2.774	88.564	mg/kg	0.00886 %	✓	
		024-007-00-3											
12		phenol				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
13		TPH (C6 to C40) petroleum group				447	mg/kg		419.718	mg/kg	0.042 %	✓	
				TPH									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
15		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
16		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
17		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
19		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
20		fluoranthene				0.11	mg/kg		0.103	mg/kg	0.0000103 %	✓	
			205-912-4	206-44-0									
21		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
22		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.2	mg/kg		0.188	mg/kg	0.0000188 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.11	mg/kg		0.103	mg/kg	0.0000103 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27		indeno[123-cd]pyrene				0.12	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
29		benzo[ghi]perylene				0.13	mg/kg		0.122	mg/kg	0.0000122 %	✓	
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
32		ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0611 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Potentially Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS07a

Potentially Hazardous Waste
Classified as **17 05 04** or **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS07a (NAT)
Sample Depth:
0.3 m
Moisture content:
14.6%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing hazardous substances)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00864%)

Determinands

Moisture content: 14.6% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		9.6 pH		9.6 pH	9.6 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		<2 mg/kg	1.32	<2.641 mg/kg	<0.000264 %		<**LOD**
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		4 mg/kg	1.462	5.101 mg/kg	0.00051 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		<4 mg/kg	1.126	<4.504 mg/kg	<0.00045 %		<**LOD**
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	8 mg/kg	1.56	10.889 mg/kg	0.000698 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		<3 mg/kg	1.579	<4.738 mg/kg	<0.000474 %		<**LOD**

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<3 mg/kg	2.554	<7.661 mg/kg	<0.000766 %		<LOD
11		zinc { zinc chromate } 024-007-00-3		5 mg/kg	2.774	12.104 mg/kg	0.00121 %	✓	
12		phenol 604-001-00-2 / 203-632-7 / 108-95-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<LOD
13		TPH (C6 to C40) petroleum group TPH		99 mg/kg		86.387 mg/kg	0.00864 %	✓	
14		naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
15		acenaphthylene 205-917-1 / 208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
16		acenaphthene 201-469-6 / 83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
17		fluorene 201-695-5 / 86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
18		phenanthrene 201-581-5 / 85-01-8		0.14 mg/kg		0.122 mg/kg	0.0000122 %	✓	
19		anthracene 204-371-1 / 120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
20		fluoranthene 205-912-4 / 206-44-0		0.19 mg/kg		0.166 mg/kg	0.0000166 %	✓	
21		pyrene 204-927-3 / 129-00-0		0.14 mg/kg		0.122 mg/kg	0.0000122 %	✓	
22		benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23		chrysene 601-048-00-0 / 205-923-4 / 218-01-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24		benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25		benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27		indeno[123-cd]pyrene 205-893-2 / 193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28		dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29		benzo[ghi]perylene 205-883-8 / 191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30		benzene 601-020-00-8 / 200-753-7 / 71-43-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<LOD
31		toluene 601-021-00-3 / 203-625-9 / 108-88-3		<5 mg/kg		<5 mg/kg	<0.0005 %		<LOD
32		ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<2 mg/kg		<2 mg/kg	<0.0002 %		<LOD
33		xylene 601-022-00-9 / 202-422-2 [1], 203-396-5 [2], 203-576-3 [3], 215-535-7 [4] / 95-47-6 [1], 106-42-3 [2], 108-38-3 [3], 1330-20-7 [4]		<2 mg/kg		<2 mg/kg	<0.0002 %		<LOD
						Total:	0.015 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Potentially Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS08

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS08 (MG)
Sample Depth:
0.3 m
Moisture content:
8.7%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

zinc chromate: (compound conc.: 0.217%)

Determinands

Moisture content: 8.7% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		8.4 pH		8.4 pH	8.4 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9 mg/kg	1.32	10.932 mg/kg	0.00109 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		18 mg/kg	1.462	24.202 mg/kg	0.00242 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		11 mg/kg	1.126	11.394 mg/kg	0.00114 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	38.744 mg/kg	0.00248 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		9 mg/kg	1.579	13.078 mg/kg	0.00131 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
		034-002-00-8											
11		zinc { zinc chromate }				849	mg/kg	2.774	2166.744	mg/kg	0.217 %	✓	
		024-007-00-3											
12		phenol				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
13		TPH (C6 to C40) petroleum group				<42	mg/kg		<42	mg/kg	<0.0042 %		<**LOD**
				TPH									
14		naphthalene				0.22	mg/kg		0.202	mg/kg	0.0000202 %	✓	
		601-052-00-2	202-049-5	91-20-3									
15		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
16		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
17		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
18		phenanthrene				0.39	mg/kg		0.359	mg/kg	0.0000359 %	✓	
			201-581-5	85-01-8									
19		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
20		fluoranthene				0.92	mg/kg		0.846	mg/kg	0.0000846 %	✓	
			205-912-4	206-44-0									
21		pyrene				0.81	mg/kg		0.745	mg/kg	0.0000745 %	✓	
			204-927-3	129-00-0									
22		benzo[a]anthracene				0.5	mg/kg		0.46	mg/kg	0.000046 %	✓	
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				0.56	mg/kg		0.515	mg/kg	0.0000515 %	✓	
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.73	mg/kg		0.672	mg/kg	0.0000672 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				0.24	mg/kg		0.221	mg/kg	0.0000221 %	✓	
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.49	mg/kg		0.451	mg/kg	0.0000451 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27		indeno[123-cd]pyrene				0.31	mg/kg		0.285	mg/kg	0.0000285 %	✓	
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
29		benzo[ghi]perylene				0.28	mg/kg		0.258	mg/kg	0.0000258 %	✓	
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
32		ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.232 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS09 (NAT)
Sample Depth:
1 m
Moisture content:
7.1%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.1% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		5.1	pH		5.1	pH	5.1 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2	mg/kg	1.884	<3.768	mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8	mg/kg	1.32	9.862	mg/kg	0.000986 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		15	mg/kg	1.462	20.47	mg/kg	0.00205 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		5	mg/kg	1.126	5.256	mg/kg	0.000526 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	8	mg/kg	1.56	11.651	mg/kg	0.000747 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		5	mg/kg	1.579	7.374	mg/kg	0.000737 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
11	zinc { zinc chromate }	024-007-00-3				34	mg/kg	2.774	88.068	mg/kg	0.00881 %	✓	
12	phenol	604-001-00-2	203-632-7	108-95-2		<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
13	TPH (C6 to C40) petroleum group			TPH		<42	mg/kg		<42	mg/kg	<0.0042 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
15	•	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
16	•	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18	•	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
19	•	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
20	•	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
21	•	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
22		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
27	•	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
29	•	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
32	•	ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0208 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP01

Potentially Hazardous Waste
Classified as **17 05 04** or **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
HP01 (MG)
Sample Depth:
0.5 m
Moisture content:
12%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing hazardous substances)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00705%)

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		8 pH		8 pH	8pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	8.252 mg/kg	0.000825 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		15 mg/kg	1.462	19.574 mg/kg	0.00196 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25 mg/kg	1.126	25.131 mg/kg	0.00251 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	45 mg/kg	1.56	62.671 mg/kg	0.00402 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		7 mg/kg	1.579	9.872 mg/kg	0.000987 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		<3 mg/kg	2.554	<7.661 mg/kg	<0.000766 %		<**LOD**
11		zinc { zinc chromate } 024-007-00-3		64 mg/kg	2.774	158.523 mg/kg	0.0159 %	✓	
12		phenol 604-001-00-2 / 203-632-7 / 108-95-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
13		TPH (C6 to C40) petroleum group TPH		79 mg/kg		70.536 mg/kg	0.00705 %	✓	
14		naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
15		acenaphthylene 205-917-1 / 208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
16		acenaphthene 201-469-6 / 83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
17		fluorene 201-695-5 / 86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<**LOD**
18		phenanthrene 201-581-5 / 85-01-8		0.55 mg/kg		0.491 mg/kg	0.0000491 %	✓	
19		anthracene 204-371-1 / 120-12-7		0.16 mg/kg		0.143 mg/kg	0.0000143 %	✓	
20		fluoranthene 205-912-4 / 206-44-0		1.91 mg/kg		1.705 mg/kg	0.000171 %	✓	
21		pyrene 204-927-3 / 129-00-0		1.66 mg/kg		1.482 mg/kg	0.000148 %	✓	
22		benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		1.17 mg/kg		1.045 mg/kg	0.000104 %	✓	
23		chrysene 601-048-00-0 / 205-923-4 / 218-01-9		1.03 mg/kg		0.92 mg/kg	0.000092 %	✓	
24		benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		1.76 mg/kg		1.571 mg/kg	0.000157 %	✓	
25		benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		0.6 mg/kg		0.536 mg/kg	0.0000536 %	✓	
26		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		1.35 mg/kg		1.205 mg/kg	0.000121 %	✓	
27		indeno[123-cd]pyrene 205-893-2 / 193-39-5		1.08 mg/kg		0.964 mg/kg	0.0000964 %	✓	
28		dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.18 mg/kg		0.161 mg/kg	0.0000161 %	✓	
29		benzo[ghi]perylene 205-883-8 / 191-24-2		0.91 mg/kg		0.813 mg/kg	0.0000812 %	✓	
30		benzene 601-020-00-8 / 200-753-7 / 71-43-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
31		toluene 601-021-00-3 / 203-625-9 / 108-88-3		<5 mg/kg		<5 mg/kg	<0.0005 %		<**LOD**
32		ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
33		xylene 601-022-00-9 / 202-422-2 [1], 203-396-5 [2], 203-576-3 [3], 215-535-7 [4] / 95-47-6 [1], 106-42-3 [2], 108-38-3 [3], 1330-20-7 [4]		<2 mg/kg		<2 mg/kg	<0.0002 %		<**LOD**
						Total:	0.0369 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Potentially Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP02

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
HP02 (MG)
Sample Depth:
0.15 m
Moisture content:
6.1%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.1% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.4	pH		6.4	pH	6.4 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2	mg/kg	1.884	<3.768	mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5	mg/kg	1.32	6.222	mg/kg	0.000622 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		10	mg/kg	1.462	13.775	mg/kg	0.00138 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		7	mg/kg	1.126	7.428	mg/kg	0.000743 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21	mg/kg	1.56	30.873	mg/kg	0.00198 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		4	mg/kg	1.579	5.955	mg/kg	0.000595 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
11	zinc { zinc chromate }	024-007-00-3				36	mg/kg	2.774	94.127	mg/kg	0.00941 %	✓	
12	phenol	604-001-00-2	203-632-7	108-95-2		<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
13	TPH (C6 to C40) petroleum group			TPH		<42	mg/kg		<42	mg/kg	<0.0042 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
15	●	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
16	●	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
17	●	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
18	●	phenanthrene				0.31	mg/kg		0.292	mg/kg	0.0000292 %	✓	
			201-581-5	85-01-8									
19	●	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
20	●	fluoranthene				1.01	mg/kg		0.952	mg/kg	0.0000952 %	✓	
			205-912-4	206-44-0									
21	●	pyrene				0.92	mg/kg		0.867	mg/kg	0.0000867 %	✓	
			204-927-3	129-00-0									
22		benzo[a]anthracene				0.72	mg/kg		0.679	mg/kg	0.0000679 %	✓	
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				0.5	mg/kg		0.471	mg/kg	0.0000471 %	✓	
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.82	mg/kg		0.773	mg/kg	0.0000773 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				0.33	mg/kg		0.311	mg/kg	0.0000311 %	✓	
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.67	mg/kg		0.631	mg/kg	0.0000631 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27	●	indeno[123-cd]pyrene				0.55	mg/kg		0.518	mg/kg	0.0000518 %	✓	
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
29	●	benzo[ghi]perylene				0.44	mg/kg		0.415	mg/kg	0.0000415 %	✓	
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
32	●	ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0222 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP04b

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
HP04b (MG)
Sample Depth:
0.2 m
Moisture content:
12.9%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		5.2	pH		5.2	pH	5.2 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2	mg/kg	1.884	<3.768	mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	8.186	mg/kg	0.000819 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		36	mg/kg	1.462	46.604	mg/kg	0.00466 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		<4	mg/kg	1.126	<4.504	mg/kg	<0.00045 %		<**LOD**
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	10	mg/kg	1.56	13.816	mg/kg	0.000886 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8	mg/kg	1.579	11.192	mg/kg	0.00112 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
11	zinc { zinc chromate }	024-007-00-3				30	mg/kg	2.774	73.715	mg/kg	0.00737 %	✓	
12	phenol	604-001-00-2	203-632-7	108-95-2		<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
13	TPH (C6 to C40) petroleum group			TPH		<42	mg/kg		<42	mg/kg	<0.0042 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
15		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8									
16		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9									
17		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
19		anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7									
20		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0									
21		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
22		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
27		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
29		benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
32		ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0223 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: HP04c

Potentially Hazardous Waste
Classified as **17 05 04** or **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
HP04c (MG)
Sample Depth:
0.8 m
Moisture content:
6.5%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing hazardous substances)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00657%)

Determinands

Moisture content: 6.5% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		6.3 pH		6.3 pH	6.3 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4 mg/kg	1.32	4.959 mg/kg	0.000496 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		12 mg/kg	1.462	16.468 mg/kg	0.00165 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		6 mg/kg	1.126	6.343 mg/kg	0.000634 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	30.757 mg/kg	0.00197 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		4 mg/kg	1.579	5.932 mg/kg	0.000593 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
		034-002-00-8											
11		zinc { zinc chromate }				63	mg/kg	2.774	164.104	mg/kg	0.0164 %	✓	
		024-007-00-3											
12		phenol				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
13		TPH (C6 to C40) petroleum group				70	mg/kg		65.728	mg/kg	0.00657 %	✓	
				TPH									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
15		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
16		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
17		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
18		phenanthrene				0.51	mg/kg		0.479	mg/kg	0.0000479 %	✓	
			201-581-5	85-01-8									
19		anthracene				0.12	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			204-371-1	120-12-7									
20		fluoranthene				1.1	mg/kg		1.033	mg/kg	0.000103 %	✓	
			205-912-4	206-44-0									
21		pyrene				0.93	mg/kg		0.873	mg/kg	0.0000873 %	✓	
			204-927-3	129-00-0									
22		benzo[a]anthracene				0.65	mg/kg		0.61	mg/kg	0.000061 %	✓	
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				0.45	mg/kg		0.423	mg/kg	0.0000423 %	✓	
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.71	mg/kg		0.667	mg/kg	0.0000667 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				0.3	mg/kg		0.282	mg/kg	0.0000282 %	✓	
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.59	mg/kg		0.554	mg/kg	0.0000554 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27		indeno[123-cd]pyrene				0.44	mg/kg		0.413	mg/kg	0.0000413 %	✓	
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
29		benzo[ghi]perylene				0.32	mg/kg		0.3	mg/kg	0.00003 %	✓	
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
32		ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0315 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Potentially Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03

Potentially Hazardous Waste
Classified as **17 05 04** or **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS03 (MG)
Sample Depth:
0.7 m
Moisture content:
3.6%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 or 17 05 03 * (Soil and stones other than those mentioned in 17 05 03 or Soil and stones containing hazardous substances)

Hazard properties (substances considered hazardous until shown otherwise)

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00434%)

Determinands

Moisture content: 3.6% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.6 pH		7.6 pH	7.6 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3 mg/kg	1.32	3.823 mg/kg	0.000382 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		7 mg/kg	1.462	9.875 mg/kg	0.000988 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9 mg/kg	1.126	9.781 mg/kg	0.000978 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	55 mg/kg	1.56	82.809 mg/kg	0.00531 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		6 mg/kg	1.579	9.148 mg/kg	0.000915 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
10		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
		034-002-00-8											
11		zinc { zinc chromate }				27	mg/kg	2.774	72.299	mg/kg	0.00723 %	✓	
		024-007-00-3											
12		phenol				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
13		TPH (C6 to C40) petroleum group				45	mg/kg		43.436	mg/kg	0.00434 %	✓	
				TPH									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
15		acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
16		acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
17		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
18		phenanthrene				0.56	mg/kg		0.541	mg/kg	0.0000541 %	✓	
			201-581-5	85-01-8									
19		anthracene				0.12	mg/kg		0.116	mg/kg	0.0000116 %	✓	
			204-371-1	120-12-7									
20		fluoranthene				0.8	mg/kg		0.772	mg/kg	0.0000772 %	✓	
			205-912-4	206-44-0									
21		pyrene				0.74	mg/kg		0.714	mg/kg	0.0000714 %	✓	
			204-927-3	129-00-0									
22		benzo[a]anthracene				0.56	mg/kg		0.541	mg/kg	0.0000541 %	✓	
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				0.35	mg/kg		0.338	mg/kg	0.0000338 %	✓	
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.64	mg/kg		0.618	mg/kg	0.0000618 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				0.29	mg/kg		0.28	mg/kg	0.000028 %	✓	
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.53	mg/kg		0.512	mg/kg	0.0000512 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27		indeno[123-cd]pyrene				0.44	mg/kg		0.425	mg/kg	0.0000425 %	✓	
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
29		benzo[ghi]perylene				0.32	mg/kg		0.309	mg/kg	0.0000309 %	✓	
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
32		ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0233 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Potentially Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05
Sample Depth:
0.3 m
Moisture content:
5.6%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5.6% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.5 pH		7.5 pH	7.5 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2 mg/kg	1.884	<3.768 mg/kg	<0.000377 %		<LOD
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	8.752 mg/kg	0.000875 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		17 mg/kg	1.462	23.529 mg/kg	0.00235 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	19.191 mg/kg	0.00192 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	47 mg/kg	1.56	69.424 mg/kg	0.00445 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<LOD
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		6 mg/kg	1.579	8.974 mg/kg	0.000897 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3 mg/kg	2.554	<7.661 mg/kg	<0.000766 %		<LOD
11	zinc { zinc chromate }	024-007-00-3				103 mg/kg	2.774	270.584 mg/kg	0.0271 %	✓	
12	phenol	604-001-00-2	203-632-7	108-95-2		<2 mg/kg		<2 mg/kg	<0.0002 %		<LOD
13	TPH (C6 to C40) petroleum group			TPH		<42 mg/kg		<42 mg/kg	<0.0042 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
15	●	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
16	●	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
17	●	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
18	●	phenanthrene				0.55	mg/kg		0.521	mg/kg	0.0000521 %	✓	
			201-581-5	85-01-8									
19	●	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
20	●	fluoranthene				0.97	mg/kg		0.919	mg/kg	0.0000919 %	✓	
			205-912-4	206-44-0									
21	●	pyrene				0.82	mg/kg		0.777	mg/kg	0.0000777 %	✓	
			204-927-3	129-00-0									
22		benzo[a]anthracene				0.51	mg/kg		0.483	mg/kg	0.0000483 %	✓	
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				0.44	mg/kg		0.417	mg/kg	0.0000417 %	✓	
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.68	mg/kg		0.644	mg/kg	0.0000644 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				0.28	mg/kg		0.265	mg/kg	0.0000265 %	✓	
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.54	mg/kg		0.511	mg/kg	0.0000511 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27	●	indeno[123-cd]pyrene				0.4	mg/kg		0.379	mg/kg	0.0000379 %	✓	
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
29	●	benzo[ghi]perylene				0.3	mg/kg		0.284	mg/kg	0.0000284 %	✓	
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
32	●	ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0449 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS10

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS10 (NAT)
Sample Depth:
0.3 m
Moisture content:
9.4%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.4% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		5.3	pH		5.3	pH	5.3 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<2	mg/kg	1.884	<3.768	mg/kg	<0.000377 %		<**LOD**
3	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5	mg/kg	1.32	6.034	mg/kg	0.000603 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<**LOD**
5	chromium { chromium(III) oxide }		215-160-9	1308-38-9		20	mg/kg	1.462	26.719	mg/kg	0.00267 %	✓	
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		5	mg/kg	1.126	5.146	mg/kg	0.000515 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	9	mg/kg	1.56	12.832	mg/kg	0.000823 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<**LOD**
9	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		5	mg/kg	1.579	7.219	mg/kg	0.000722 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<3	mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<**LOD**
11	zinc { zinc chromate }	024-007-00-3				25	mg/kg	2.774	63.395	mg/kg	0.00634 %	✓	
12	phenol	604-001-00-2	203-632-7	108-95-2		<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
13	TPH (C6 to C40) petroleum group			TPH		<42	mg/kg		<42	mg/kg	<0.0042 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
15	●	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-917-1	208-96-8									
16	●	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-469-6	83-32-9									
17	●	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-695-5	86-73-7									
18	●	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			201-581-5	85-01-8									
19	●	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			204-371-1	120-12-7									
20	●	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-912-4	206-44-0									
21	●	pyrene				0.17	mg/kg		0.155	mg/kg	0.0000155 %	✓	
			204-927-3	129-00-0									
22		benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
23		chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-048-00-0	205-923-4	218-01-9									
24		benzo[b]fluoranthene				0.21	mg/kg		0.192	mg/kg	0.0000192 %	✓	
		601-034-00-4	205-911-9	205-99-2									
25		benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
26		benzo[a]pyrene; benzo[def]chrysene				0.19	mg/kg		0.174	mg/kg	0.0000174 %	✓	
		601-032-00-3	200-028-5	50-32-8									
27	●	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-893-2	193-39-5									
28		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
29	●	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<**LOD**
			205-883-8	191-24-2									
30		benzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
31		toluene				<5	mg/kg		<5	mg/kg	<0.0005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
32	●	ethylbenzene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
33		xylene				<2	mg/kg		<2	mg/kg	<0.0002 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
										Total:	0.0187 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s)/Risk Phrase(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

chromium(III) oxide (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Aquatic Chronic 2 H411 , Repr. 2 H361d , Carc. 1B H350 , Muta. 1B H340 , STOT RE 2 H373 , Asp. Tox. 1 H304 , Flam. Liq. 3 H226

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 1 H310 , Acute Tox. 1 H330 , Acute Tox. 4 H302

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 2 H411 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Carc. 2 H351 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s)/Risk Phrase(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

chromium {chromium(III) oxide}

Correct species

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead chromate}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on risk phrases

zinc {zinc chromate}

Worst case species based on risk phrases

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2019.163.3889.7904 (12 Jun 2019)
HazWasteOnline Database: 2019.163.3889.7904 (12 Jun 2019)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

APPENDIX 5: EXTENT OF SURVEY AND LIMITATIONS

The Harlequin Building
65 Southwark Street
London, SE1 OHR

t: +44 (0)207 125 0112
f: +44 (0)207 125 0113

e: paragon.info@colliers.com
w: paragonbc.co.uk

building & project consultants

paragon

Extent of Survey and Limitations

Standard Limitations

Inspection and Concealed Parts: Our report will cover all parts of the site made available to us during our visual inspection of the property, which is normally and safely accessible without the use of ladders, and therefore exclude all ceiling, wall and floor voids unless stated within the report. Where inspection of roof areas by use of access hoists or a drone is required this will be agreed with you prior to inspection. The structure and fabric will not be opened up for further investigation. Those parts of the building and engineering services that are concealed, inaccessible or covered will not be inspected and confirmation that such parts are free from defects cannot be provided. Where we feel further investigation is merited, reference will be made in our report. Our services survey is based on a visual inspection and comment on the condition and the quality of the installation relating to normal good standards. We will specifically exclude tests relating to the performance of any heating, air conditioning or ventilation systems, pipe pressure tests, electrical or drainage tests. The omission of such tests might give risks to the fact that certain problems could exist which are not reflected in our report. No inspection or comment is made on the below ground drainage installations or service conduits unless instructed otherwise.

Occupied Buildings: Where buildings are occupied at the time of our inspection access to some areas may be restricted or denied although these areas will be noted in our report. Regardless of occupation, we will not lift fitted carpets, nor disturb any part of the fabric or fittings which are fixed or may cause damage.

Budget Costs: Where budget costs are included in our report, these costs are for guidance purposes only and will not be calculated from measured quantities but will be based on knowledge and experience of similar repair or replacement situations. Costs are inclusive of contractor's preliminaries but exclusive of all contingencies, professional fees and VAT. They will be based on current prices and no allowances will be made for inflation. Access costs for high level works will be included. There will be no allowances for loss or damage as a result of force majeure, terrorism, discovery or removal of any deleterious materials or out of hours working.

Specialist Sub-Consultants / Sub-Contractors: where specialist consultants or contractors are engaged on your behalf. we may make reference to their findings in our report, but this should not be considered as a substitute for reading their report in its entirety, nor can we take responsibility for their conclusion.

Compliance with Legislation: In respect of planning permissions and building regulations consents we will review relevant documentation made available to us and liaise with your lawyers in this regard. If documentation is missing we will record this as a risk in our report, as should your lawyer. Our inspection will involve a review of the state of compliance with Statutory Requirements such as Workplace Regulations, Fire Regulations, Equality Act and other relevant matters. We will provide opinion and advise on these matters in our report. Please note that compliance with these Regulations often requires a more detailed specialist study and / or the preparation of a risk assessment. Such studies and risk assessments are beyond the scope of our report. Where appropriate we will make recommendations for further specialist surveys.

Weather conditions: Our inspection may be restricted by the prevailing weather conditions at the time of our inspection.

Communicable Disease – we shall not be liable in respect of any Claim, circumstance, loss or Defence Cost that arise as a result of, or is connected in any way, directly or indirectly with;

a) A *Communicable Disease* or the fear or threat (whether actual or perceived) of a *Communicable Disease* regardless of any other cause or event contributing concurrently or in any other sequence thereto;

b) any action taken to control, prevent, isolate, quarantine, suppress, mitigate or in any way relating to any actual or suspected outbreak of any *Communicable Disease* or the fear or threat (whether actual or perceived) of a *Communicable Disease*;

c) instructions, orders, requests, restrictions or limitations given by any national or local government, regulatory or statutory body, health authority or organisation relating to any *Communicable Disease.*

A *Communicable Disease* means any disease which can be transmitted by means of any substance, medium or agent from any organism to another organism where:

i. the substance, medium or agent includes, but is not limited to, a virus, bacterium, parasite or other organism or any variation thereof, whether deemed living or not, and

ii. the method of transmission, whether direct or indirect, includes but is not limited to, airborne transmission, bodily fluid transmission,

Extent of Survey and Limitations

transmission from or to any surface or object, solid, liquid or gas or between organisms, and

iii. the disease, substance or agent can cause or threaten damage to human health or human welfare or can cause or threaten damage to, deterioration of, loss of value of, marketability of or loss of use of property.

Deleterious and Hazardous Materials

Generally: Our report and survey excludes any investigation into the unsuitable use of deleterious or hazardous materials except in so far as such matters may come to our knowledge in the normal course of inspecting the property and state of repair. We will advise you if we consider there is a significant possibility that deleterious or hazardous materials exist at the property, although we will not undertake or commission specific inspections, laboratory testing or reports unless this possibility has been raised by us as a concern and further instructions received which in any event will be confined to the following: admixtures / aggregates in concrete, asbestos, brick slips, calcium silicate brickwork, high alumina cement, lead, urea formaldehyde foam, woodwool cement slab (used as permanent shuttering), aluminium composite panels, thin stone panels.

Many factors including location, use, design and quantity determine whether a material is deleterious or not and, therefore, the inclusion in the material in the above list does not, of itself, imply that it is deleterious.

Where composite cladding panels may be identified in our report we confirm that no intrusive testing will be undertaken to determine the type of insulation, classification of the insulating core or whether this is approved by the Loss Prevention Certification Board (LPCB) unless instructed otherwise.

Concrete: Where instructed to undertake a concrete investigation, our specialist report will be based on a visual examination of the concrete structure in sample test locations only. Whilst such test locations are chosen to be representative of the structure as a whole, we are not able to confirm that the structure is free from structural defects other than deleterious effect of HAC, chlorides and reinforcement corrosion durability.

Asbestos: Where instructed to undertake a specialist asbestos survey, we cannot guarantee that all asbestos containing materials will be identified, despite the best endeavours of our asbestos sub-consultant. Where instructed, every effort will be made to remove representative samples however it is possible that indiscriminate uses of asbestos may be present between sample locations of otherwise visually similar materials. An asbestos management survey is non-destructive and includes an inspection within accessible ceiling voids, above loose laid removable tiles, inside openable risers and cupboards, within accessible risers and behind removable casings.

Similarly access within lift shafts, live electrical equipment and mechanical plant may be restricted. A Refurbishment and Demolition asbestos survey is destructive and includes an inspection within accessible ceiling voids, above loose laid removable tiles, inside openable risers and cupboards, within accessible risers and behind removable casings. Representative areas of each element of building fabric will be intrusively opened up to inspect for the presence of ACM's behind built-in ducts, voids or similar enclosed or concealed areas within the building fabric. No intrusive work will be undertaken within the structural framework, concrete floors and masonry walls.

Mechanical and Electrical Surveys

Generally: Our survey and report is compiled under the brief to visually inspect and comment on the condition and the quality of the installation relating to normal good standards in the building services industry as dictated by CIBSE and IEE's current recommendations and standards without testing or dismantling of the plant. Where appropriate, we have provided an overview of the lift installations, which was carried out by the attending building services consultant.

Budget Costs: Any costs indicated within this report are based on our best assessment of the situation and the work involved at current prices and should not be taken as firm costs for the items of work detailed. To provide more accurate costs an investigation will be required in greater detail for individual items of the plant and systems, and may involve the employment of specialists where appropriate.

This overview provides a description of the lift services and general condition other than inspection of the lift shafts and associated equipment.

There are occasions when the building services will be inspected by a building surveyor rather than a mechanical and electrical consultant and we will advise within the fee quotation. In this case, if you require a survey by a mechanical and electrical consultant, you should confirm this prior to our inspection.

Concealed Parts: We have not inspected parts of the Engineering Services which are encased, covered up, or otherwise made inaccessible in a normal course of

Extent of Survey and Limitations

construction, alteration, or fitting out. We will not carry out any internal inspection of the plant/systems.

Design Analysis: No definitive calculations have been undertaken to determine the capacity or performance of the plant items, nor have performance tests been carried out on any of the systems or plant items. Design analysis of the systems has been undertaken using generally accepted design criteria both past and present, primarily to establish the principles of design. We have specifically excluded tests relating to the performance or efficiency of any heating, air conditioning, or ventilation systems, pipe pressure tests, electrical or drainage tests. The omission of such tests might give rise to the fact that certain problems could exist which are not reflected in this report. We would point out that during the course of our building services survey we did not carry out an inspection of the below ground services.

Deleterious & Hazardous Materials: Our report and survey excludes any investigation into structural engineering design, compliance with legislation relating to buildings, or the unsuitable use of high alumina cement or calcium chloride, calcium silicate brickwork, alkali-silicate reaction in concrete, cavity wall tie failure, radon gas seepage, woodwool slab permanent shuttering, asbestos or PCB's or other materials considered as deleterious in construction, except insofar as such matters may come to knowledge in the normal course of inspecting the materials and state of repair.

White Goods & Data: This report does not include an inspection of the white goods, catering and vending equipment, telecommunication, data or wireless systems installed within the property. We are unable to comment, advise or identify items that are reliant on day/date dependent embedded chips.

Pre Acquisition Survey

Compliance with Legislation: Our inspection will involve a general review of the state of compliance with Statutory Requirements such as the Building Regulations, Workplace Regulations, Fire Regulations, Equality Act and other relevant matters applicable within the relevant country. Please note that compliance with these Regulations often requires a more detailed specialist study and/ or the preparation of a risk assessment. Such studies and risk assessments are beyond the scope of our report.

Rights of Way / Support / Light

Where necessary we will comment on apparent rights of way / support or light which may be visible or suspected albeit our comments will be outline in nature and without any detailed investigations.

Environmental

Desk Based Risk Assessment: The risk assessment is dictated by the finite data on which it is based and is relevant only for the purpose of which the report is commissioned. If additional information or data becomes available which may affect the opinions expressed in our report, we reserve the right to review such information and, if warranted, to modify the risk assessment accordingly. We reserve the right to charge an additional fee for un-anticipated second opinion reviewing of previous reports.

The survey excludes intrusive opening up of the building fabric. Accordingly, an inspection is not undertaken behind built-in ducts, voids or similar enclosed or concealed areas within the structure and fabric.

Compliance with Legislation: The environmental risk assessment will be undertaken with due regard to Contaminated Land Guidance documents (available and relevant at the time of issuing our report) issued by (but not limited to) the Environmental Protection Act Part IIA 1990, Department for Environment, Food and Rural Affairs (DEFRA) and its predecessors, the Environment Agency (and its devolved equivalents), British Standards Institute (BSi), the Royal Institution of Chartered Surveyors (RICS) and the American Society for Testing and Materials (ASTM) Standard E 1527-00. No liability can be accepted for the effects of any future changes to such guidelines and legislation. In the event that guidance / legislation changes it may be necessary for Paragon to update or modify reports.

Content of Report: Our Phase I Environmental Audit will be based on a visual inspection of the site, a review of available historical and environmental setting records, consultations with site representatives, pertinent information provided from the client and regulatory consultations. No samples will be taken as part of this study.

Generic Risk Assessment: The risk assessment is dictated by the finite data on which it is based and is relevant only for the purpose of which the report is commissioned. If additional information or data becomes available which may affect the opinions expressed in our report, we reserve the right to review such information and, if warranted, to modify the risk

assessment accordingly. We reserve the right to charge an additional fee for un-anticipated second opinion reviewing of previous reports.

The survey excludes intrusive opening up of the building fabric. Accordingly, an inspection is not undertaken behind built-in ducts, voids or similar enclosed or concealed areas within the structure and fabric. Where necessary we will comment on apparent rights of way / support or light which may be visible or suspected albeit our comments will be outline in nature and without any detailed investigations.

Phase 2 Site Investigation

Content of report: The content and findings of the report will be based on data obtained by employing site assessment methods and techniques, considered appropriate to the site as far as can be interpreted from desk based materials and a visual walkover of the site. Such techniques and methods are subject to limitations and constraints set out in the report. The findings and opinions are relevant at the time of writing, and should not be relied upon at a substantially later date as site conditions can changes. For example, seasonal groundwater levels, natural degradation of contaminants etc. No liability is accepted for areas not covered by the investigation.

Risk Assessment: The opinions and findings conveyed via the report will be based on information obtained from a variety of sources as detailed by the report. The information should not be treated as exhaustive but is, in good faith, considered as representative as possible of the site conditions when considering constraints set out by the report. The risk assessment will be completed in line with current industry practices but is not a guarantee that the site is free of hazardous conditions. The risk assessment is completed in line with the relevant land use agreed for the site and the time of completing the works. Changes to site conditions or land use may require a reassessment.

Unforeseen Contamination: Where Paragon is responsible for directing the number and location of exploratory holes, it shall exercise all the reasonable skill, care and diligence to be expected of a properly qualified and competent member of the Consultant's profession experienced in performing such services, taking into account site conditions, and available knowledge, as well as access, budgetary and scheduling constraints. Subject to having complied with the foregoing: (1) no liability can be accepted for the conditions that have not been revealed by the exploratory hole locations, or those which occur between each location and (2) whilst every effort will be made to interpolate the conditions between exploratory locations, such information is only indicative and liability cannot be accepted for its accuracy. By their nature, it is generally the case that exploratory holes provide a relatively small and localised snapshot of the ground conditions relative to the size of the site.

Buried Services: Whilst reasonable efforts will be taken to avoid buried services, we accept no liability for damage to services which have not been accurately identified in advance of site works.

Flooding: Our commentary is only based on the publicly available mapping available via the EA, NRW or SEPA at the time of writing and we cannot accept any liability where the information is updated following the issue of our report.

Dilapidations

Listed below are the limitations specifically applying to our dilapidations work and must be read in conjunction with our other Standard Limitations set out above.

Generally: We will assume unless otherwise requested that we are engaged as an advisor to prepare or comment on a schedule or claim which is distinct from an instruction to act as an expert witness. However, in discharging the advisory role it is always necessary for us to take account of considerations relating to expert witnesses as set out in the current Practice Statement and Guidance Note for Surveyors Acting as Expert Witnesses by the Royal Institute of Chartered Surveyors, a copy of which can be provided on request. This states that the primary function, and duty, of an expert witness is to assist the court on matters within their expertise.

Ongoing Advice: Our dilapidations advice aims to provide you with an informed opinion as to the anticipated level of liability/claim. Changes in case law, statute and the passage of time may affect the accuracy of our advice; it is therefore important that our advice is reviewed at regular intervals and. in particular, prior to the expiry of the lease.

Documentation Provided: Our assessments can only be as accurate as the information provided to us; it is therefore important that the most complete set of documentation possible is provided in order for the best advice to be given. We cannot take any responsibility for distorted findings resulting from deficient, incorrect or incomplete information.

Estimated Settlement: When an estimate of settlement is provided at any time prior to concluding the claim, this is for guidance only and should never be taken as a definitive evaluation of the likely damages which may fall due.

Extent of Survey and Limitations

Final Settlement: Settlements can be limited by S.18(1) of the Landlord & Tenant Act 1927 and the common law principles to the diminution in the value of the Landlord's reversion, regardless of the cost of works and other heads of claim. We will advise you if we consider that a formal valuation (commonly known as a Section 18 valuation) is necessary.

A claim based on the cost of the works may also be capped or even extinguished if it can be shown that the premises are to be altered or demolished after the expiry of the lease. Landlords should advise us if this is the case. Again, we will advise you if we consider that a Section 18 valuation is necessary. Where no formal release is provided by a Landlord we reserve the right to charge on a time expended basis.

Solicitors: In some cases it may be necessary to liaise with a solicitor on matters of strict legal interpretation. In the event of litigation, our communications with surveyors and other experts, including solicitors, may not be privileged.

Heads of Claim
Loss of Rent, Rates, Service Charge, etc.: For the purposes of the calculation of a loss of rent (and where applicable, service charge) claim we will provide an assessment of the period that it is likely to take to procure and complete works identified in the Schedule of Dilapidations. However, the applicability of such a claim will depend on market conditions prevailing at the end of the term and require initial input from your appointed letting agents shortly before lease expiry. Unless specifically agreed or stated within the lease, we will not include finance charges, loss of rates and other similar items in our assessments/claims.

Fees: We will include an allowance for legal fees only for the service of Schedules of Dilapidations in our assessments and claims. Surveyors' fees for the preparation and service of schedules will be included but other professionals' fees (such as building services or structural engineers) will not be included unless otherwise stated. All professional fees included will be estimates.

VAT: VAT may form part of a claim and is subject to the VAT status of the property and parties to the lease. The total claim (of which VAT may form part) is a damages payment that Customs and Excise do not deem a taxable supply. Invoices are not usually issued by landlords to tenants for this reason.

Contamination: We will include in our assessment any obvious contamination issues but we will not undertake any tests or investigation of current or previous uses of the site or adjoining land. We will advise you where we consider a need for specialist advice.

Energy Performance Certificates

The appointment of Paragon Building Consultancy Limited is subject to the Standard Limitations set out above. Listed below are some specific limitations relating to the provision of Energy Performance Certificates (EPCs).

Generally: This work is usually undertaken in three stages being:
1. Site inspection and research;
2. Data inputting and Calculating the Certificate; and
3. Lodging the certificate and reporting to the client.

We will initially determine the level of complexity of the building from the information provided by the client. Should it be determined during the site inspection that the complexity of the building and/or its services makes the standard assessment methodology inappropriate, this will be drawn to the attention of the client and a revised proposal will be submitted for sub-consulting the assessment to enable Dynamic Simulation Modelling (DSM) to be carried out.

Fees: Our fee quote is based on the assumption that the building can be inspected in one visit with unrestricted access to all areas. If we find that access is restricted to some parts of the building and that a return visit is required we will invoice all additional time on a time charge basis.

Where keys are held remotely from the property we will charge an additional fee on a time charge basis to cover our time in collecting and returning the keys.
Where an instruction is made on the basis that plans are available the following applies:

- Plans must be to scale.
- Plans must accurately show the current layout of the premises.
- Plans must be provided at the time of appointment or before inspection.

Where plans are not immediately available and we are expected to recover them from other parties an additional charge may be made to cover our time in this regard.

Site Inspection: The nature of a building's construction will not always be obvious from a visual inspection alone. Where sectional details are not available we will use the inference values provided in iSBEM. Where these are poor and possibly have an effect on the banding/rating of the property we may advise the client to consider opening up elements of the property so that more accurate construction details can be obtained. Opening up works will fall outside the initial fee

agreement and we reserve the right to invoice our time for this separately.

Lifespan/Carbon Checker: We will generate the EPCs using Lifespan. This system is a software application tool that provides an interface to enable the user to enter data into DCLG's SBEM (Simplified Building Energy Model). SBEM is at the heart of all government approved interface tools and whilst it has been passed for use, and Lifespan is an accredited software tool, there are inherent built in faults with the software that may affect the final rating. Although some tests have been undertaken to establish the accuracy of this software. We accept no responsibility for the software's accuracy.

Reporting and Advice: The EPC generates a Recommendations Report within which advice is given for the building owner to upgrade the building's efficiency performance. The advice is generic and in some cases is not considered to be relevant. Where we consider the advice to be poor, we will tailor the report to more accurately reflect the requirements of the building. The recommendations given in the report are not mandatory, so where a building owner implements improvement works based on the recommendations we would expect them to discuss the proposals in more detail before any expense is incurred.

Documentation Provided: We cannot take responsibility for the accuracy of any information provided by others for the purpose of carrying out the assessments. Similarly we cannot take responsibility where information to be provided is missing or its provision is delayed and that information conflicts with our assessment. Where such documents become available we recommend that copies are forwarded to us immediately in order that any advice provided can be refined.

Bank or Fund Monitoring

The appointment of Paragon Building Consultancy Limited is subject to the Standard Limitations set out above. Listed below are some specific limitations relating to the provision of bank of fund monitoring services.

Our report is based upon discussions with the borrower (being the person to whom our client, a funder, is lending money), as well as reports, records and data provided by the borrower or on their behalf ("Information"). We will use our professional judgement and experience to evaluate and interrogate the Information, however we are not auditing the Information and we cannot guarantee that it is accurate and complete in all respects. It is the borrower's duty to ensure that the Information is accurate and complete, and Paragon shall not be liable for any errors or omissions in the Information, or for losses arising as a result of such errors or omissions.

APPENDIX D

ENVIROCHECK DATABASE RESULTS

Geology 1:10,000 Maps Legends

Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	LSGR	Landscaped Ground (Undivided)	Unknown/Unclassified Entry	Holocene - Holocene
	WGR	Worked Ground (Undivided)	Unknown/Unclassified Entry	Holocene - Holocene
	MGR	Made Ground (Undivided)	Unknown/Unclassified Entry	Holocene - Holocene
	WMGR	Infilled Ground	Unknown/Unclassified Entry	Holocene - Holocene

Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	RTDU	River Terrace Deposits (Undifferentiated)	Sand and Gravel	Quaternary - Ryazanian
	HEAD	Head	Diamicton	Quaternary - Ryazanian
	PEAT	Peat	Peat [Unlithified Deposits Coding Scheme]	Quaternary - Ryazanian
	RTD6	River Terrace Deposits, 6	Sand and Gravel	Quaternary - Ryazanian

Bedrock and Faults

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WIDS	Windlesham Formation	Sand	Eocene - Eocene
	BGS	Bagshot Formation	Sand	Eocene - Eocene
	STHP	Stanners Hill Pebble Bed Member	Gravel	Eocene - Eocene
	CMBS	Camberley Sand Formation	Sand	Eocene - Eocene

Envirocheck®

LANDMARK INFORMATION GROUP®

Geology 1:10,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:10,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around a site. This mapping may be more up to date than previously published paper maps.

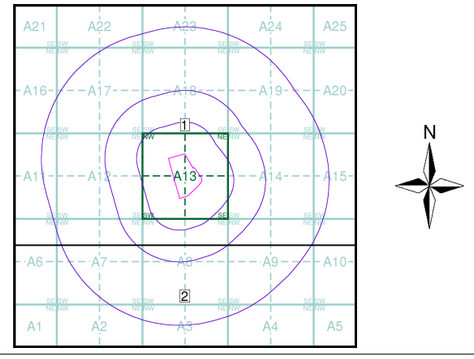
The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page.

Please Note: Not all of the layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

Geology 1:10,000 Maps Coverage

Map ID:	2	**Map ID:**	1
Map Name:	SU96SE	**Map Name:**	SU96NE
Map Date:	1996	**Map Date:**	1996
Bedrock Geology:	Available	**Bedrock Geology:**	Available
Superficial Geology:	Available	**Superficial Geology:**	Available
Artificial Geology:	Available	**Artificial Geology:**	Available
Faults:	Not Available	**Faults:**	Not Available
Landslip:	Not Available	**Landslip:**	Not Available
Rock Segments:	Not Available	**Rock Segments:**	Not Available

Geology 1:10,000 Maps - Slice A



Order Details

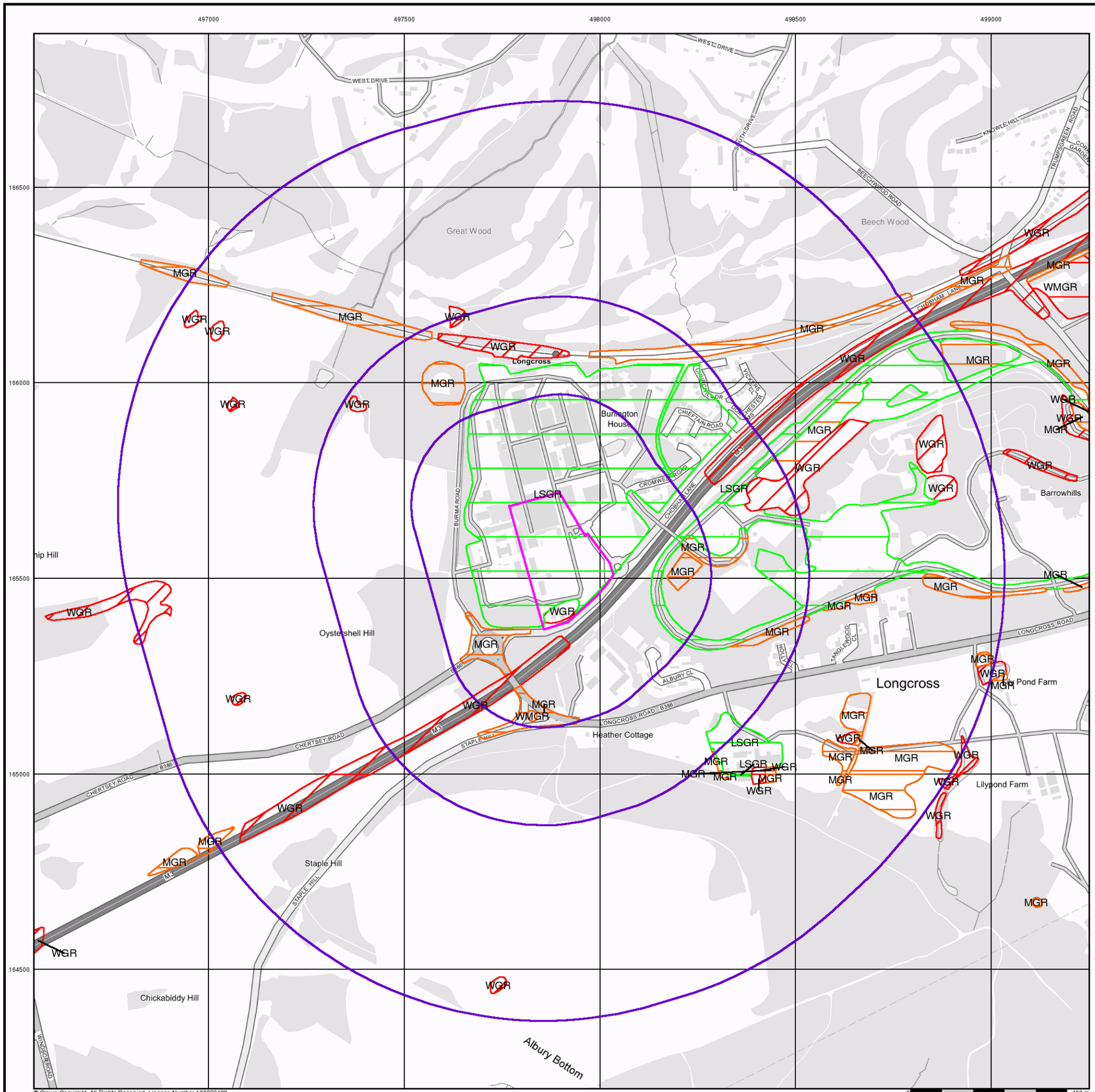
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Artificial Ground and Landslip

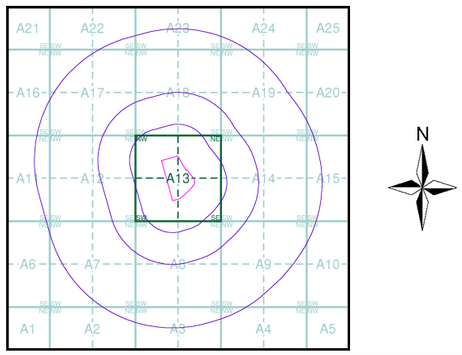
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

Artificial Ground and Landslip Map - Slice A



Order Details

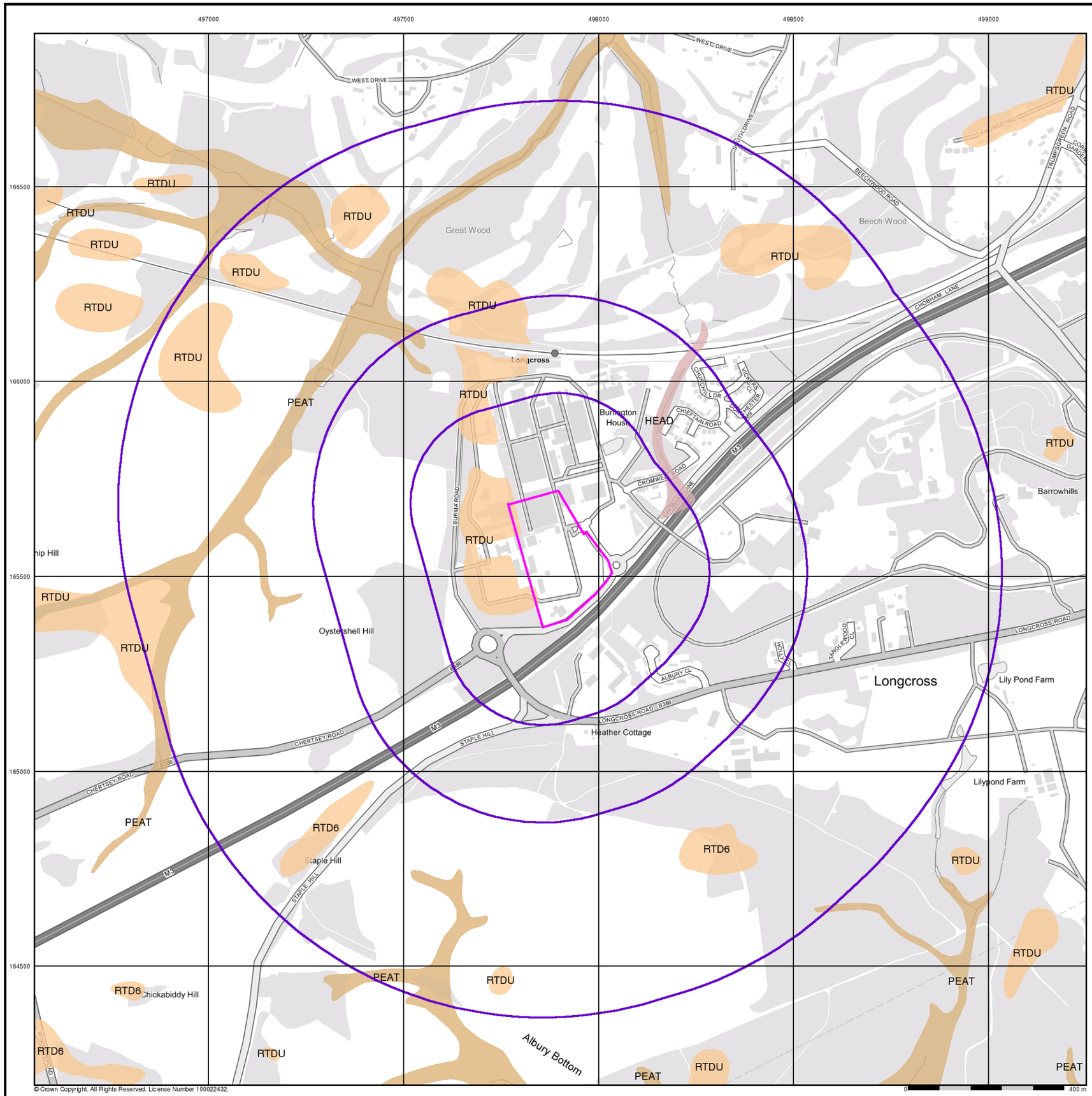
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

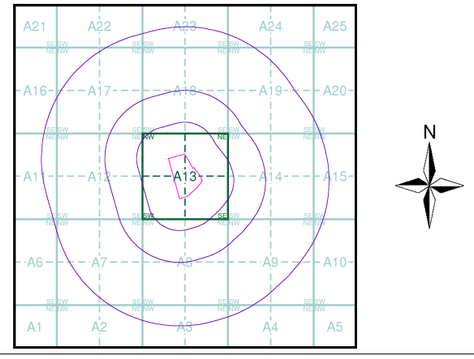
Superficial Geology

BGS 1:10,000 Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details

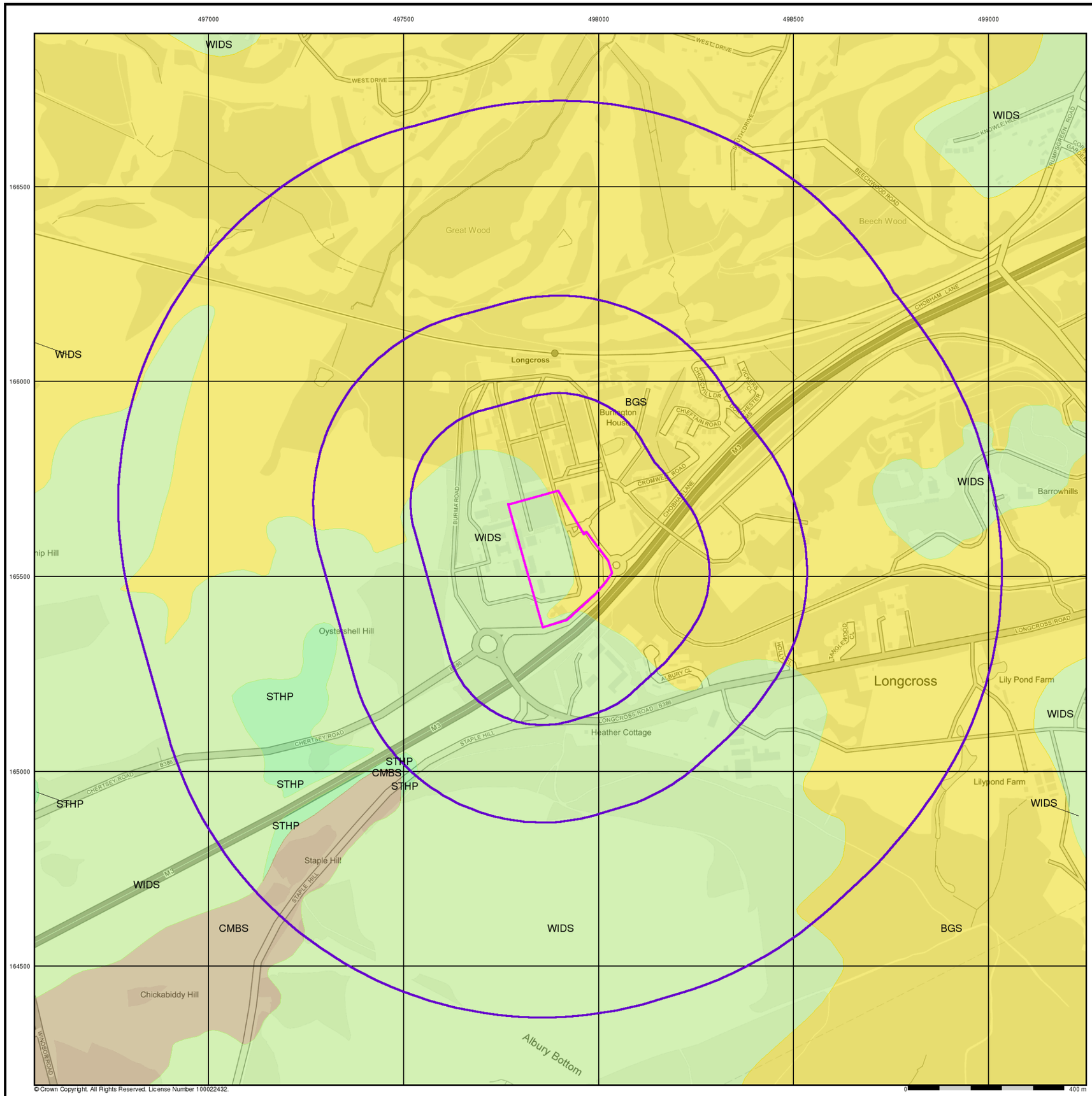
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Bedrock and Faults

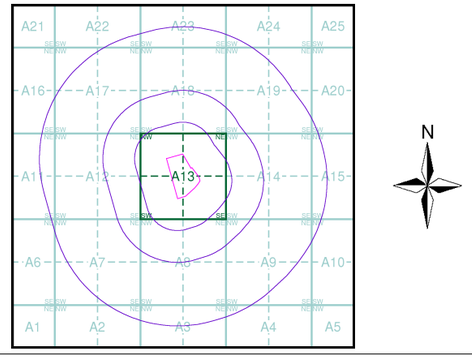
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults and thin beds mapped as lines such as coal seams and mineral veins. These are not restricted by age and could relate to features of any of the 1:10,000 geology datasets.

Bedrock and Faults Map - Slice A



Order Details

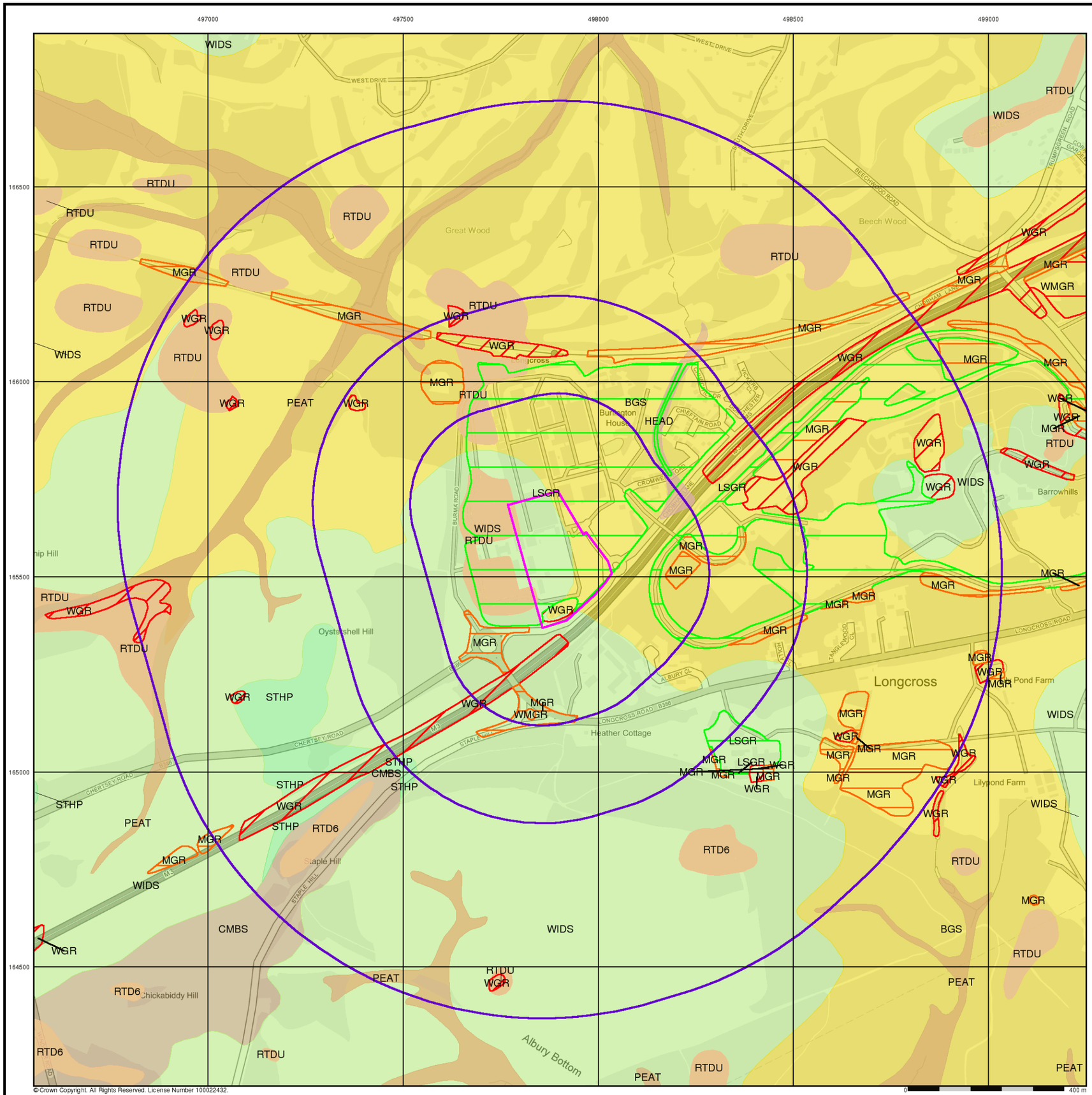
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP®

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

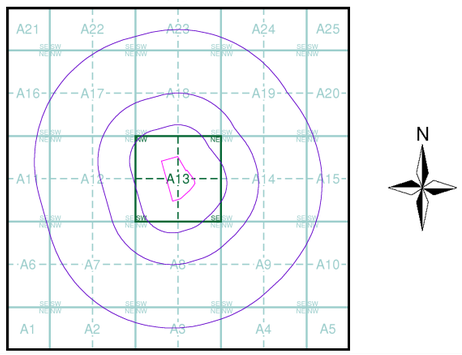
Additional Information

More information on 1:10,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

Contact

British Geological Survey
Kingsley Dunham Centre
Keyworth
Nottingham
NG12 5GG
Telephone: 0115 936 3143
Fax: 0115 936 3276
email: enquiries@bgs.ac.uk
website: www.bgs.ac.uk

Combined Geology Map - Slice A

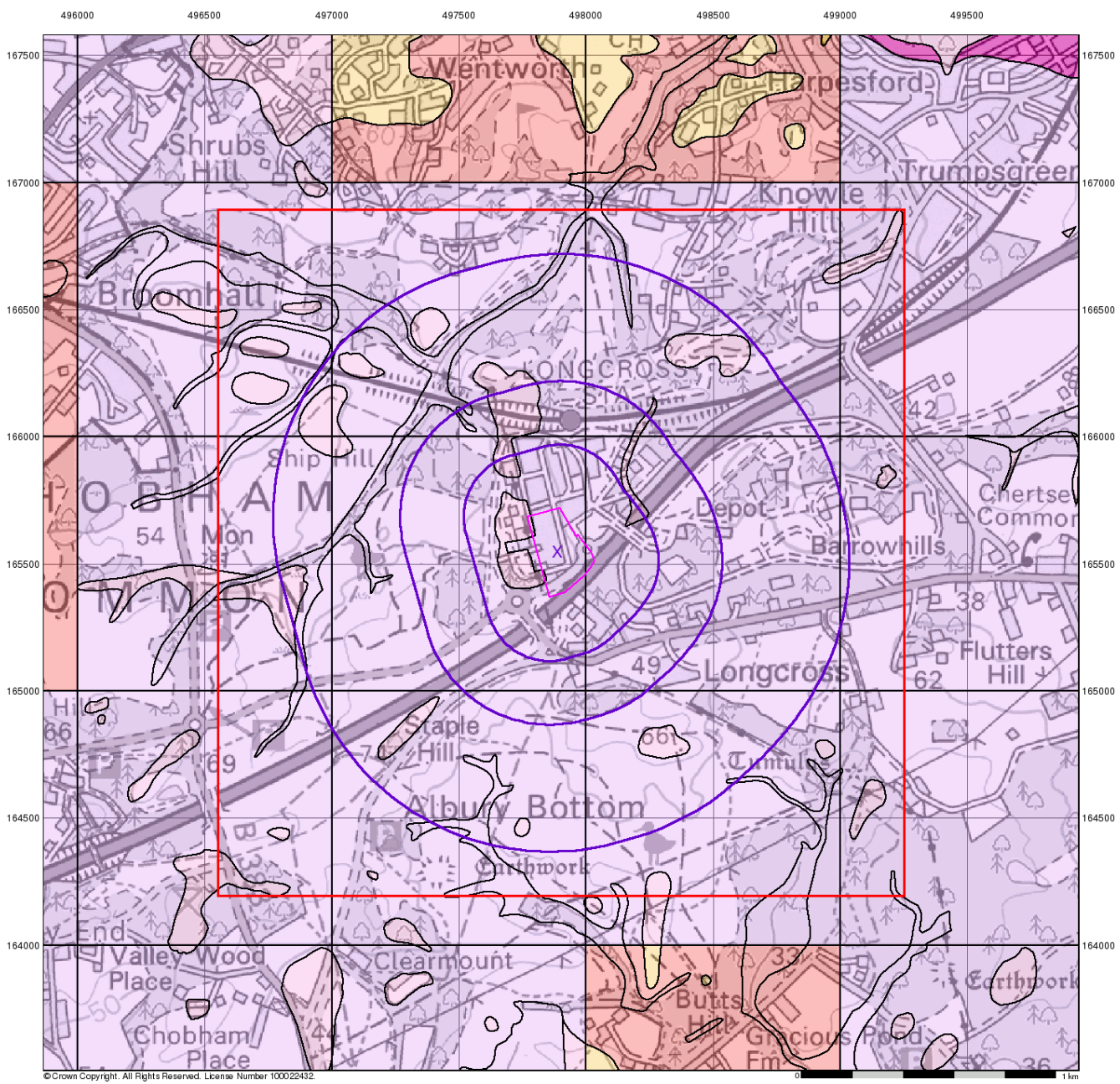


Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540



Envirocheck®

LANDMARK INFORMATION GROUP®

Groundwater Vulnerability

General

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

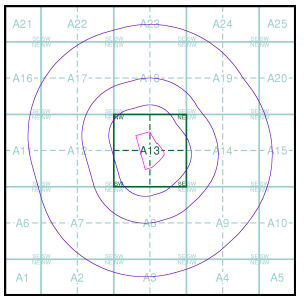
Agency and Hydrological

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

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

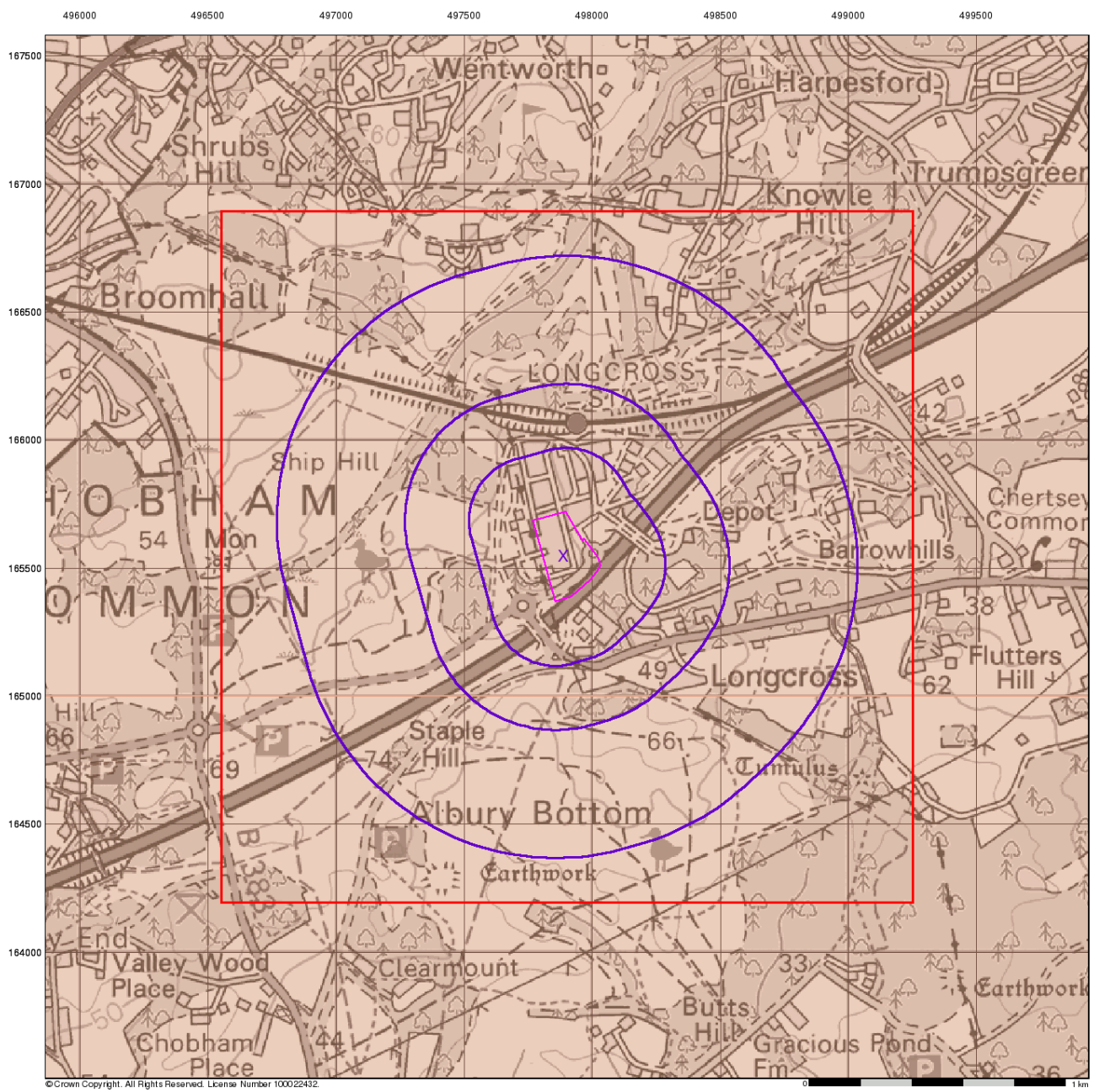
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Bedrock Aquifer Designation

General

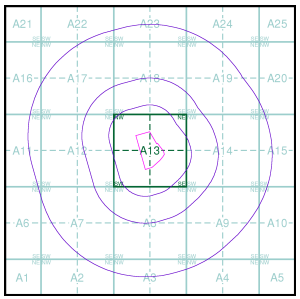
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



Order Details

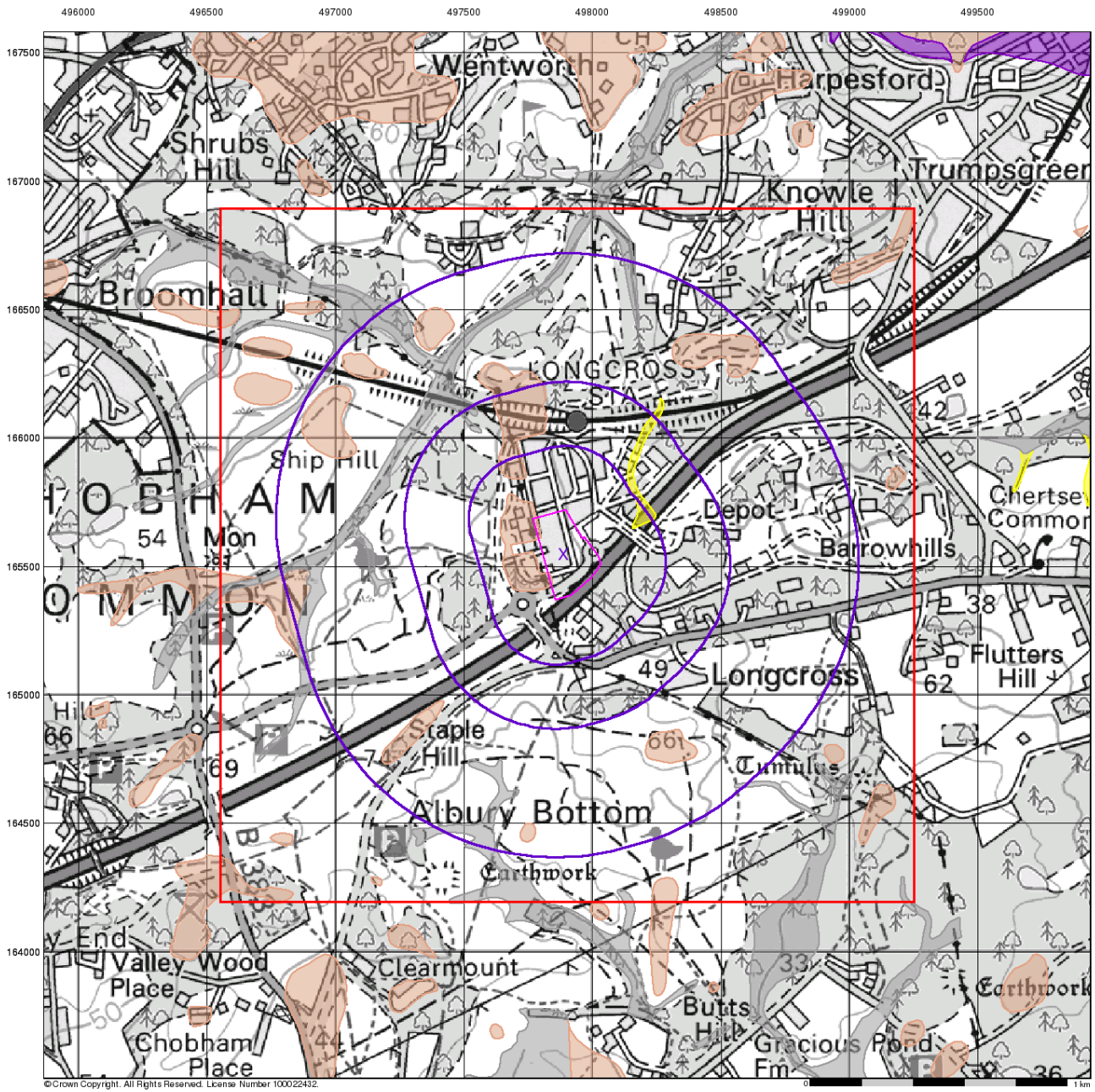
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Superficial Aquifer Designation

General

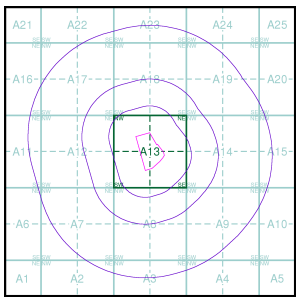
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

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

Site Sensitivity Context Map - Slice A



Order Details

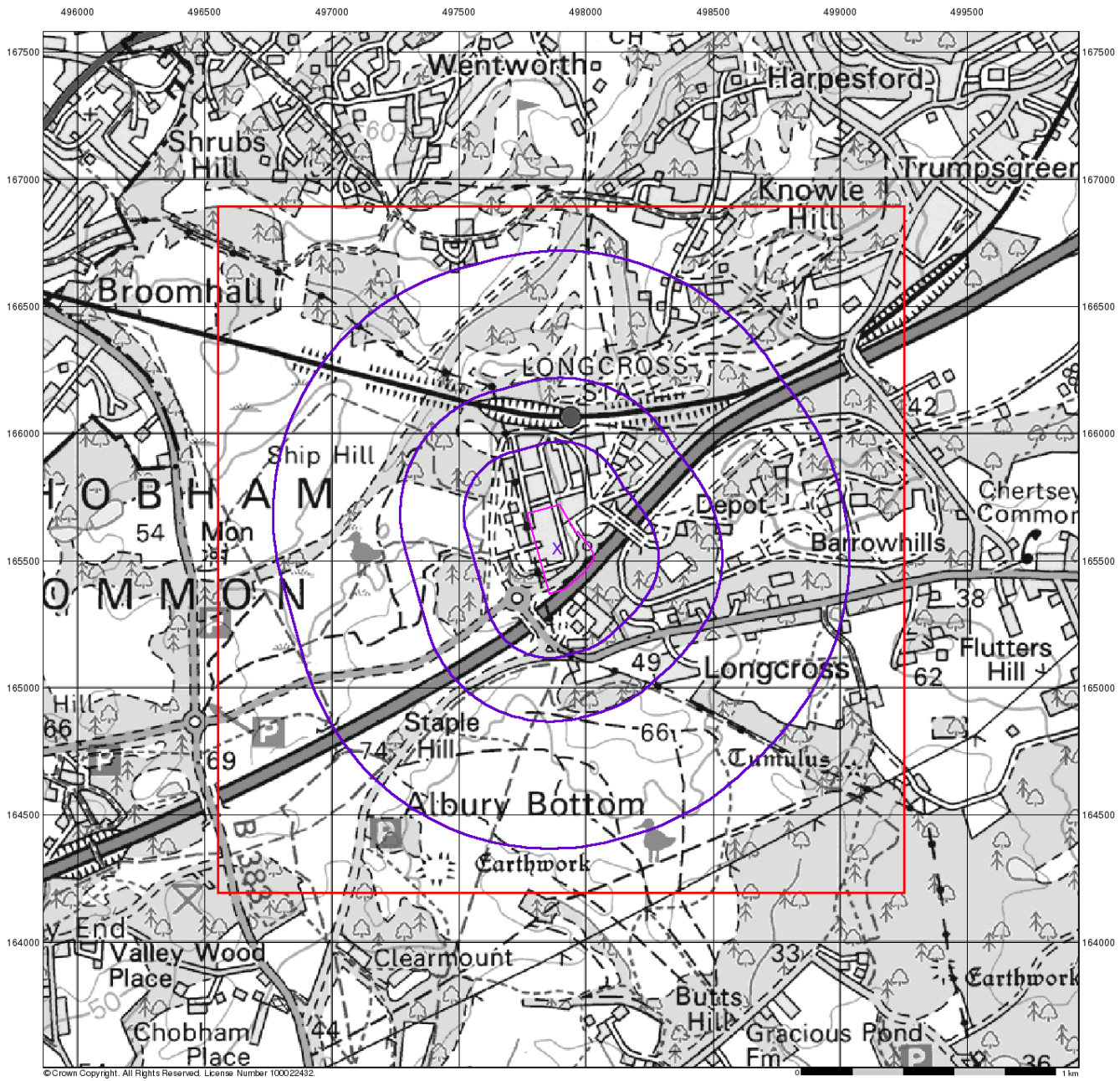
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Source Protection Zones

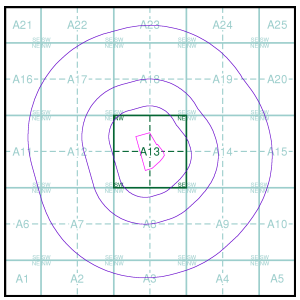
General

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

Agency and Hydrological

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

Site Sensitivity Context Map - Slice A



Order Details

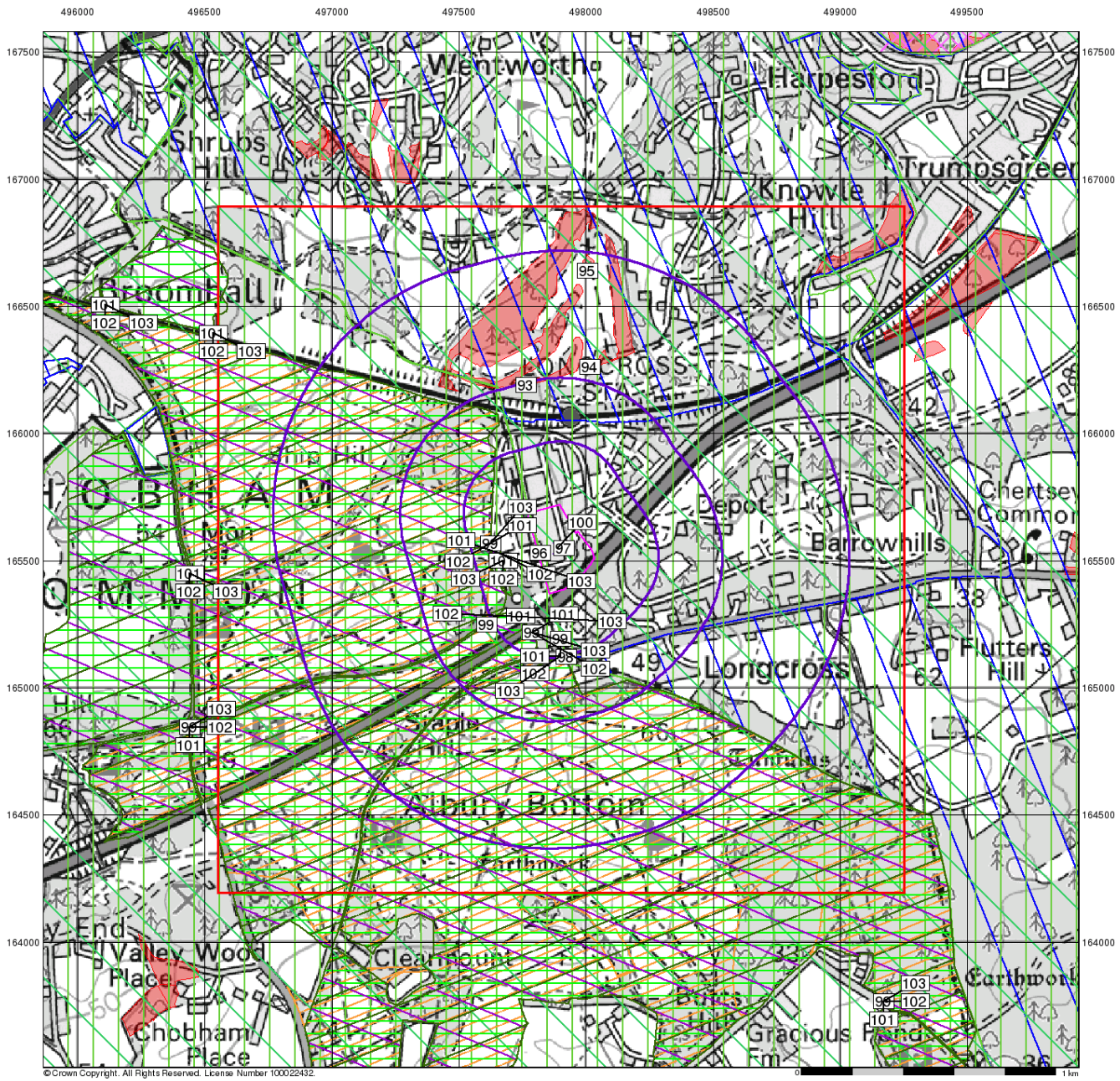
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Sensitive Land Uses

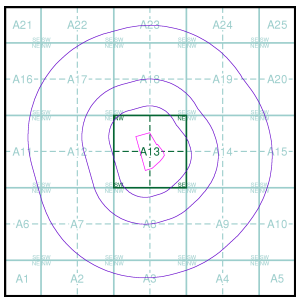
General

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

Sensitive Land Uses

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

Site Sensitivity Context Map - Slice A



Order Details

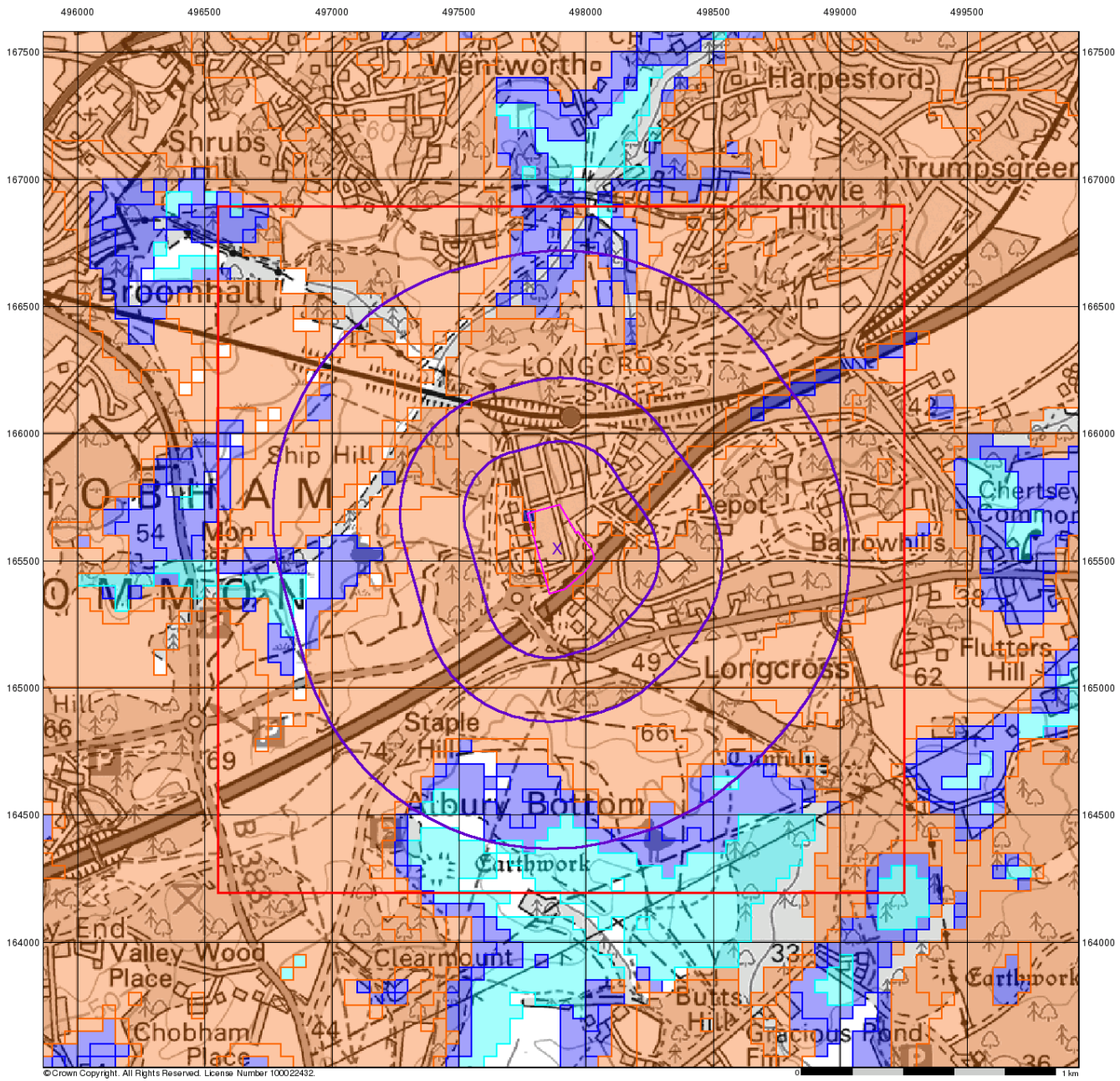
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

BGS Flood GFS Data

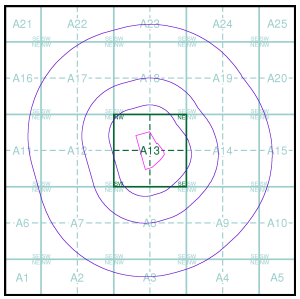
General

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

Agency and Hydrological (Flood)

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

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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

Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Flood Data Map (1:10,000)

General

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

Flood Data

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

Contours (height in metres)

Standard Contour 105 100 95

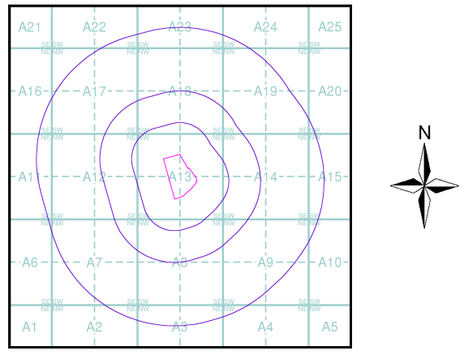
Master Contour

Spot Height 167.8

MLW Mean Low Water

MHW Mean High Water

EA/NRW Flood Data Map - Slice A



Order Details

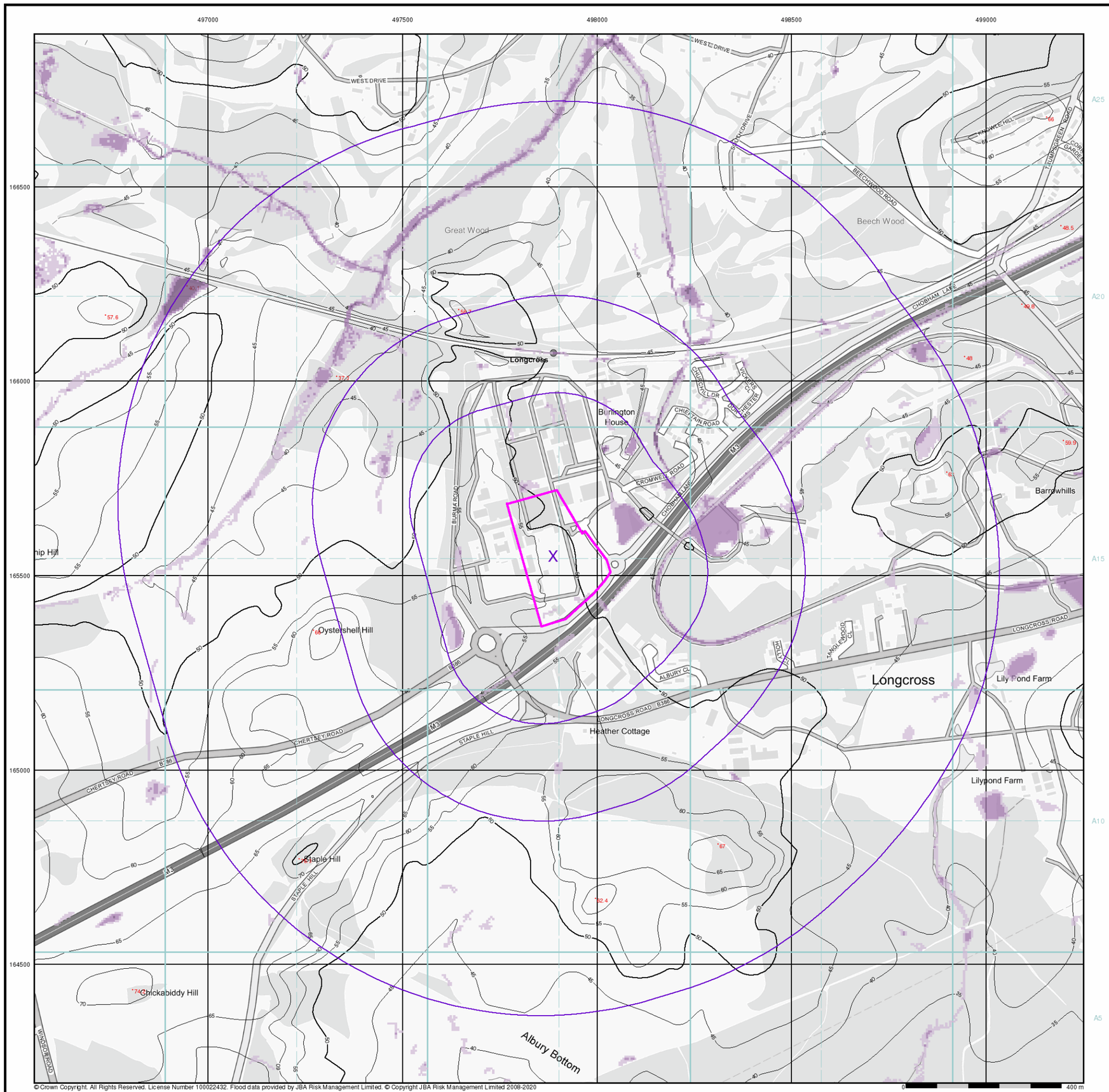
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

JBA 75 Year Return Flood Map (Undefended) (1:10,000)

General

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

Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

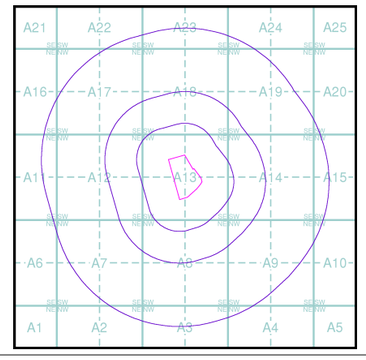
Contours (height in metres)

Standard Contour 105 100 95 — MLW Mean Low Water

Master Contour — MHW Mean High Water

Spot Height 157.8

JBA 75 Year Return Flood Map (Undefended) - Slice A



Order Details

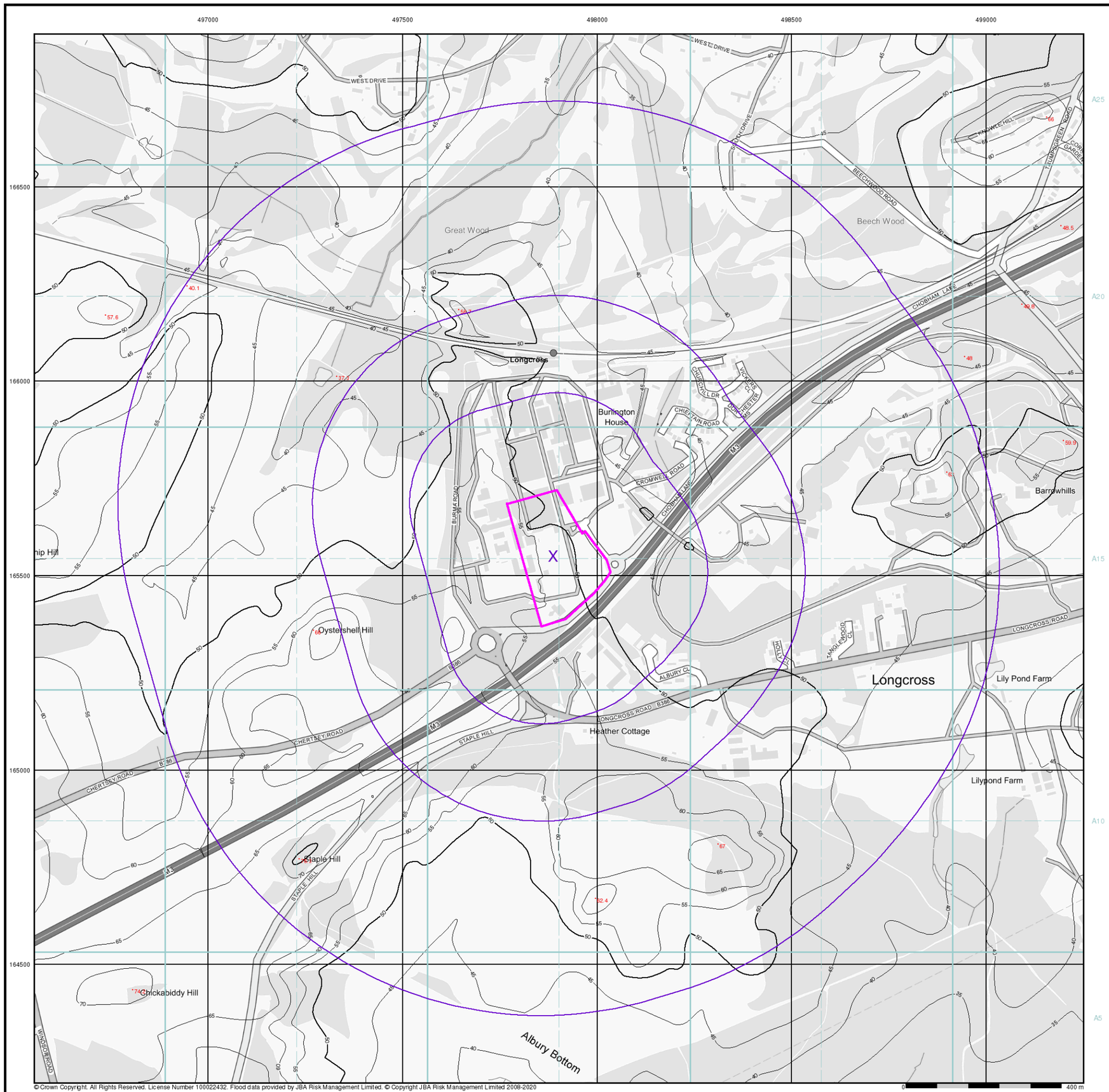
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

JBA 100 Year Return Flood Map (Undefended) (1:10,000)

General

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

Modelled Flood Depth

Fluvial Depth	Coastal Depth
0.01m - 0.05m	0.01m - 0.05m
0.05m - 0.1m	0.05m - 0.1m
0.1m - 0.3m	0.1m - 0.3m
0.3m - 1m	0.3m - 1m
>1m	>1m

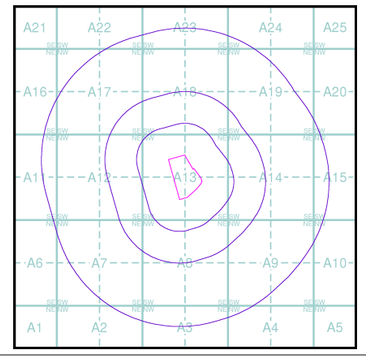
Contours (height in metres)

Standard Contour 105 100 95 — MLW Mean Low Water

Master Contour — MHW Mean High Water

Spot Height 167.8

JBA 100 Year Return Flood Map (Undefended) - Slice A



Order Details

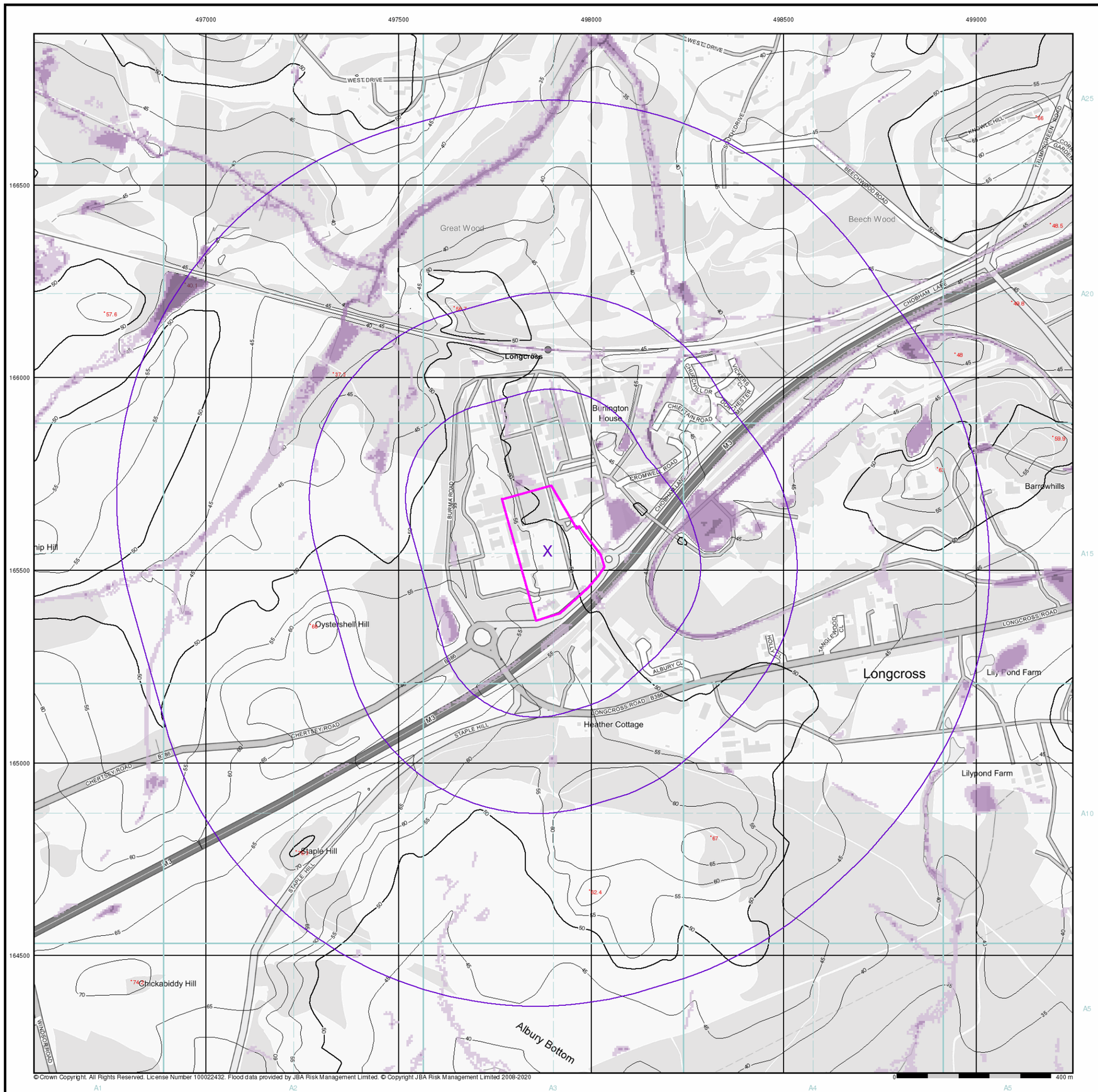
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

JBA 200 Year Return Flood Map (Undefended) (1:10,000)

General

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

Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

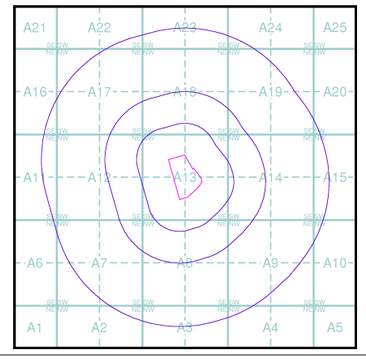
Contours (height in metres)

Standard Contour 105 100 95 — MLW Mean Low Water

Master Contour — MHW Mean High Water

Spot Height 157.8

JBA 200 Year Return Flood Map (Undefended) - Slice A



Order Details

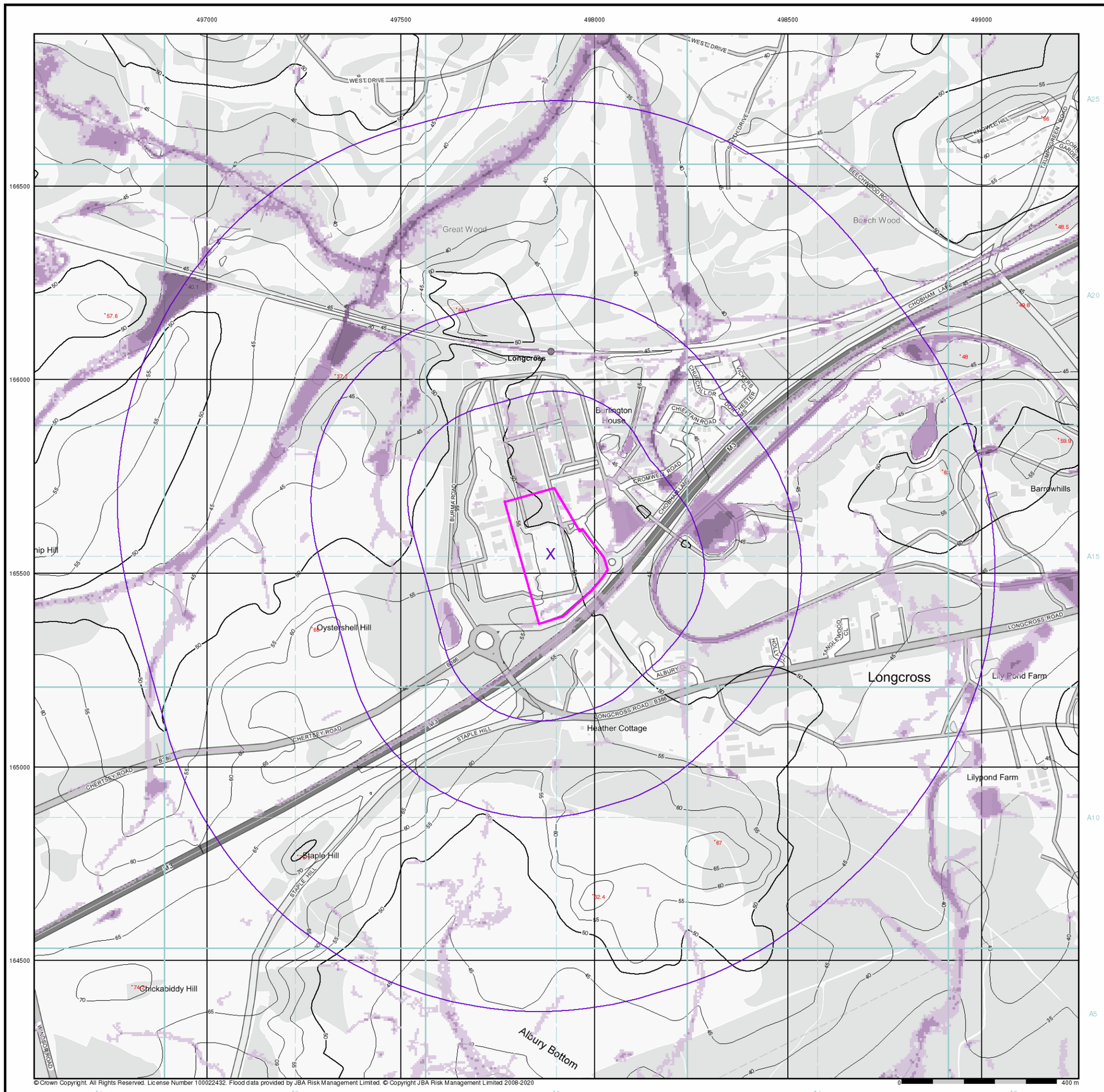
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

JBA 1000 Year Return Flood Map (Undefended) (1:10,000)

General

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

Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

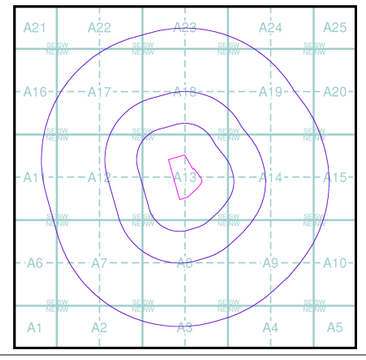
Contours (height in metres)

Standard Contour 105 100 95 — MLW Mean Low Water

Master Contour — MHW Mean High Water

Spot Height 157.8

JBA 1000 Year Return Flood Map (Undefended) - Slice A



Order Details

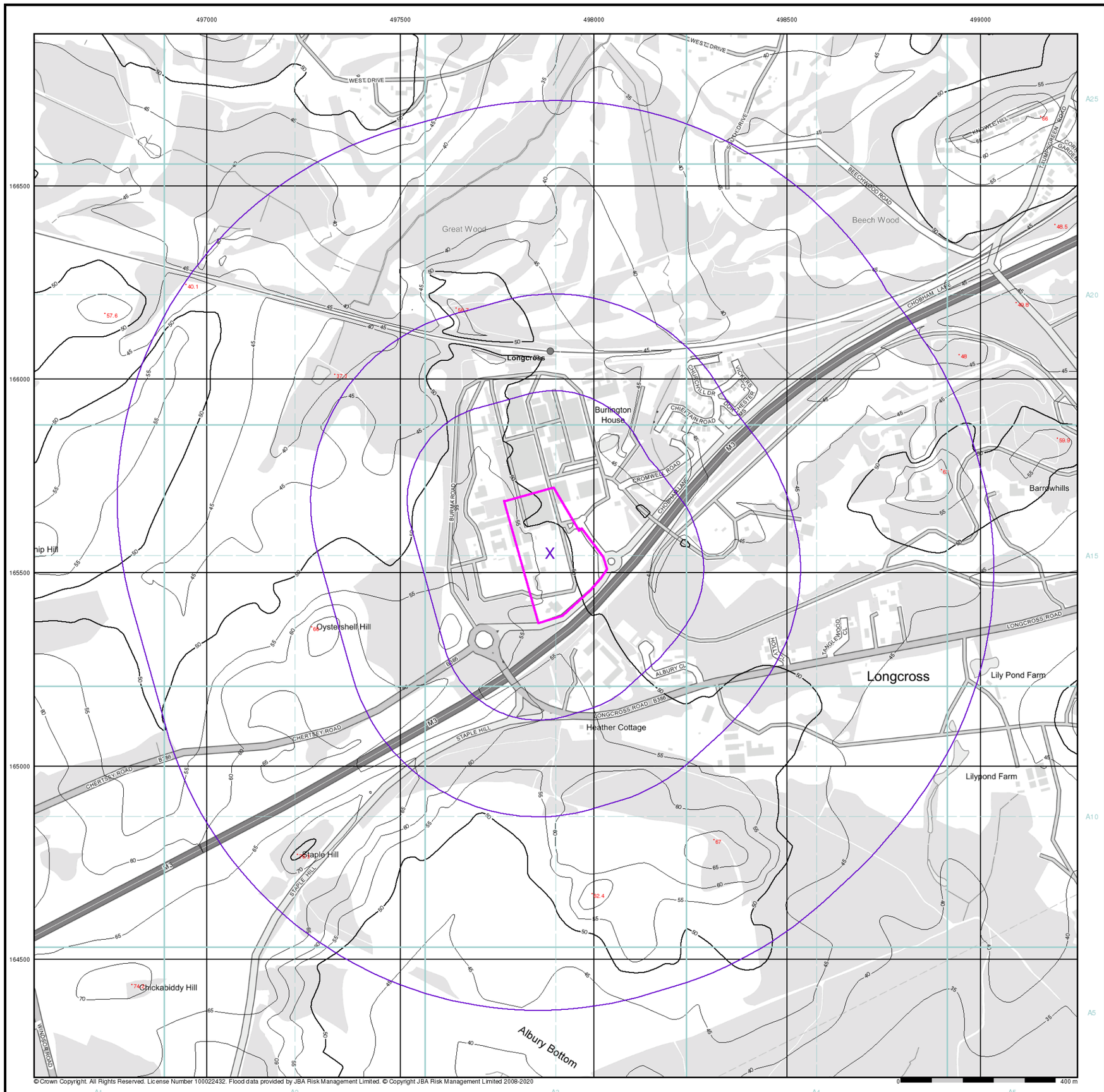
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

JBA Canal Failure Map (1:10,000)

General

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

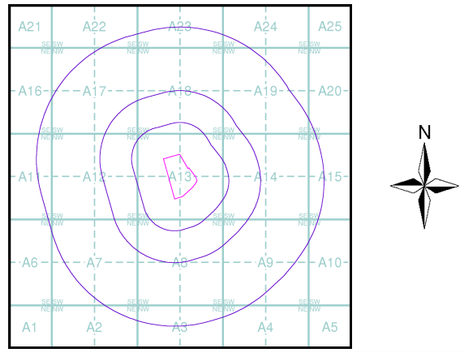
Flood Data

- Canal Failure
- Coverage

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height 167.8
- MLW Mean Low Water
- MHW Mean High Water

JBA Canal Failure Flood Map - Slice A



Order Details

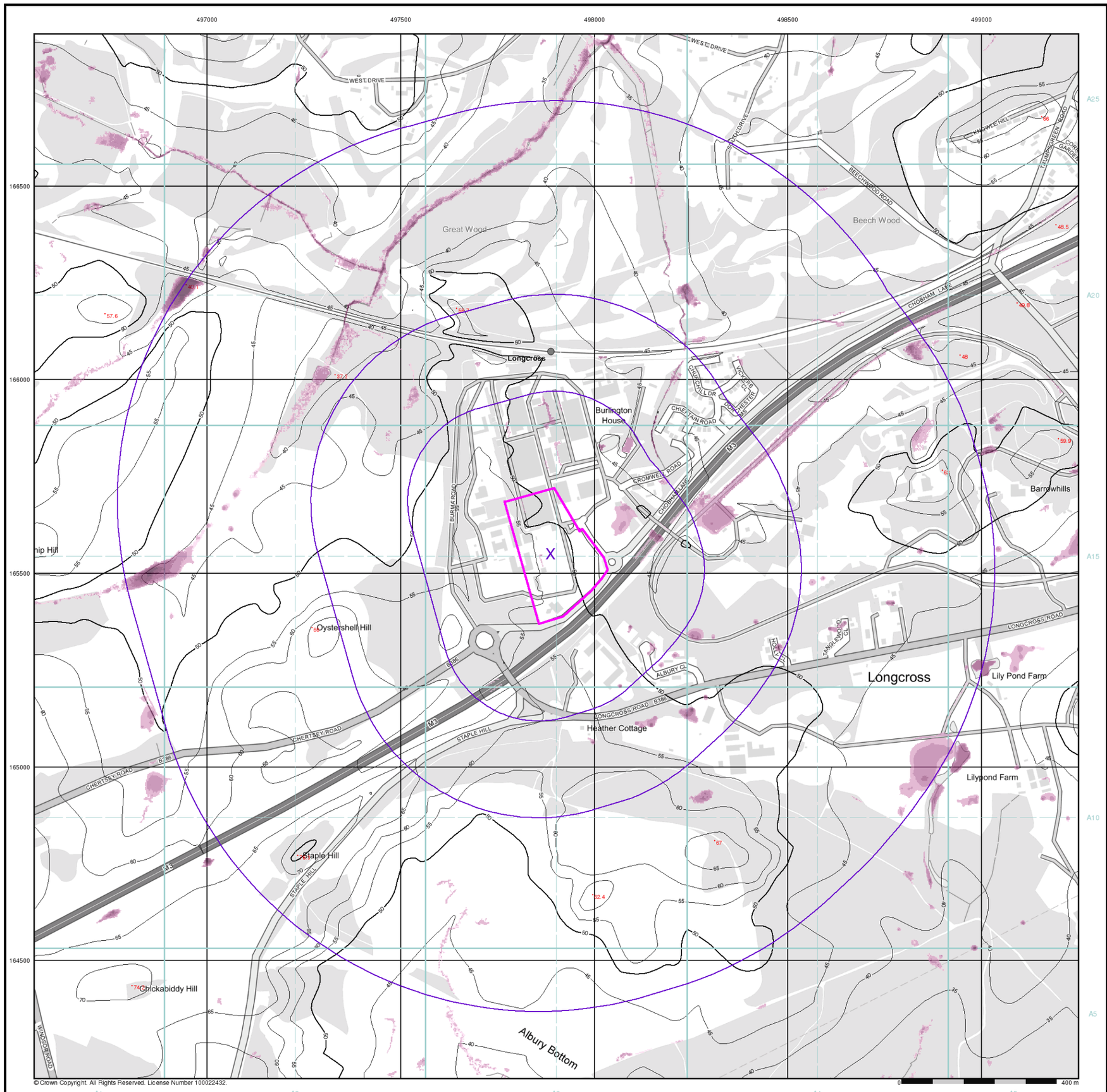
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 30 Year Return Depth Map (1:10,000)

General

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

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

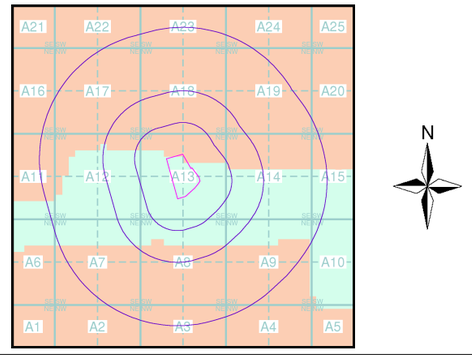
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

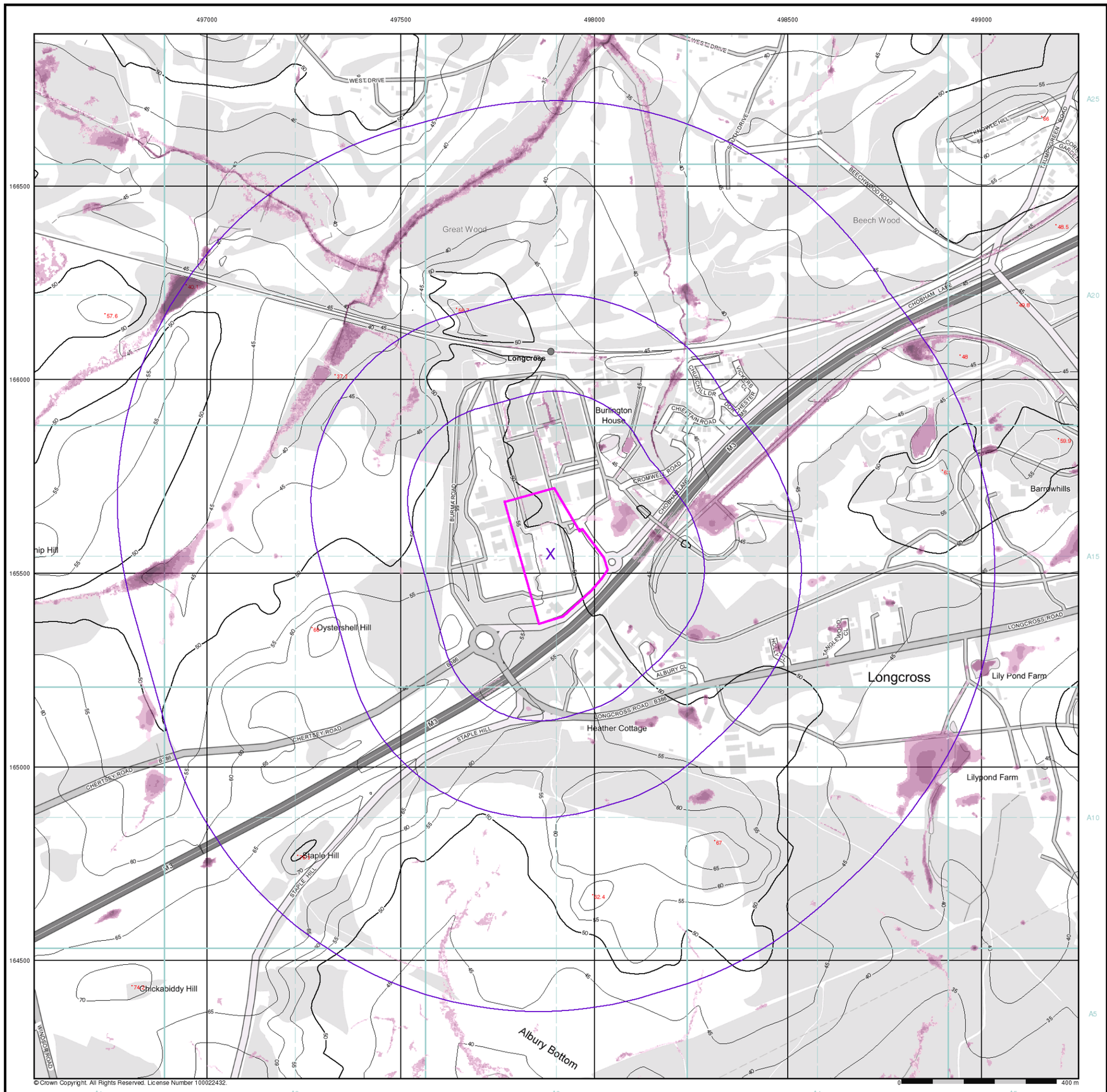
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 100 Year Return Depth Map

General

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

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

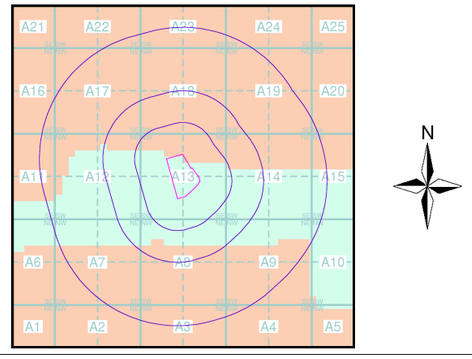
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

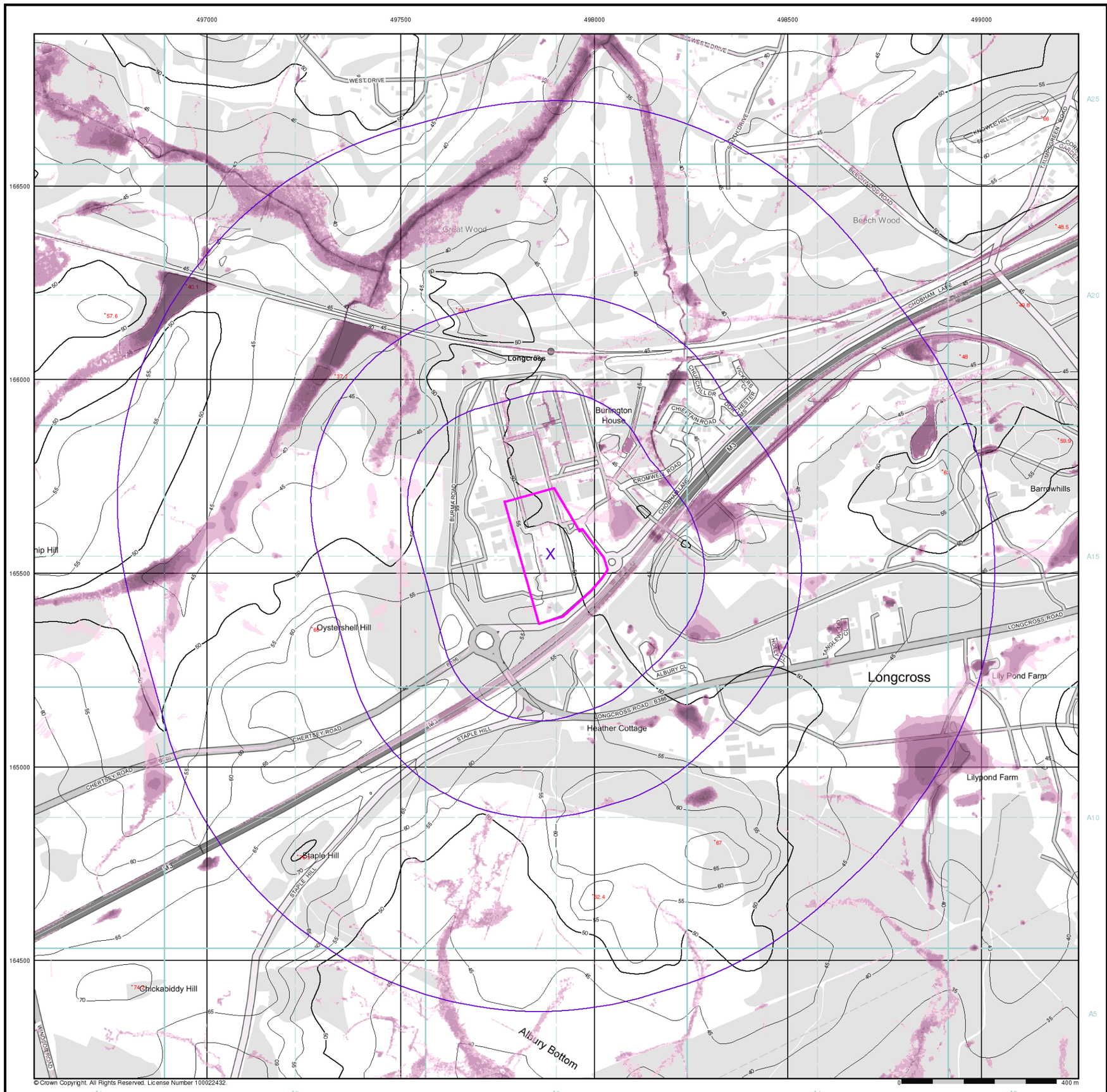
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 1000 Year Return Depth Map (1:10,000)

General

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

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

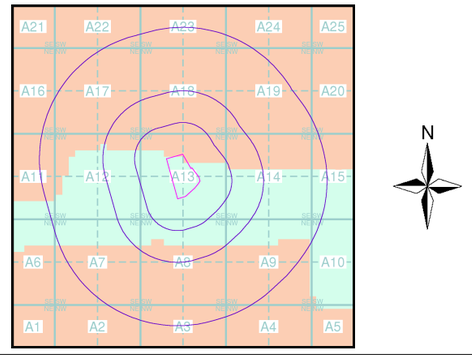
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

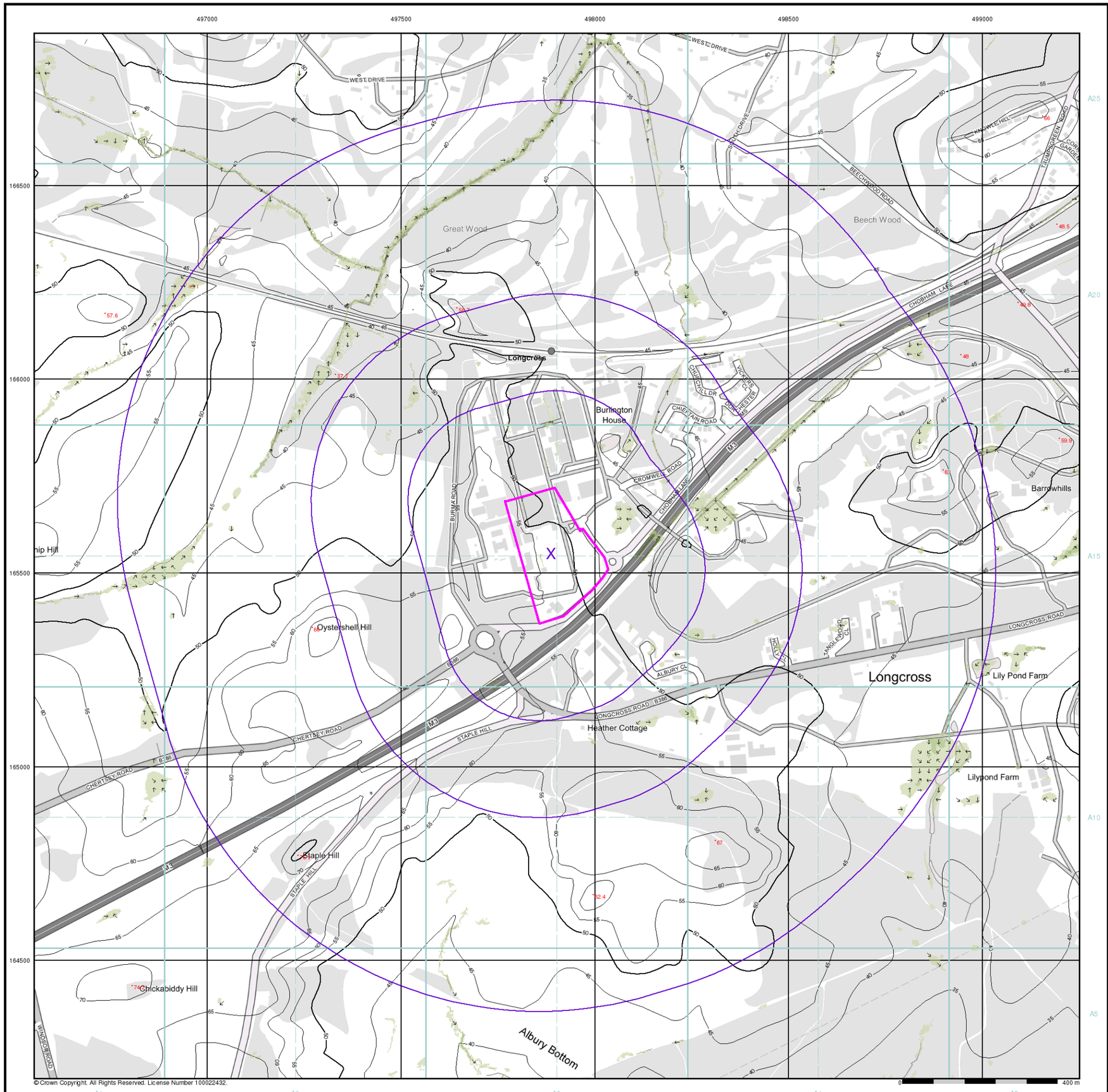
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 30 Year Return Velocity and Flow Direction Map (1:10,000)

General

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

Surface Water Velocity and Direction

- 0.00 - 0.25m/s
- 0.25 - 0.50m/s
- 0.50 - 1.00m/s
- 1.00 - 2.00m/s
- > 2.00m/s

Flow Direction at maximum velocity

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

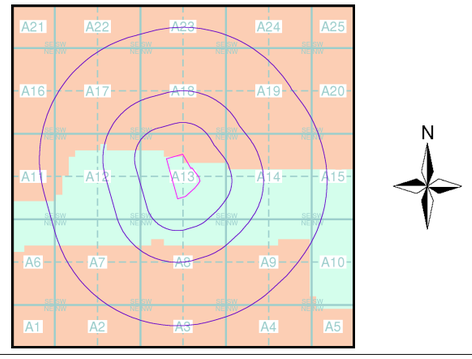
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 100 Year Return Velocity and Flow Direction Map (1:10,000)

General

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

Surface Water Velocity and Direction

- 0.00 - 0.25m/s
- 0.25 - 0.50m/s
- 0.50 - 1.00m/s
- 1.00 - 2.00m/s
- > 2.00m/s

Flow Direction at maximum velocity

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

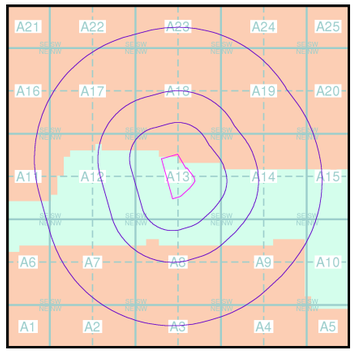
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

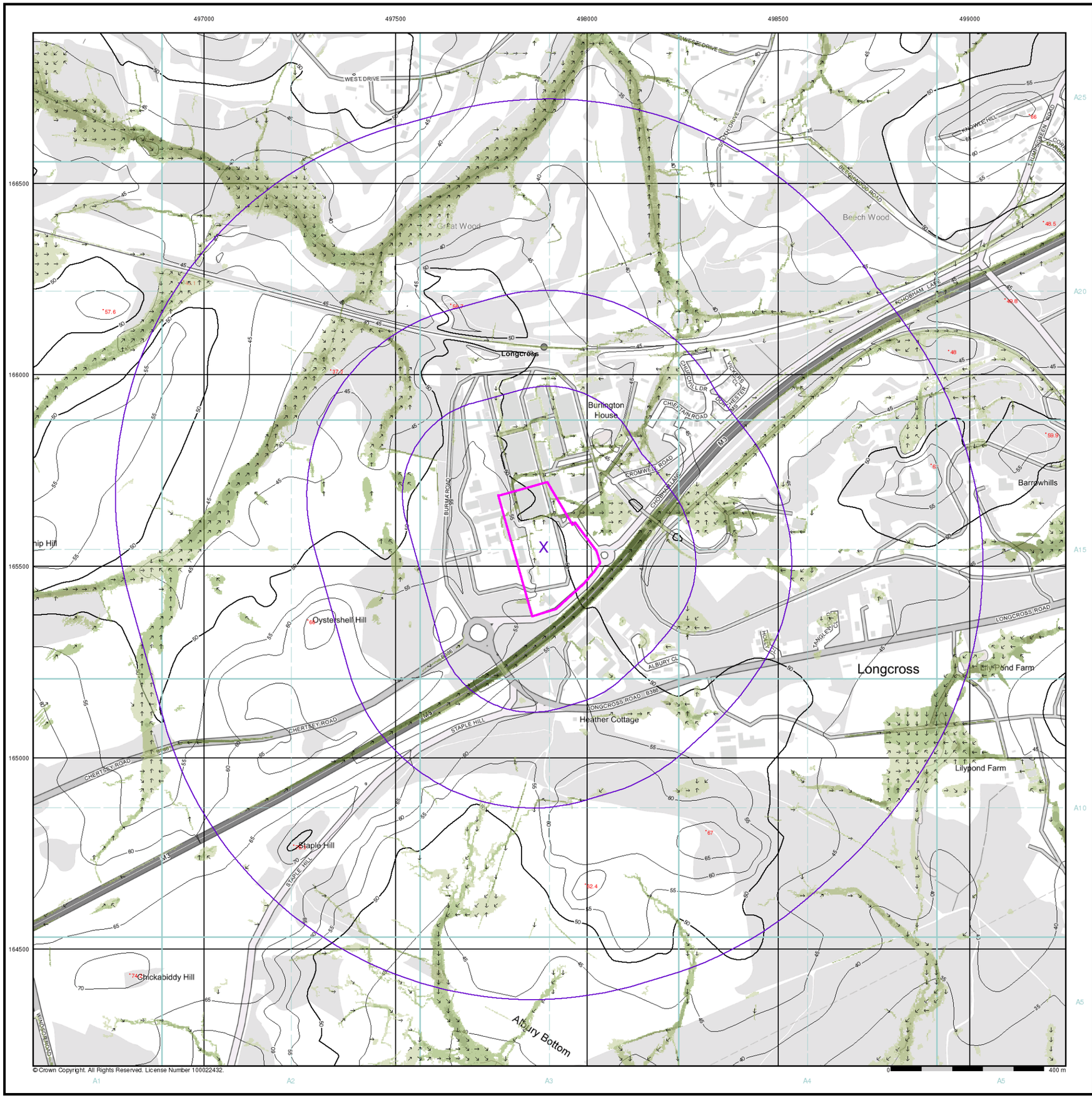
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 1000 Year Return Velocity and Flow Direction Map (1:10,000)

General

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

Surface Water Velocity and Direction

- 0.00 - 0.25m/s
- 0.25 - 0.50m/s
- 0.50 - 1.00m/s
- 1.00 - 2.00m/s
- > 2.00m/s

Flow Direction at maximum velocity

Contours (height in metres)

Standard Contour | Master Contour | Spot Height *167.8

MLW Mean Low Water

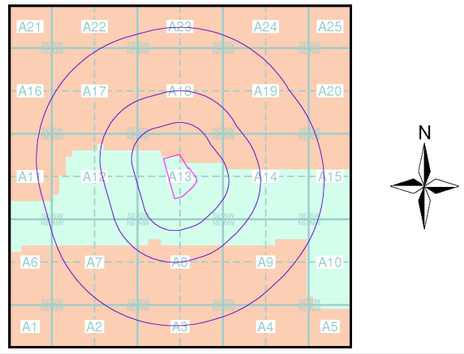
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

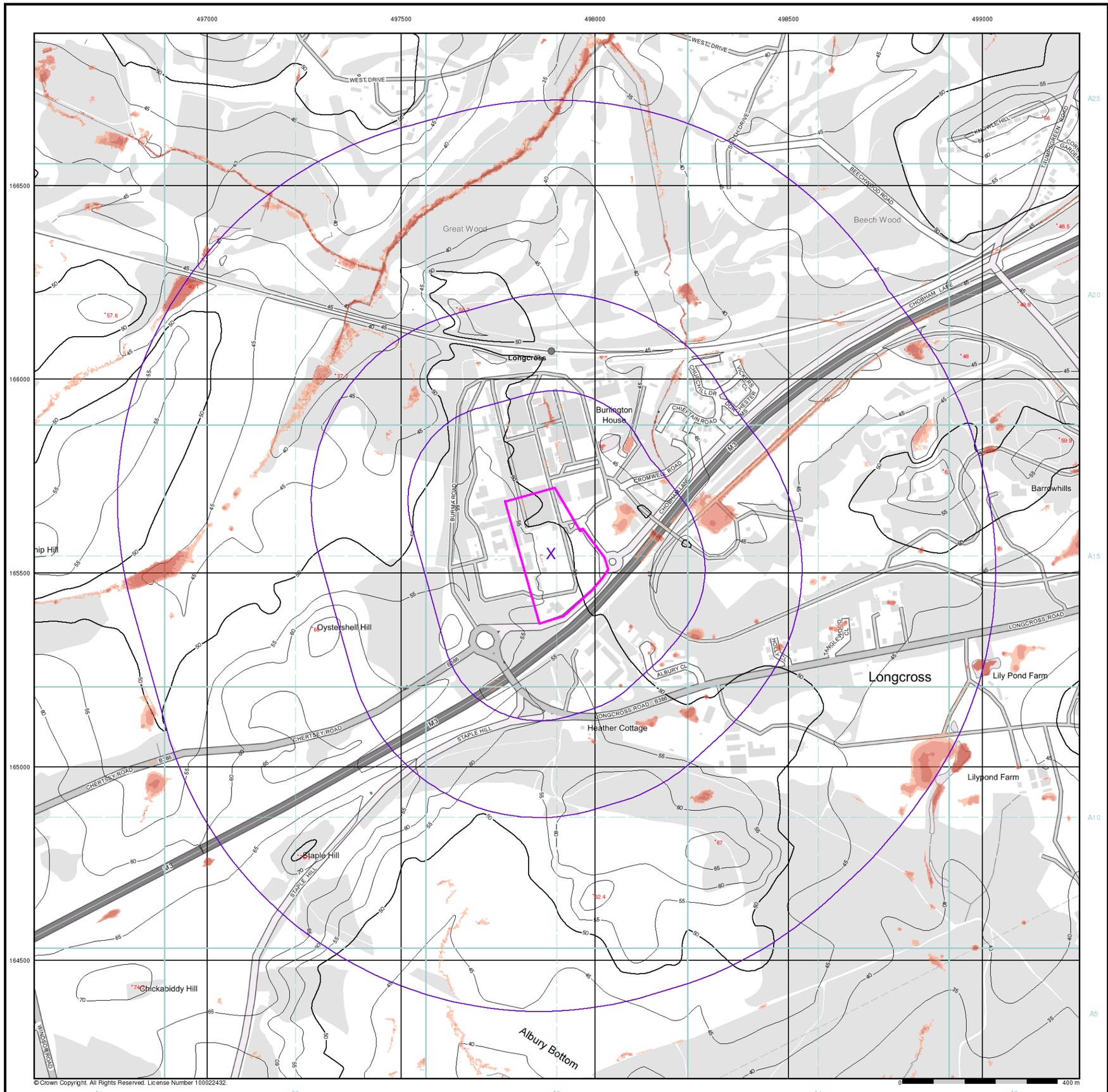
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 30 Year Return Hazard Rating Map (1:10,000)

General

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

Surface Water Hazard Rating

- Low (0.5 – 0.75)
- Moderate (0.75 – 1.25)
- Significant (1.25 – 2.0)
- Extreme (>2.0)

Contours (height in metres)

Standard Contour | Master Contour | Spot Height * 167.8

MLW Mean Low Water

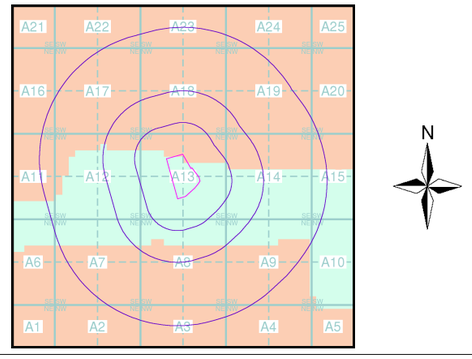
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

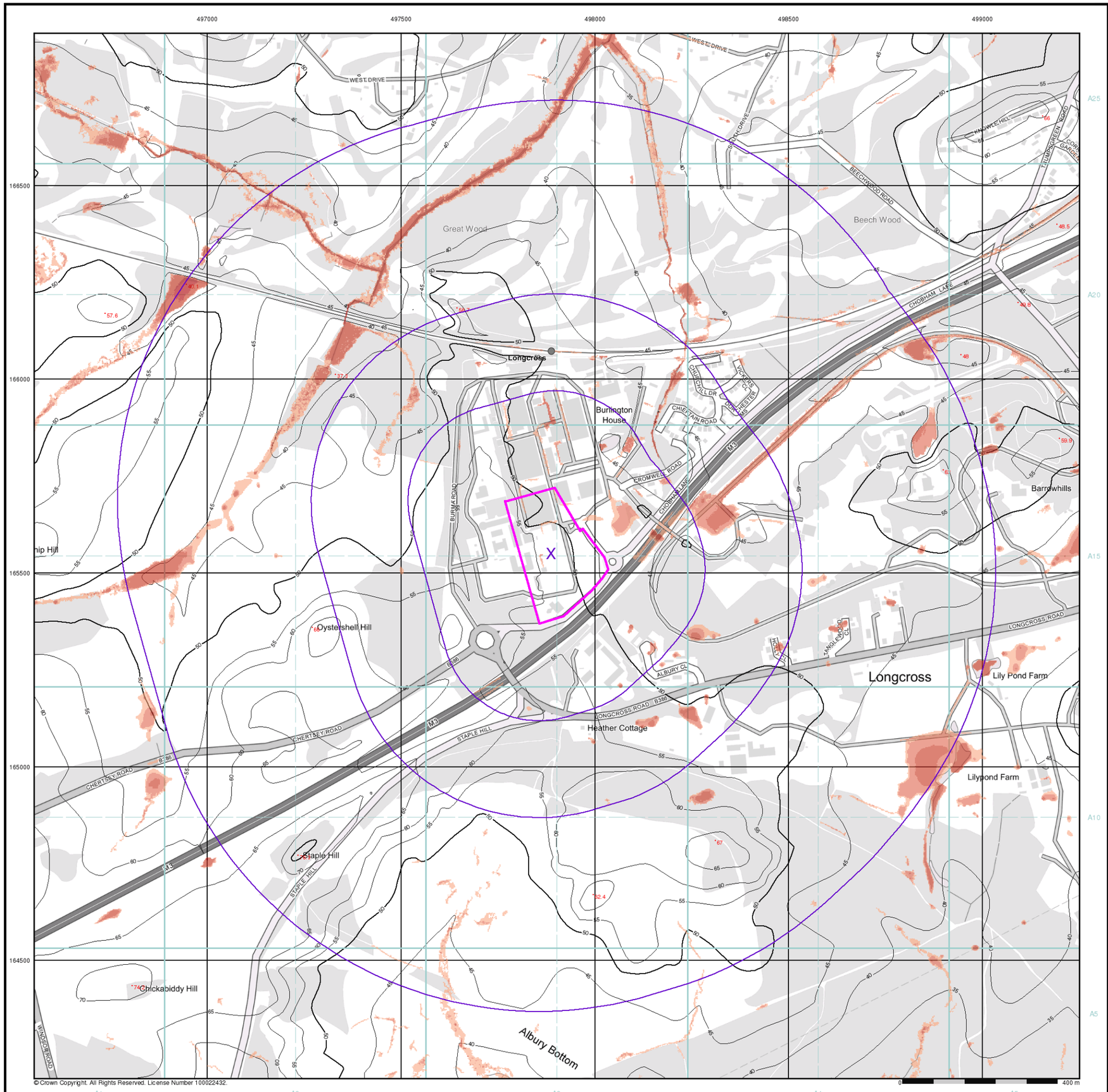
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 100 Year Return Hazard Rating Map (1:10,000)

General

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

Surface Water Hazard Rating

- Low (0.5 – 0.75)
- Moderate (0.75 – 1.25)
- Significant (1.25 – 2.0)
- Extreme (>2.0)

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

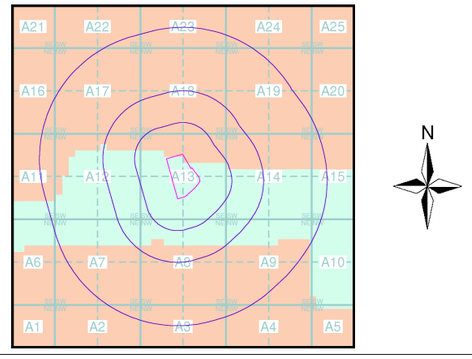
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

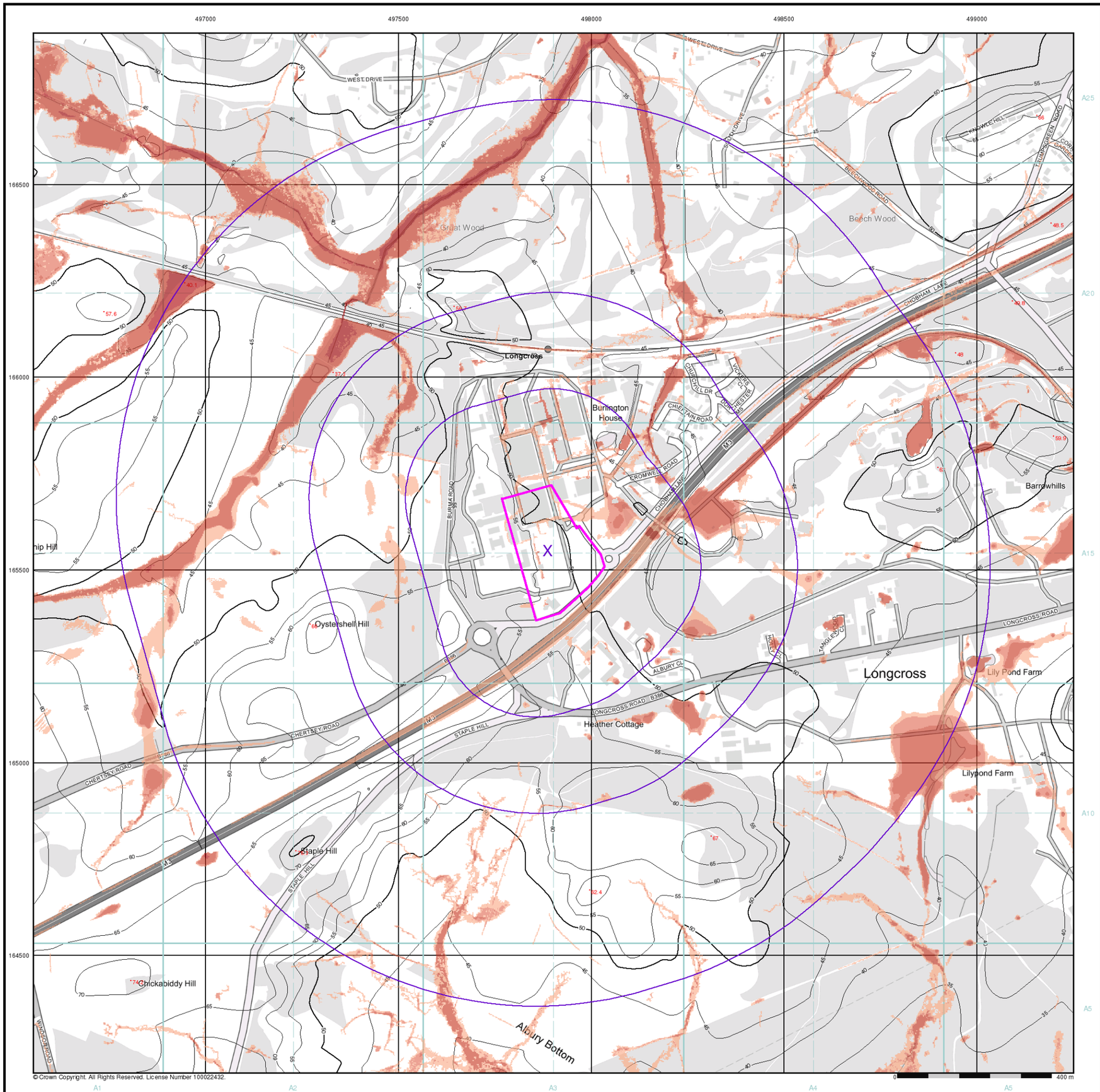
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Surface Water 1000 Year Return Hazard Rating Map (1:10,000)

General

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

Surface Water Hazard Rating

- Low (0.5 – 0.75)
- Moderate (0.75 – 1.25)
- Significant (1.25 – 2.0)
- Extreme (>2.0)

Contours (height in metres)

Standard Contour | Master Contour | Spot Height 167.8

MLW Mean Low Water

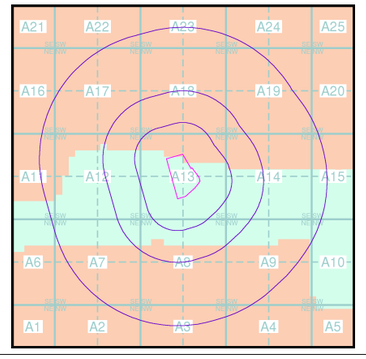
MHW Mean High Water

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

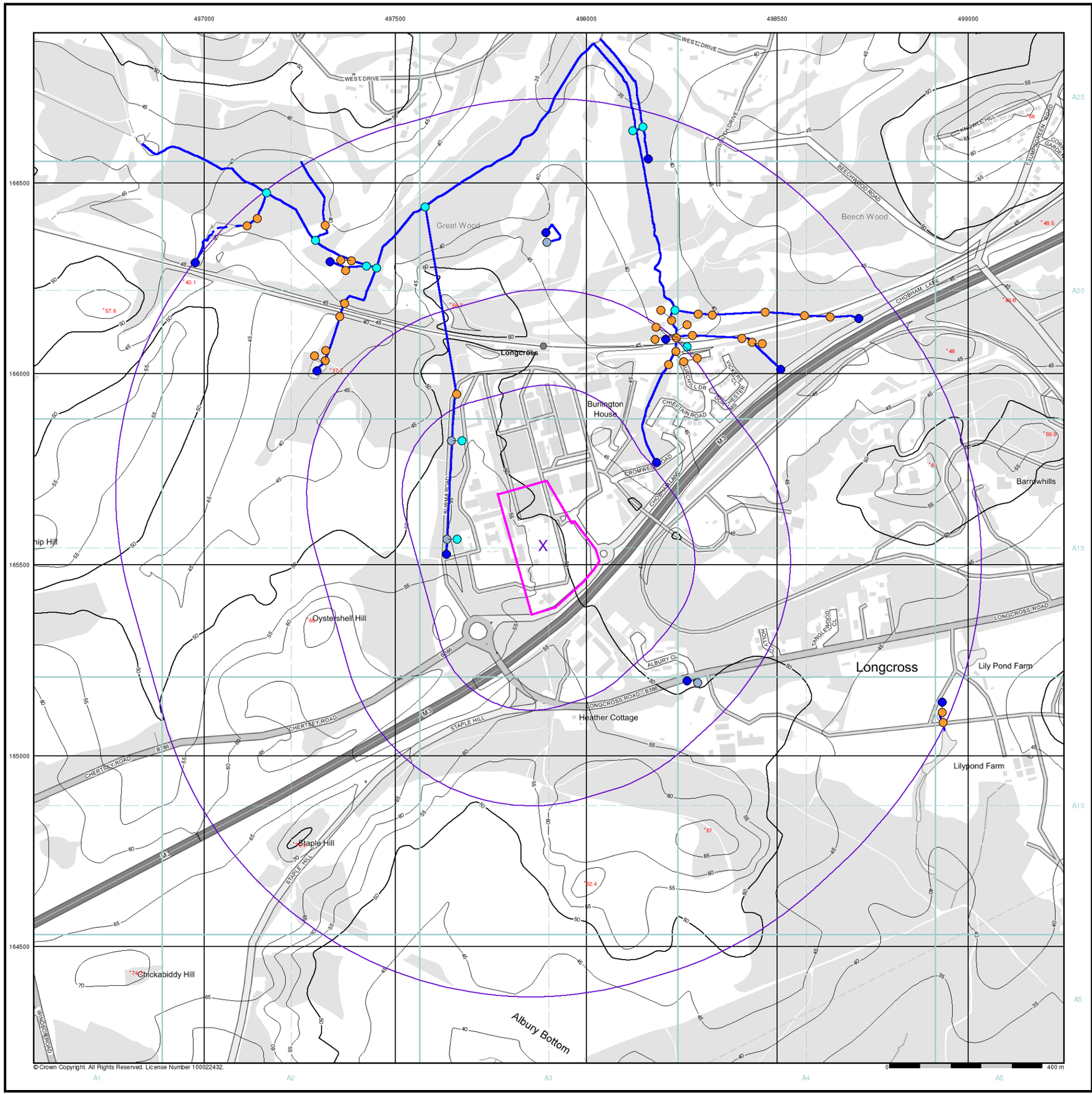
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

OS Water Network Lines Map (1:10,000)

General

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

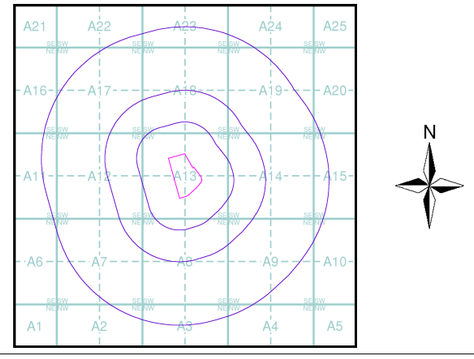
OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea
- Junction
- Outlet
- Pseudo
- Source
- Other

Contours (height in meters)

- Standard Contour
- Master Contour
- Spot Height 167.3
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



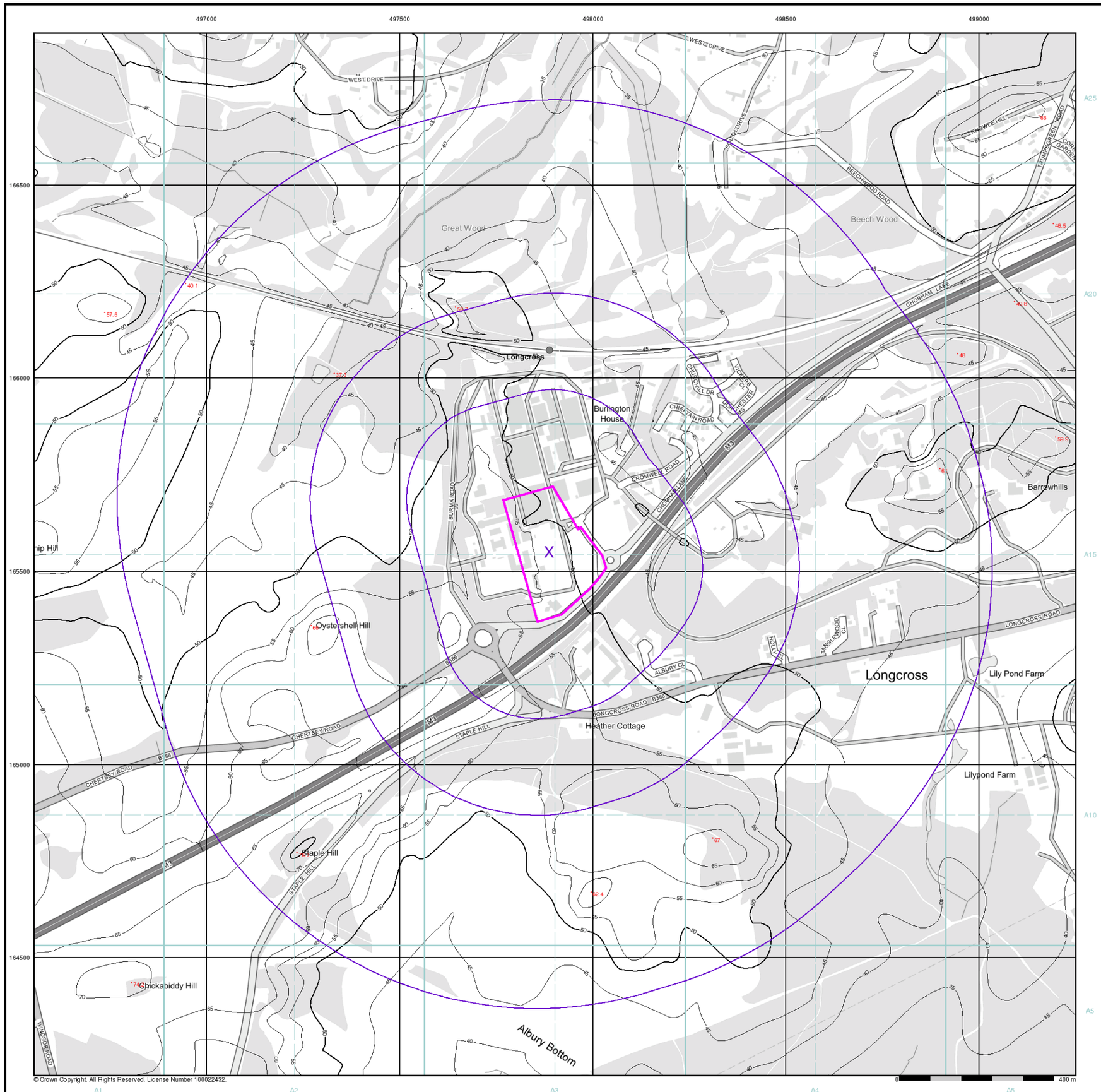
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW Historic Flood Map (1:10,000)

General

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

Historic Flood Events Data

- Channel Capacity Exceeded (no raised defences)
- Channel Capacity Exceeded /Surface Water
- Groundwater/High Water Table
- Local Drainage/Surface Water
- Mechanical Failure
- Obstruction/Blockage - Bridge
- Obstruction/Blockage - Channel
- Historical Flood Liabilities
- Obstruction/Blockage - Culvert
- Obstruction/Blockage - Debris Screen
- Operational Failure/ Breach of Defence
- Other
- Overtopping of Defences
- Surface Water
- Unknown

Contours (height in metres)

Standard Contour 105 100 95

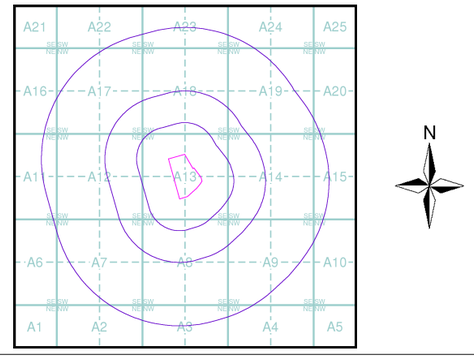
Master Contour

Spot Height 167.8

MLW Mean Low Water

MHW Mean High Water

EA/NRW Historic Flood Map - Slice A



Order Details

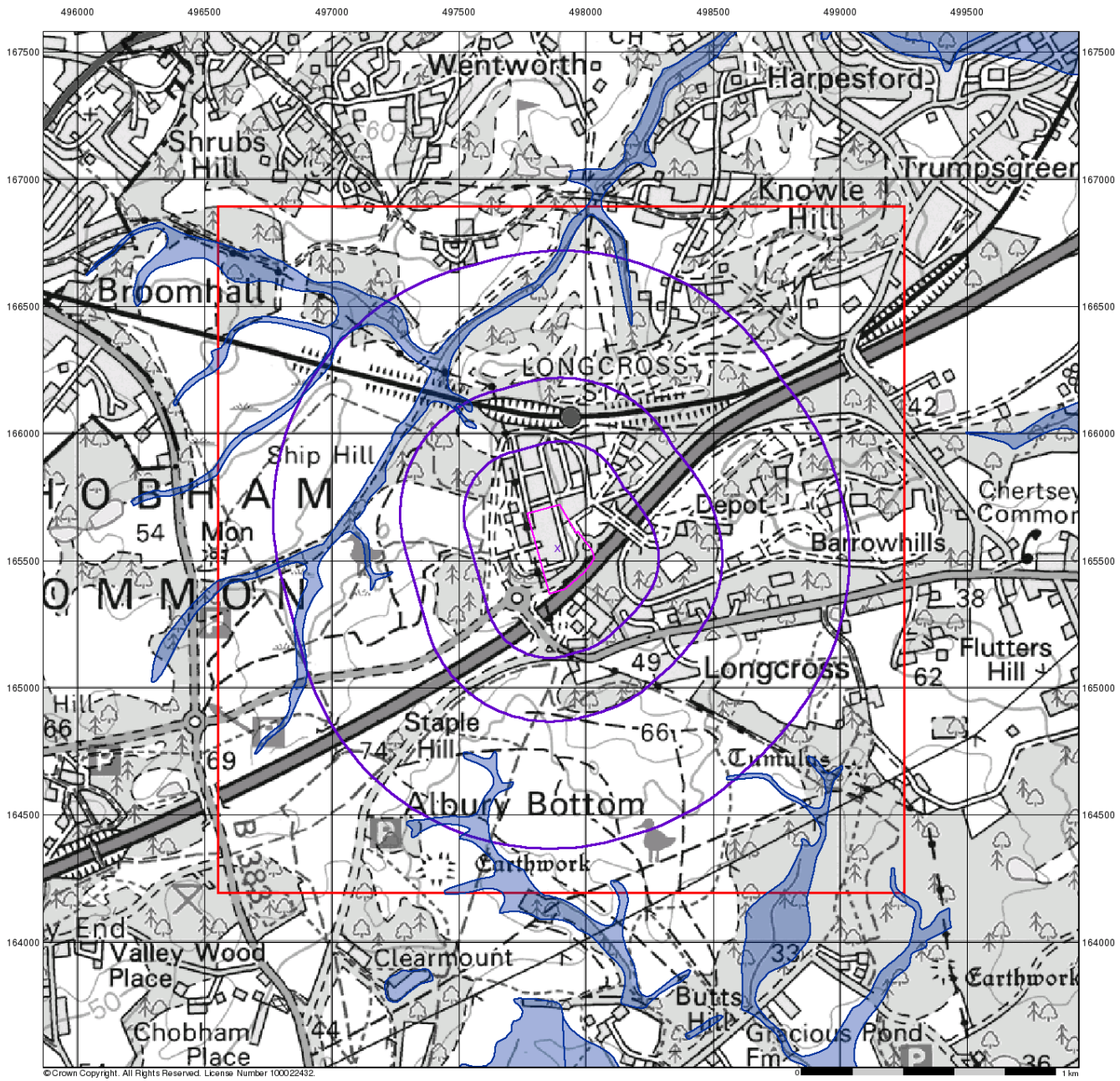
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

BGS Flood Data (1:50,000)

General

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

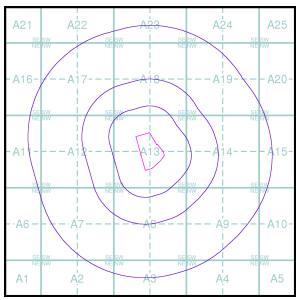
BGS Geological Indicators of Flooding

Coastal

Inland

Bodies of Water

BGS Flood Data Map - Slice A



Order Details

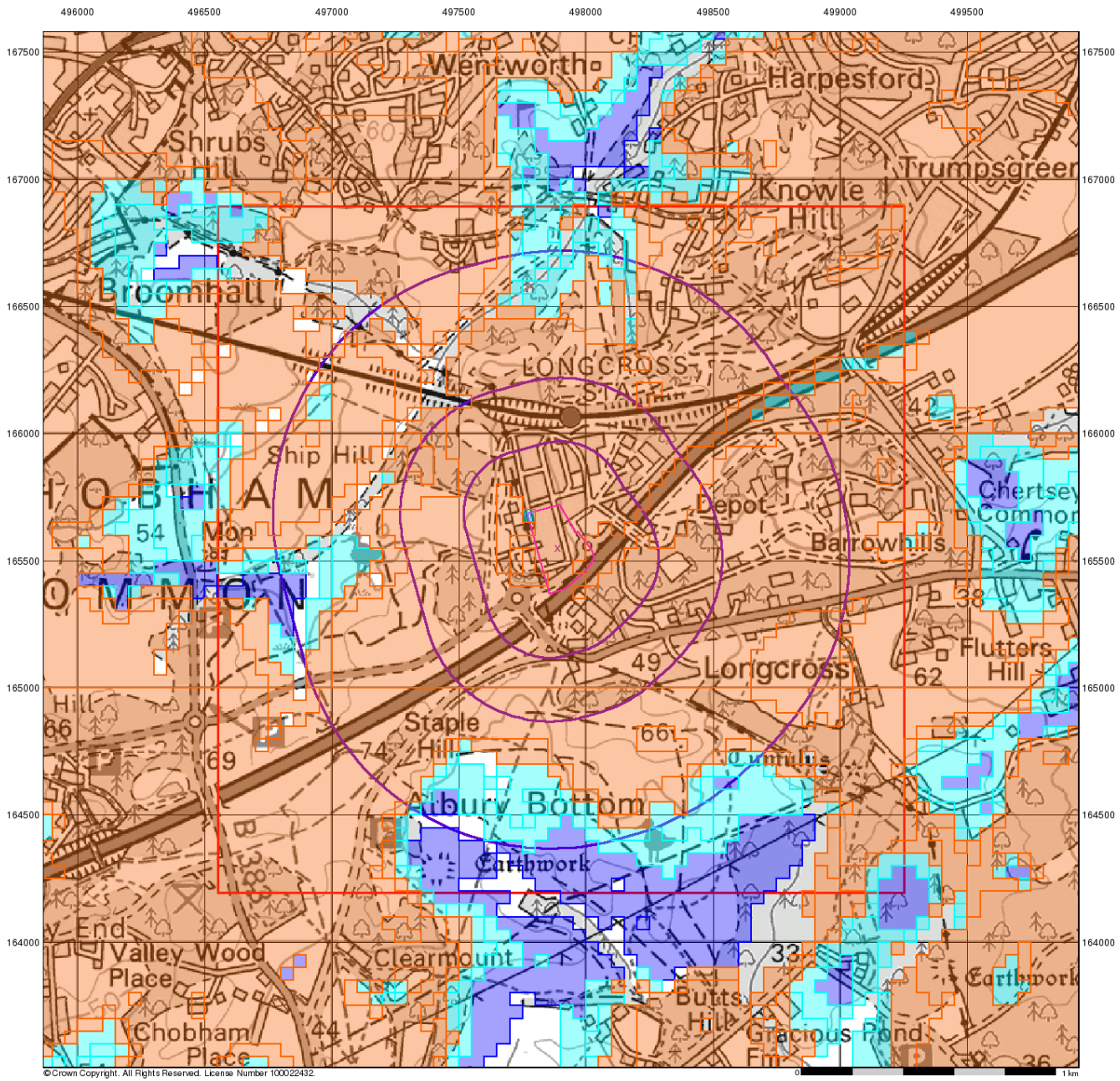
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

BGS Flood Data (1:50,000)

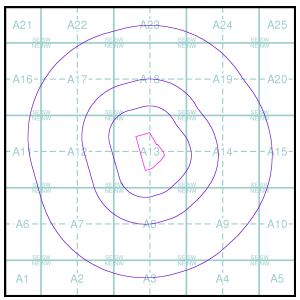
General

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

BGS Groundwater Flooding Susceptibility

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

BGS Flood Data Map - Slice A



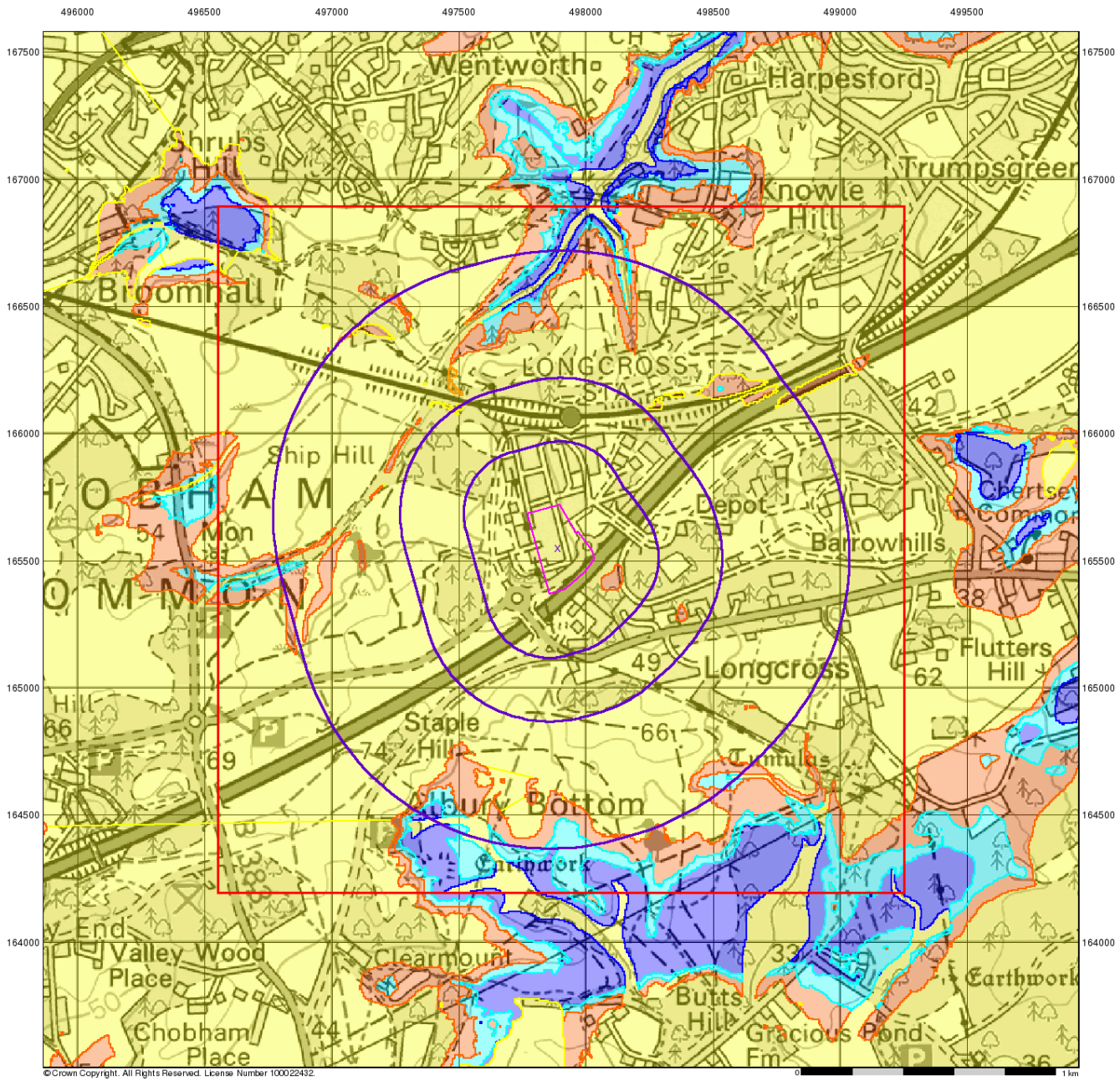
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

GeoSmart Information Groundwater Flood Map (1:50,000)

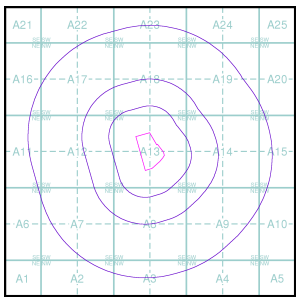
General

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

GeoSmart Information Groundwater Flooding Risk

- High Risk
- Moderate Risk
- Low Risk
- Negligible Risk

GeoSmart Information Groundwater Flood Map - Slice A



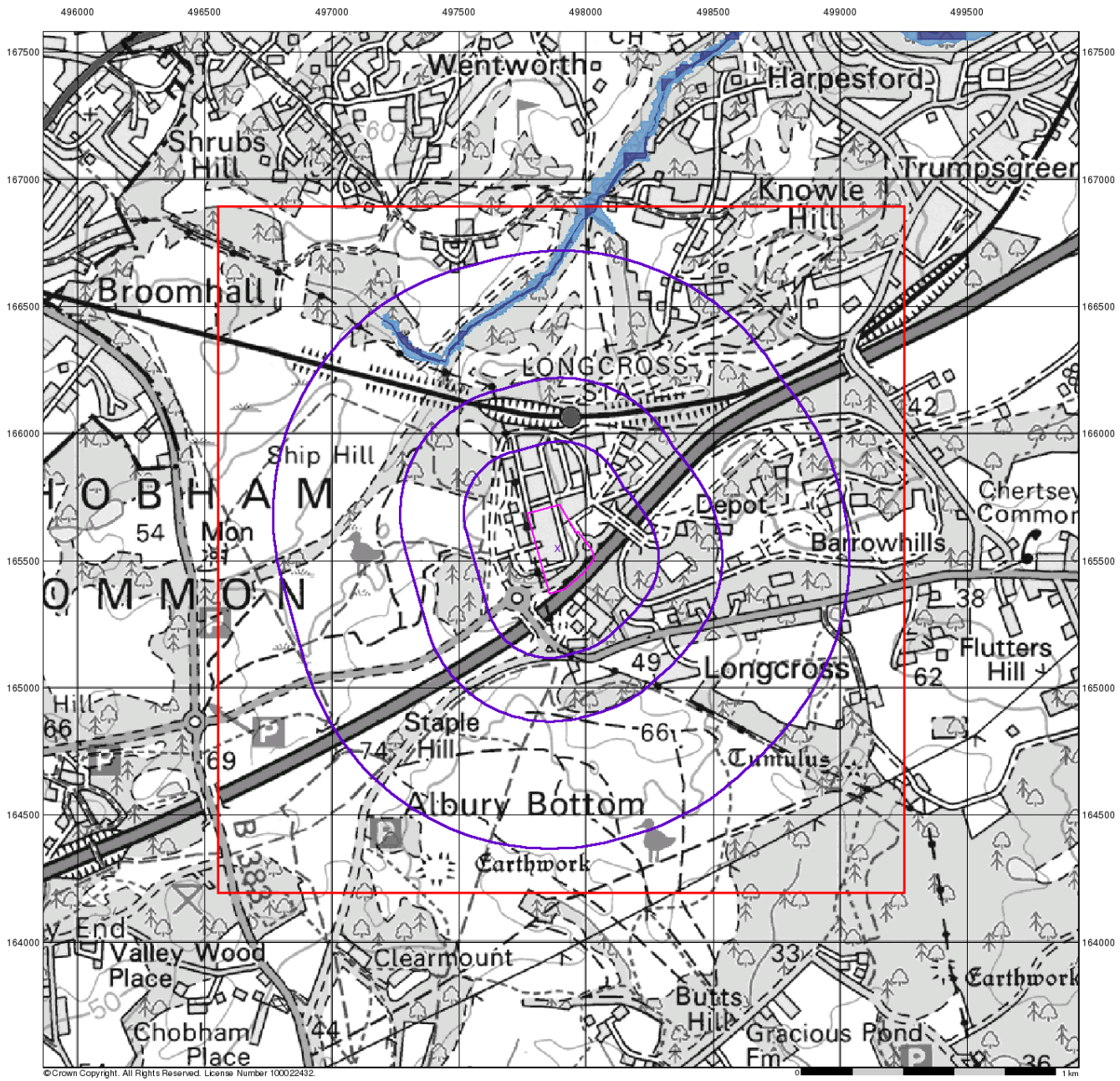
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

EA/NRW RoFRS Data (1:50,000)

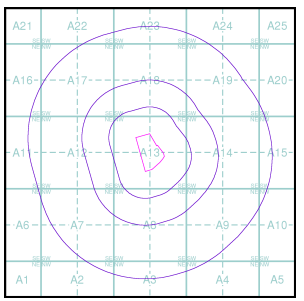
General

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

Risk of Flooding from Rivers and Sea (RoFRS)

- High Risk
- Medium Risk
- Low Risk
- Very Low Risk

EA/NRW RoFRS Data Map - Slice A



Order Details

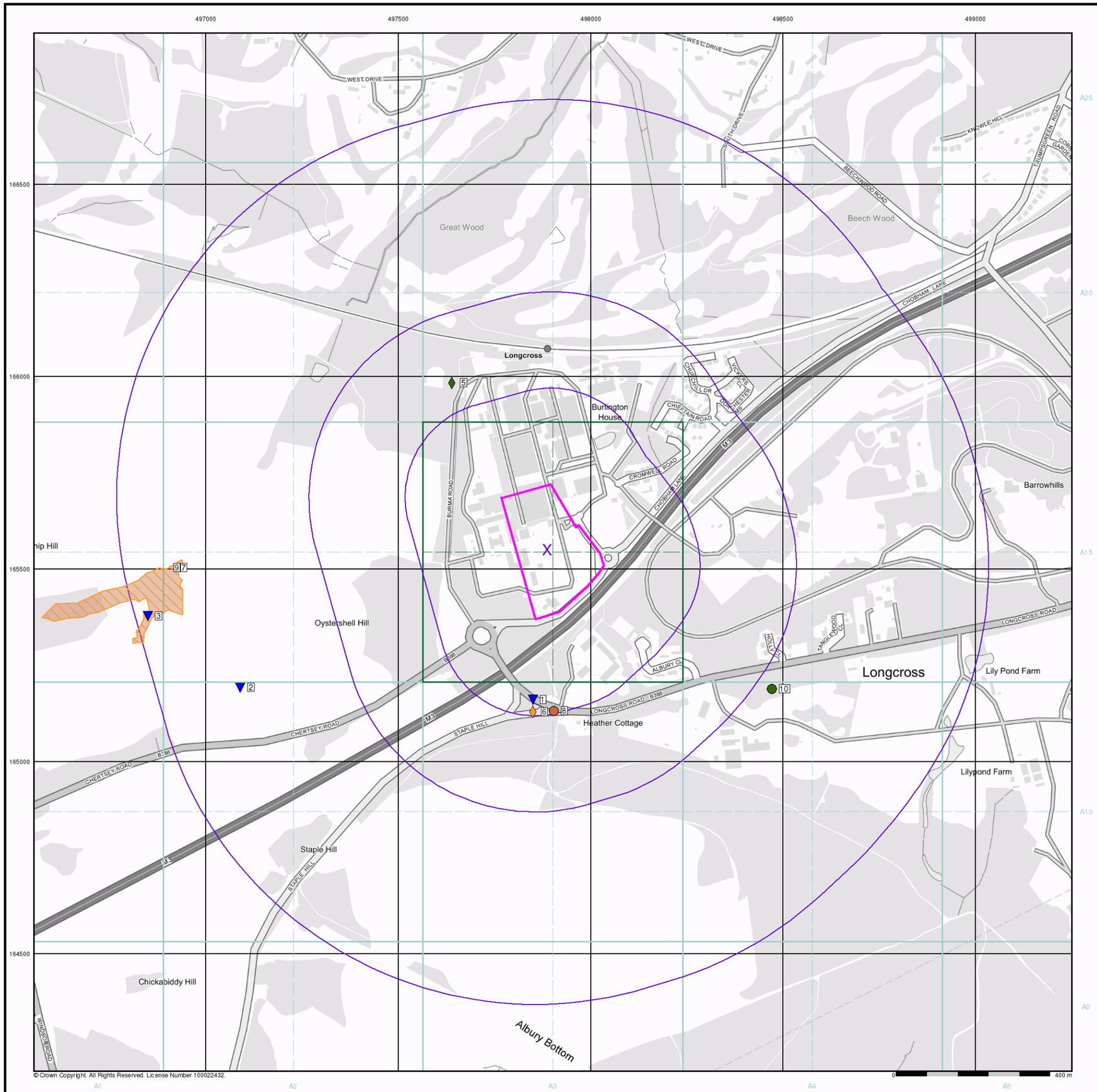
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Historical Land Use Information (1:10,000)

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Potentially Contaminative Industrial Uses (Past Land Uses - Mining)

	Point	Line	Polygon
Air Shafts	◆		
Disturbed Ground	◆		
General Quarrying	◆		
Heap, unknown constituents	◆		
Mineral Railway	◆		
Mining and Quarrying General	◆		
Mining of Coal & Lignite	◆		
Quarrying of Sand and Clay, Operation of Sand and Gravel Pits	◆		

Historical Land Use

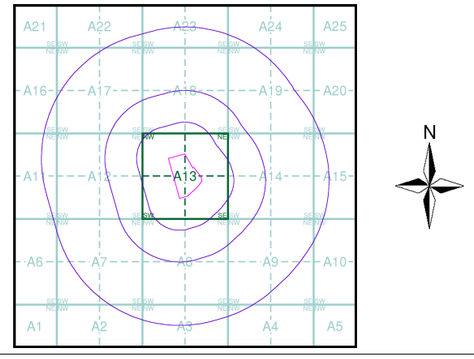
	Point	Line	Polygon
Potentially Infilled Land (Non-Water)	●		
Potentially Infilled Land (Water)	●		
Former Marsh	✠		

Mining Data

Potential Mining Area

BGS Recorded Mineral Site

Mining and Ground Stability - Slice A



Order Details

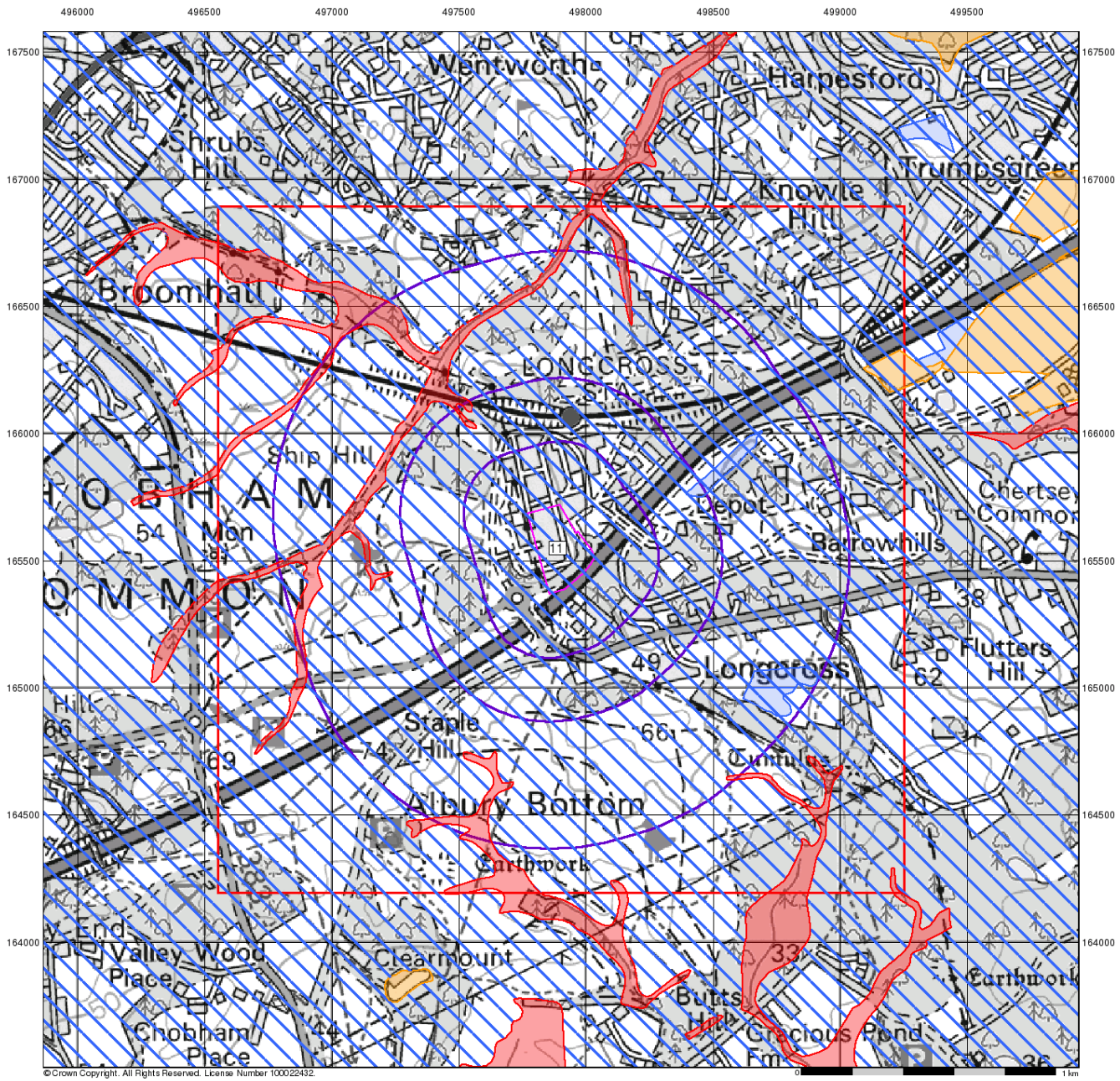
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Ground Stability Data (1:50,000)

General

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

Potential for Compressible Ground Stability Hazards

High | Low | Moderate | Very Low

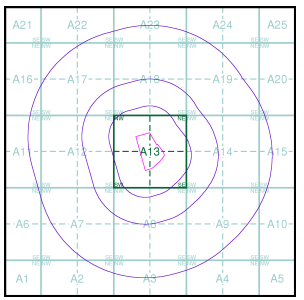
Potential for Collapsible Ground Stability Hazards

High | Low | Moderate | Very Low

Brine Pumping and Salt Mining

	Point	Polygon
Brine Pumping Related Feature	▲	▨
Salt Mining Related Feature	▲	▨

Mining and Ground Stability - Slice A



Order Details

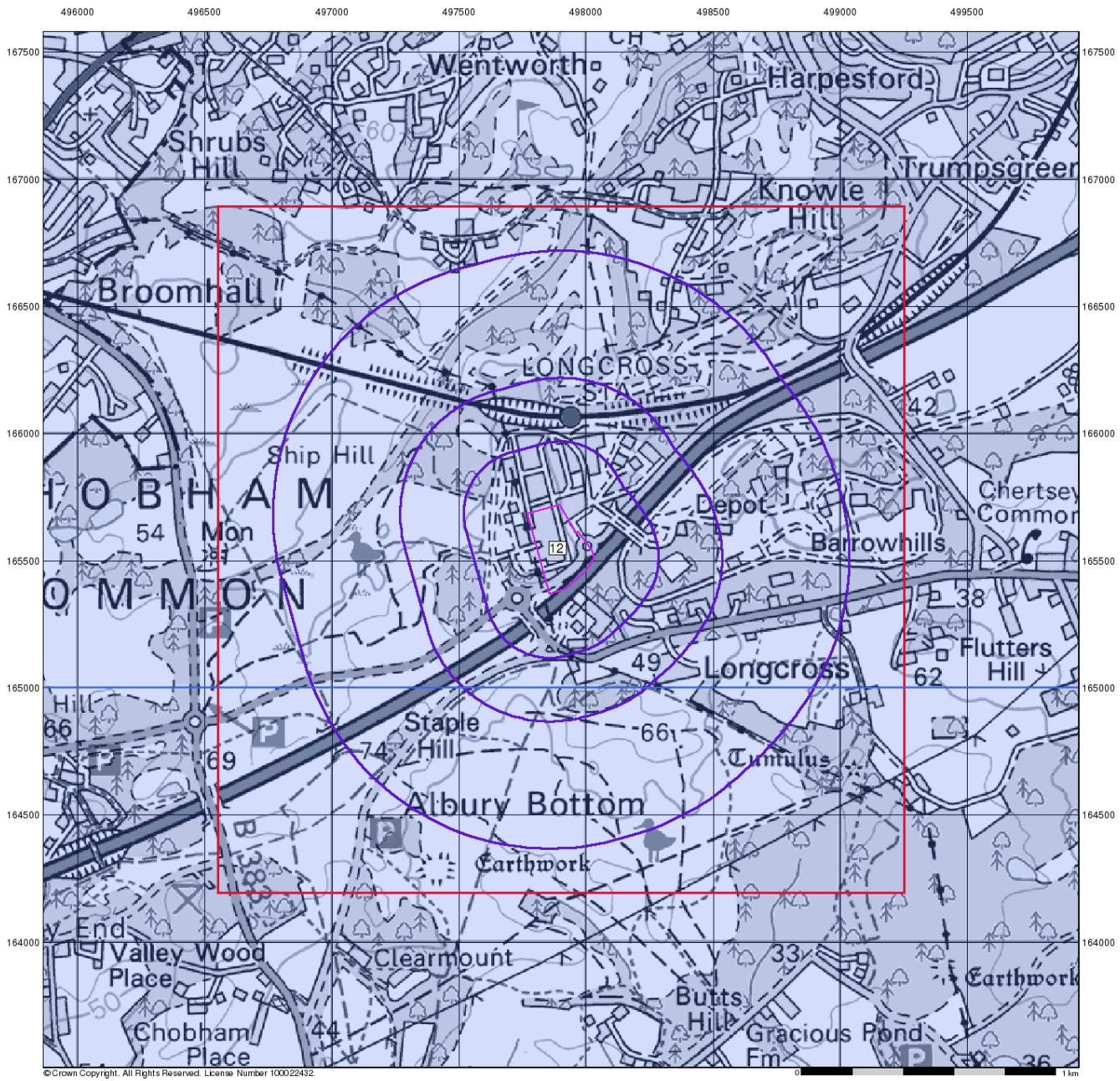
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Ground Stability Data (1:50,000)

General

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

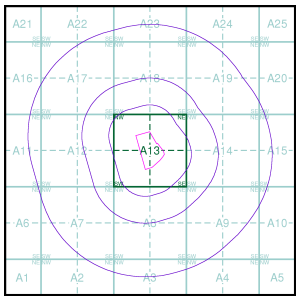
Potential for Landslide Ground Stability Hazards

High | Low | Moderate | Very Low

Potential for Ground Dissolution Stability Hazards

High | Low | Moderate | Very Low

Mining and Ground Stability - Slice A



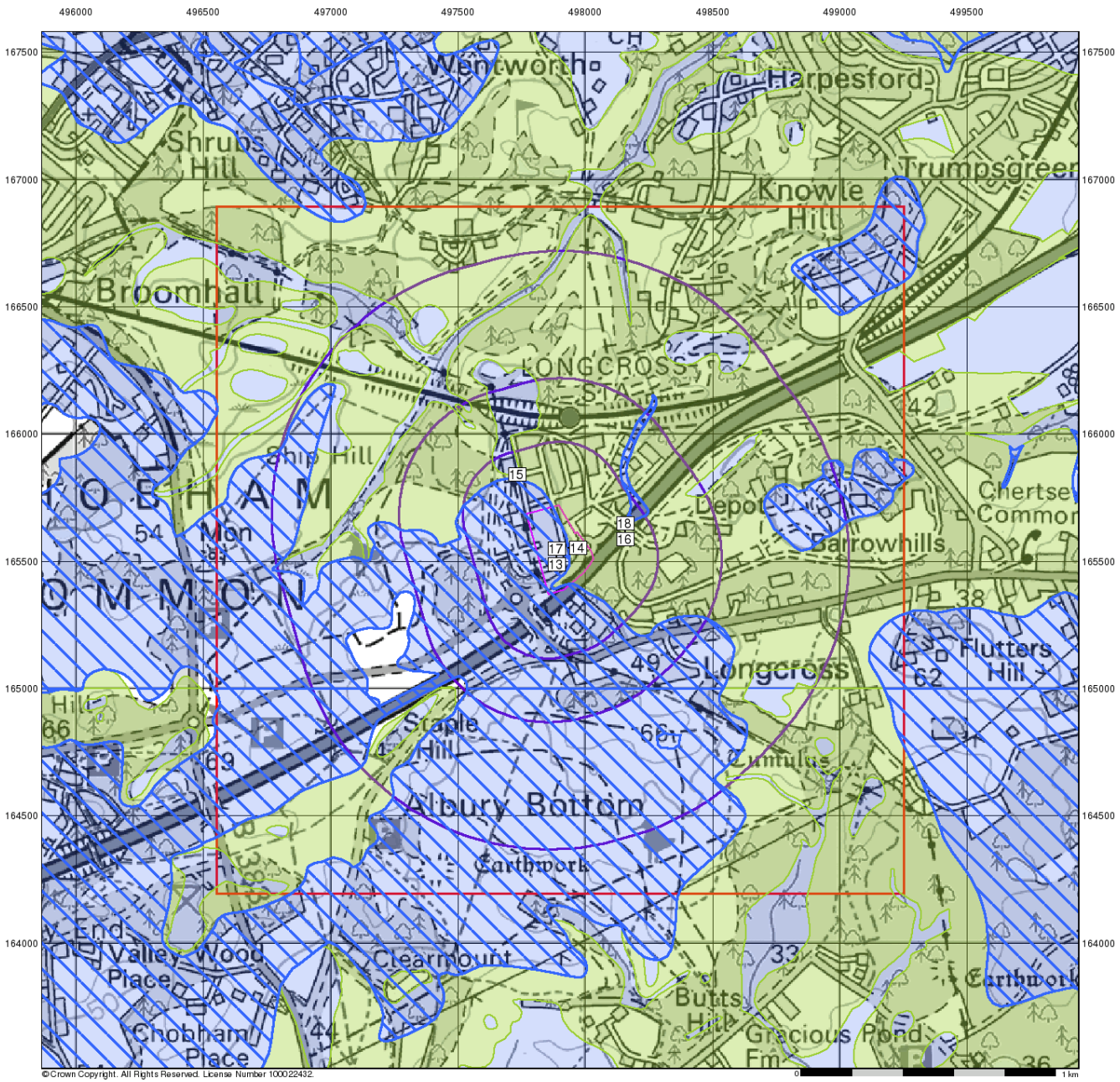
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Ground Stability Data (1:50,000)

General

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

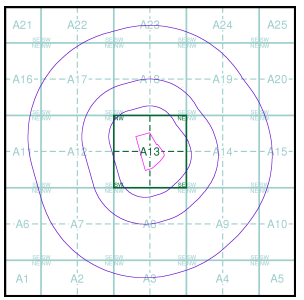
Potential for Running Sand Ground Stability Hazards

High | Low
Moderate | Very Low

Potential for Shrinking or Swelling Clay Ground Stability Hazards

High | Low
Moderate | Very Low

Mining and Ground Stability - Slice A



Order Details

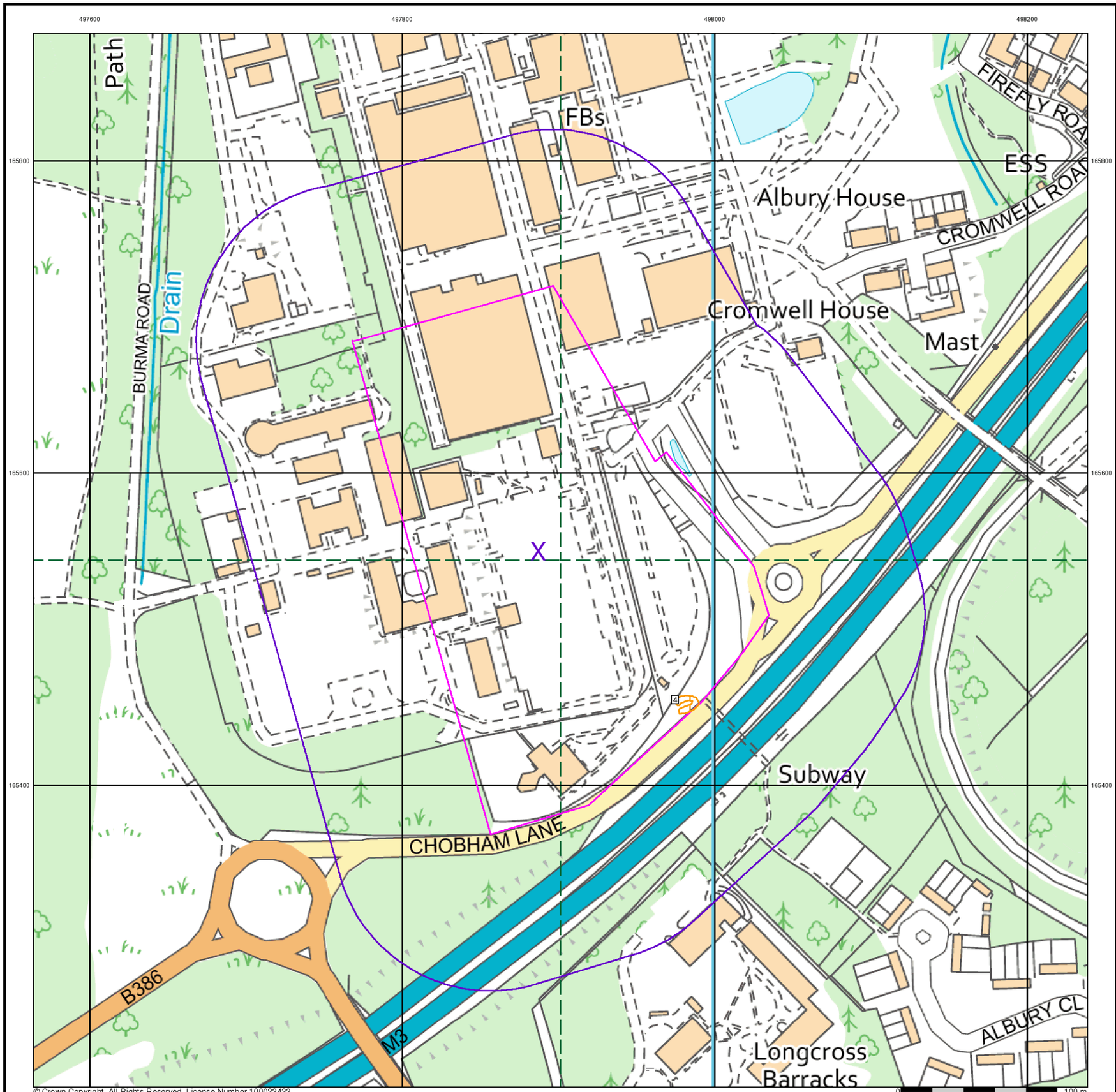
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Historical Land Use Information (1:2,500)

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID | Several of Type at Location

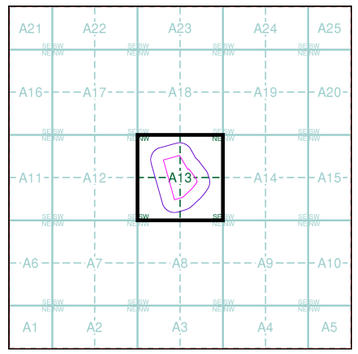
Potentially Contaminative Industrial Uses (Extractive Industries Activity)

	Point	Line	Polygon
Extractive Industries Activity from 1855 - 1909	▲	—	▭
Extractive Industries Activity from 1893 - 1915	▲	—	▨
Extractive Industries Activity from 1906 - 1937	▲	—	▭
Extractive Industries Activity from 1924 - 1949	▲	—	▨
Extractive Industries Activity from 1950 - 1980	▲	—	▭

Subterranean Features

	Point	Line	Polygon
Subterranean Features	▼	- - -	▭

Mining and Ground Stability - Segment A13



Order Details

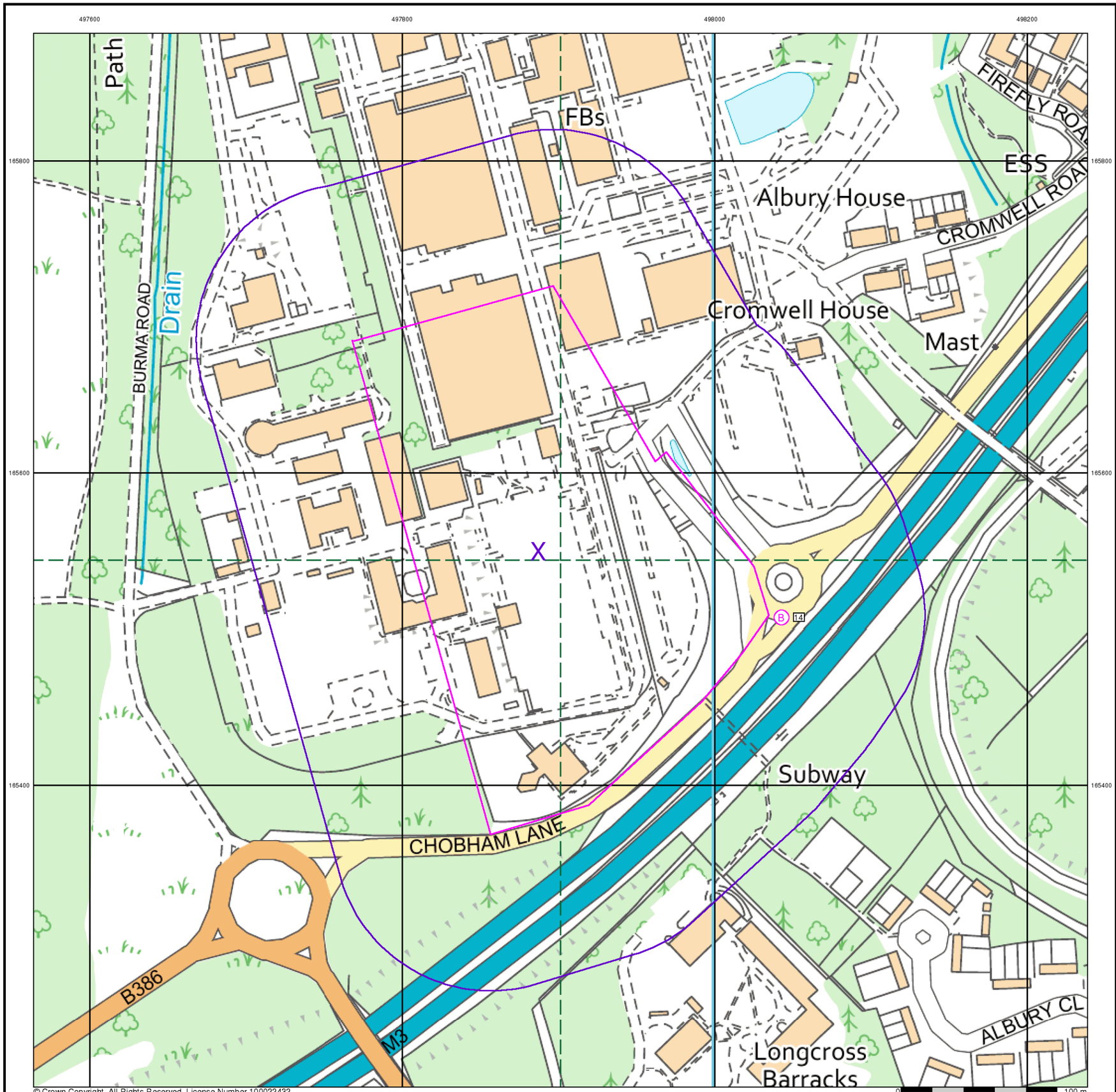
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Plot Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

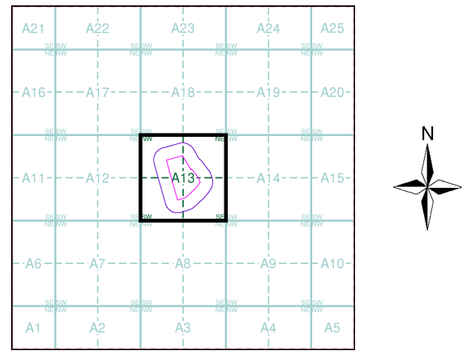
Historical Building Plans

- Area Cleared due to Enemy Action
- Asbestos
- Above Ground Fuel Tanks
- Benzene/Benzole/Naphtha, Naphthalene/Kerosene
- Electricity Generation
- Electricity Sub-Stations
- Gas Industry
- Gas Storage
- Gas Use
- Oil Industry
- Oil Storage
- Oil Use
- Paint based Oils
- Paraffin
- Petrol and Diesel Industry
- Petrol and Diesel Storage
- Petrol and Diesel Use
- Potential Fuel Gas
- Potential Fuel Oil
- Potential Fuel Use
- Potential Petrol and Diesel
- Potential Tanks
- Potentially Fuel-related Tanks
- Underground Fuel Tanks

Historical Tanks and Energy Facilities

- (B) Electrical Sub Station Facility
- (E) Electricity Industry Facility
- (G) Gas Industry Facility
- (V) Gas Monitoring Facility
- (M) Miscellaneous Power Facility
- (O) Oil Industry Facility
- (S) Petroleum Storage Facility
- (P) Potential Tank
- (T) Tank

Historical Data Report - Segment A13



Order Details

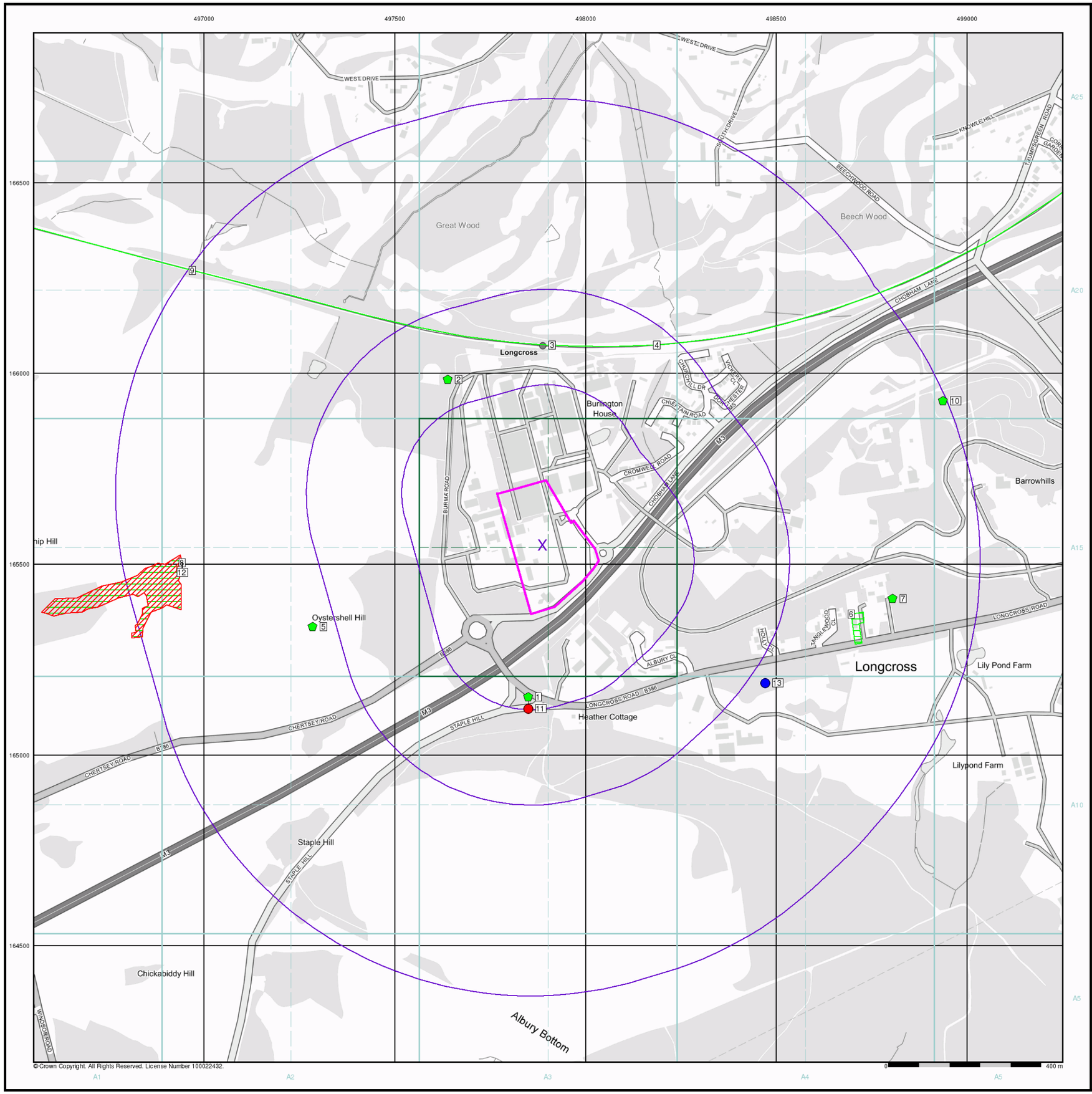
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Plot Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

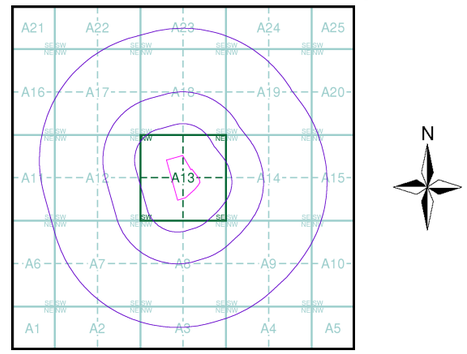
Historical Building Plans

Area Cleared due to Enemy Action

Historical Land Use

- Former Marsh
- Historical Flood Liability
- Historical Flood Liability (Location)
- Potentially Contaminative Industrial Use (Past Land Use)
- Potentially Contaminative Industrial Use (Past Land Use) (Linear)
- Potentially Contaminative Industrial Use (Past Land Use) (Location)
- Potentially Infilled Land (Non-Water)
- Potentially Infilled Land (Non-Water) (Linear)
- Potentially Infilled Land (Non-Water) (Location)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water) (Linear)
- Potentially Infilled Land (Water) (Location)

Historical Data Report - Slice Map A



Order Details

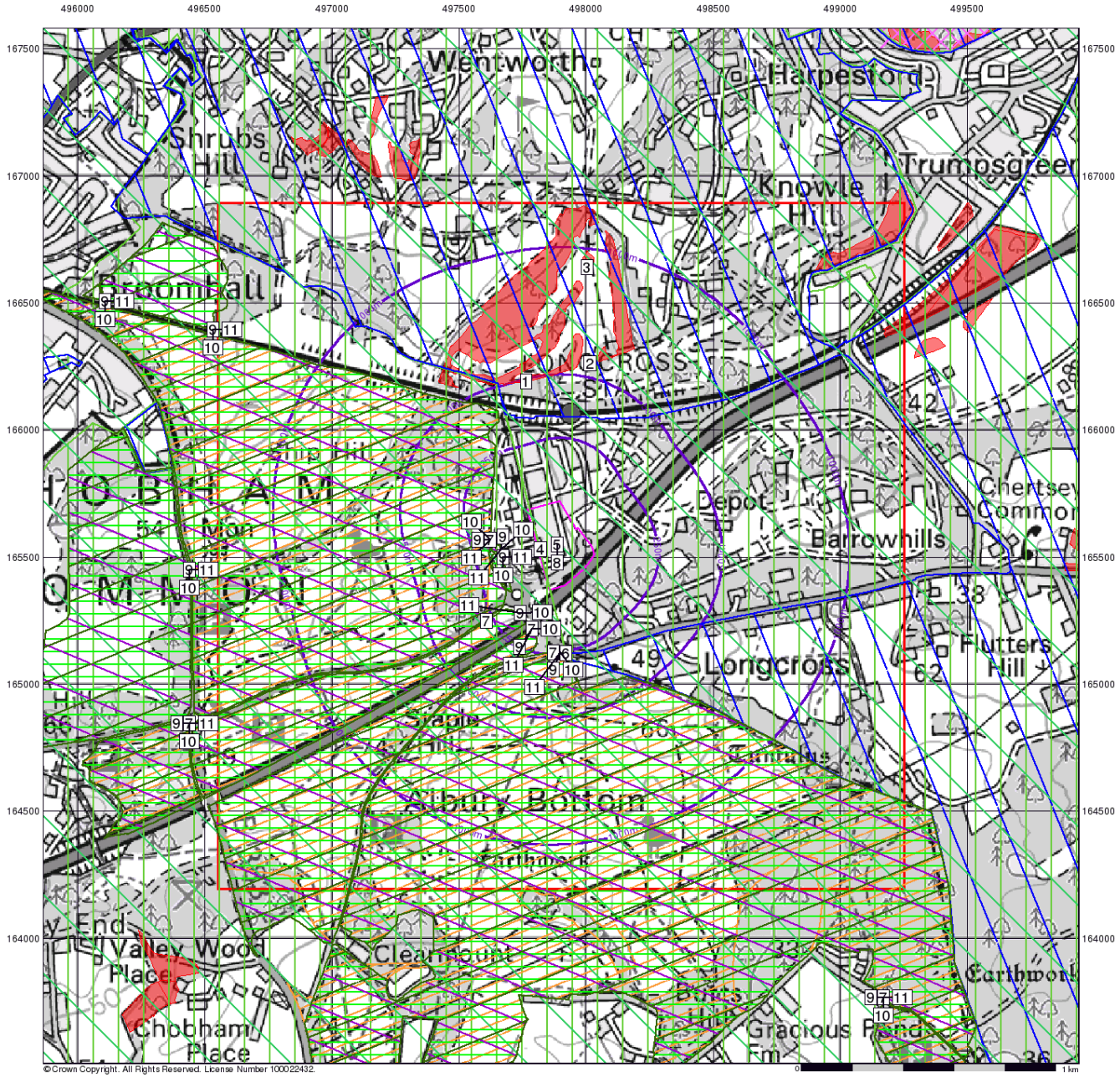
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Ecology

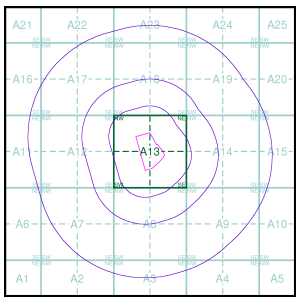
General

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

Ecology

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

Ecology - Slice A



Order Details

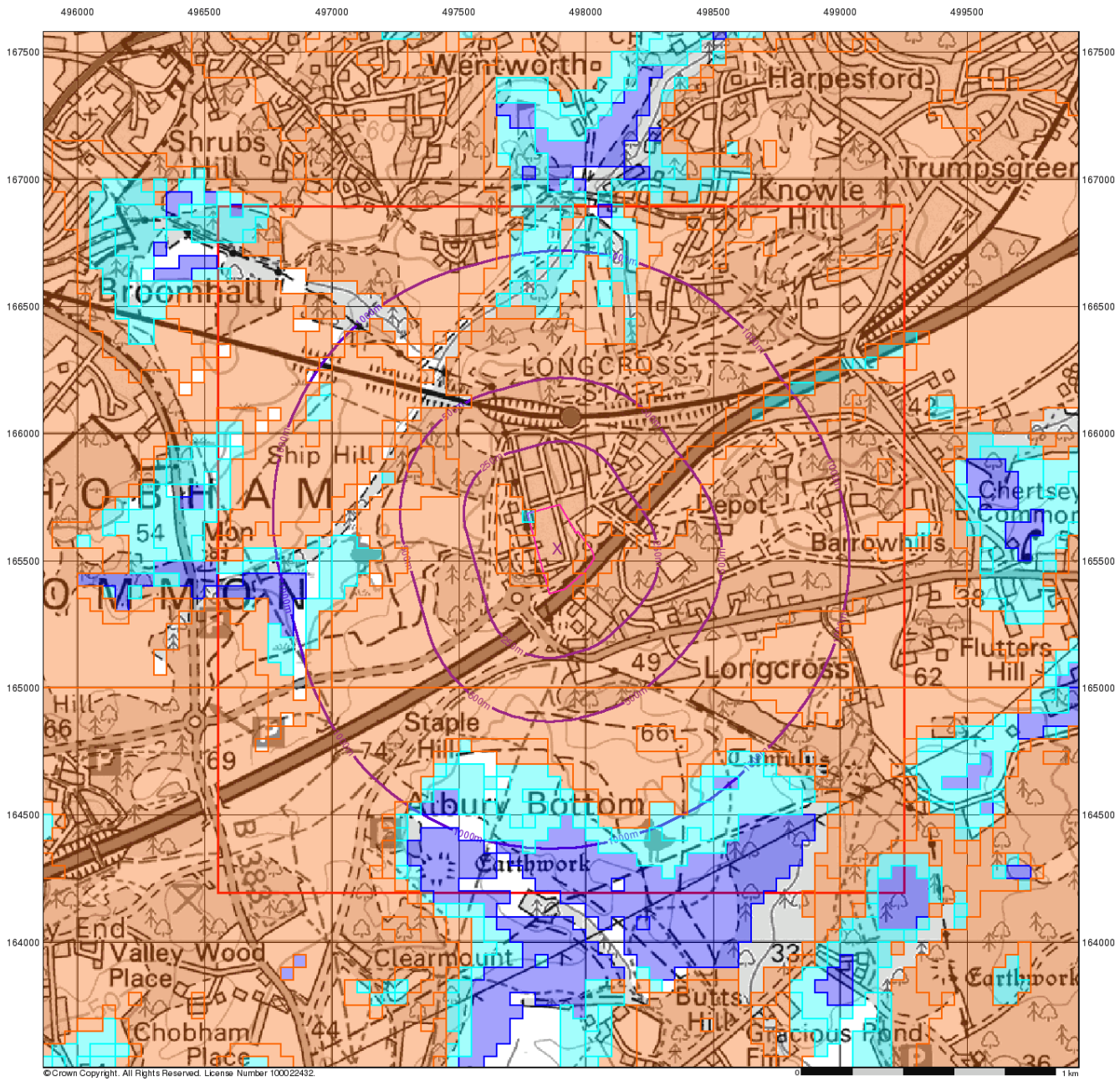
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Water and Hydrology

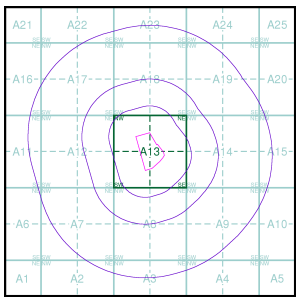
General

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

Groundwater Flooding Susceptibility

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

Groundwater Flooding Susceptibility - Slice A



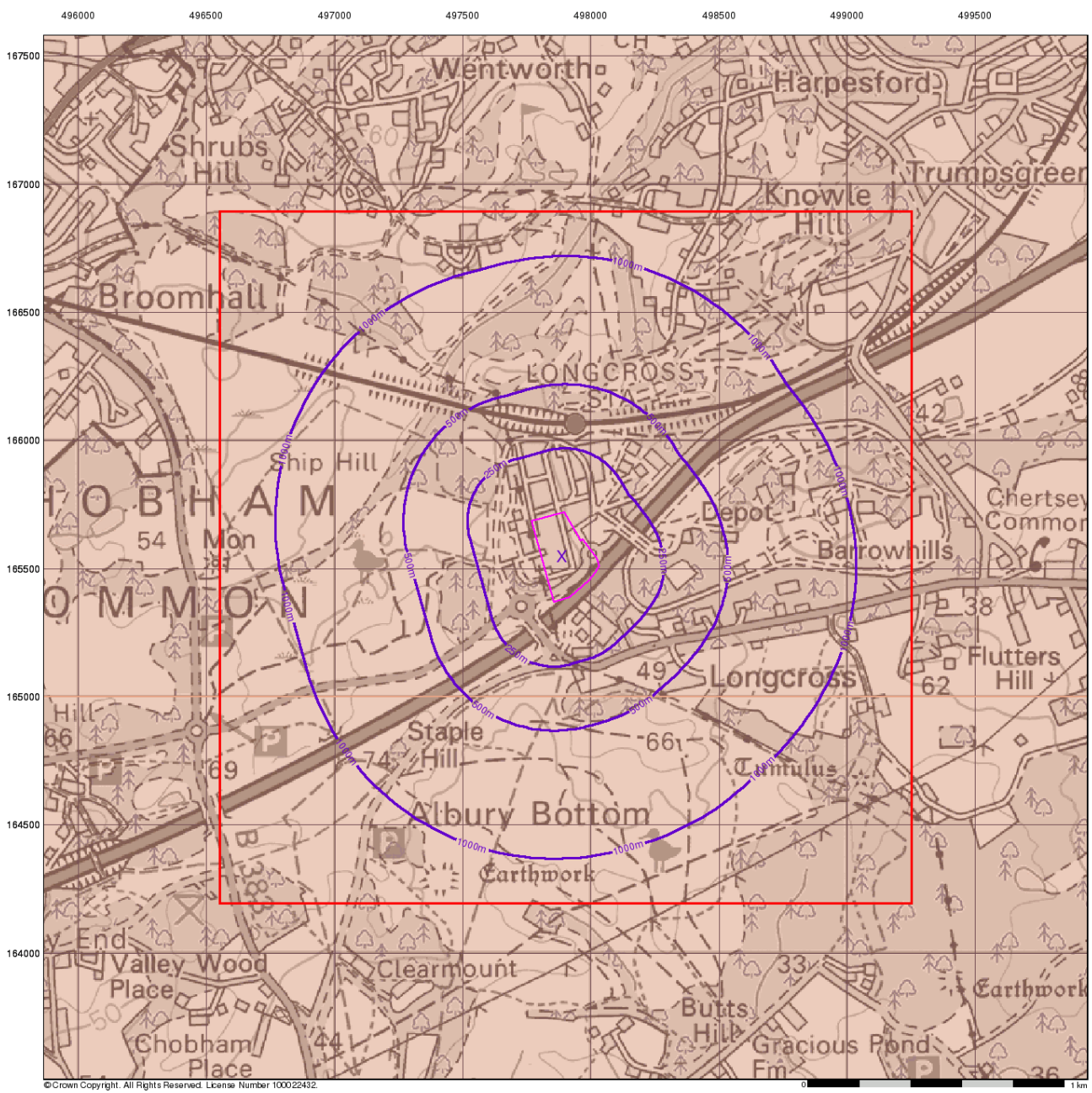
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Water and Hydrology

General

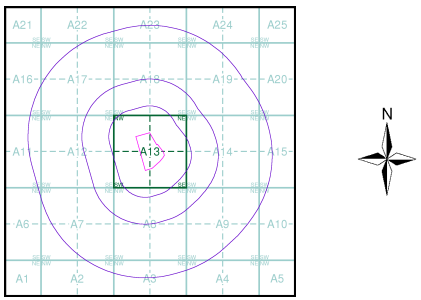
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Bedrock Aquifer Designations

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Bedrock Aquifer Designations - Slice A



Order Details

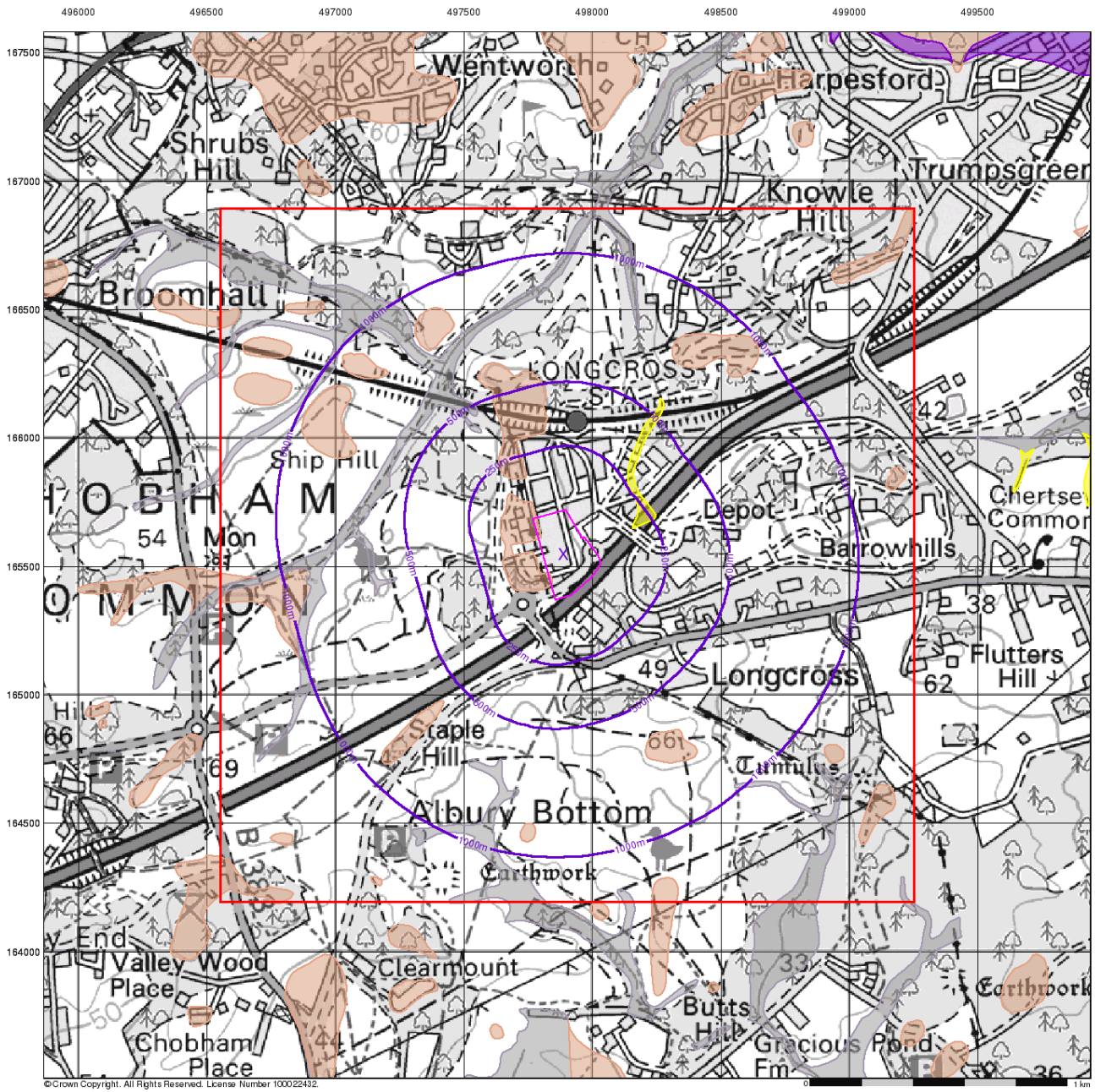
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Water and Hydrology

General

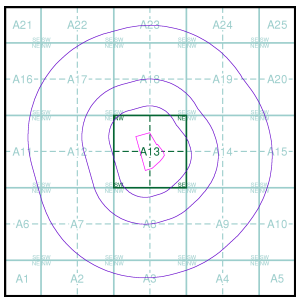
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Superficial Aquifer Designations

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown

Superficial Aquifer Designations - Slice A

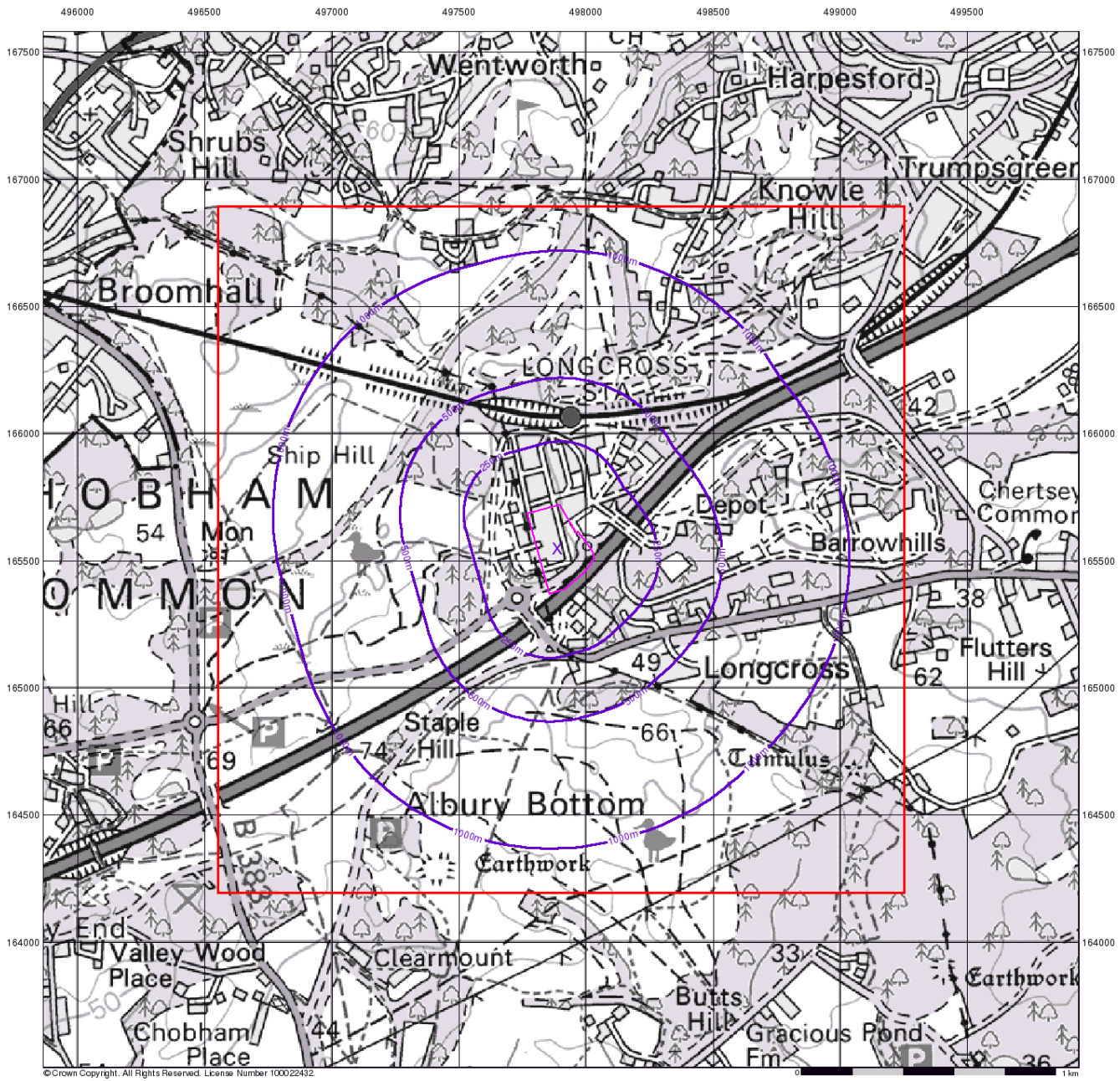


Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540



Envirocheck®

LANDMARK INFORMATION GROUP®

Water and Hydrology

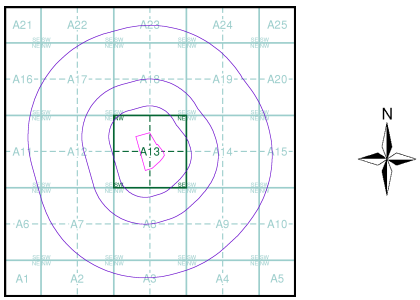
General

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

Source Protection Zones

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

Source Protection Zones - Slice A



Order Details

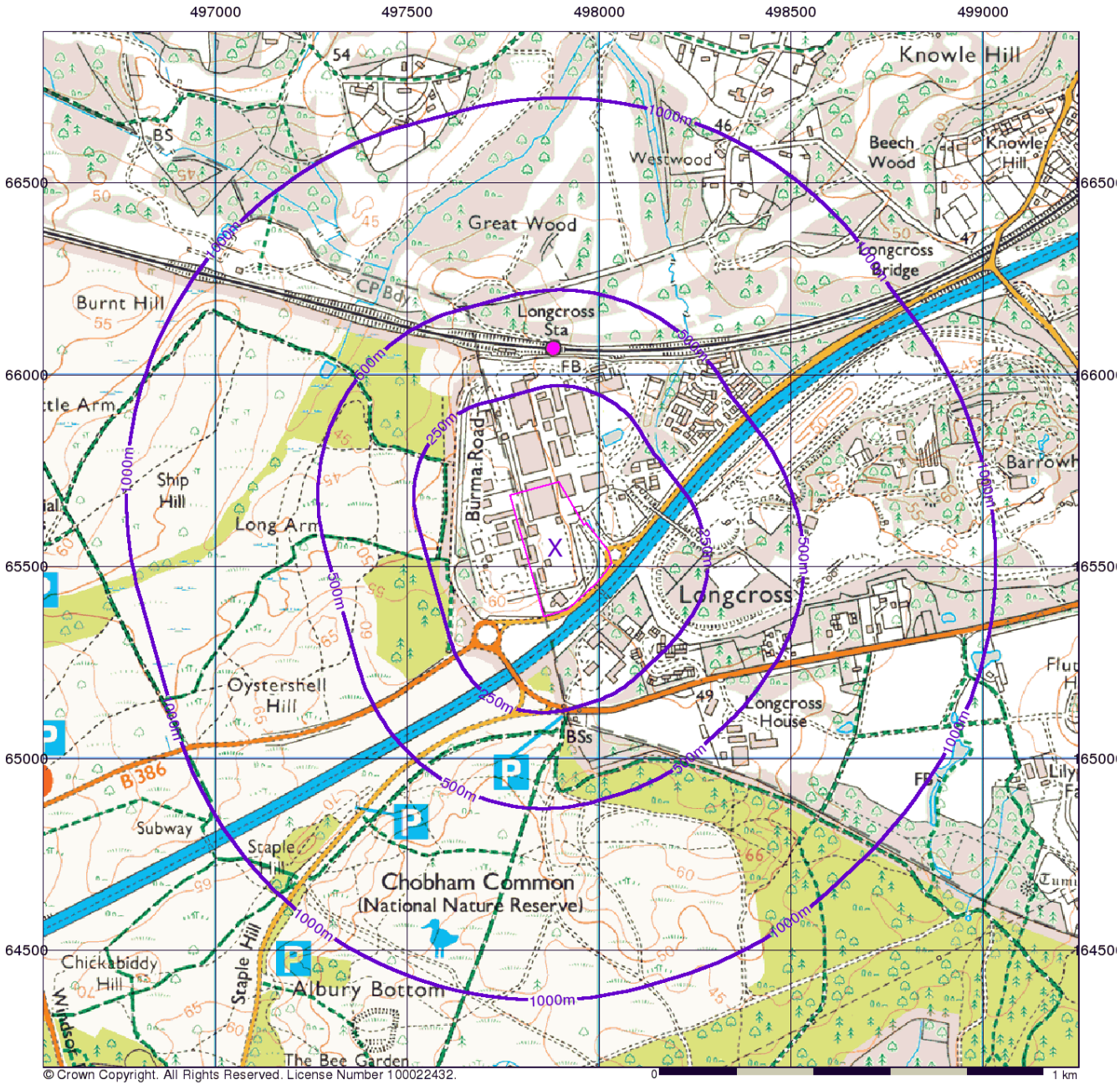
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

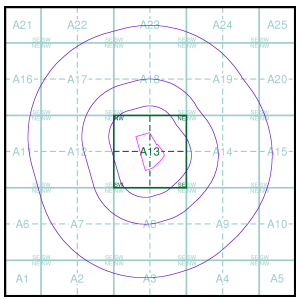
LANDMARK INFORMATION GROUP®

Site Location

General

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

Site Location - Slice A



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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

OS Explorer Map / 1:25 000 Scale Colour Raster

Customer Information

Communications

ROADS AND PATHS

Not necessarily rights of way

Service area

Junction number

M1 or A6(M) — Motorway

A35 — Dual carriageway

A30 — Main road

B3074 — Secondary road

Narrow road with passing places

Road under construction

Road generally more than 4 m wide

Road generally less than 4 m wide

Other road, drive or track, fenced and unfenced

Gradient: steeper than 20% (1 in 5); 14% (1 in 7) to 20% (1 in 5)

Ferry — Ferry; Ferry P - passenger only

Path

RAILWAYS

Multiple track / Single track — standard gauge

Narrow gauge or Light rapid transit system (LRTS) and station

Road over; road under; level crossing

Cutting; tunnel; embankment

Station, open to passengers; siding

PUBLIC RIGHTS OF WAY

(Rights of way are not shown on maps of Scotland)

Footpath

Bridleway

Byway open to all traffic

Restricted byway
(not for use by mechanically propelled vehicles)

Public rights of way shown on this map have been taken from local authority definitive maps and later amendments.
Rights of way are liable to change and may not be clearly defined on the ground.
Please check with the relevant local authority for the latest information

The representation on this map of any other road, track or path is no evidence of the existence of a right of way

OTHER PUBLIC ACCESS

Other routes with public access (not normally shown in urban areas)
The exact nature of the rights on these routes and the existence of any restrictions may be checked with the local highway authority. Alignments are based on the best information available

National Trail / Long Distance Route — Recreational Route

Permissive footpath / Permissive bridleway — Footpaths and bridleways along which landowners have permitted public use but which are not rights of way. The agreement may be withdrawn

Traffic-free cycle route

1 National cycle network route number - traffic free

1 National cycle network route number - on road

Scotland

In Scotland, everyone has access rights in law* over most land and inland water, provided access is exercised responsibly. **This includes walking, cycling, horse-riding and water access, for recreational and educational purposes, and for crossing land or water.** Access rights do not apply to motorised activities, hunting, shooting or fishing, nor if your dog is not under proper control. The **Scottish Outdoor Access Code** is the reference point for responsible behaviour, and can be obtained at **www.outdooraccess-scotland.com** or by phoning your local Scottish Natural Heritage office. *Land Reform (Scotland) Act 2003

National Trust for Scotland, always open / limited opening - observe local signs

Forestry Commission Land / Woodland Trust Land

England & Scotland

DANGER AREA

Firing and test ranges in the area. Danger! Observe warning notices
Champs de tir et d'essai. Danger! Se conformer aux avertissements
Schiess und Erprobungsgelände. Gefahr! Warnschilder beachten
Visit **www.access.mod.uk** for information

ACCESS LAND

England

Portrayal of access land on this map is intended as a guide to land which is normally available for access on foot, for example access land created under the Countryside and Rights of Way Act 2000, and land managed by the National Trust, Forestry Commission and Woodland Trust. Access for other activities may also exist.
Some restrictions will apply; some land will be excluded from open access rights.
The depiction of rights of access does not imply or express any warranty as to its accuracy or completeness. Observe local signs and follow the Countryside Code.
Visit **www.countrysideaccess.gov.uk** for up-to-date information

Access land boundary and tint

Access land in woodland area

Access information point

MANAGED ACCESS

Access permitted within managed controls for example, local byelaws
Visit **www.access.mod.uk** for information

July 2012

General Information

VEGETATION

Limits of vegetation are defined by positioning of symbols

Coniferous trees

Non-coniferous trees

Coppice

Scrub

Bracken, heath or rough grassland

Marsh, reeds or saltings

Orchard

GENERAL FEATURES

+ Place of worship

Current or former place of worship { with tower / with spire, minaret or dome

Building; important building

Glasshouse

Youth hostel

Bunkhouse/camping barn/other hostel

Bus or coach station

Lighthouse; disused lighthouse; beacon

Triangulation pillar; mast

Windmill, with or without sails

Wind pump; wind turbine

pylon pole Electricity transmission line

Slopes

Gravel pit

Sand pit

Other pit or quarry

Landfill site or slag/spoil heap

BP/BS	Boundary post/stone
CG	Cattle grid
CH	Clubhouse
FB	Footbridge
MP ; MS	Milepost ; milestone
Mon	Monument
PO	Post office
Pol Sta	Police station
Sch	School
TH	Town hall
NTL	Normal tidal limit
W; Spr	Well; spring

BOUNDARIES

National

County (England)

Unitary Authority (UA), Metropolitan District (Met Dist), London Borough (LB) or District
(Scotland & Wales are solely Unitary Authorities)

Civil Parish (CP) (England) or Community (C) (Wales)

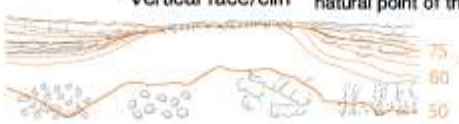
National Park boundary

HEIGHTS AND NATURAL FEATURES

52 · Ground survey height
284 · Air survey height

Surface heights are to the nearest metre above mean sea level. Where two heights are shown, the first height is to the base of the triangulation pillar and the second (in brackets) to the highest natural point of the hill

Vertical face/cliff



Contours may be at 5 or 10 metres vertical interval

Loose rock Boulders Outcrop Scree

Water

Mud

Sand; sand & shingle

ARCHAEOLOGICAL AND HISTORICAL INFORMATION

Site of antiquity

1066 Site of battle (with date)

Visible earthwork

VILLA Roman

Castle Non-Roman

Information provided by English Heritage for England and the Royal Commissions on the Ancient and Historical Monuments for Scotland and Wales

Selected Tourist and Leisure Information

RENSEIGNEMENTS TOURISME ET LOISIRS SÉLECTIONNÉS

Parking / Park & Ride, all year/seasonal
Parking / Parking et navette, ouvert toute l'année/en saison
Parkplatz / Park & Ride, ganzjährig/saisonal

Information centre, all year/seasonal
Office de tourisme, ouvert toute l'année/en saison
Informationsbüro, ganzjährig/saisonal

Visitor centre
Centre pour visiteurs
Besucherzentrum

Forestry Commission visitor centre
Commission Forestière: Centre de visiteurs
Staatsforst Besucherzentrum

PC
Public convenience
Toilettes
Öffentliche Toilette

Telephone, public/roadside assistance/emergency
Téléphone, public/borne d'appel d'urgence/urgence
Telefon, öffentlich/Notrufsäule/Notruf

Camp site / caravan site
Terrain de camping / Terrain pour caravanes
Campingplatz / Wohnwagenplatz

Recreation/leisure/sports centre
Centre de détente/loisirs/sports
Erholungs-/Freizeit-/Sportzentrum

Golf course or links
Terrain de golf
Golfplatz

Theme/pleasure park
Parc à thèmes/Parc d'agrément
Vergnügungs-/Freizeitpark

Preserved railway
Chemin de fer touristique
Museumseisenbahn

Public house/s
Pub/s
Gaststätte/n

Craft centre
Centre artisanal
Zentrum für Kunsthandwerk

AUSGEWAHLTE INFORMATIONEN ZU TOURISTIK UND FREIZEITGESTALTUNG

Walks/trails
Promenades
Wanderwege

Cycle trail
Piste cyclable
Radfahrweg

Mountain bike trail
Chemin pour VTT
Mountainbike-Strecke

Cycle hire
Location de vélos
Fahrradverleih

Horse riding
Equitation
Reitstall

Viewpoint
Point de vue
Aussichtspunkt

Picnic site
Emplacement de pique-nique
Picknickplatz

Country park
Parc naturel
Landschaftspark

Garden/arboretum
Jardin/Arboretum
Garten/Baumgarten

Water activities
Jeux aquatiques
Wassersport

Slipway
Cale
Helling

Boat trips
Croisières en bateau
Bootsfahrten

Boat hire
Location de bateau
Bootsverleih

Nature reserve
Réserve naturelle
Naturschutzgebiet

Fishing
Pêche
Angeln

Other tourist feature
Autre site intéressant
Sonstige Sehenswürdigkeit

Cathedral/Abbey
Cathédrale/Abbaye
Kathedrale/Abtei

Museum
Musée
Museum

Castle/fort
Château/Fortification
Burg/Festung

Building of historic interest
Bâtiment d'intérêt historique
Historisches Gebäude

HC
Heritage centre
Centre d'héritage
Heimatmuseum

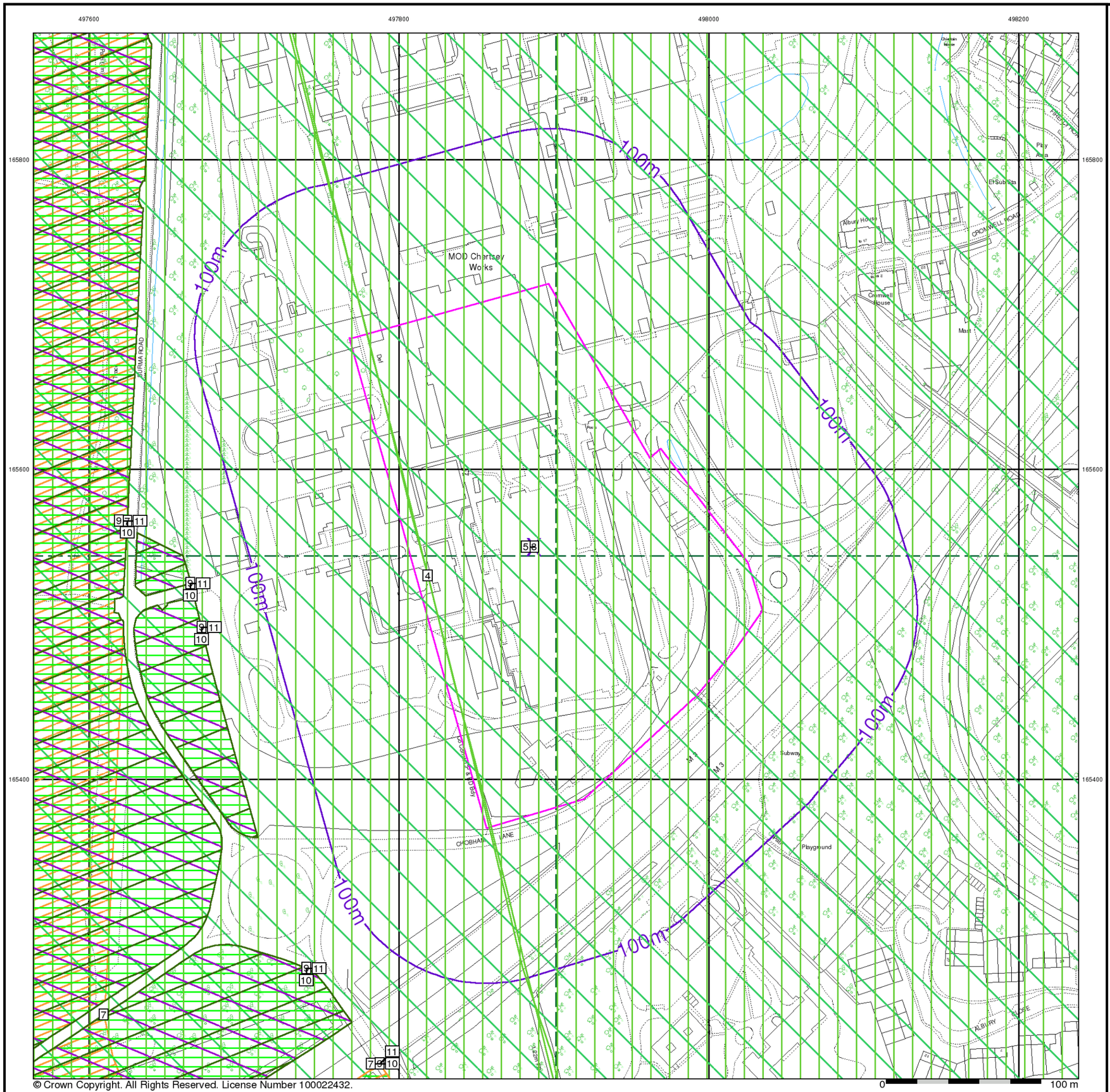
National Trust

English Heritage

Historic Scotland

July 2012

Ordnance Survey®



Envirocheck®

LANDMARK INFORMATION GROUP®

Site Sensitivity

General

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

Ecology

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

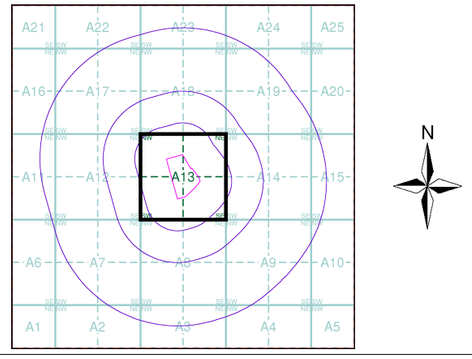
Heritage

- Historic Battlefields
- Listed Buildings
- Scheduled Monuments
- World Heritage Sites

Visual and Landscape

- Historic Parks, Gardens and Designed Landscapes

Site Sensitivity - Segment A13



Order Details

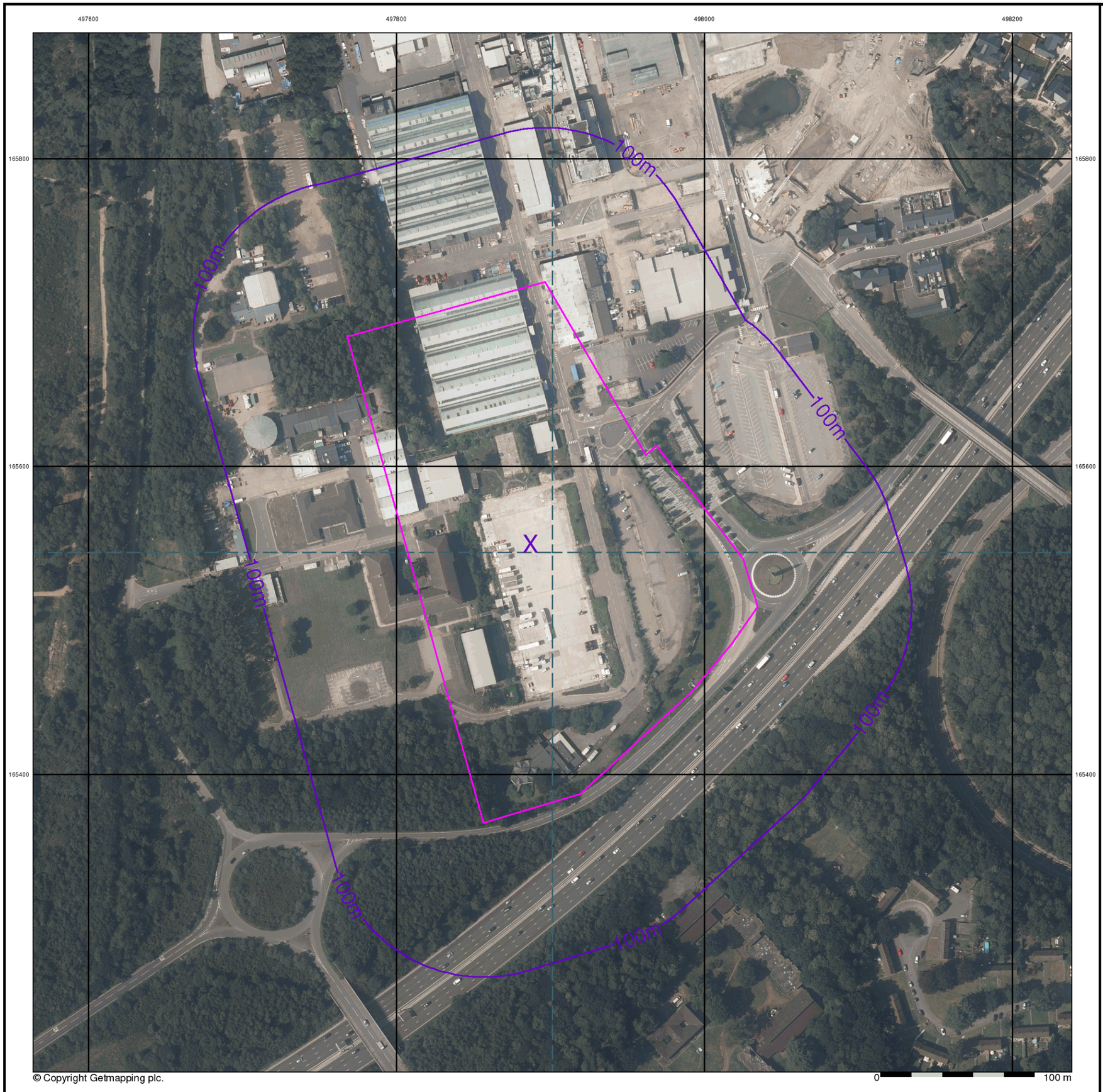
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Plot Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®
LANDMARK INFORMATION GROUP®

Aerial Photo

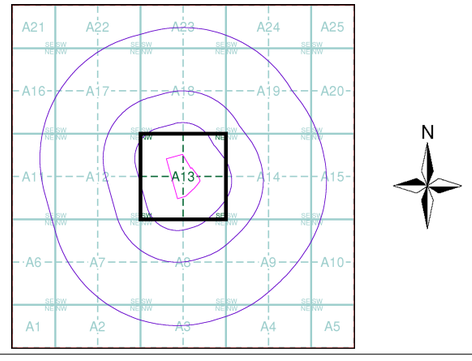
General

Specified Site
Specified Buffer(s)
X Bearing Reference Point

Published Date(s):

2019

Aerial Photo - Segment A13



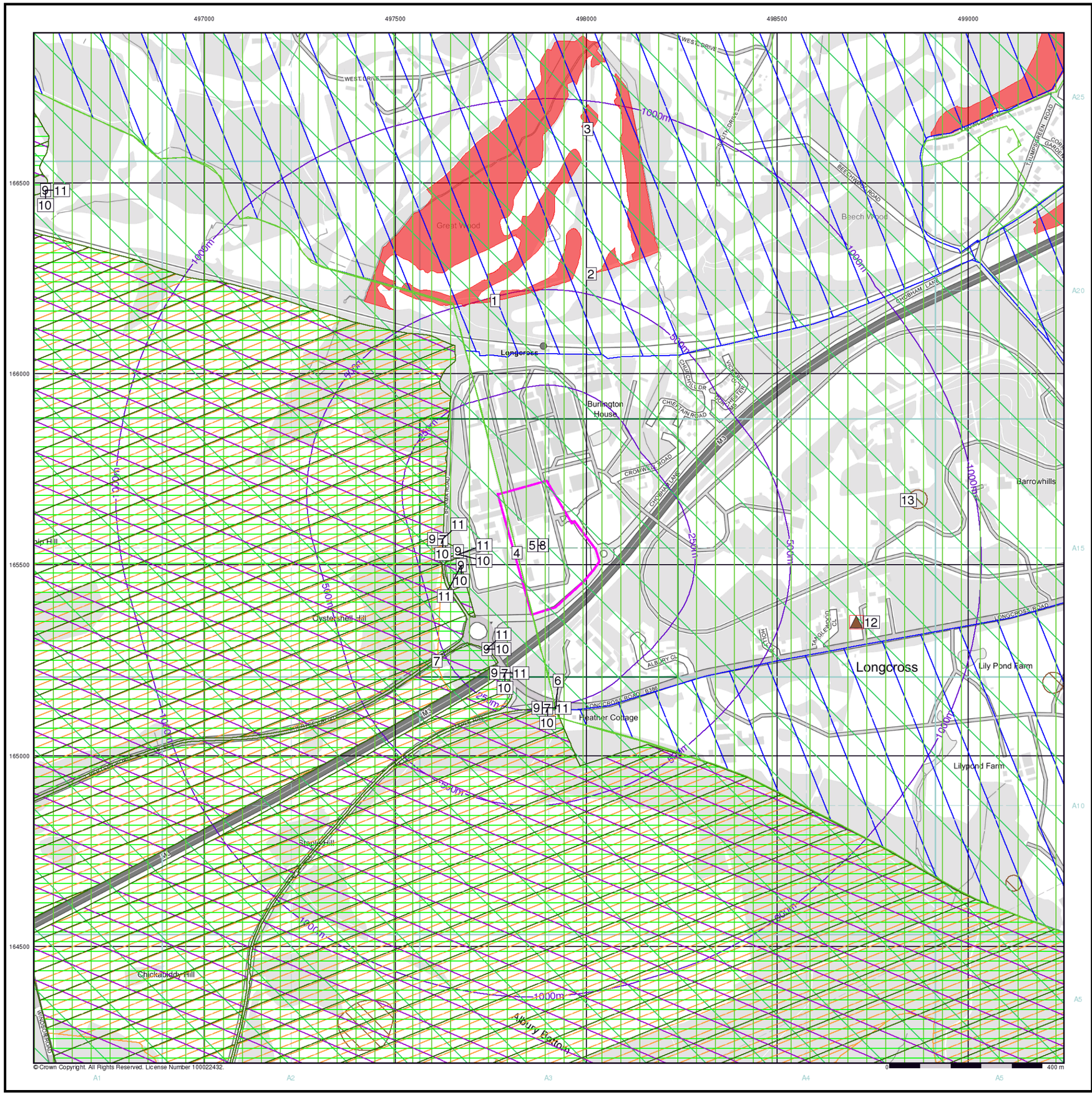
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Plot Buffer (m):	100

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Site Sensitivity

General

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

Ecology

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

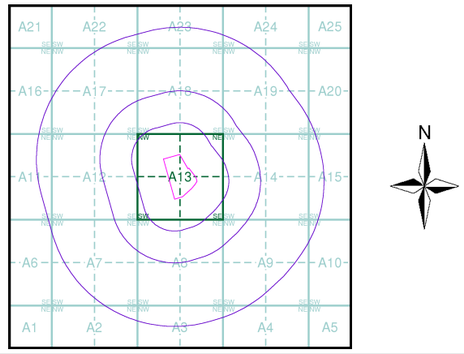
Heritage

- Historic Battlefields
- Listed Buildings
- Scheduled Monuments
- World Heritage Sites

Visual and Landscape

- Historic Parks, Gardens and Designed Landscapes

Site Sensitivity - Slice A



Order Details

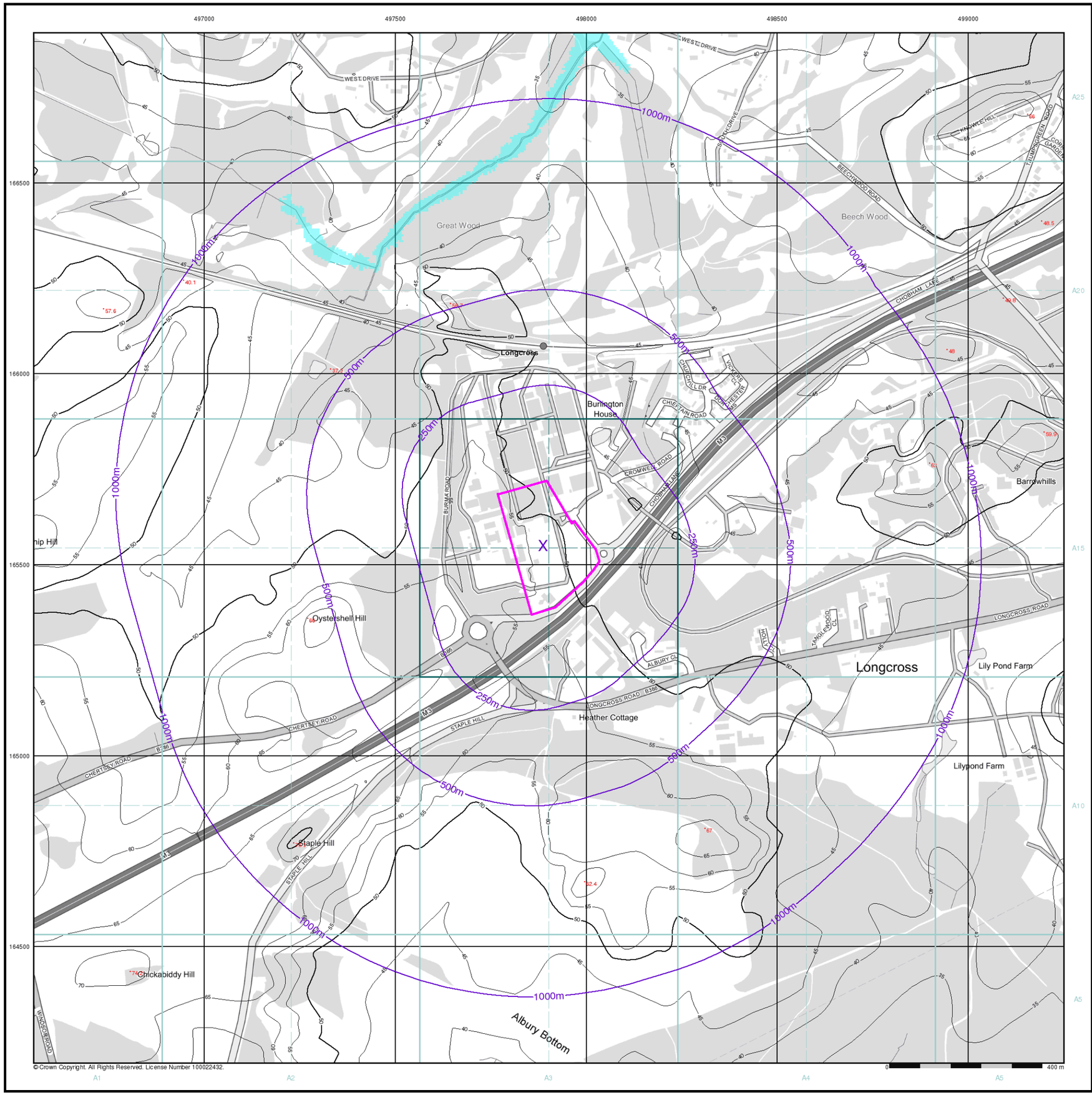
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Water and Hydrology

General

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

Flood

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

Contours (height in meters)

Standard Contour 105 100 95

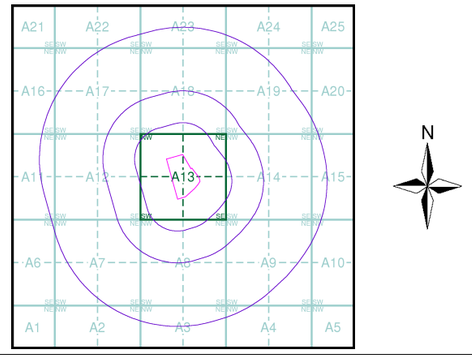
Master Contour

Spot Height 167.8

MLW Mean Low Water

MHW Mean High Water

Flood - Slice A



Order Details

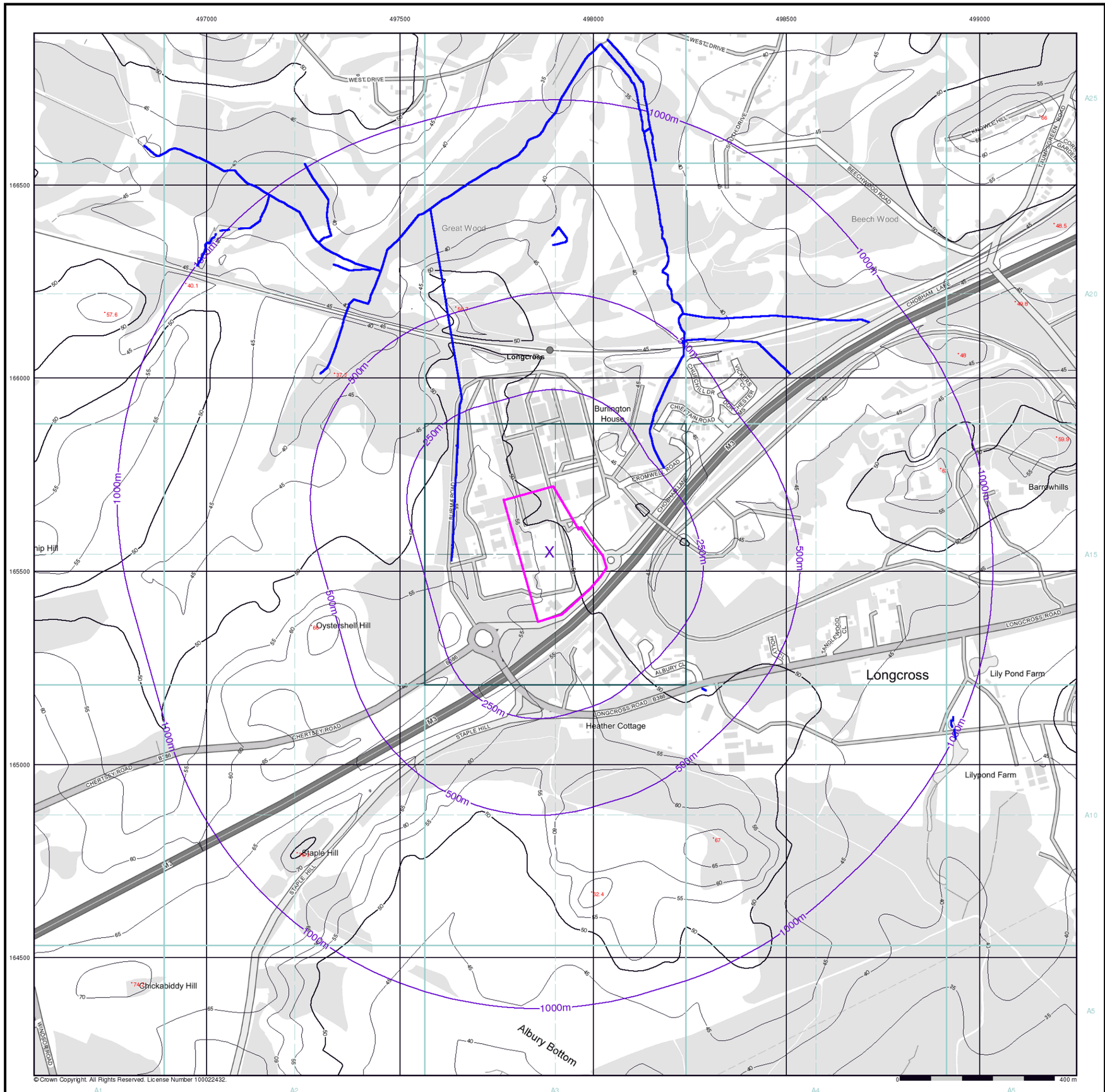
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Water And Hydrology

General

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

OS Water Network Data

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

Contours (height in meters)

Standard Contour 105 100 95

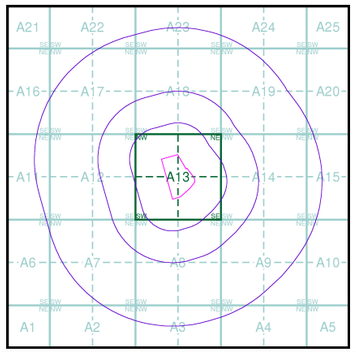
Master Contour

Spot Height 167.3

MLW Mean Low Water

MHW Mean High Water

OS Water Network - Slice A



Order Details

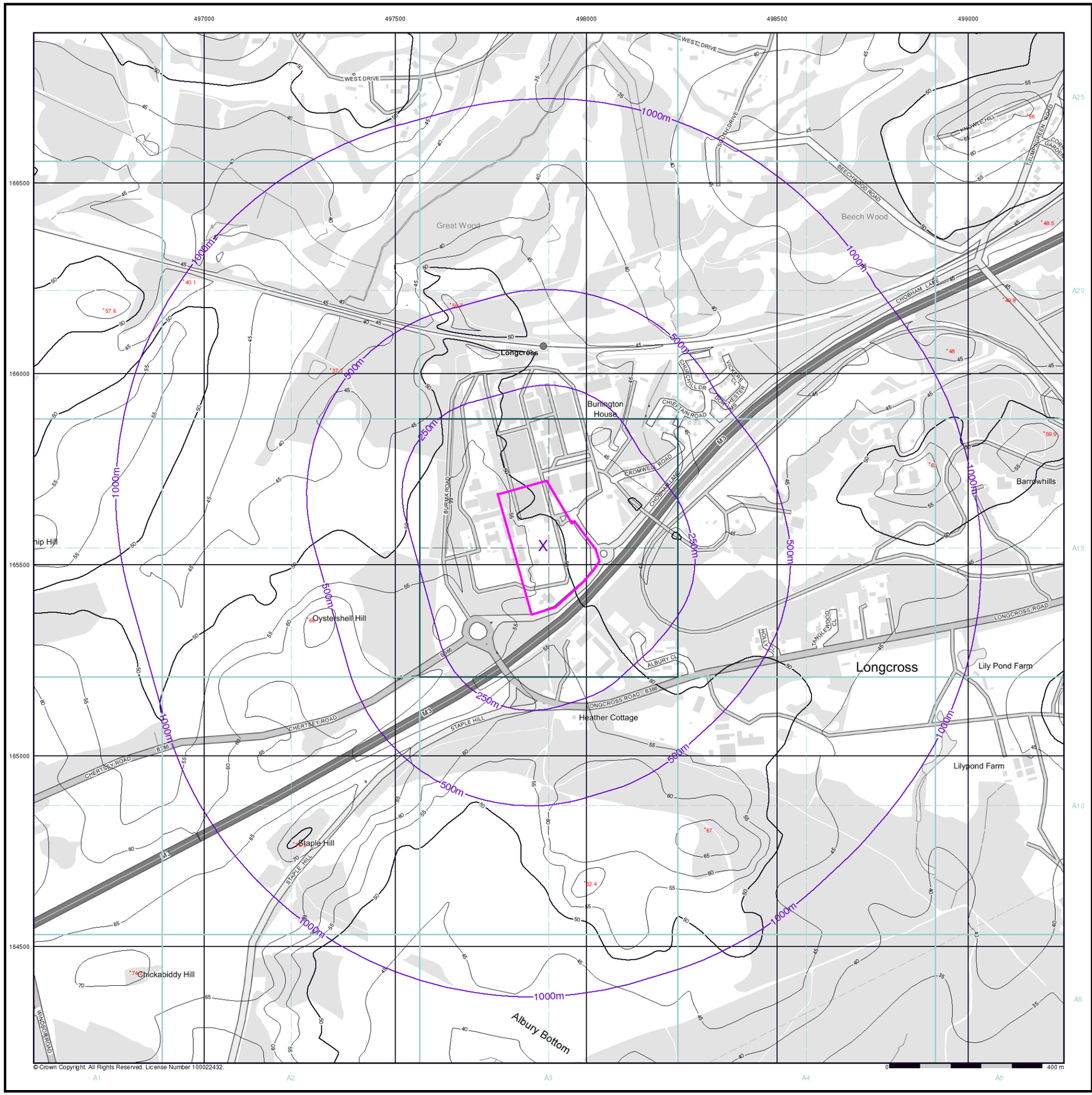
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Water and Hydrology

General

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

Historic Flood

- Channel Capacity Exceeded (no raised defences)
- Channel Capacity Exceeded /Surface Water
- Groundwater/High Water Table
- Local Drainage/Surface Water
- Mechanical Failure
- Obstruction/Blockage - Bridge
- Obstruction/Blockage - Channel
- Historical Flood Liabilities
- Obstruction/Blockage - Culvert
- Obstruction/Blockage - Debris Screen
- Operational Failure/ Breach of Defence
- Other
- Overtopping of Defences
- Surface Water
- Unknown

Contours (height in meters)

Standard Contour 105 100 95

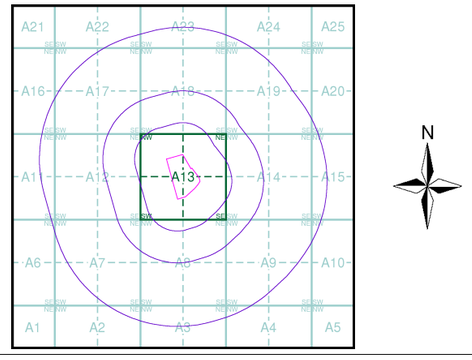
Master Contour

Spot Height 167.8

MLW Mean Low Water

MHW Mean High Water

Historic Flood - Slice A



Order Details

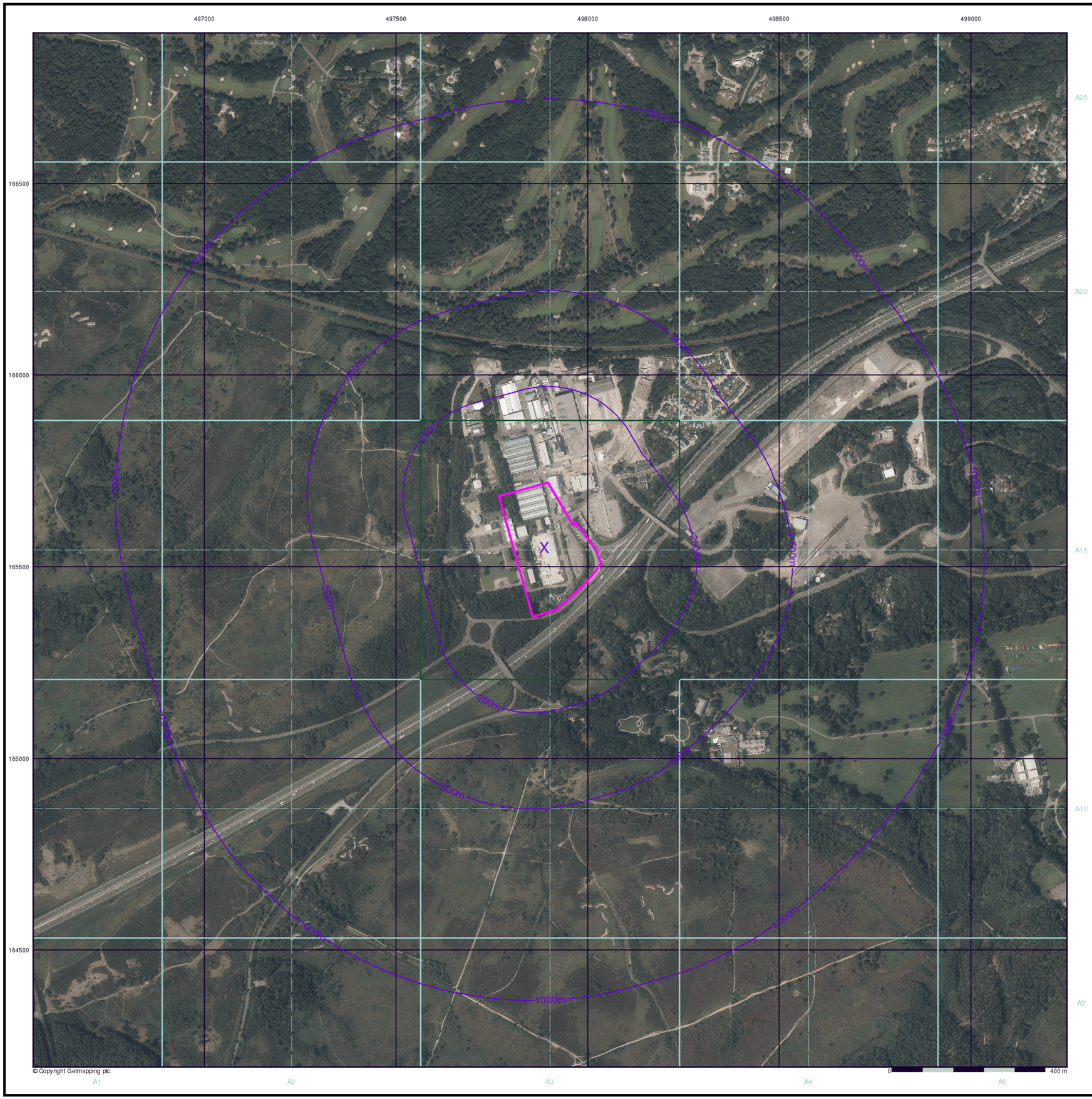
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Aerial Photo

General

Specified Site

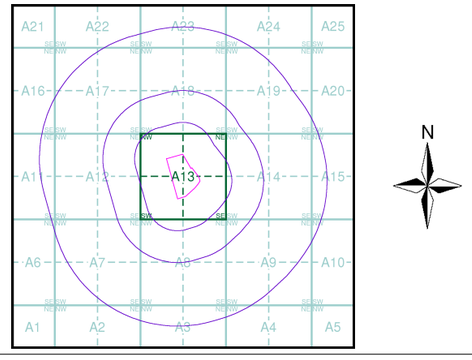
Specified Buffer(s)

X Bearing Reference Point

Published Date(s):

2019

Aerial Photo - Slice A



Order Details

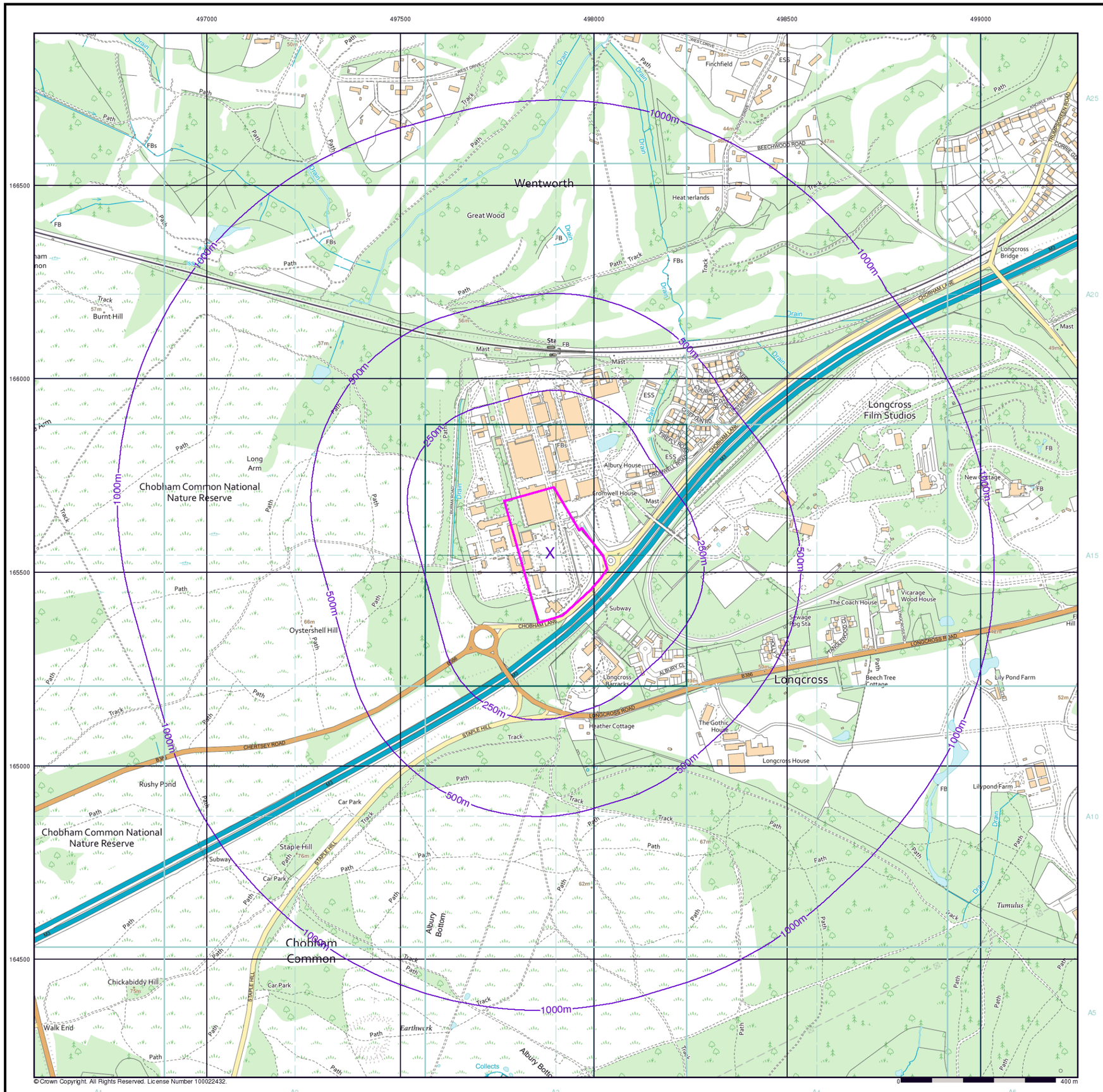
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

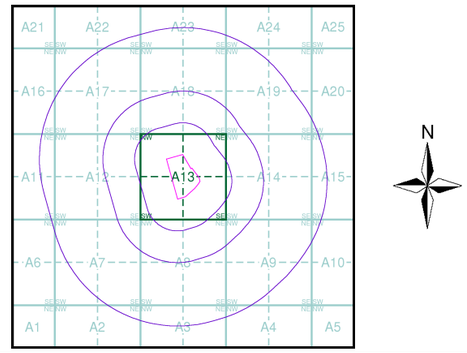
LANDMARK INFORMATION GROUP®

Site Location

General

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

Site Location - Slice A



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

OS VectorMap® Local

Colour Raster version

COMMUNICATIONS (TRANSPORT)

Depicted roads are not necessarily rights of way

- Motorway
- Primary road
- Main road ('A' road)
- Secondary road ('B' road)
- Minor road
- Local street
- Private road with public access
- Pedestrianised street
- Multiple track railway
- Single track railway or siding
- Narrow gauge railway
- Road or rail tunnel

SETTLEMENT

- Building
- Important building
- Glasshouse
- Overhead building line

VEGETATION

- Broad-leafed woodland
- Coniferous woodland
- Mixed woodland
- Orchard
- Shrub
- Unimproved grass
- Heathland
- Marsh
- Reeds

WATER FEATURES

- Water (surface or tidal)
- Water
- Mean high water
- Mean low water
- Direction of flow arrows
- Water point features (for example Wells, Springs)

HEIGHT

Surface heights are in metres above mean sea level

- 57m Height

LANDFORMS

- Ornament
- Inland rock
- Boulders
- Shingle
- Cliff
- Large slopes
- Standard slopes
- Mud
- Sand
- Gravel pit
- Sand pit
- Refuse tip or slag heap

POINT & LINE FEATURES

- General line detail
- Overhead detail
- Telephone line
- Electricity transmission line
- Pylon
- Triangulation station
- Point features (for example Shafts, Posts)
- Site of antiquity

COMMON ABBREVIATIONS

CG	Cattle grid
Chy	Chimney
Coll	College
Ct	Court
El Sub Sta	Electricity sub station
FB	Footbridge
Fl Sk	Flare stack
Fn	Fountain
FS	Flagstaff
GP	Guide post
LC	Level crossing
Liby	Library
Meml	Memorial
MHW(s)	Mean high water (springs)
MLW(s)	Mean low water (springs)
Mon	Monument
MP, MS	Mile post or stone
NTL	Normal tidal water
P, Ps	Post(s) or pole(s)
PH	Public House
PO	Post office
Pol Sta	Police Station
PW	Place of worship
Sch	School
Spr	Spring
Sta	Station
Tk	Tank or track
W	Well

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
Electricity Transmission Line
Pole
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

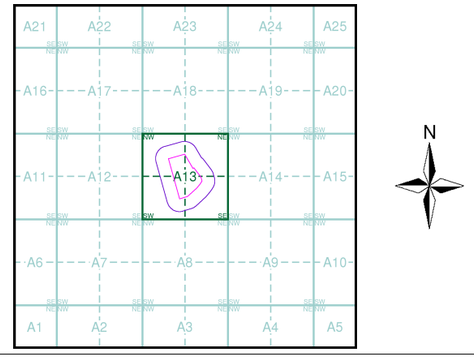
Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community 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

Envirocheck®
LANDMARK INFORMATION GROUP®

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Middlesex	1:10,560	1868	2
Surrey	1:10,560	1872	3
Surrey	1:10,560	1897 - 1898	4
Berkshire	1:10,560	1900	5
Berkshire	1:10,560	1914	6
Surrey	1:10,560	1919 - 1920	7
Surrey	1:10,560	1934	8
Surrey	1:10,560	1938	9
Surrey	1:10,560	1938	10
Historical Aerial Photography	1:10,560	1948	11
Ordnance Survey Plan	1:10,000	1961	12
Ordnance Survey Plan	1:10,000	1975 - 1976	13
Ordnance Survey Plan	1:10,000	1991	14
10K Raster Mapping	1:10,000	1999	15
10K Raster Mapping	1:10,000	2006	16
VectorMap Local	1:10,000	2020	17

Historical Map - Slice A



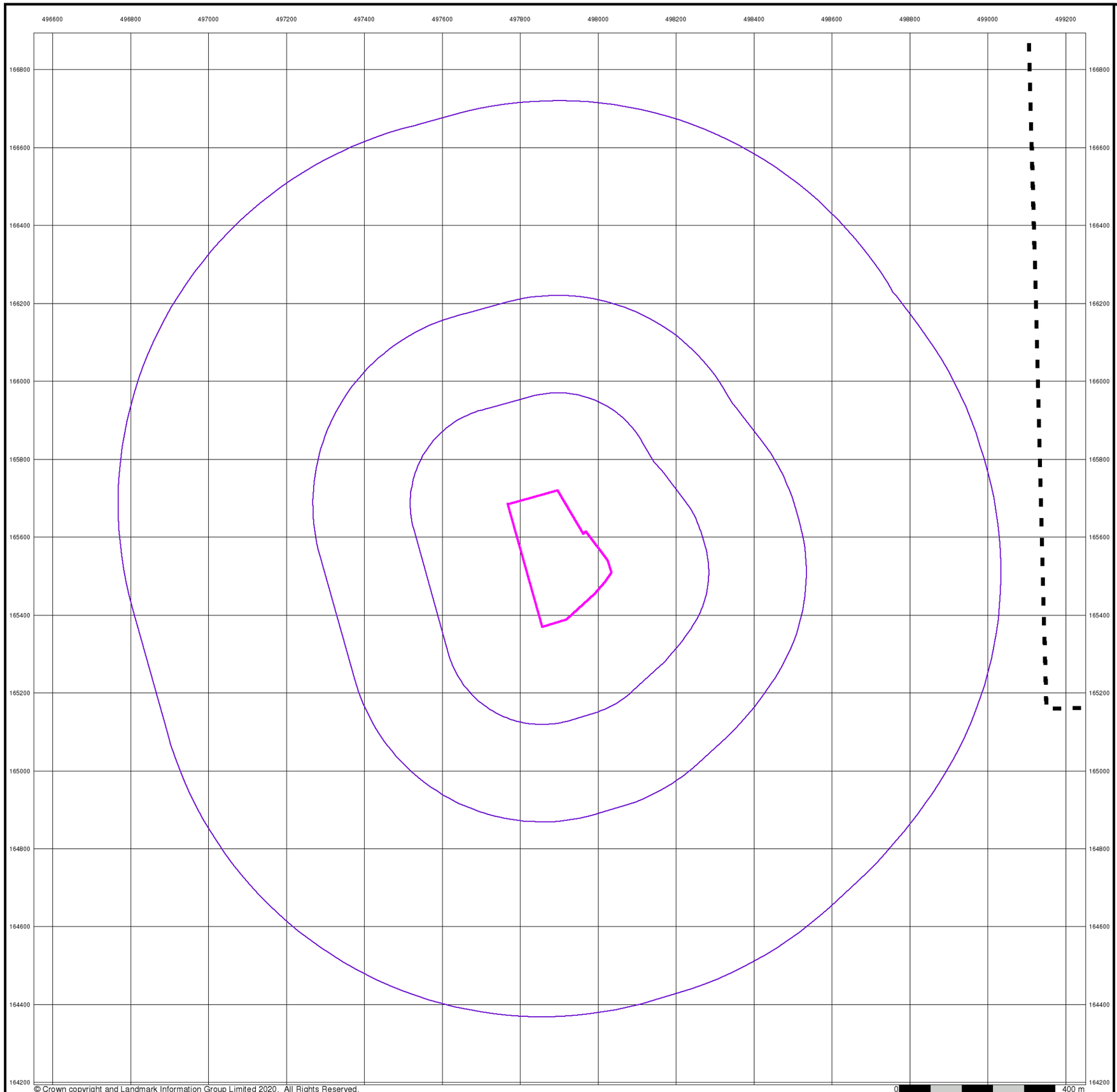
Order Details

Order Number: 243144954_1_1
Customer Ref: GLA16254
National Grid Reference: 497890, 165550
Slice: A
Site Area (Ha): 5.4
Search Buffer (m): 1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

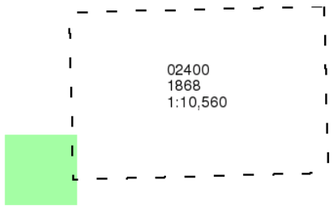
Middlesex

Published 1868

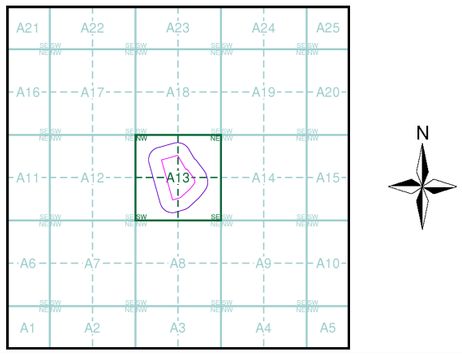
Source map scale - 1:10,560

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



Order Details

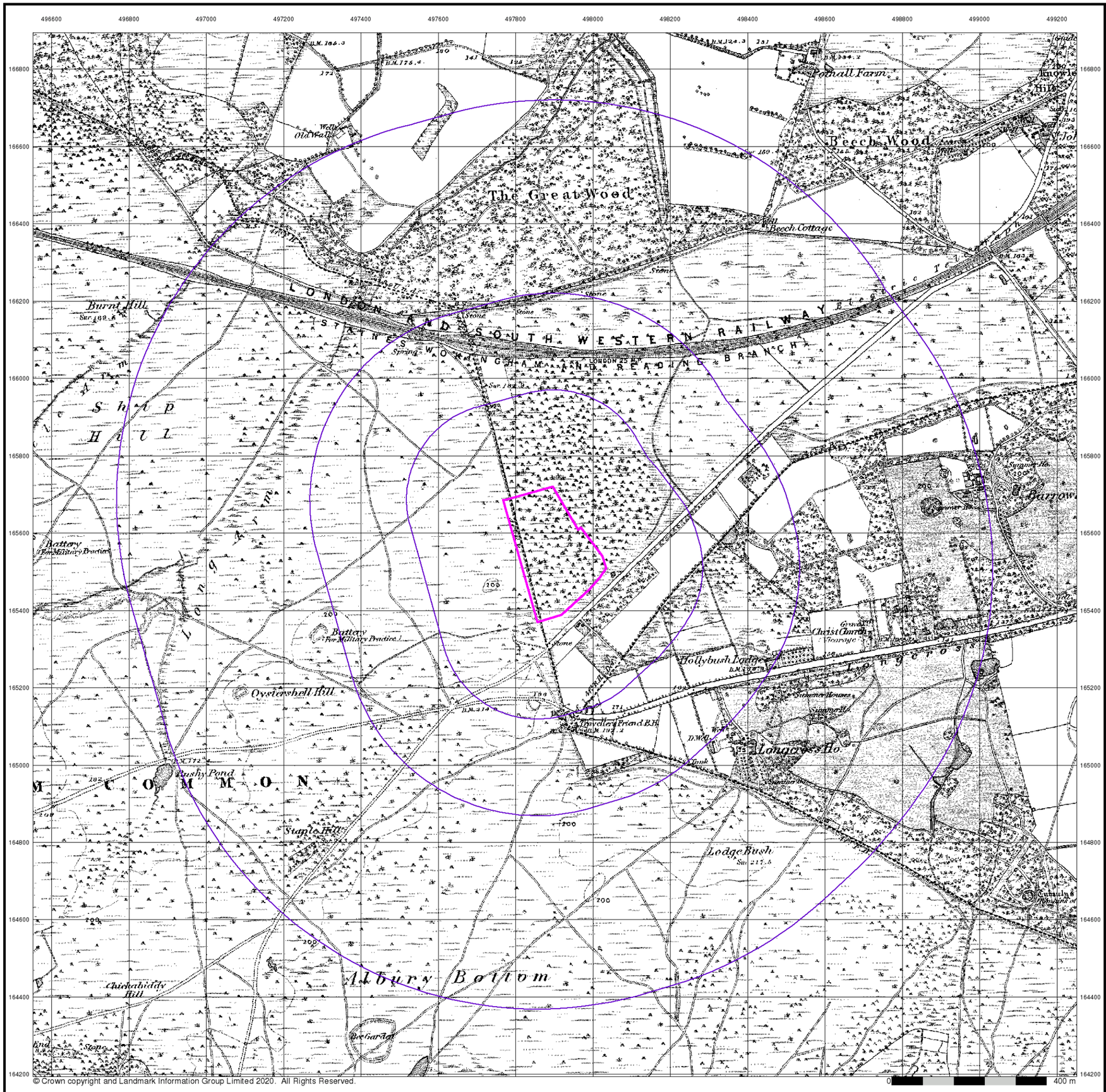
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

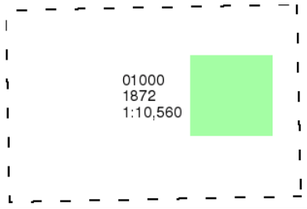
Surrey

Published 1872

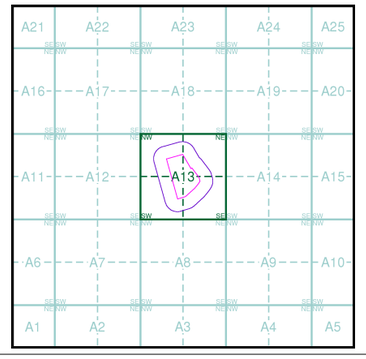
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

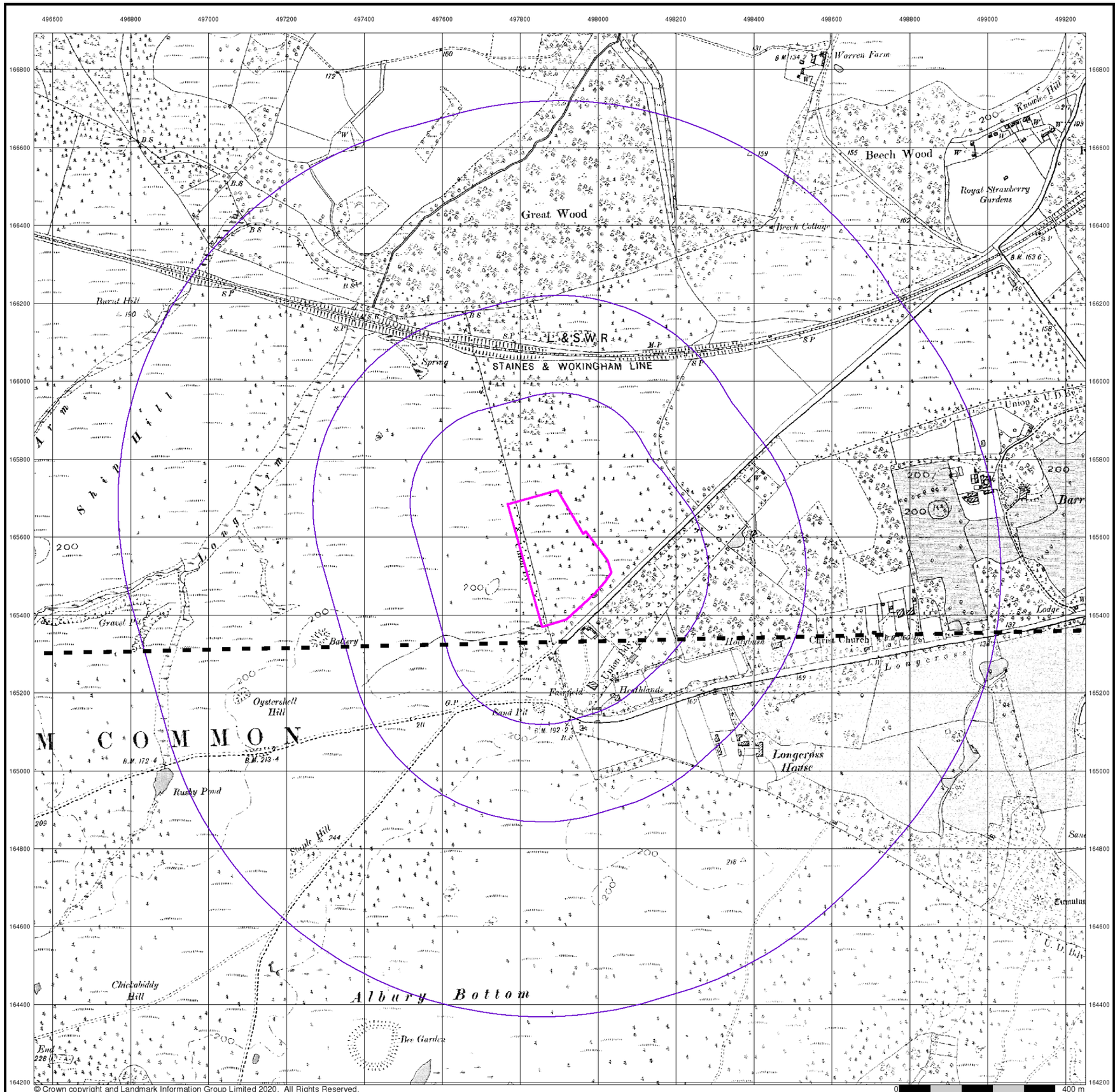
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Surrey

Published 1897 - 1898

Source map scale - 1:10,560

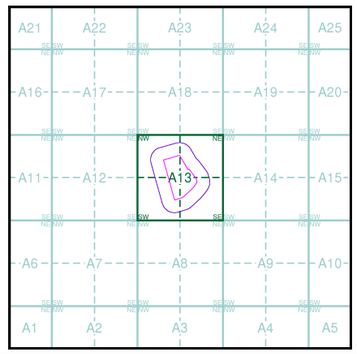
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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)

010NE
1898
1:10,560

010SE
1897
1:10,560

Historical Map - Slice A



Order Details

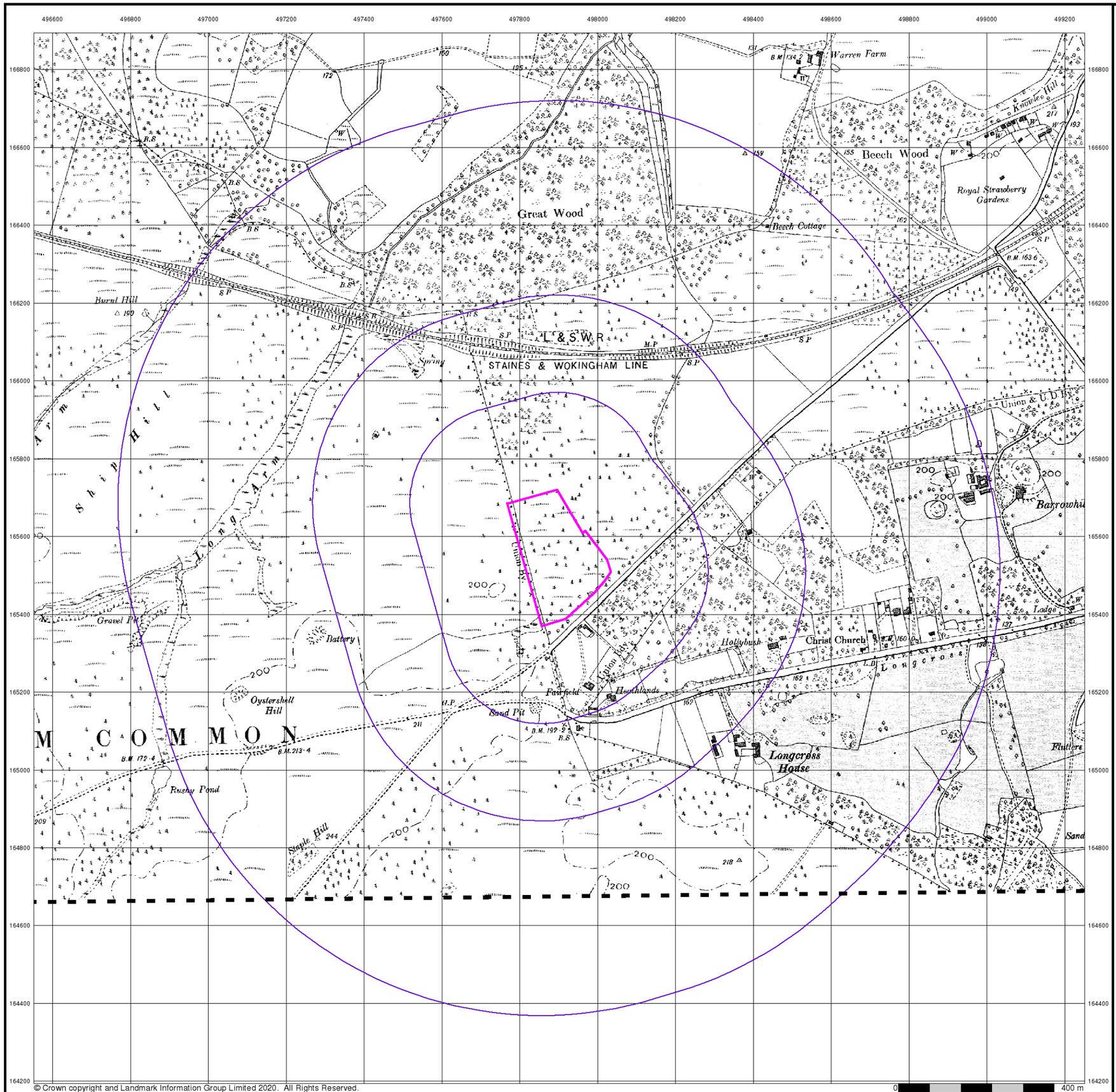
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

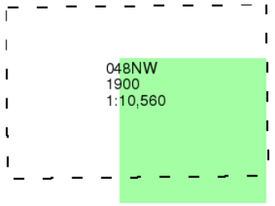
Berkshire

Published 1900

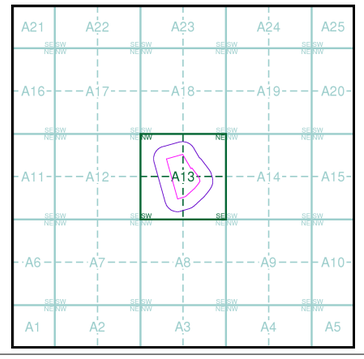
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

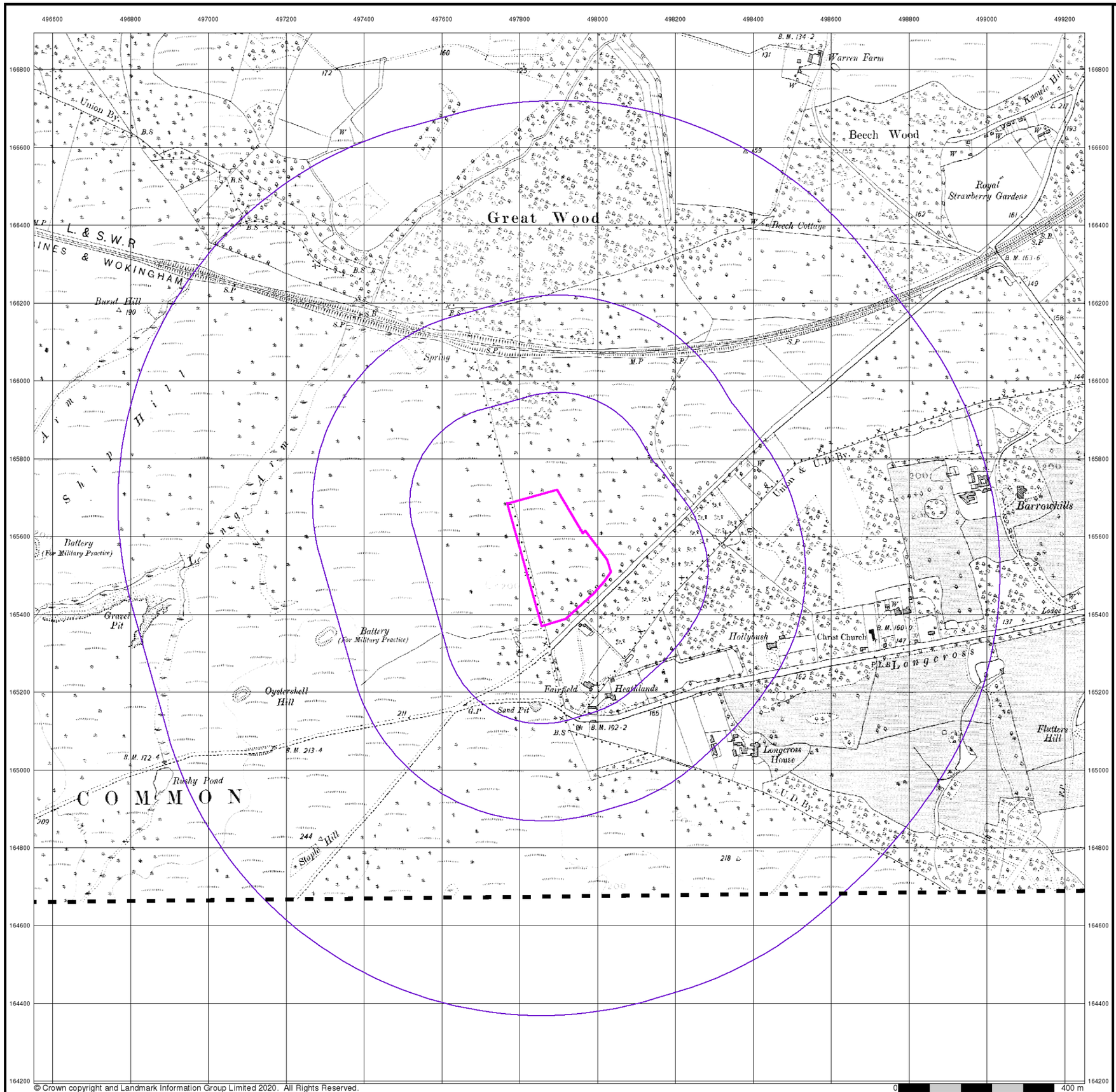
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

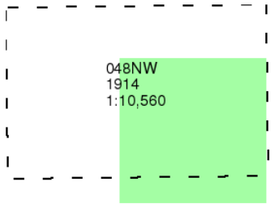
Berkshire

Published 1914

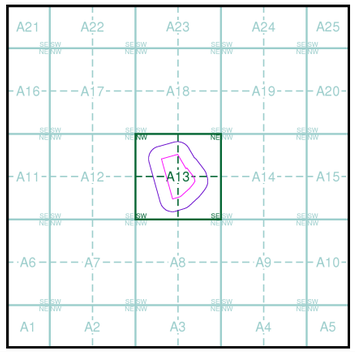
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

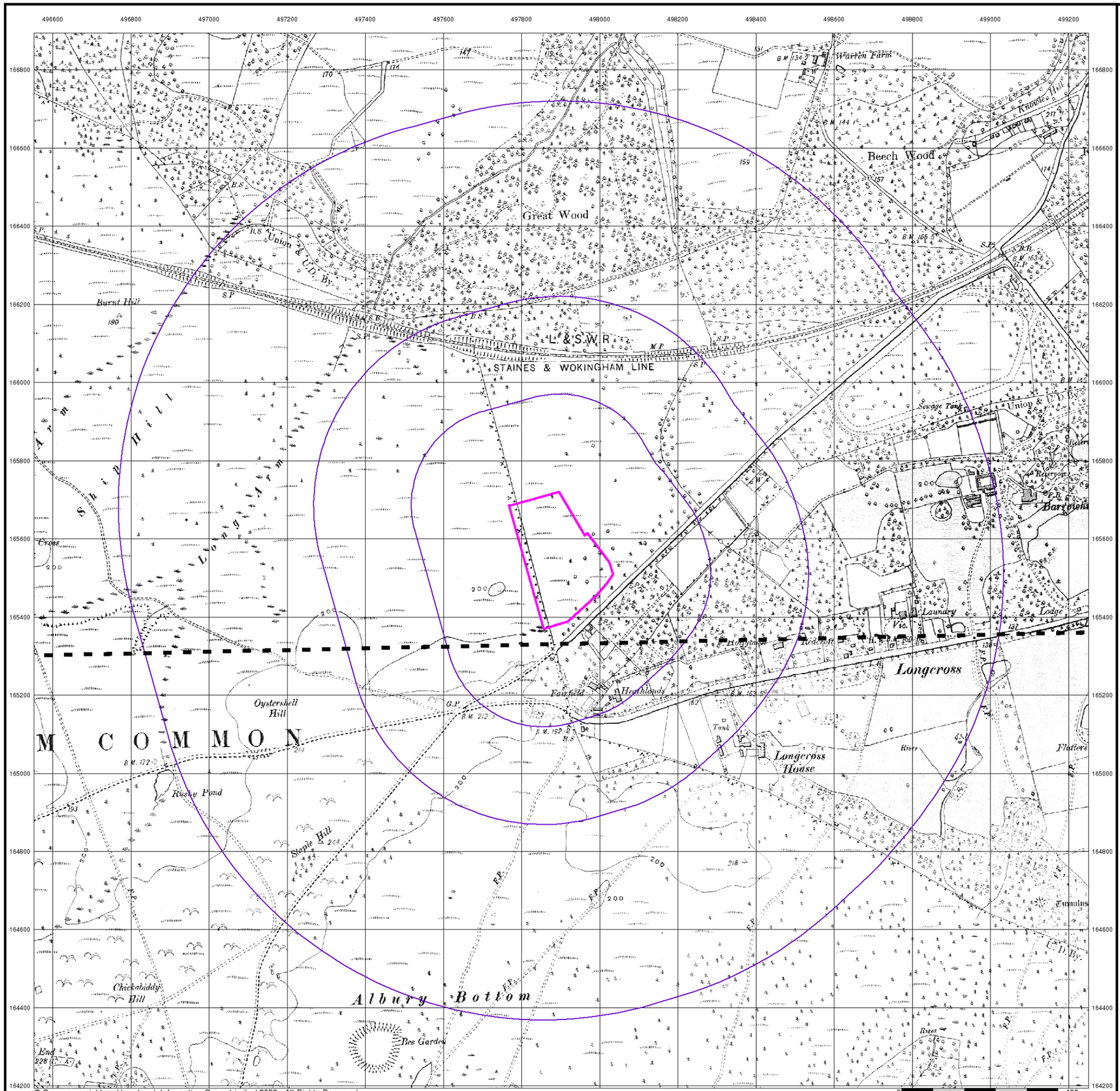
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

Surrey

Published 1919 - 1920

Source map scale - 1:10,560

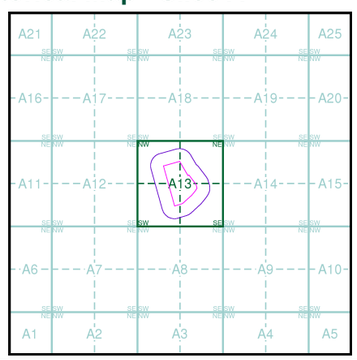
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some 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.

Map Name(s) and Date(s)

010NE
1920
1:10,560

010SE
1919
1:10,560

Historical Map - Slice A



Order Details

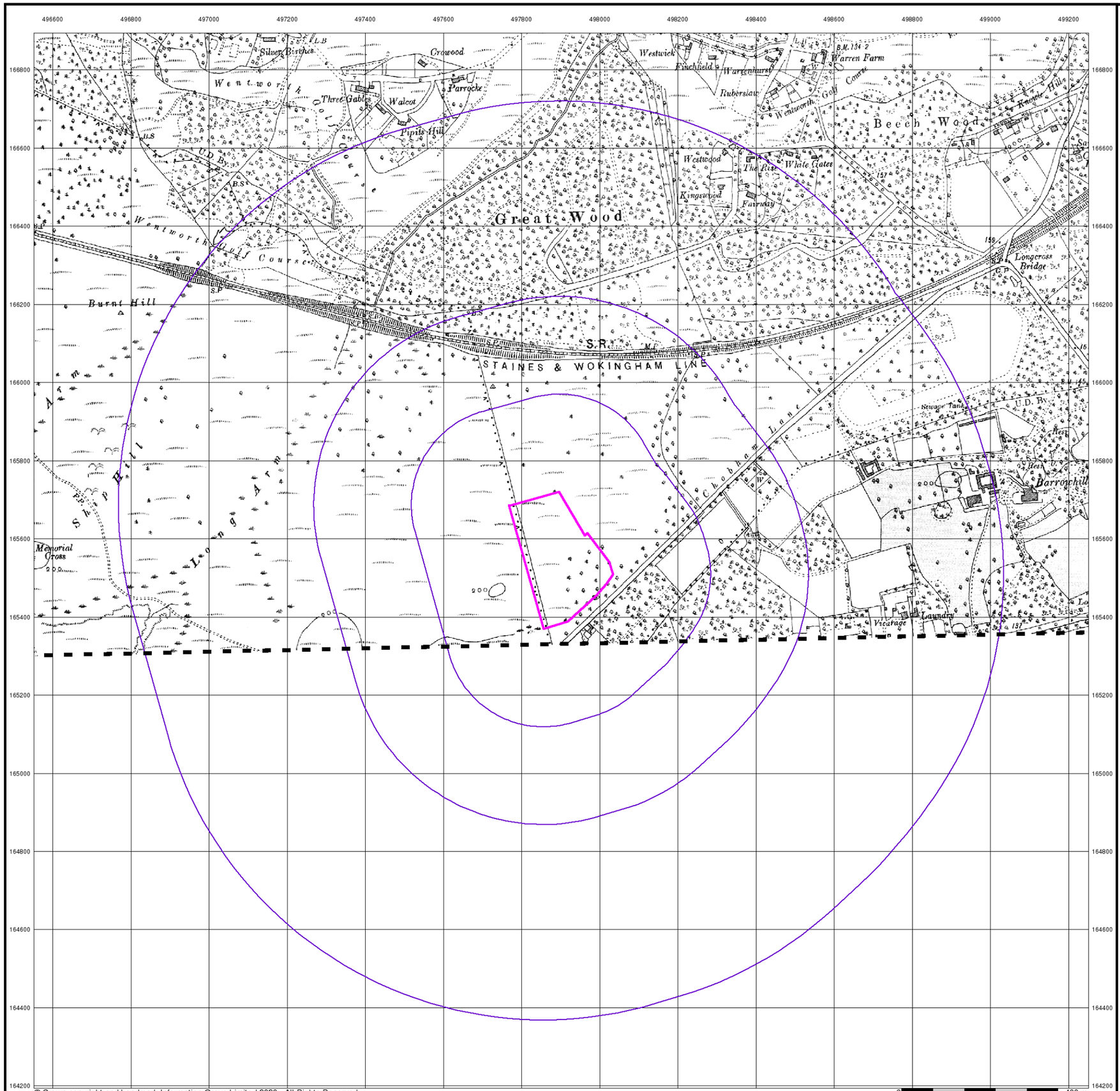
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

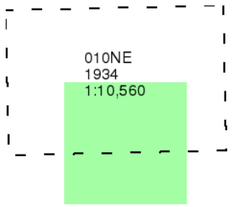
Surrey

Published 1934

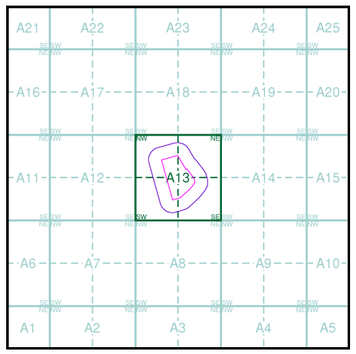
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

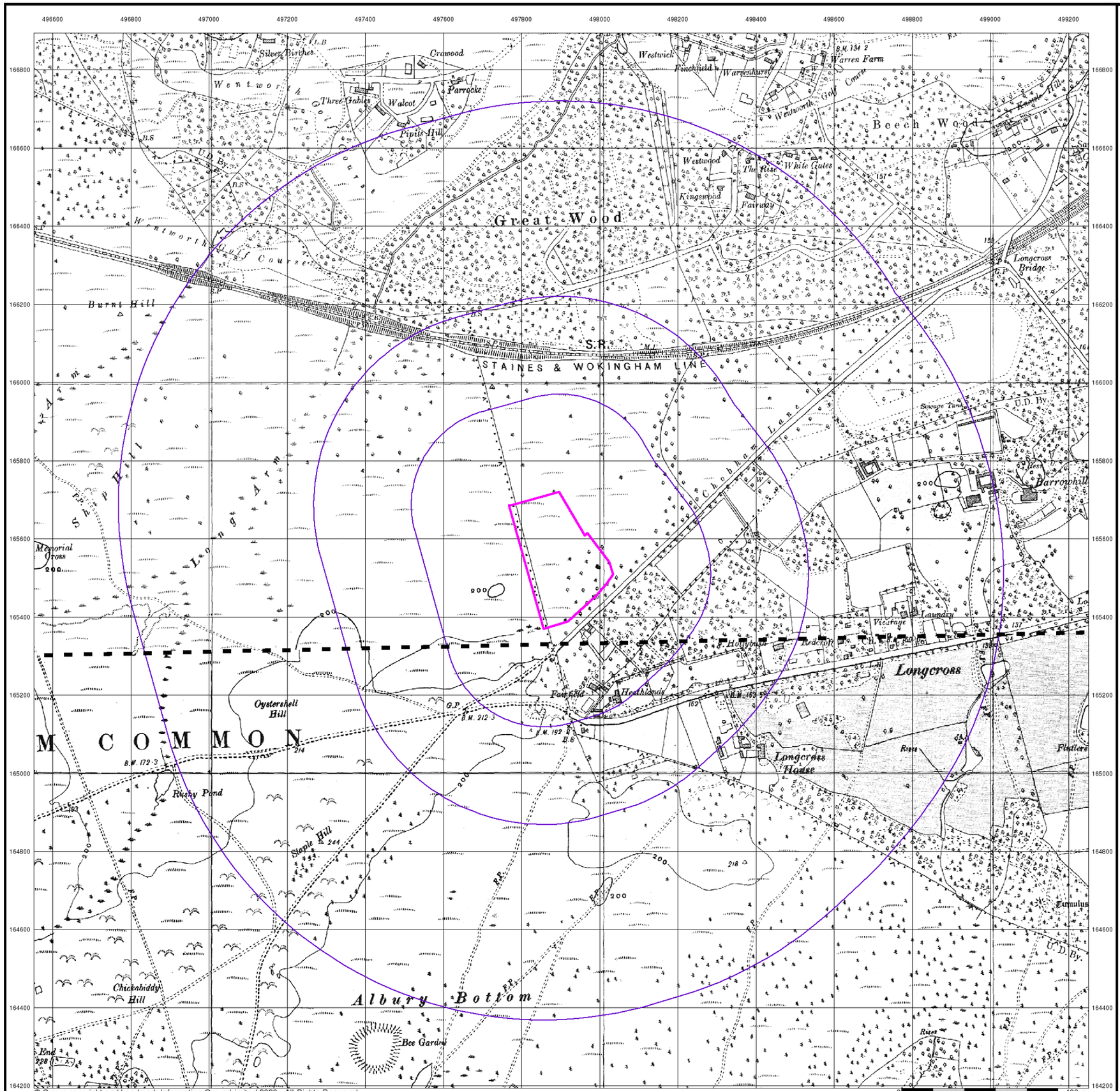
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Surrey

Published 1938

Source map scale - 1:10,560

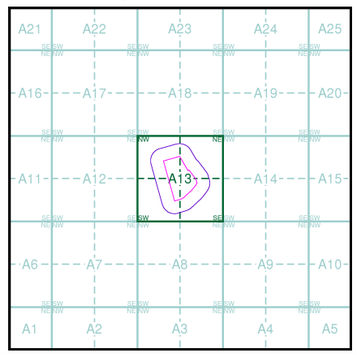
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

010NE
1938
1:10,560

010SE
1938
1:10,560

Historical Map - Slice A



Order Details

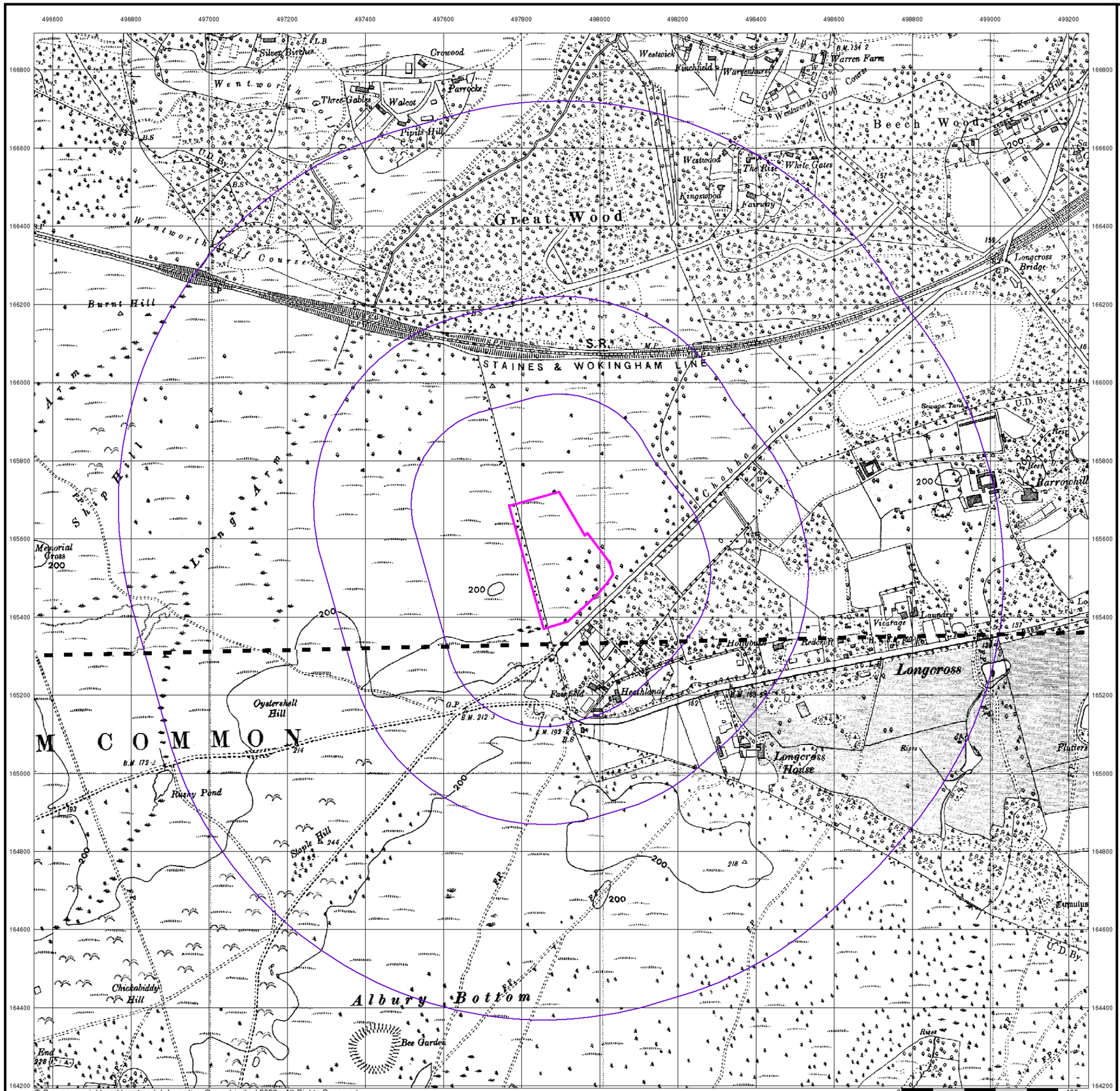
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



0 400 m

Envirocheck®

LANDMARK INFORMATION GROUP®

Surrey

Published 1938

Source map scale - 1:10,560

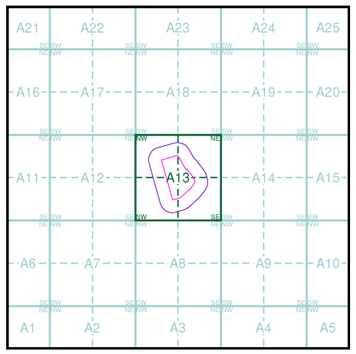
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

010NE
1938
1:10,560

010SE
1938
1:10,560

Historical Map - Slice A



Order Details

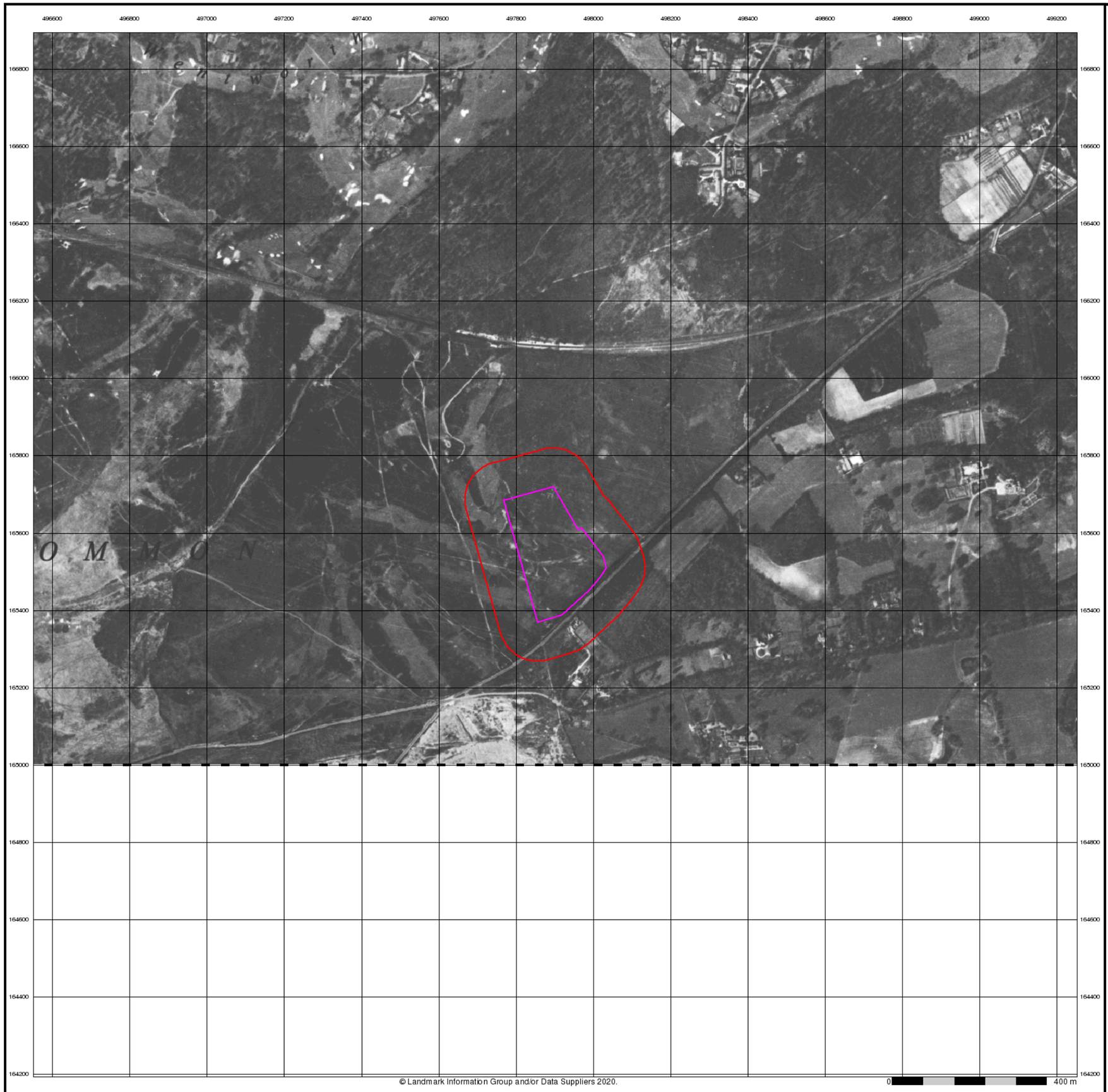
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

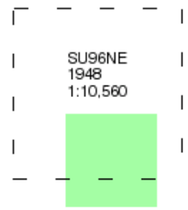
Historical Aerial Photography

Published 1948

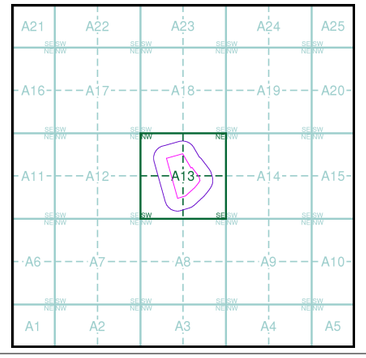
Source map scale - 1:10,560

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

Map Name(s) and Date(s)



Historical Aerial Photography - Slice A



BRITISH LIBRARY

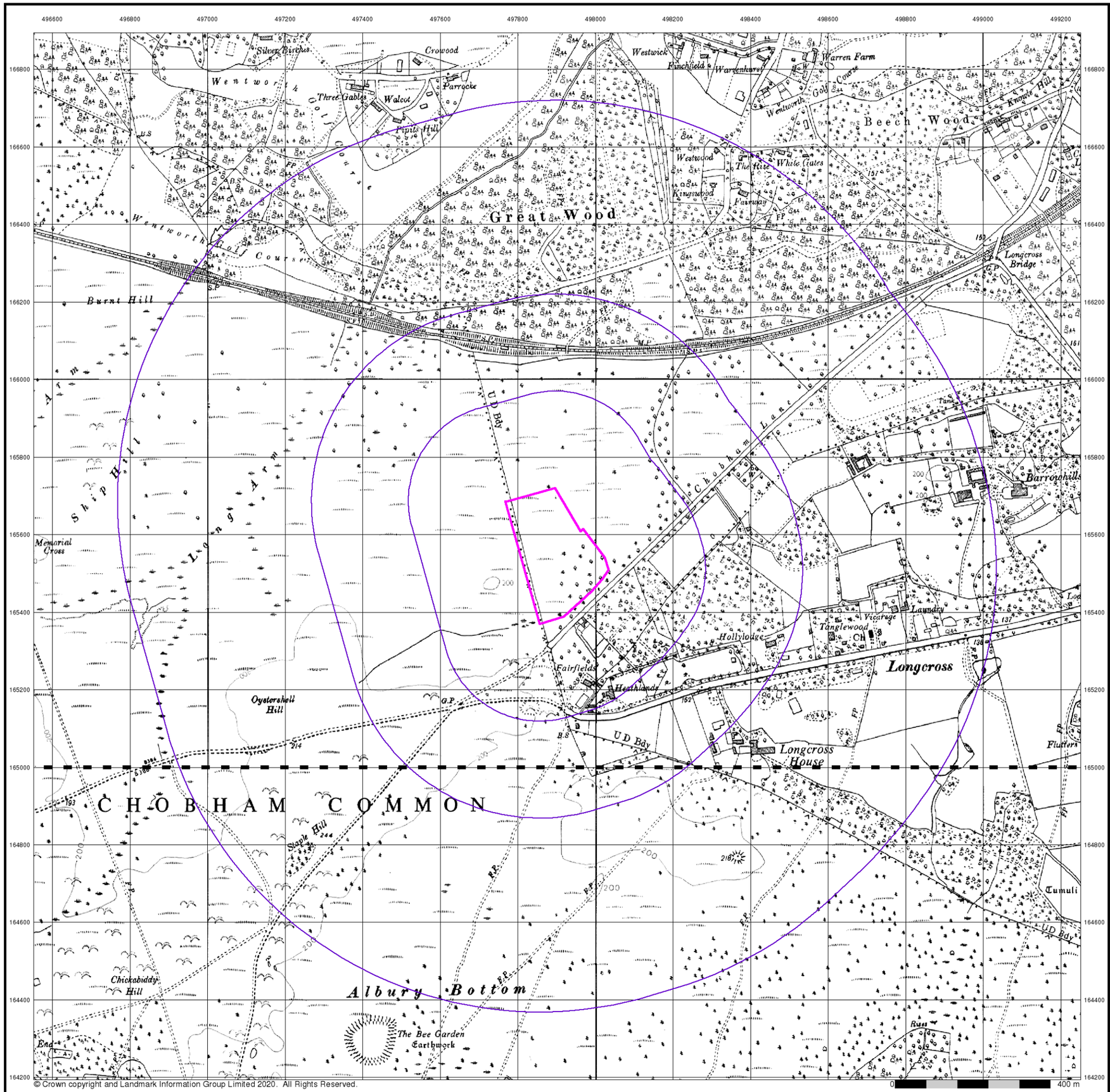
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Ordnance Survey Plan

Published 1961

Source map scale - 1:10,000

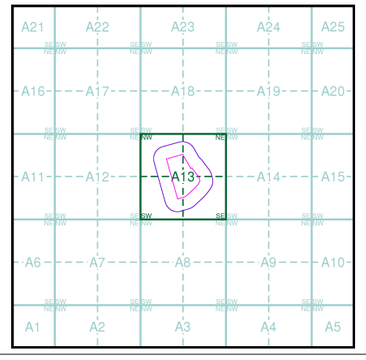
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

SU96NE
1961
1:10,560

SU96SE
1961
1:10,560

Historical Map - Slice A



Order Details

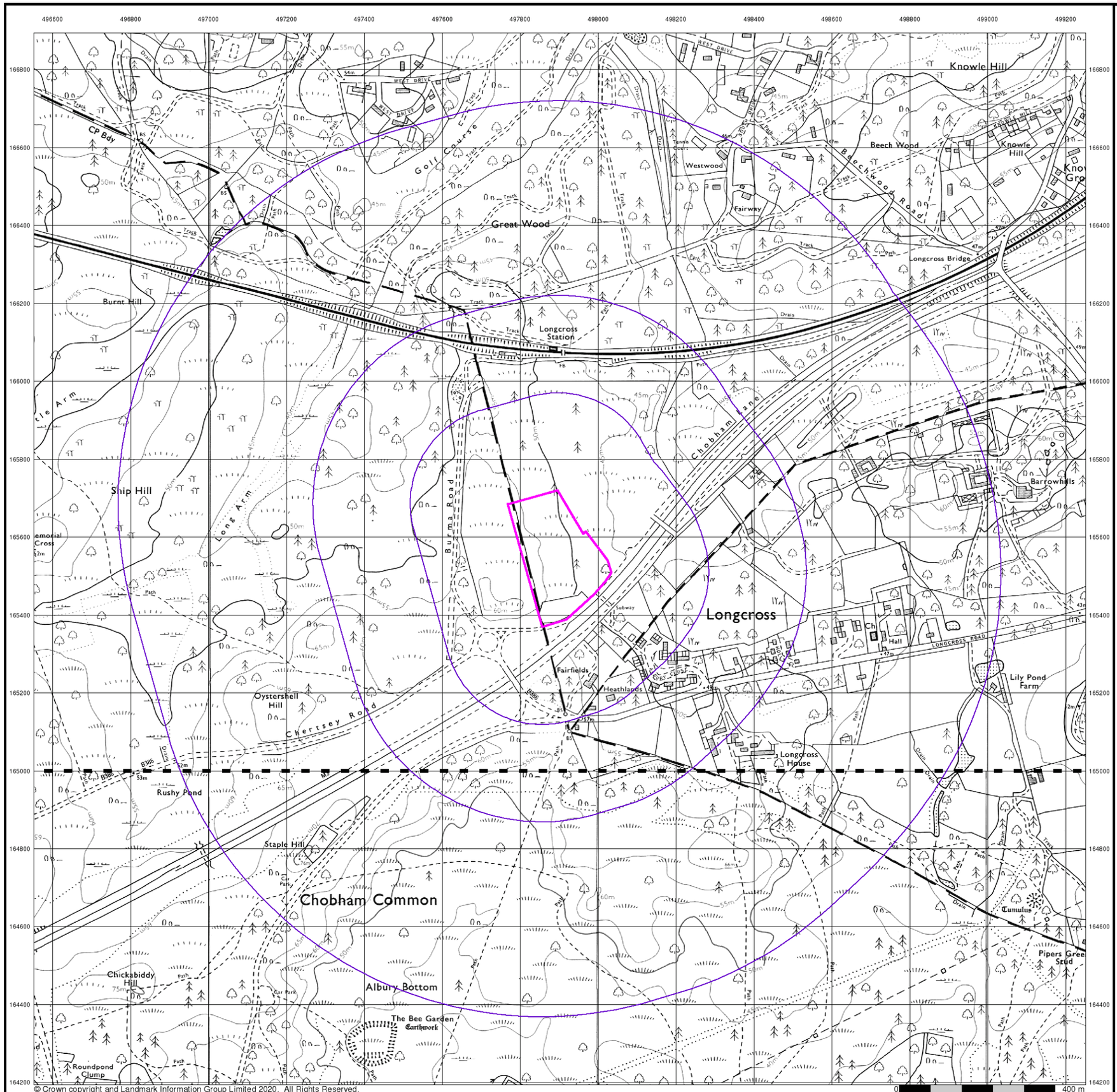
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Ordnance Survey Plan

Published 1975 - 1976

Source map scale - 1:10,000

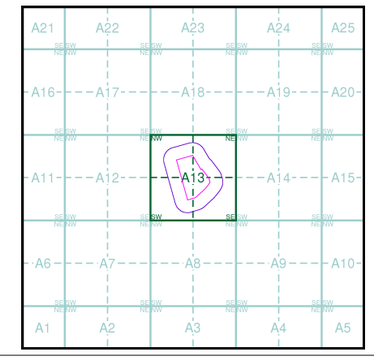
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some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

Map Name(s) and Date(s)

SU96NE
1975
1:10,000

SU96SE
1976
1:10,000

Historical Map - Slice A



Order Details

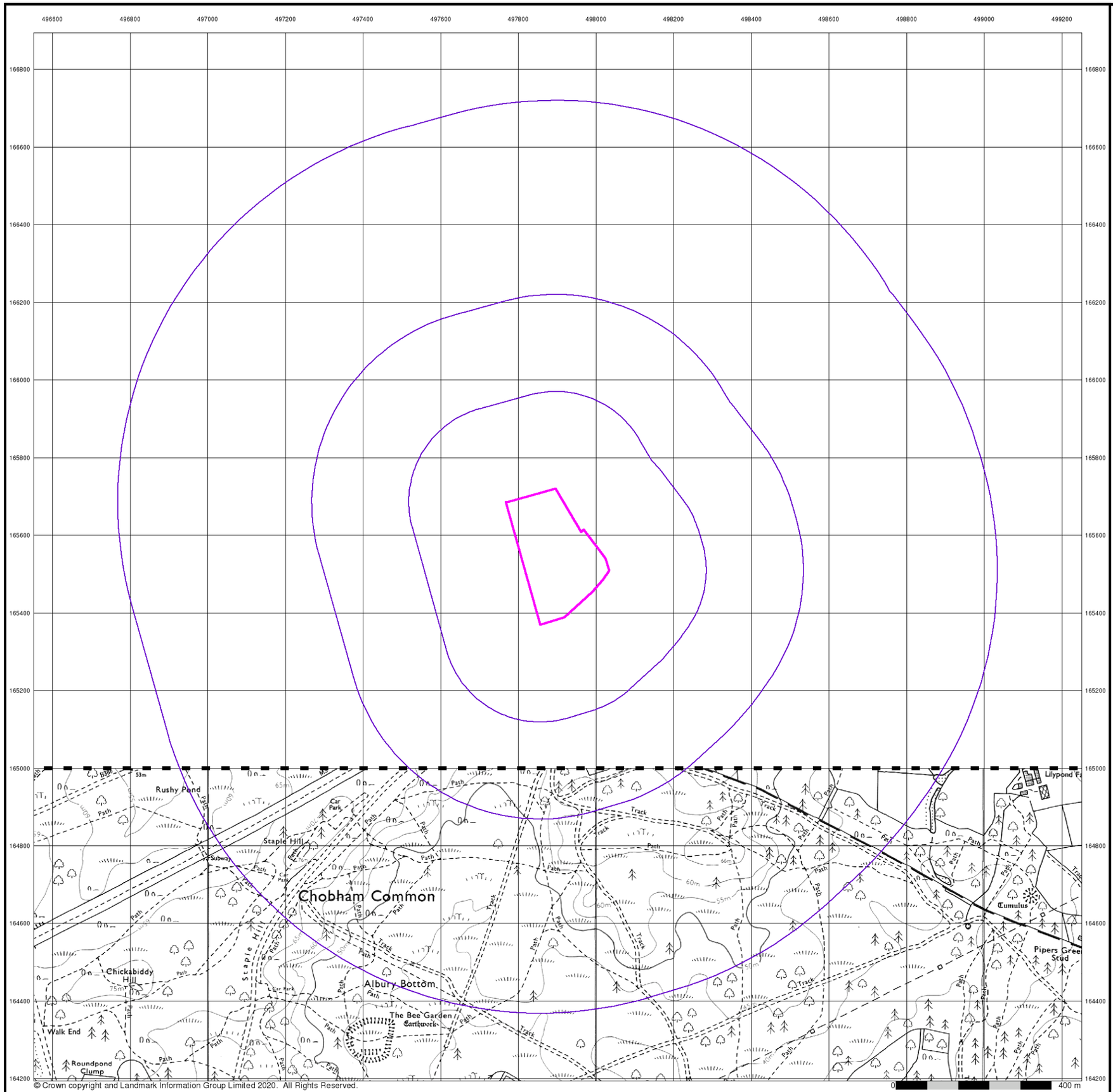
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

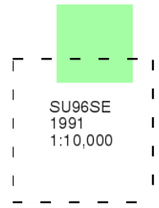
Ordnance Survey Plan

Published 1991

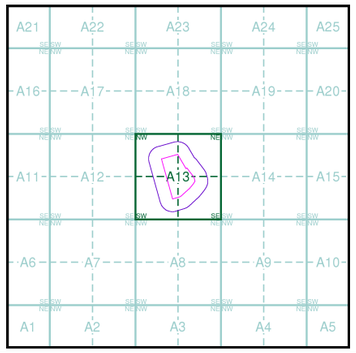
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

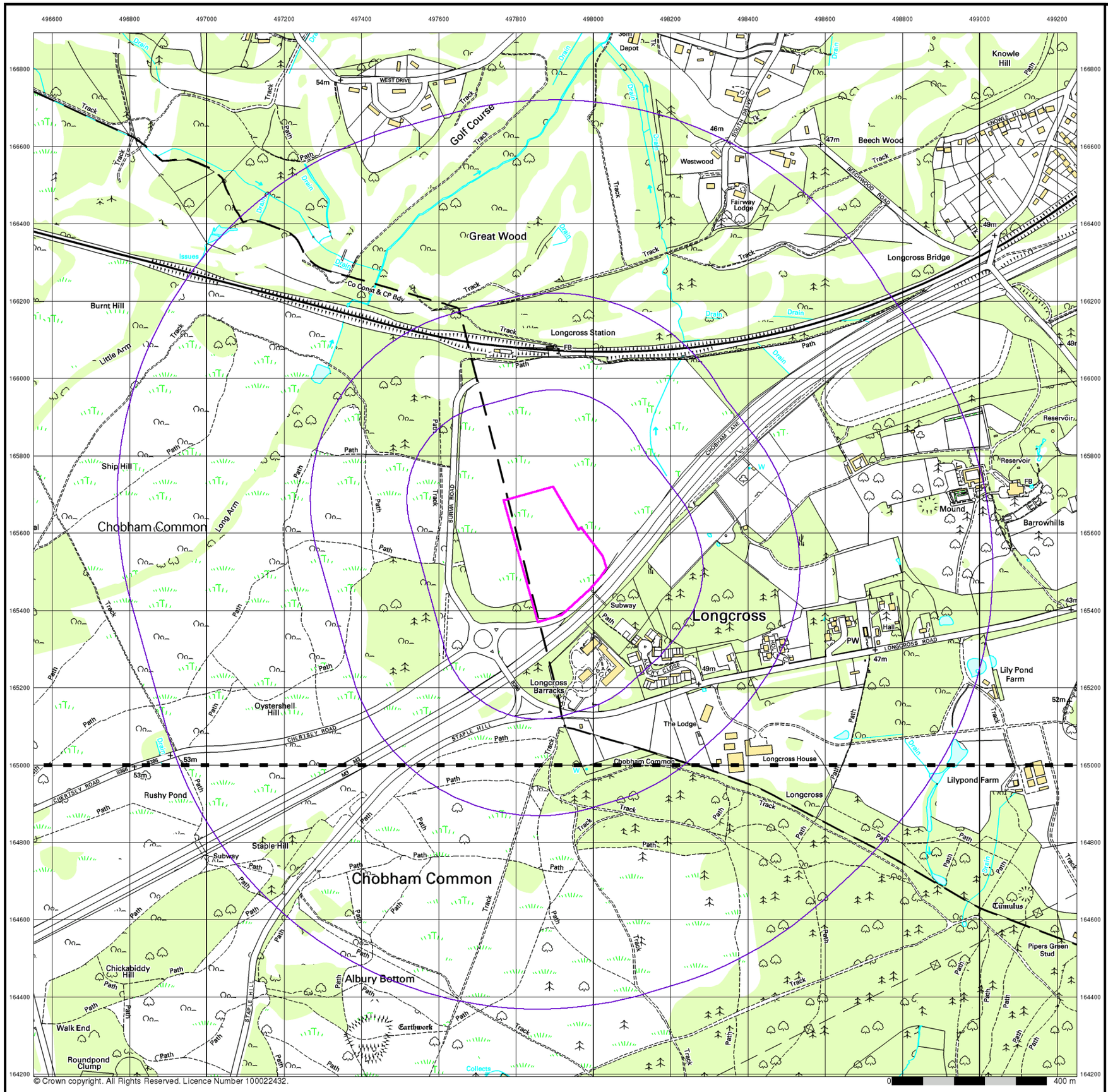
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

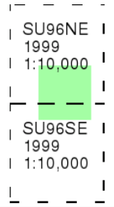
10k Raster Mapping

Published 1999

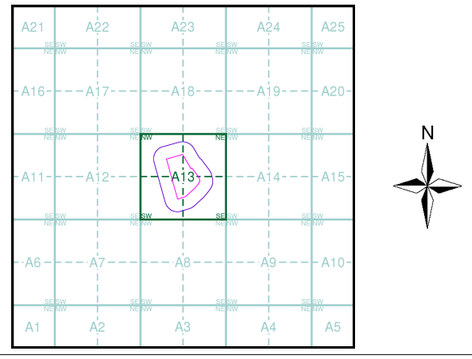
Source map scale - 1:10,000

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

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

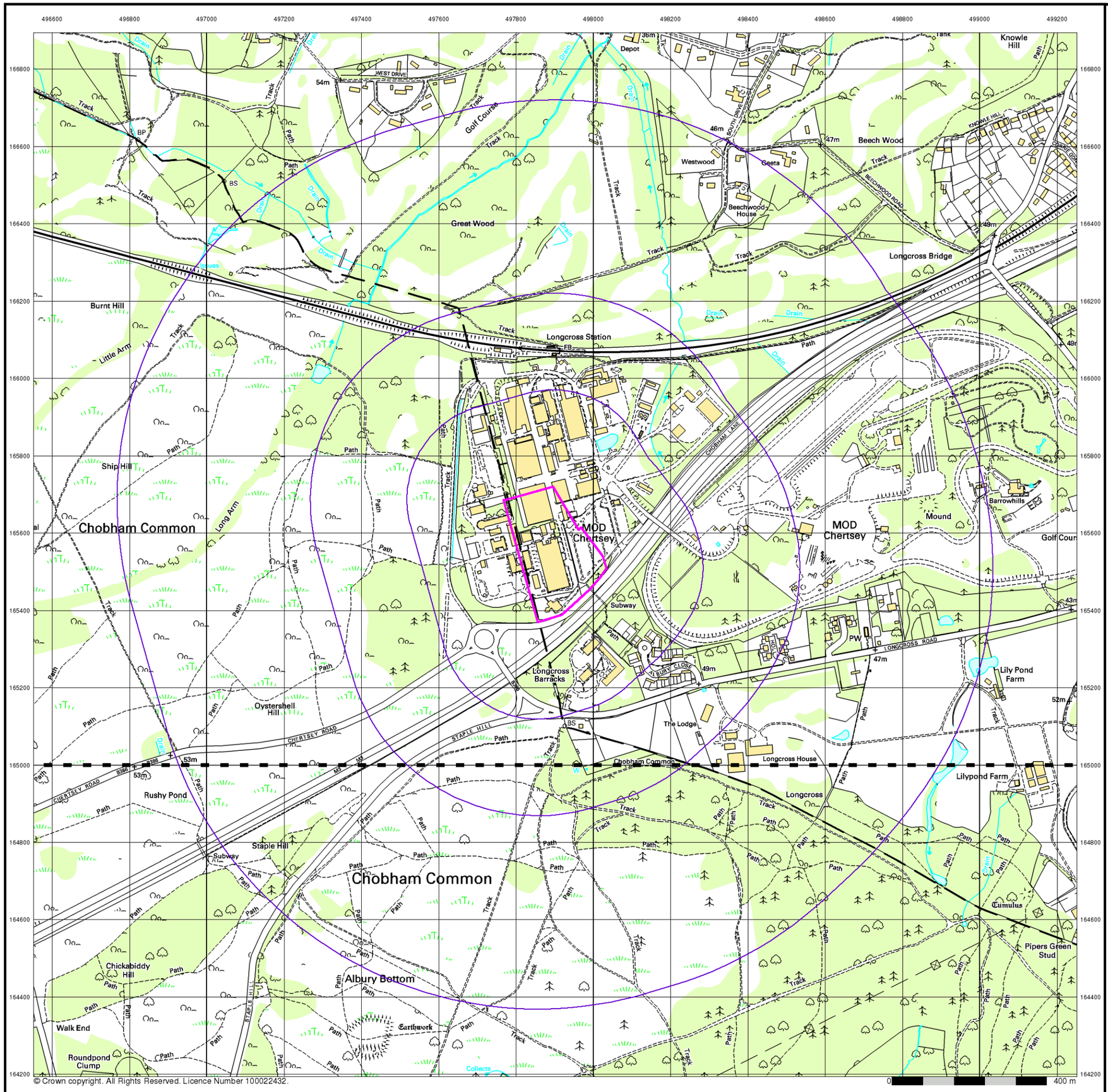
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

10k Raster Mapping

Published 2006

Source map scale - 1:10,000

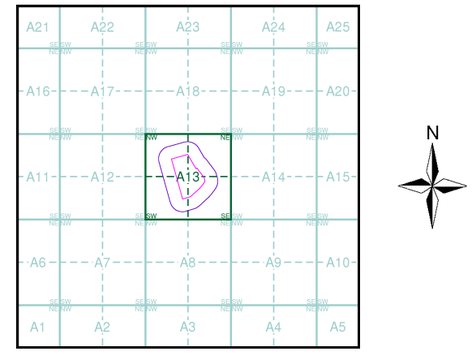
The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks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

Map Name(s) and Date(s)

SU96NE
2006
1:10,000

SU96SE
2006
1:10,000

Historical Map - Slice A



Order Details

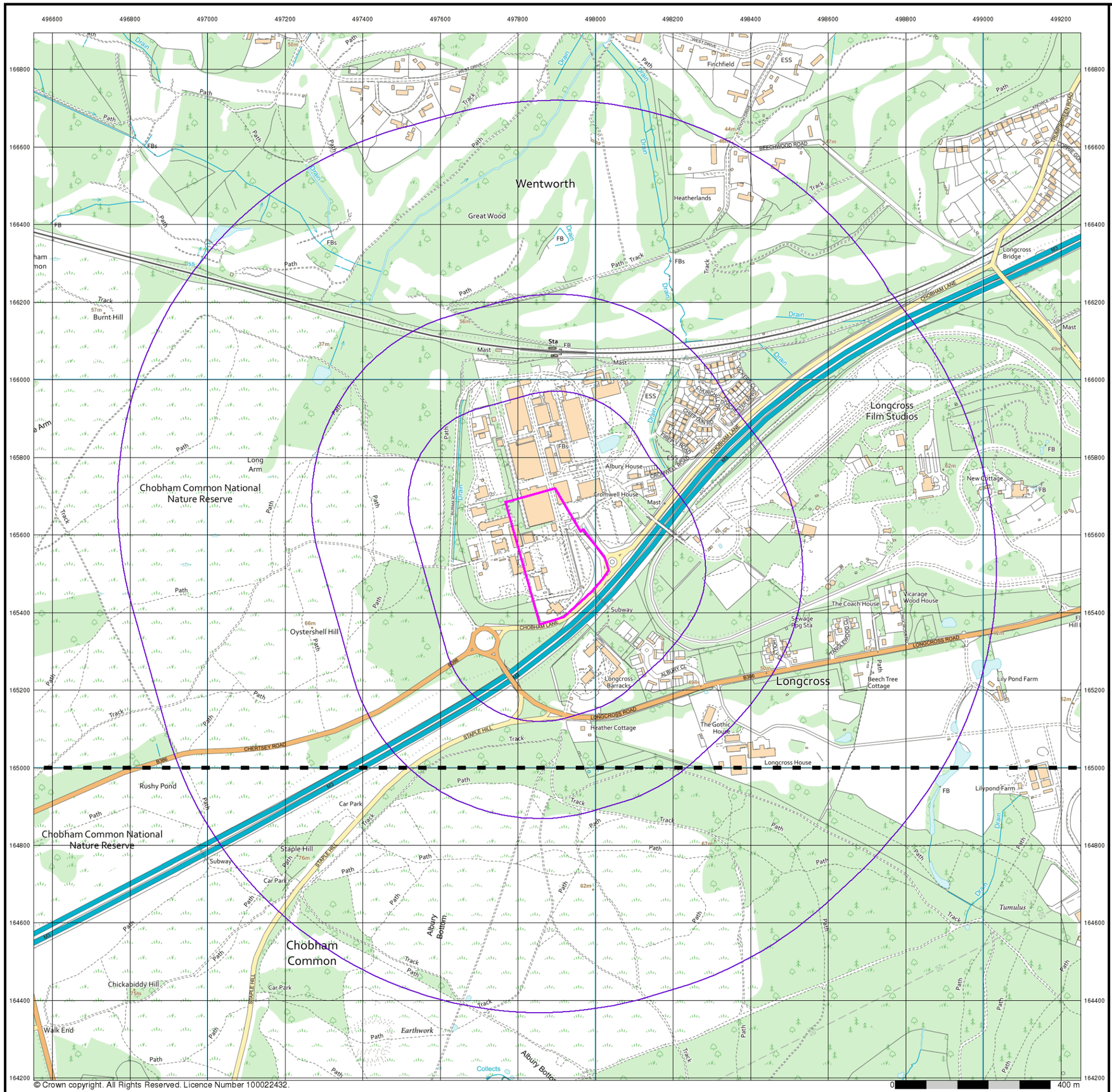
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

VectorMap Local

Published 2020

Source map scale - 1:10,000

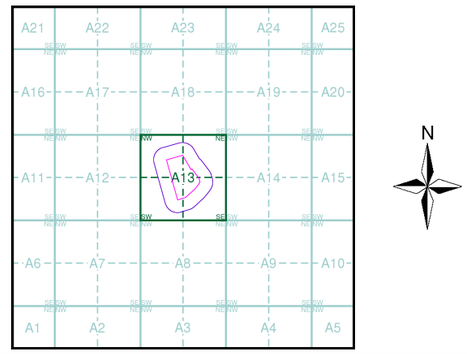
VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap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

Map Name(s) and Date(s)

SU96NE 2020 Variable

SU96SE 2020 Variable

Historical Map - Slice A



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

Envirocheck®

LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

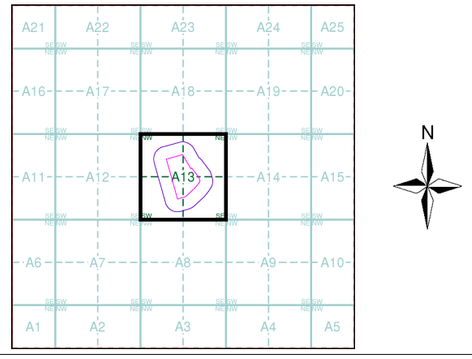
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A13



Order Details

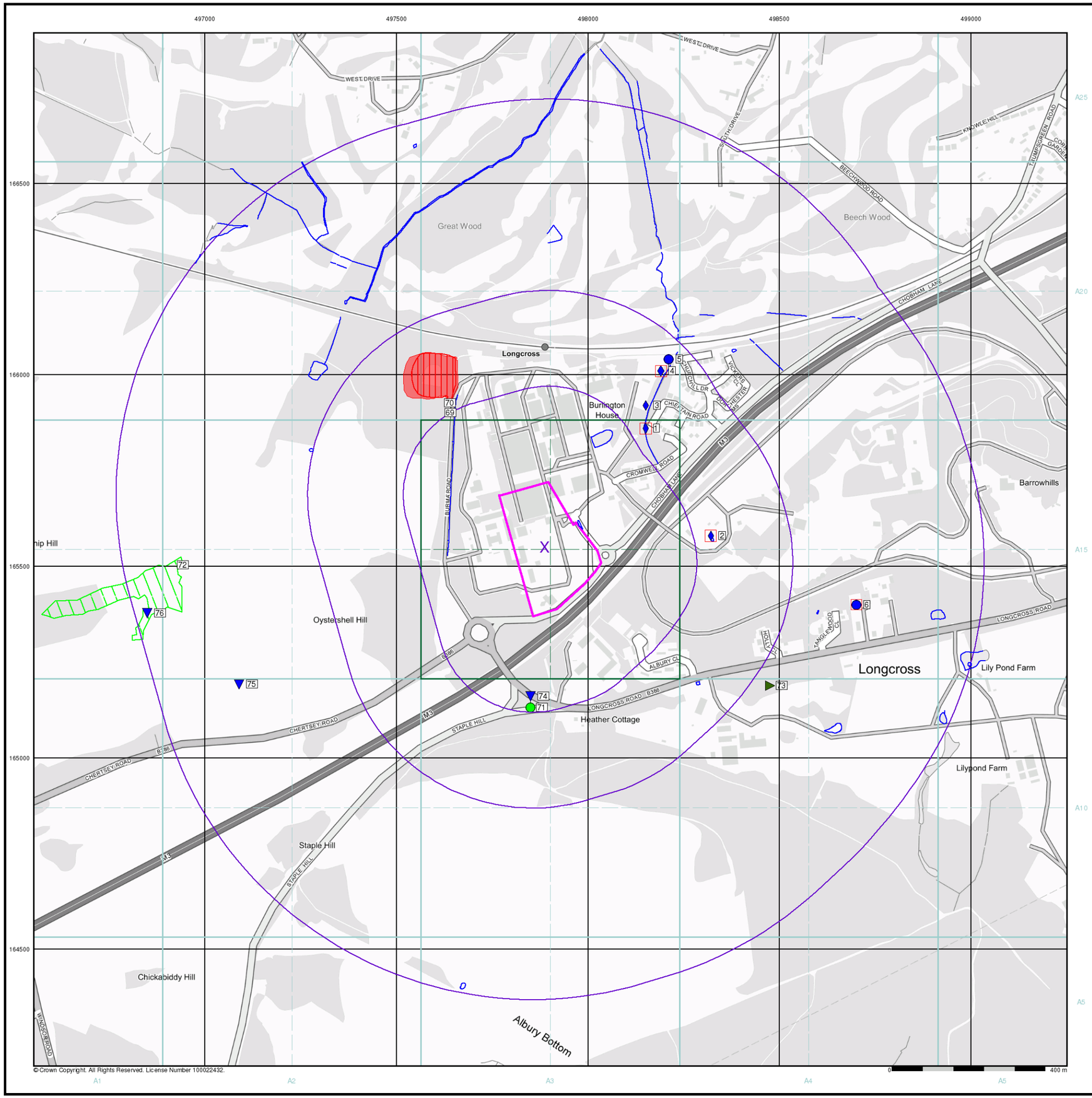
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Plot Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

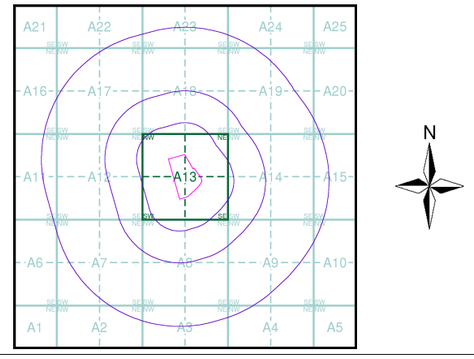
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Slice A



Order Details

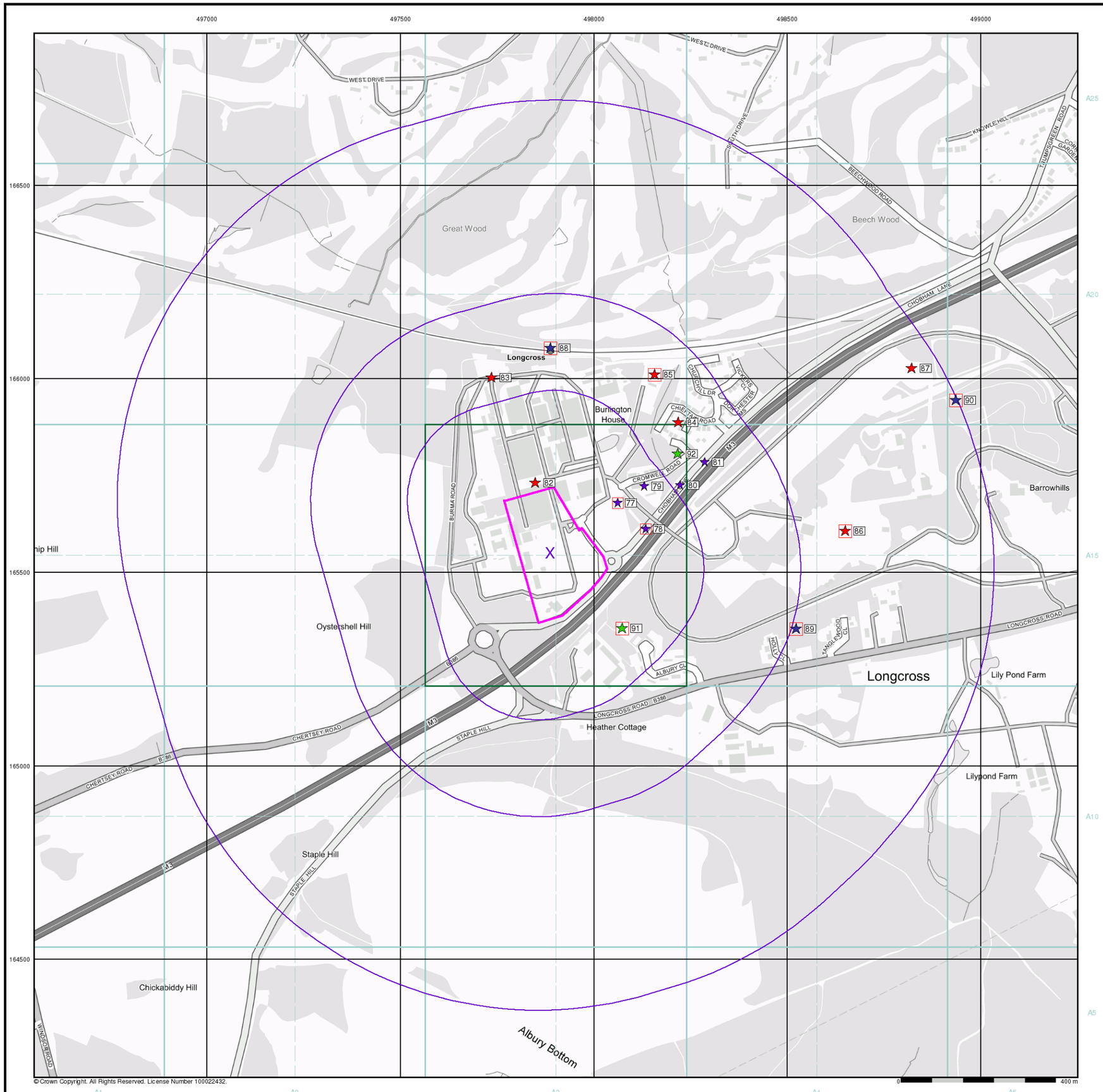
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

Industrial Land Use Map

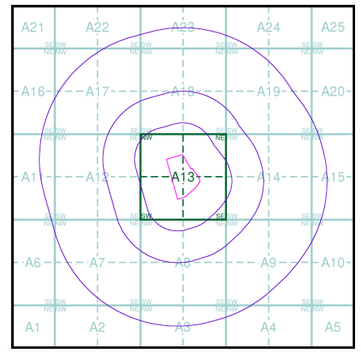
General

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

Industrial Land Use

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

Industrial Land Use Map - Slice A



Order Details

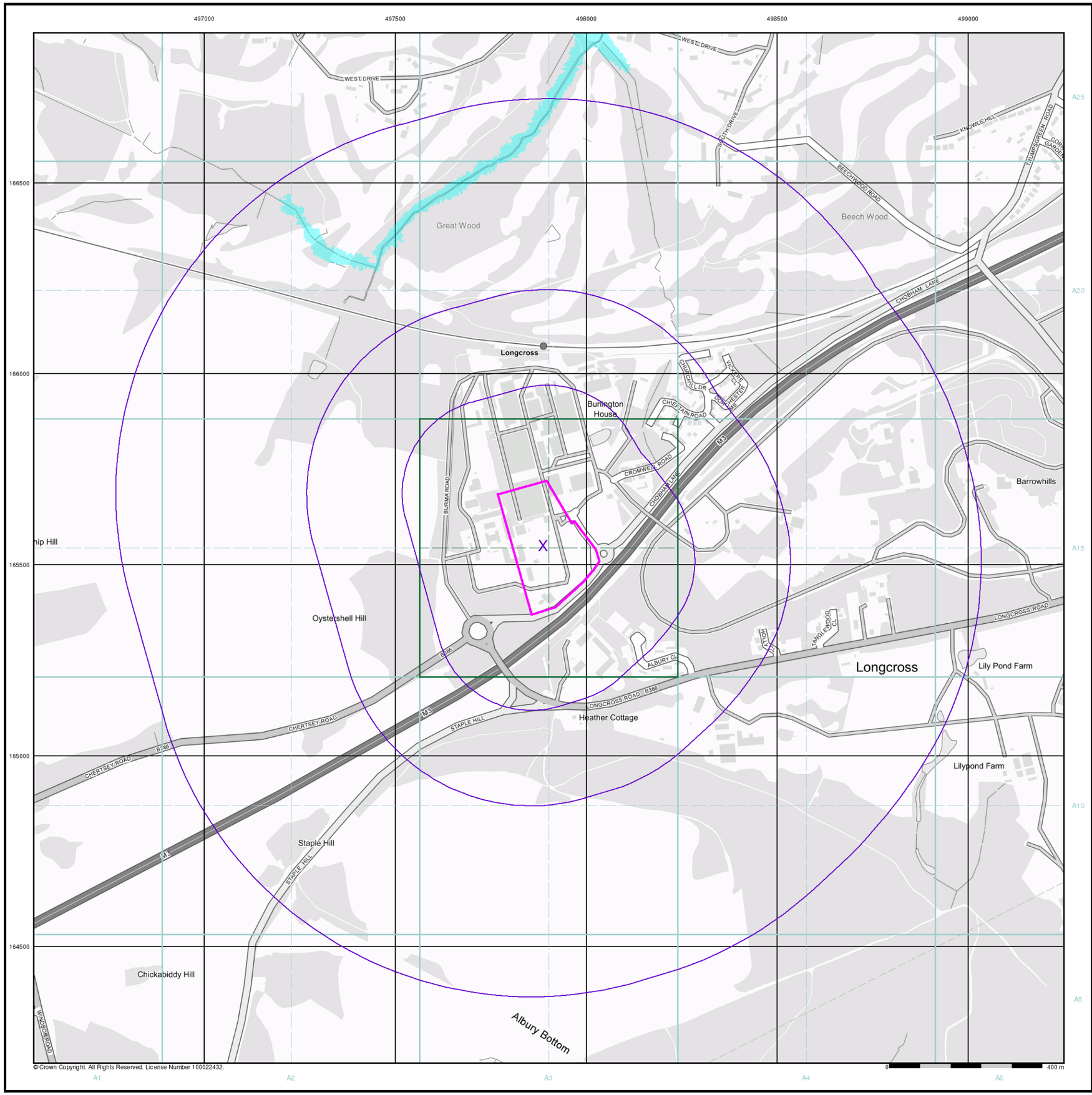
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

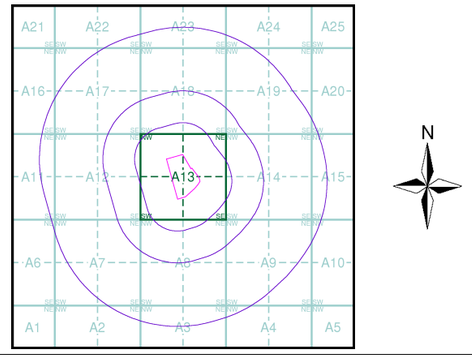
General

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

Agency and Hydrological (Flood)

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

Flood Map - Slice A



Order Details

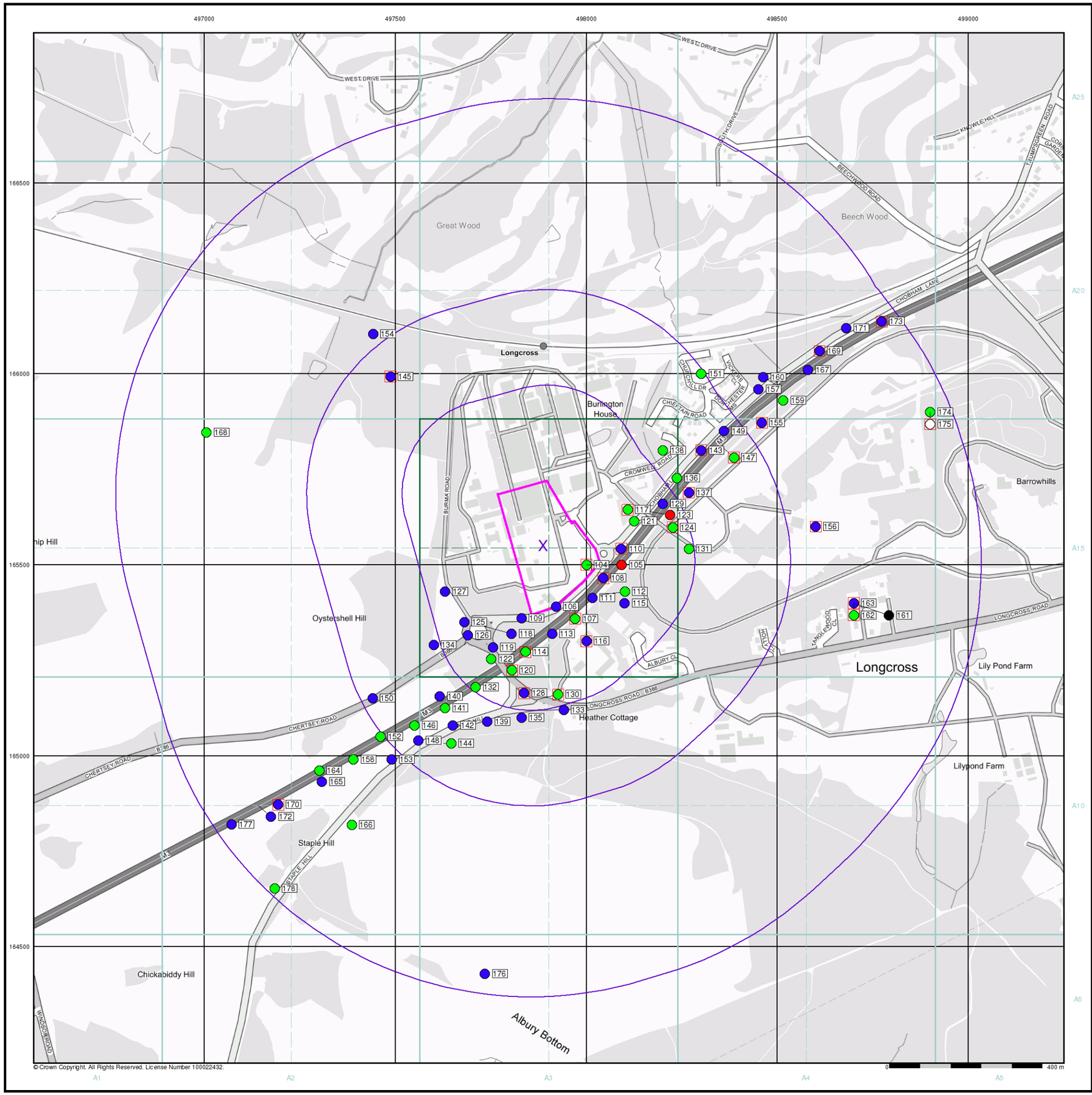
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

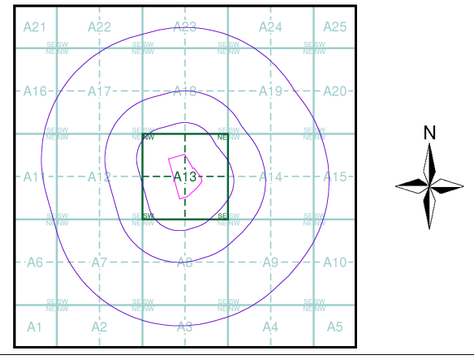
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

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

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

OS Water Network Data

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

Contours (height in meters)

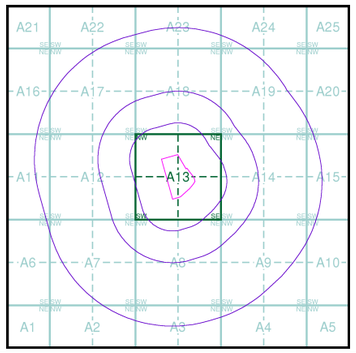
Standard Contour 105 100 95

Master Contour

Spot Height 167.3

- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

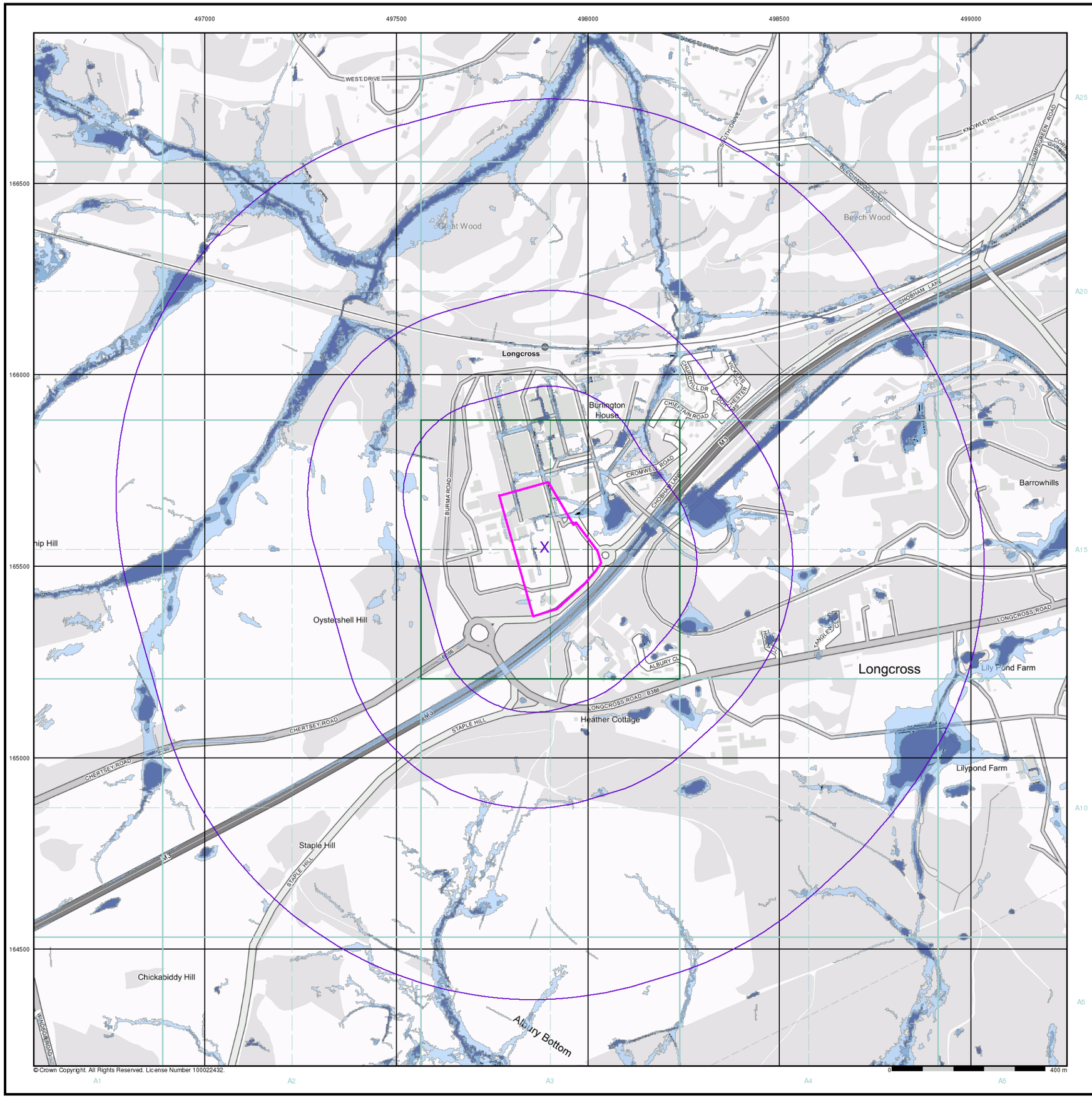
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

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

Risk of Flooding from Surface Water

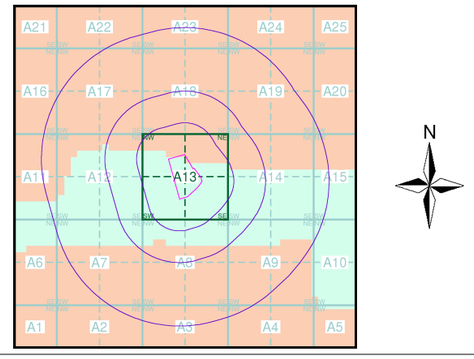
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

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

EA/NRW Suitability Map - Slice A



Order Details

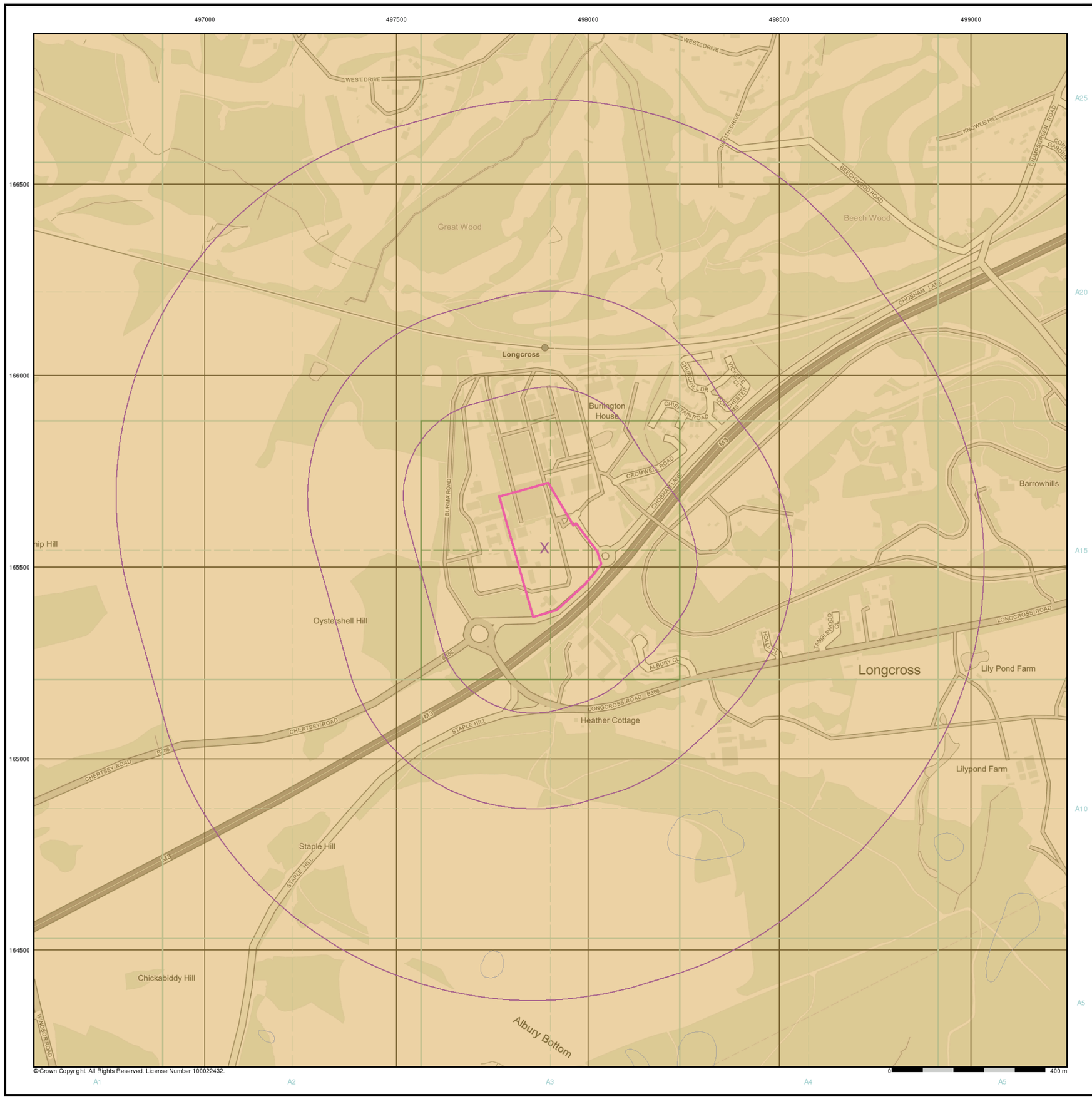
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

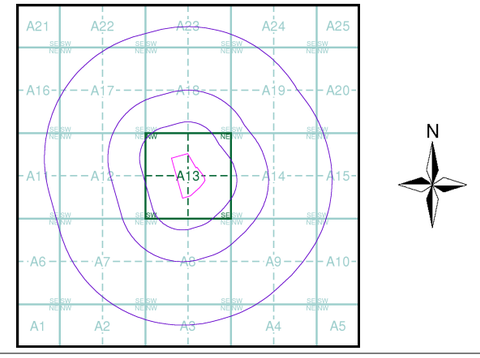
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



Order Details

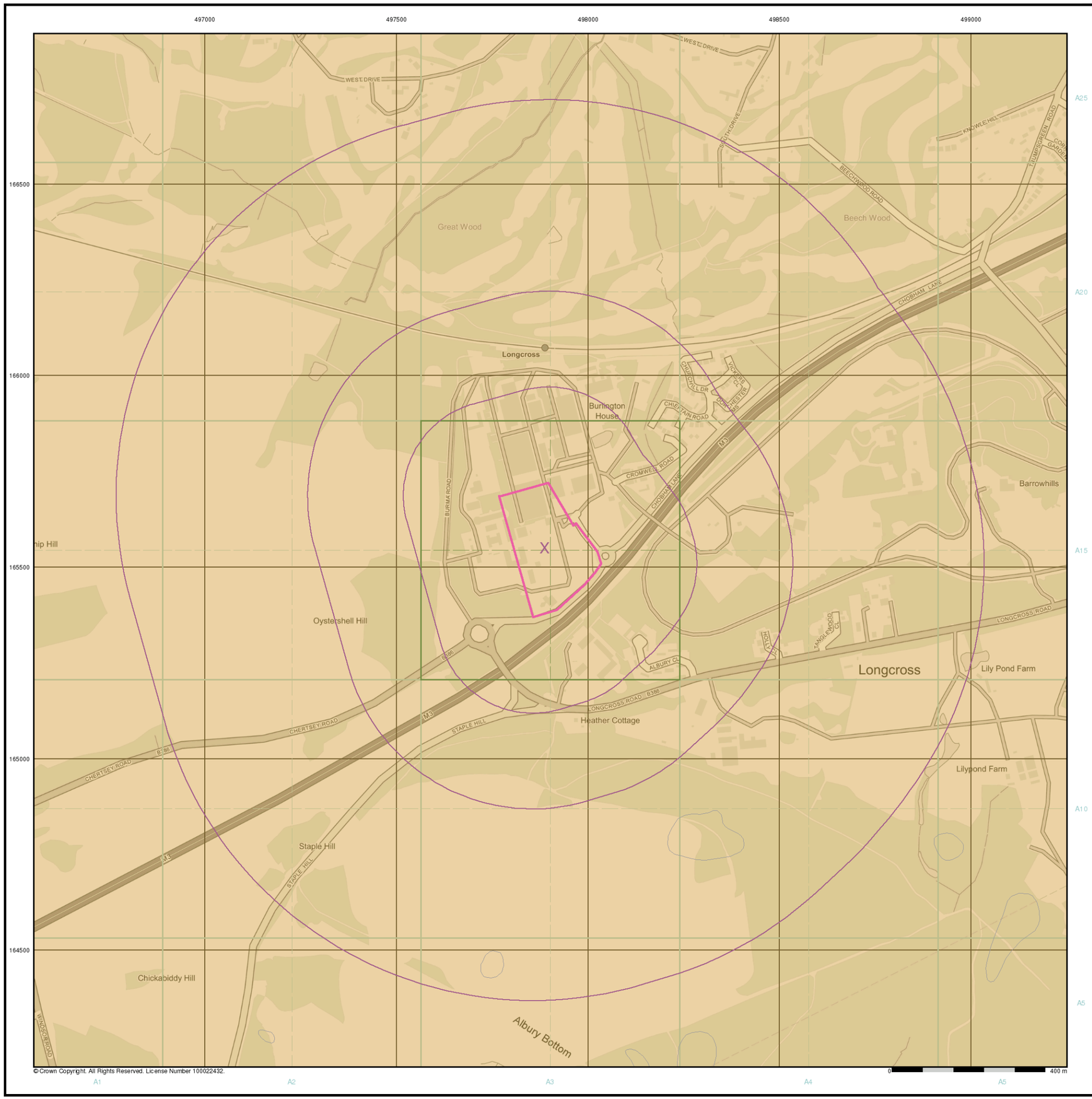
Order Details:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

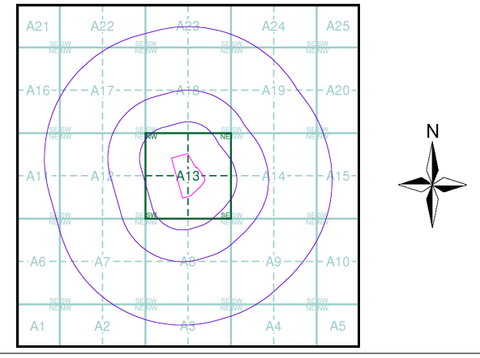
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



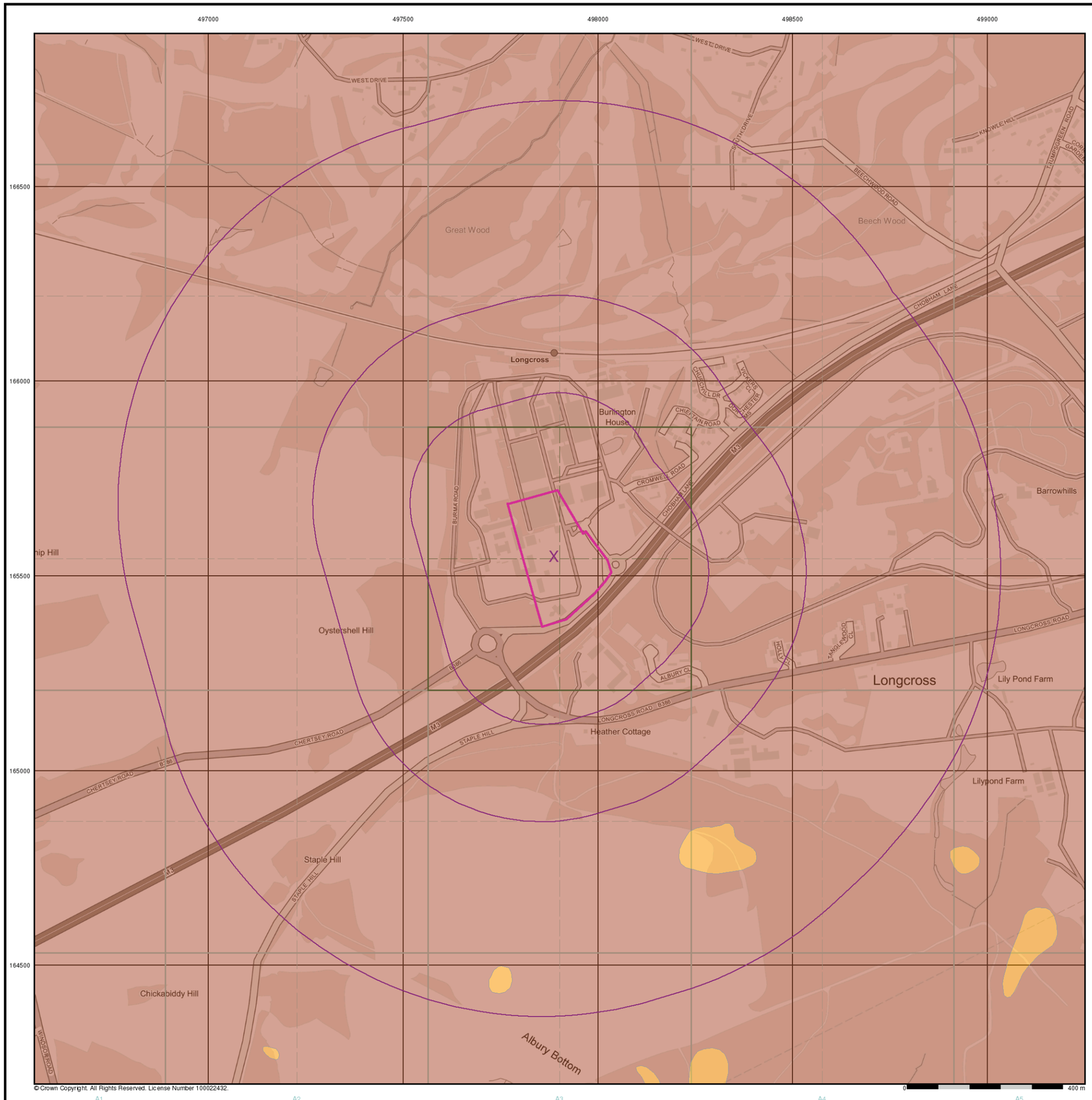
Order Details

Order Details:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

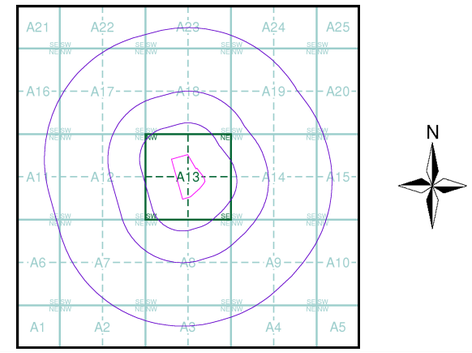
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



Order Details

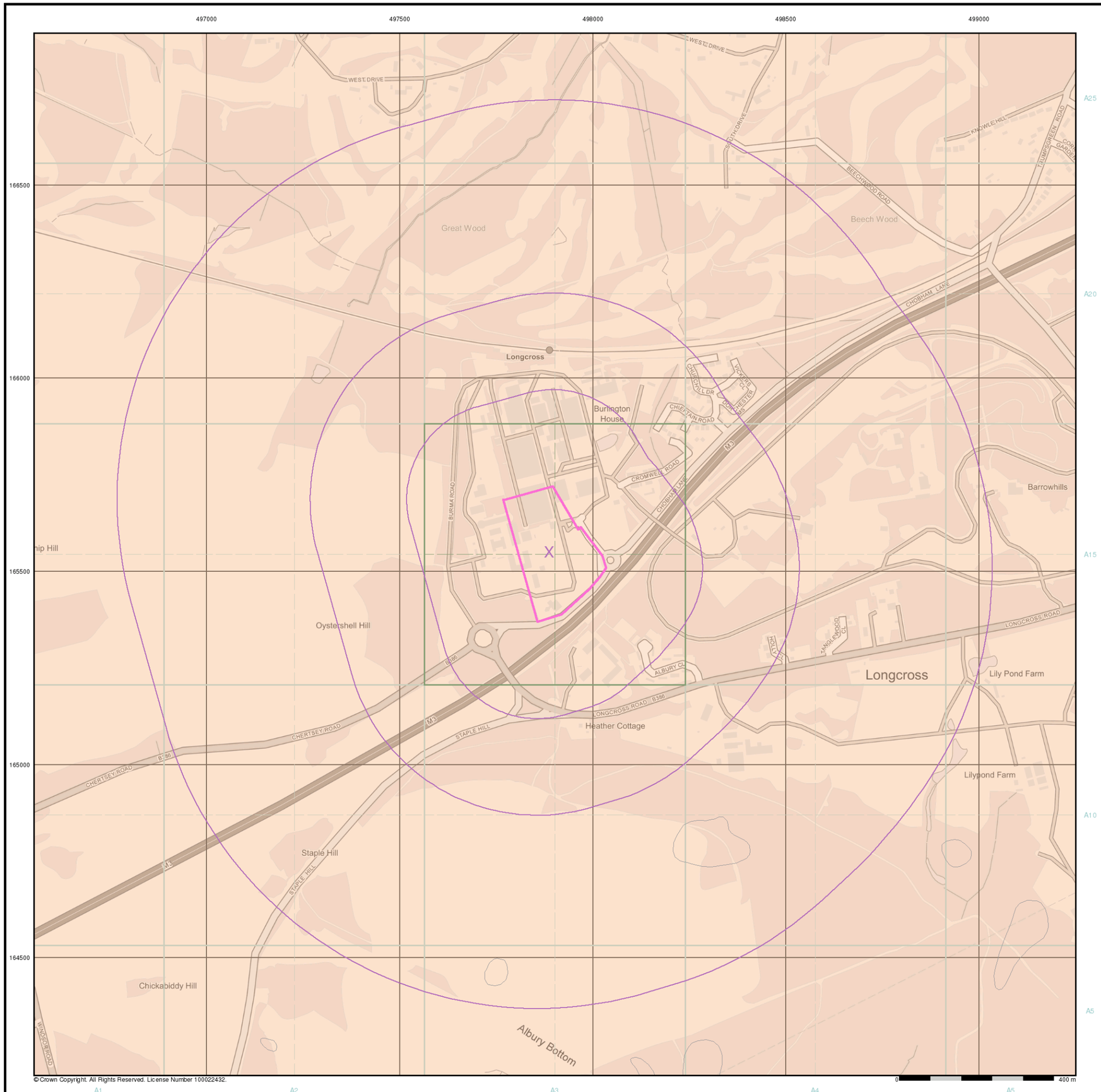
Order Details:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

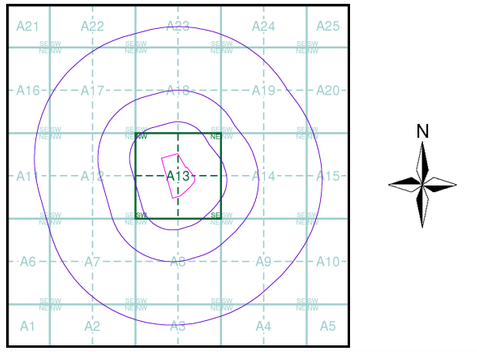
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



Order Details

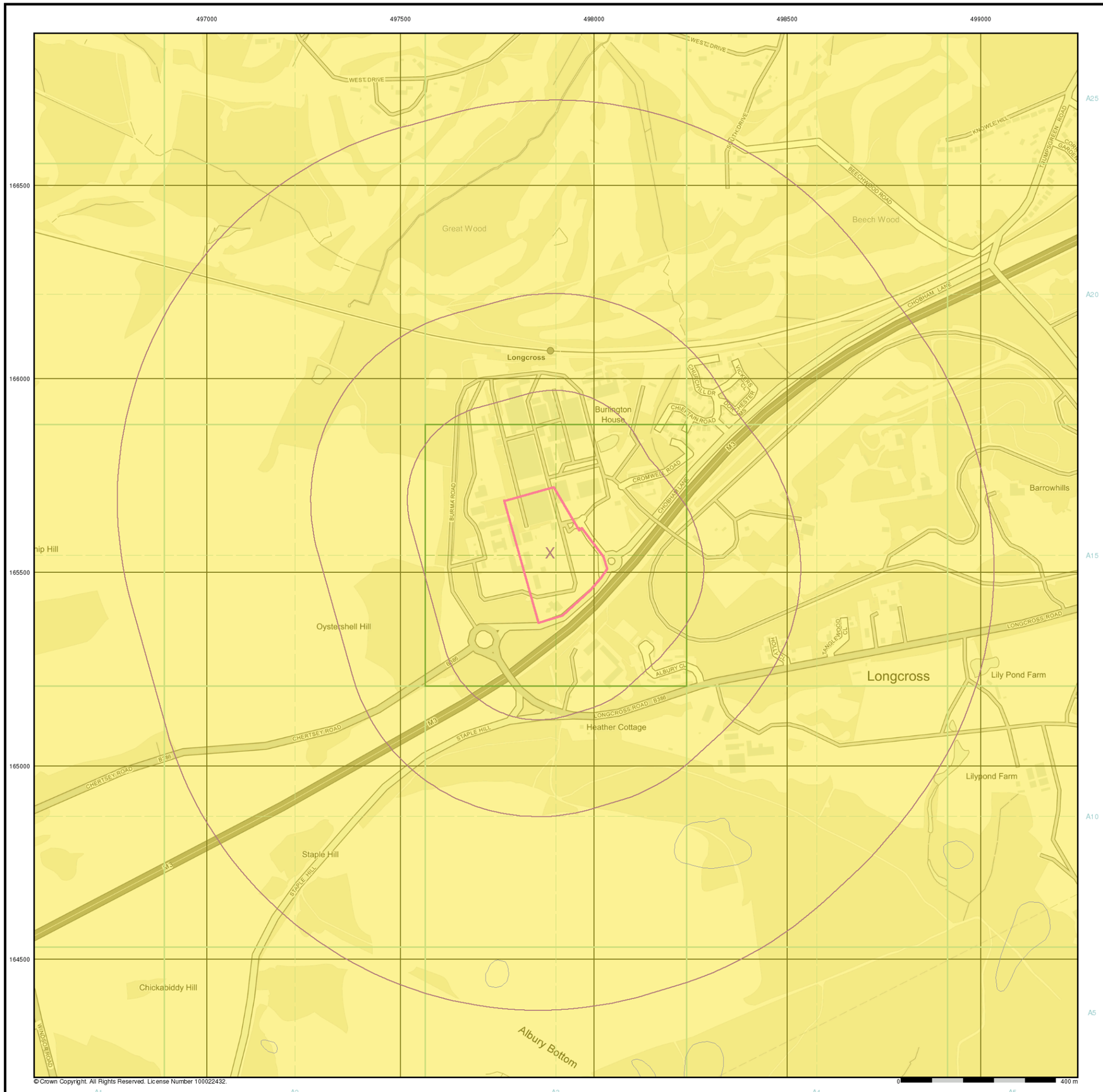
Order Details:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

General

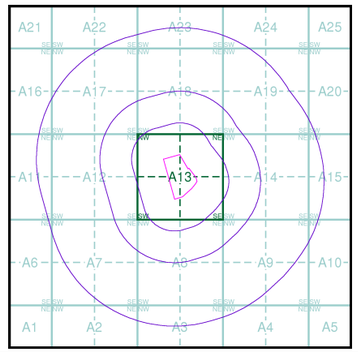
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



Order Details

Order Details:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	1000

Site Details

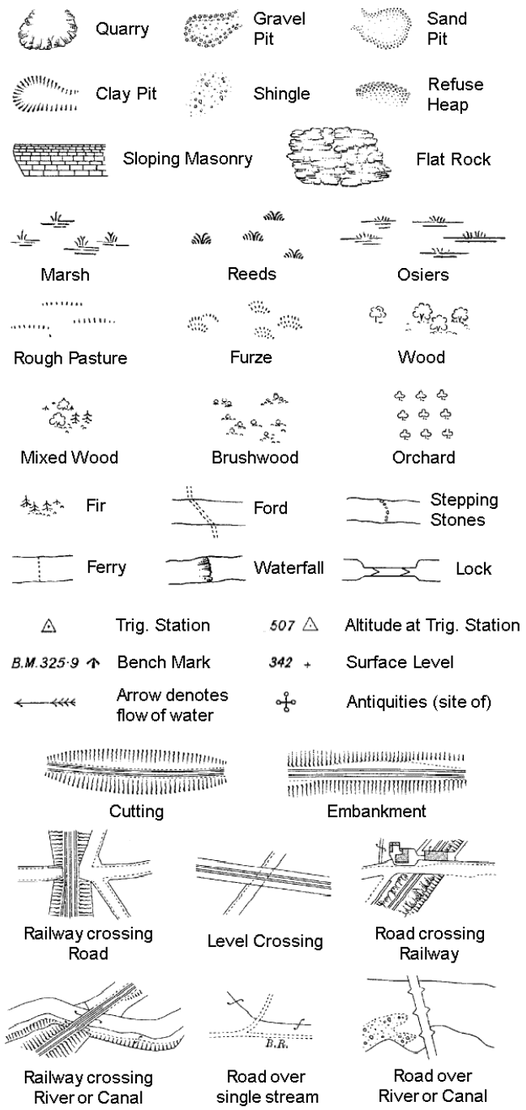
Site at 497900, 165540

Landmark INFORMATION GROUP

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

Historical Mapping Legends

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



County Boundary (Geographical)

County & Civil Parish Boundary

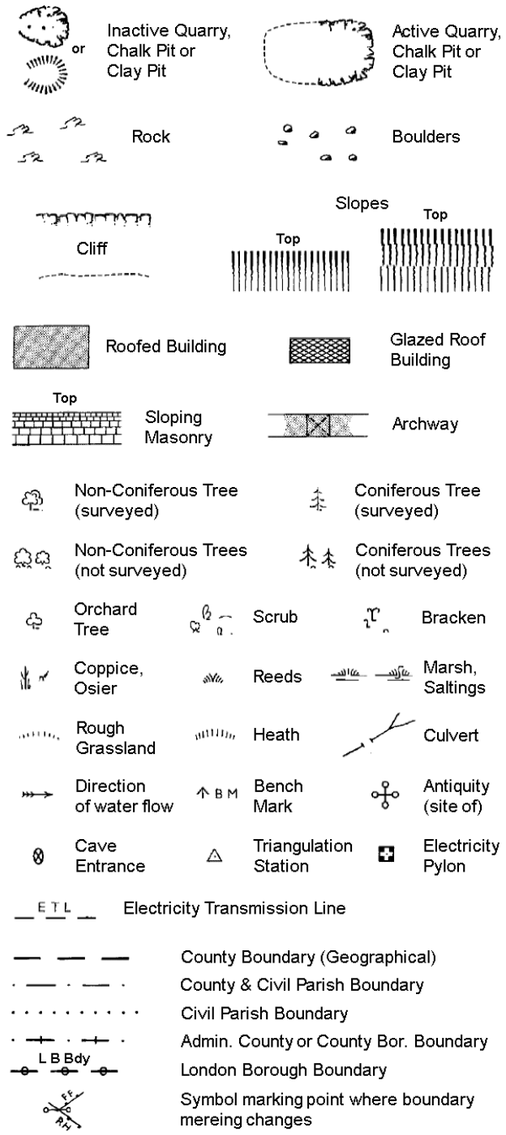
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

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

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



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

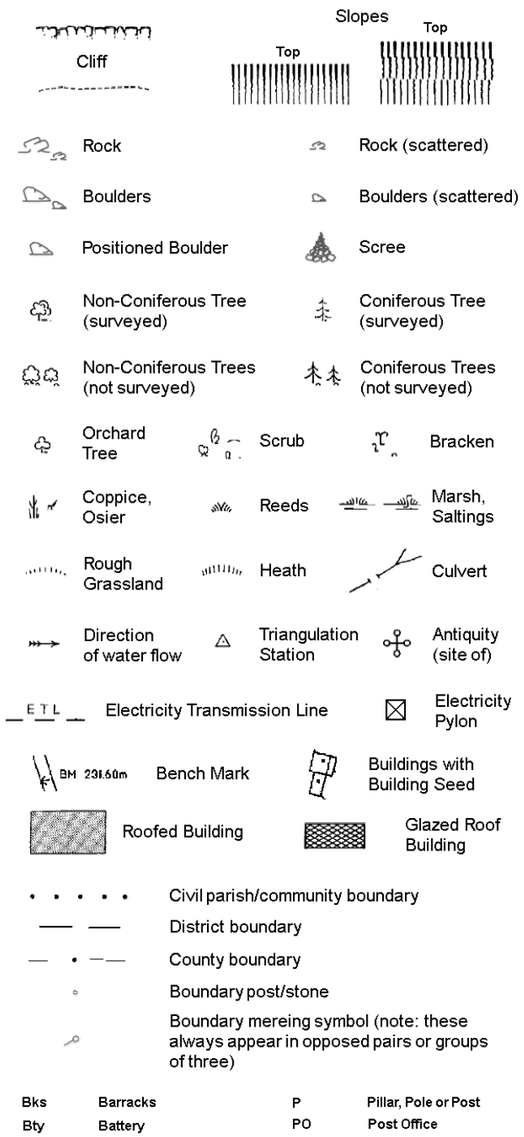
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

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

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



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

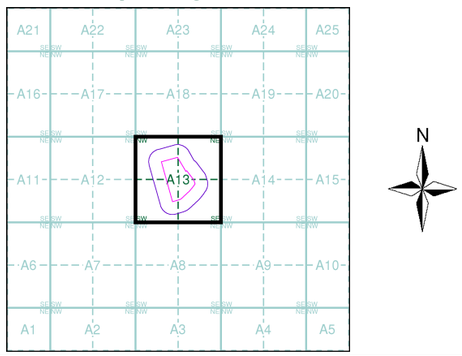
Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity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

Envirocheck®

LANDMARK INFORMATION GROUP®

Historical Mapping & Photography included:

Historical Map - Segment A13



Order Details

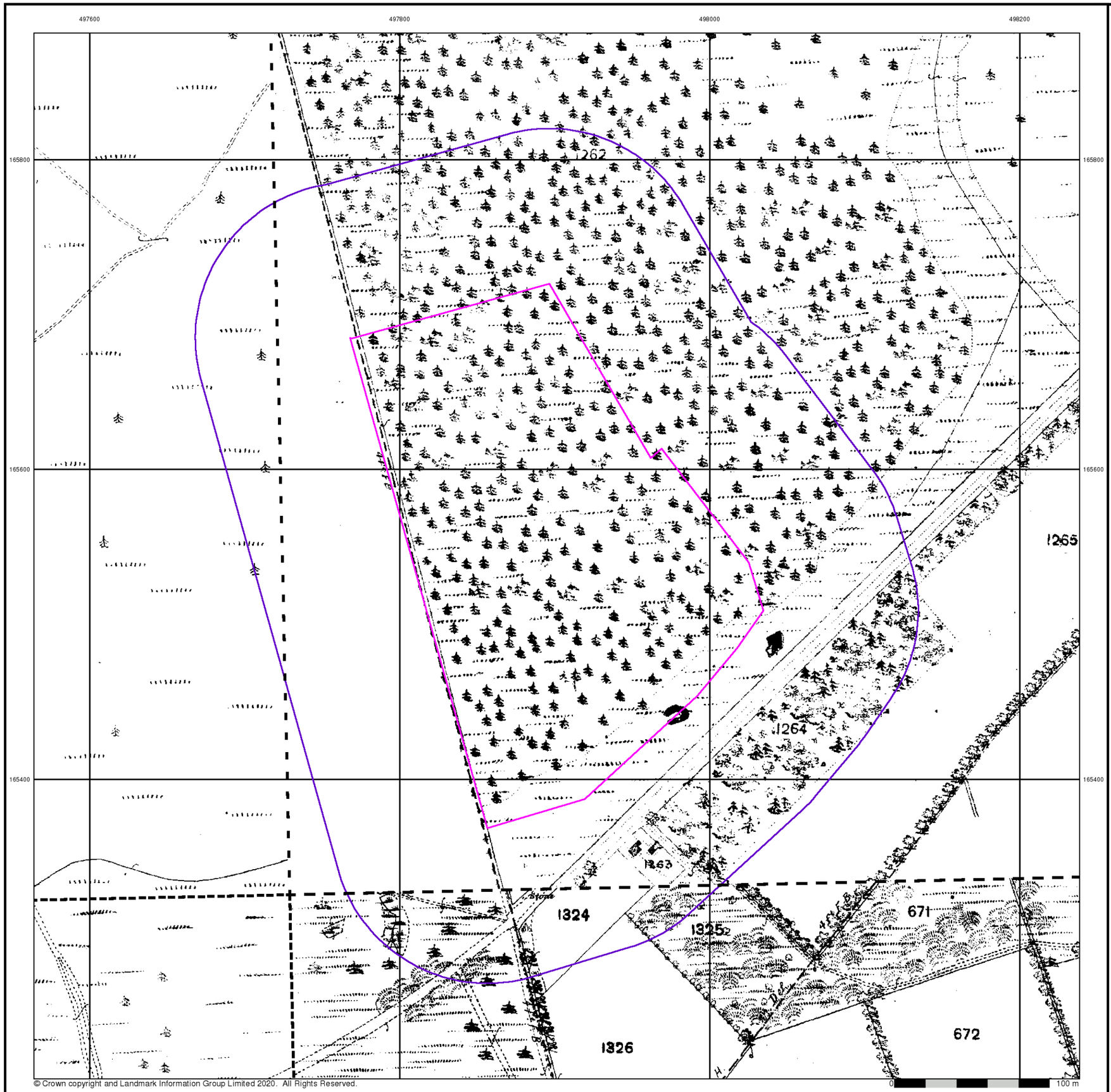
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

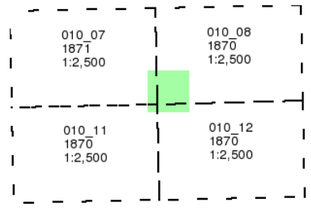
Surrey

Published 1870 - 1871

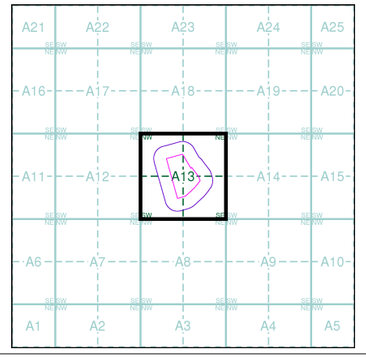
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

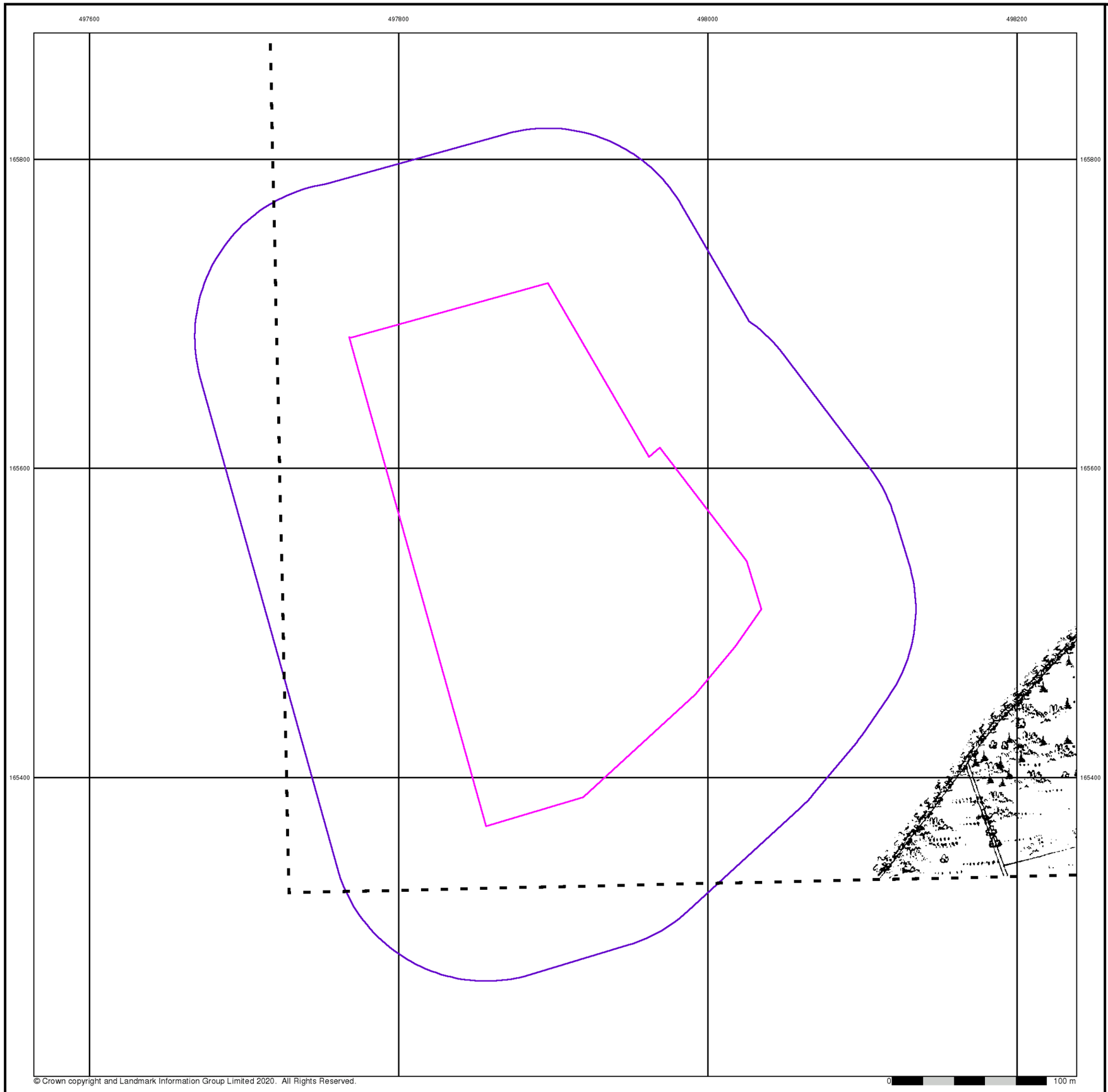
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

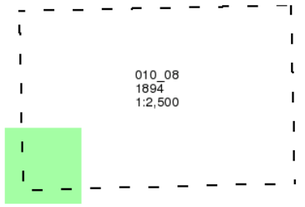
Surrey

Published 1894

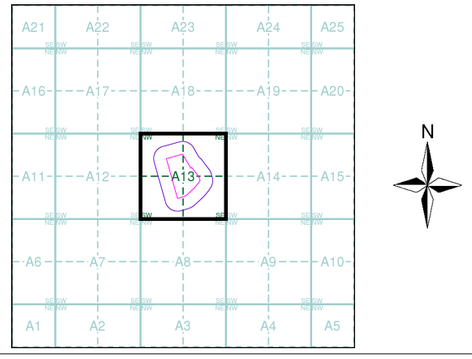
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

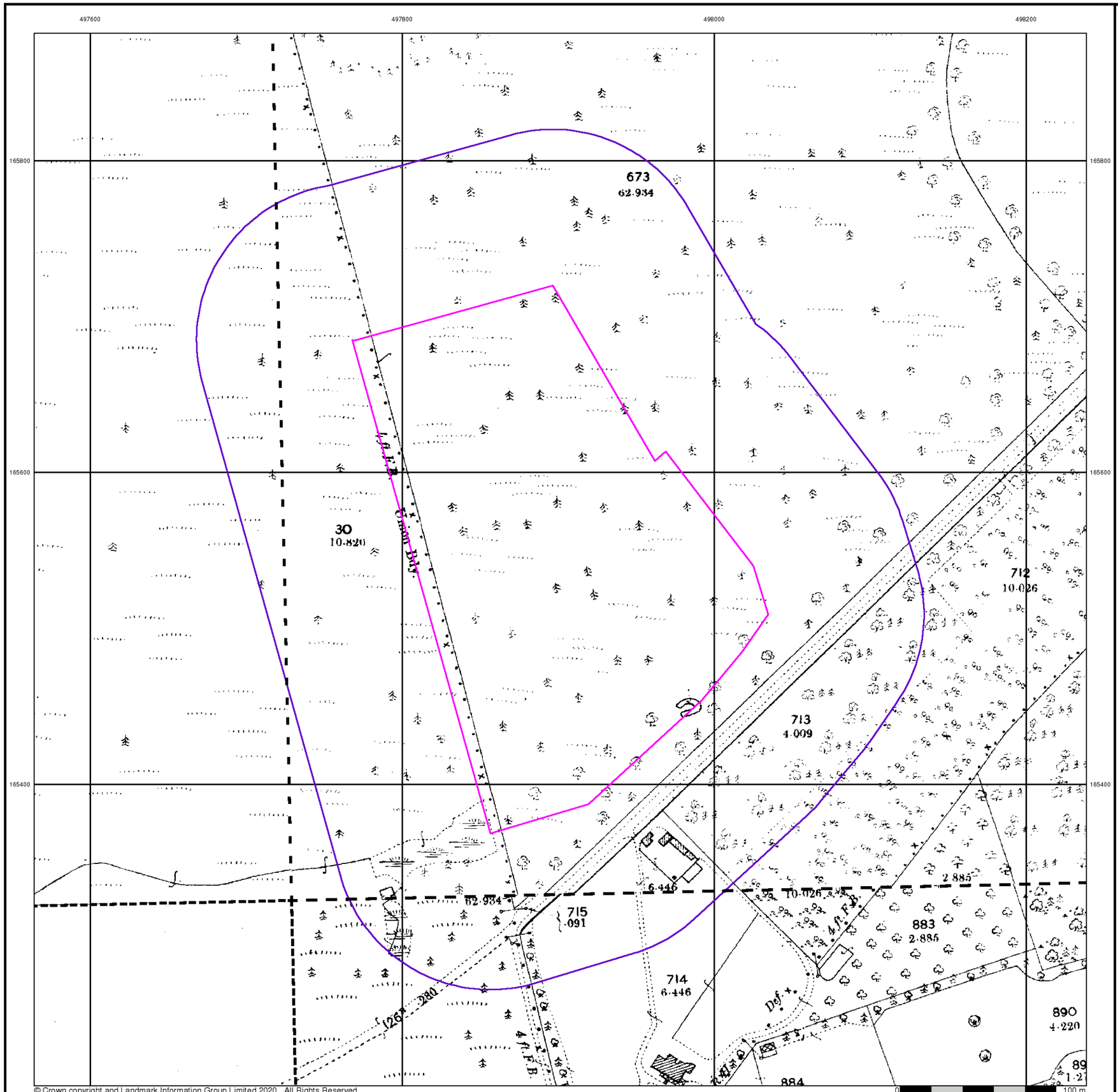
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

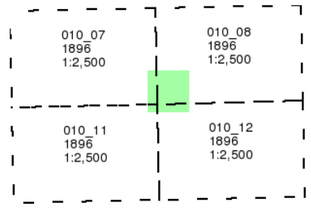
Surrey

Published 1896

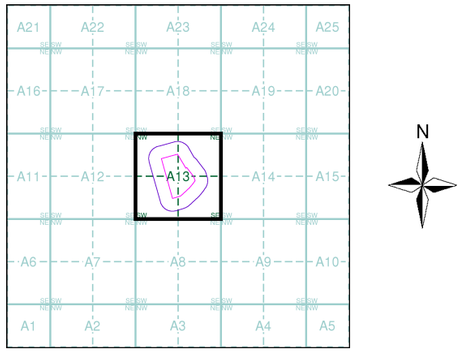
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

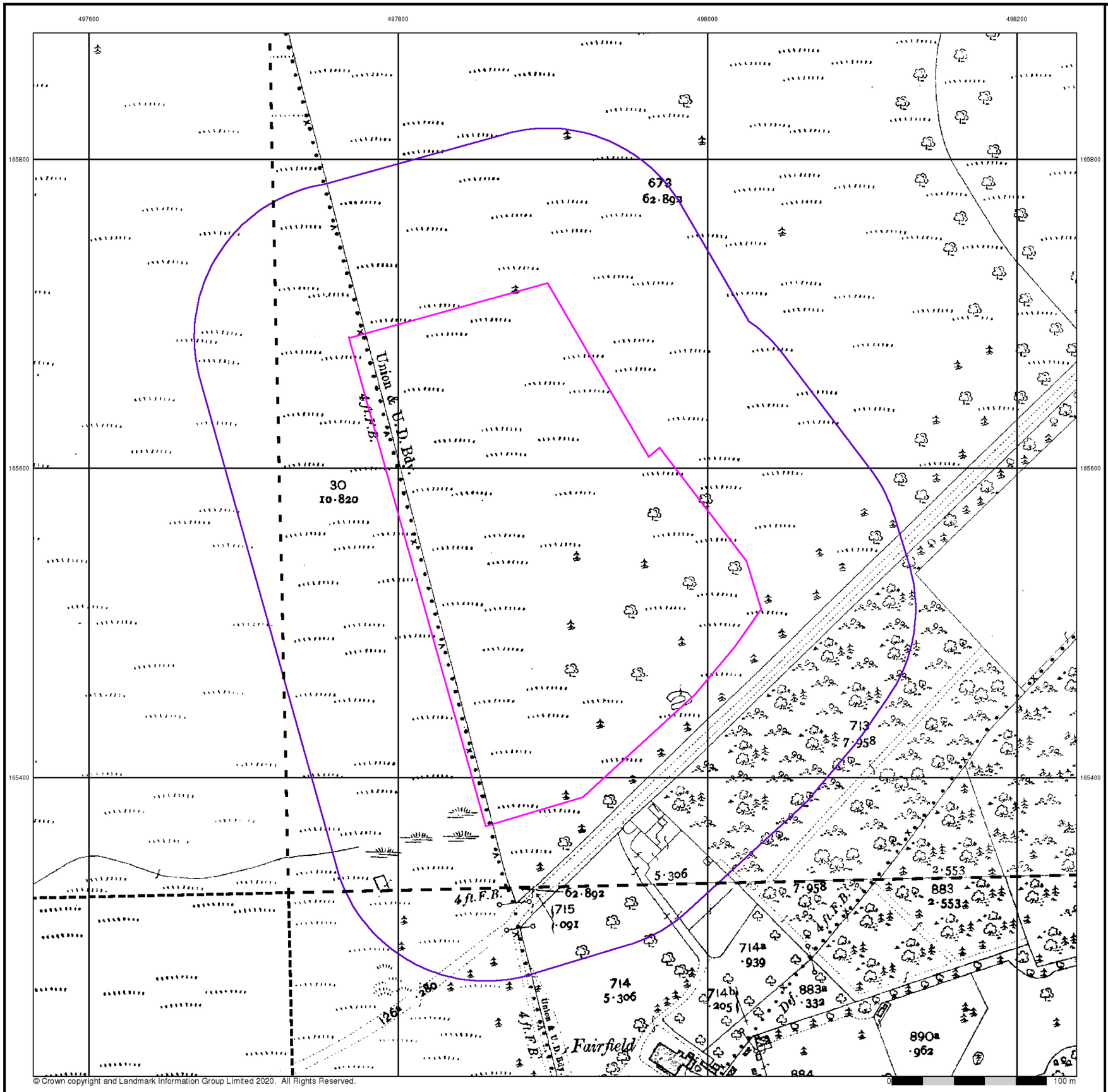
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

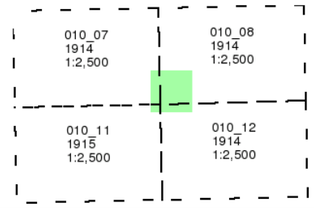
Surrey

Published 1914 - 1915

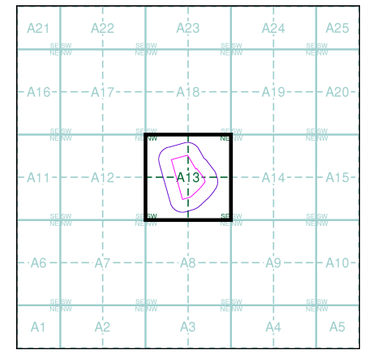
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



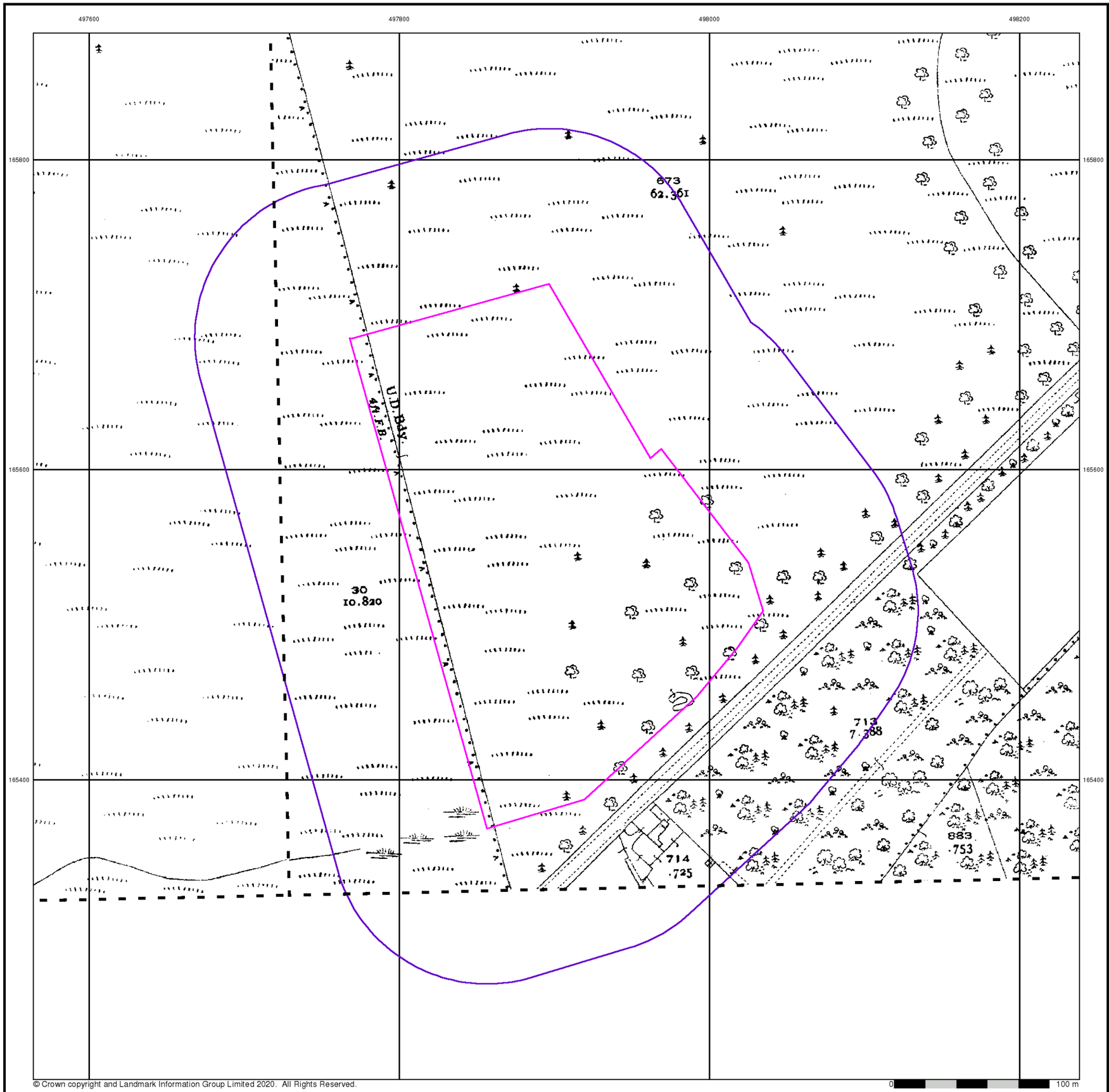
Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

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



Envirocheck®

LANDMARK INFORMATION GROUP®

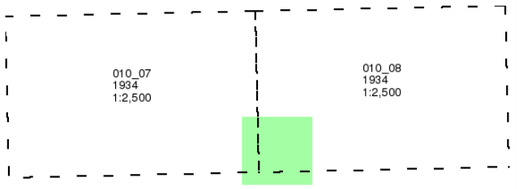
Surrey

Published 1934

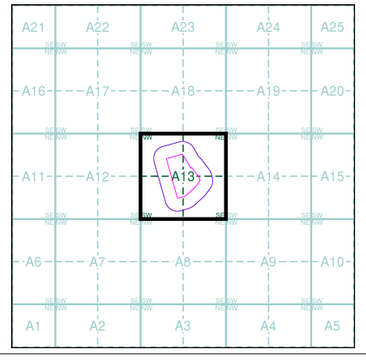
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

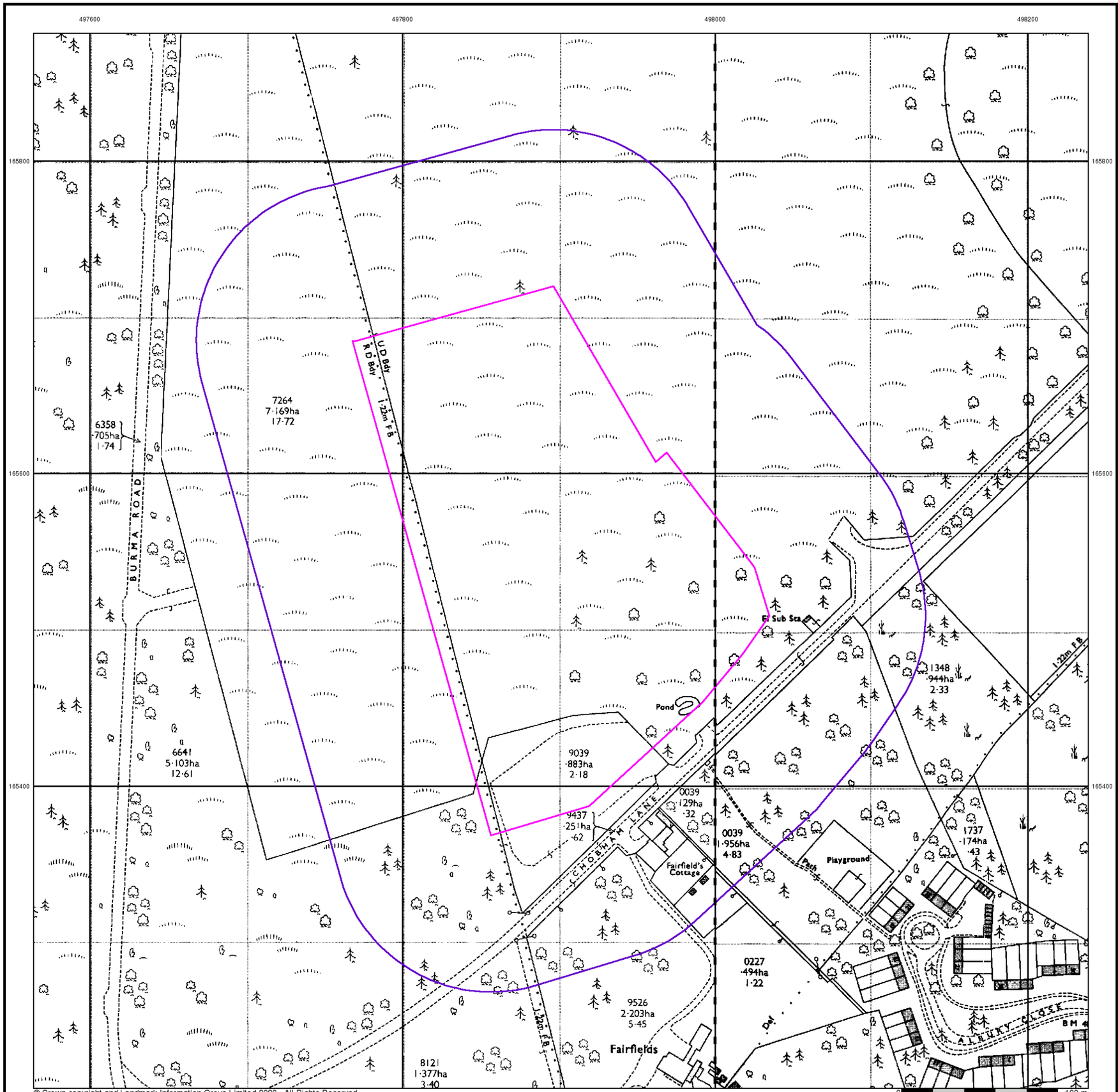
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

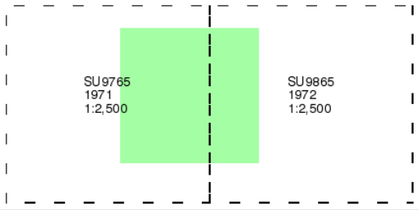
Ordnance Survey Plan

Published 1971 - 1972

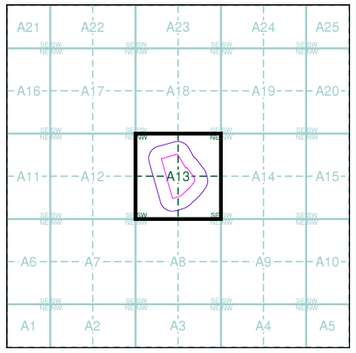
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

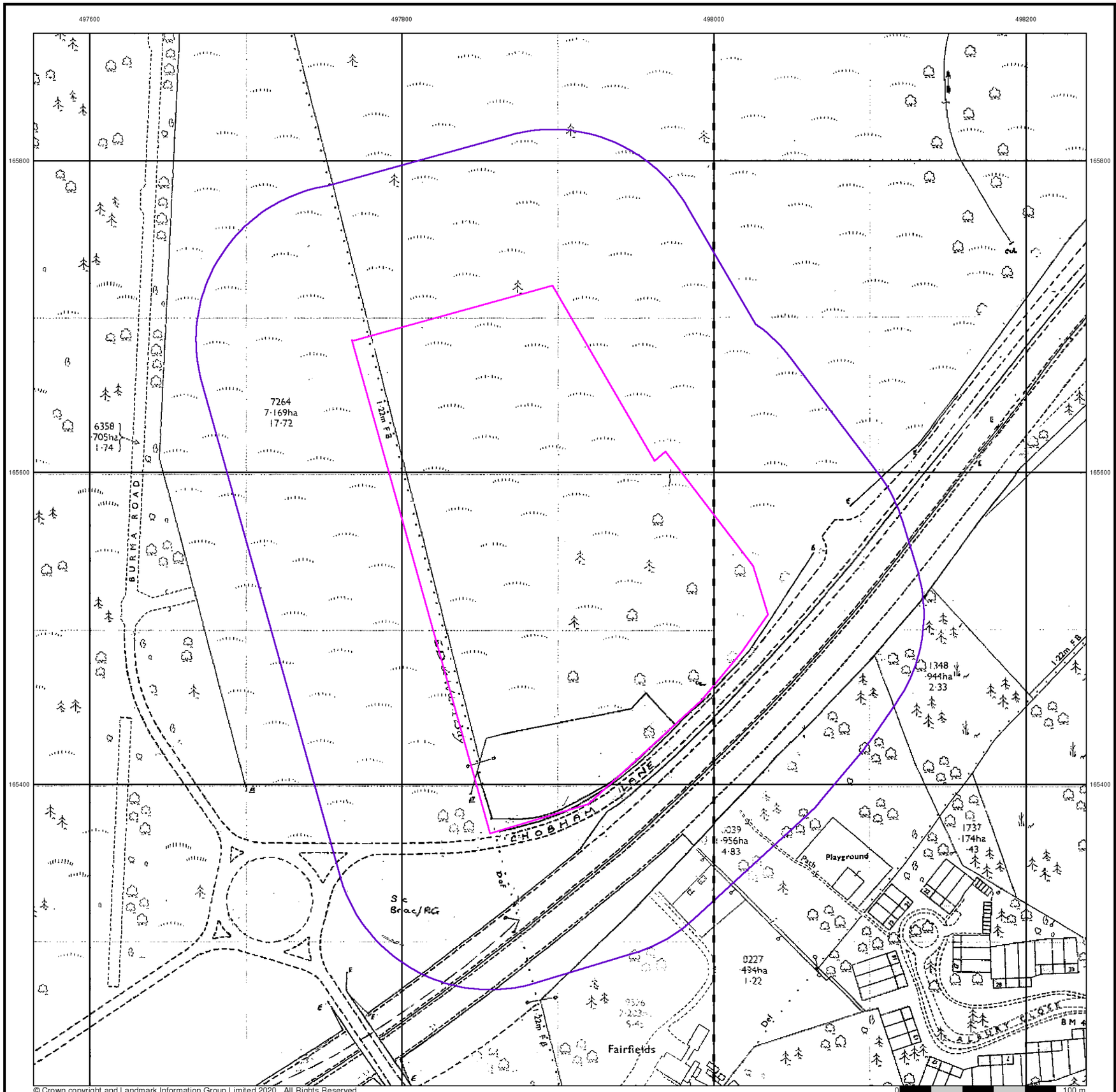
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

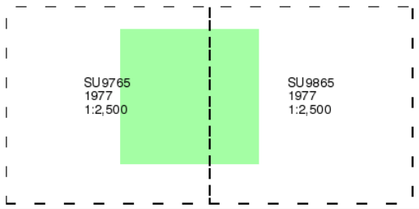
Additional SIMs

Published 1977

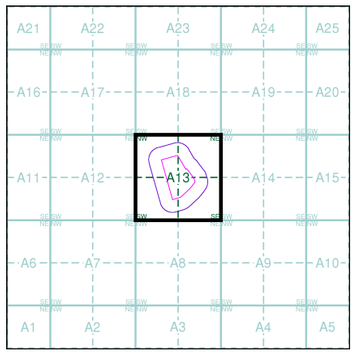
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

Envirocheck®

LANDMARK INFORMATION GROUP®

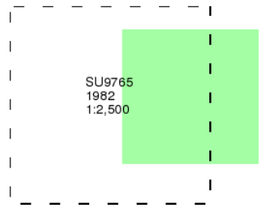
Ordnance Survey Plan

Published 1982

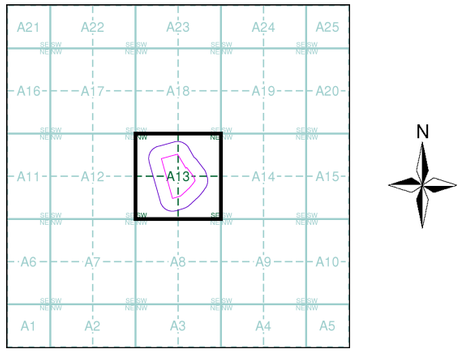
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

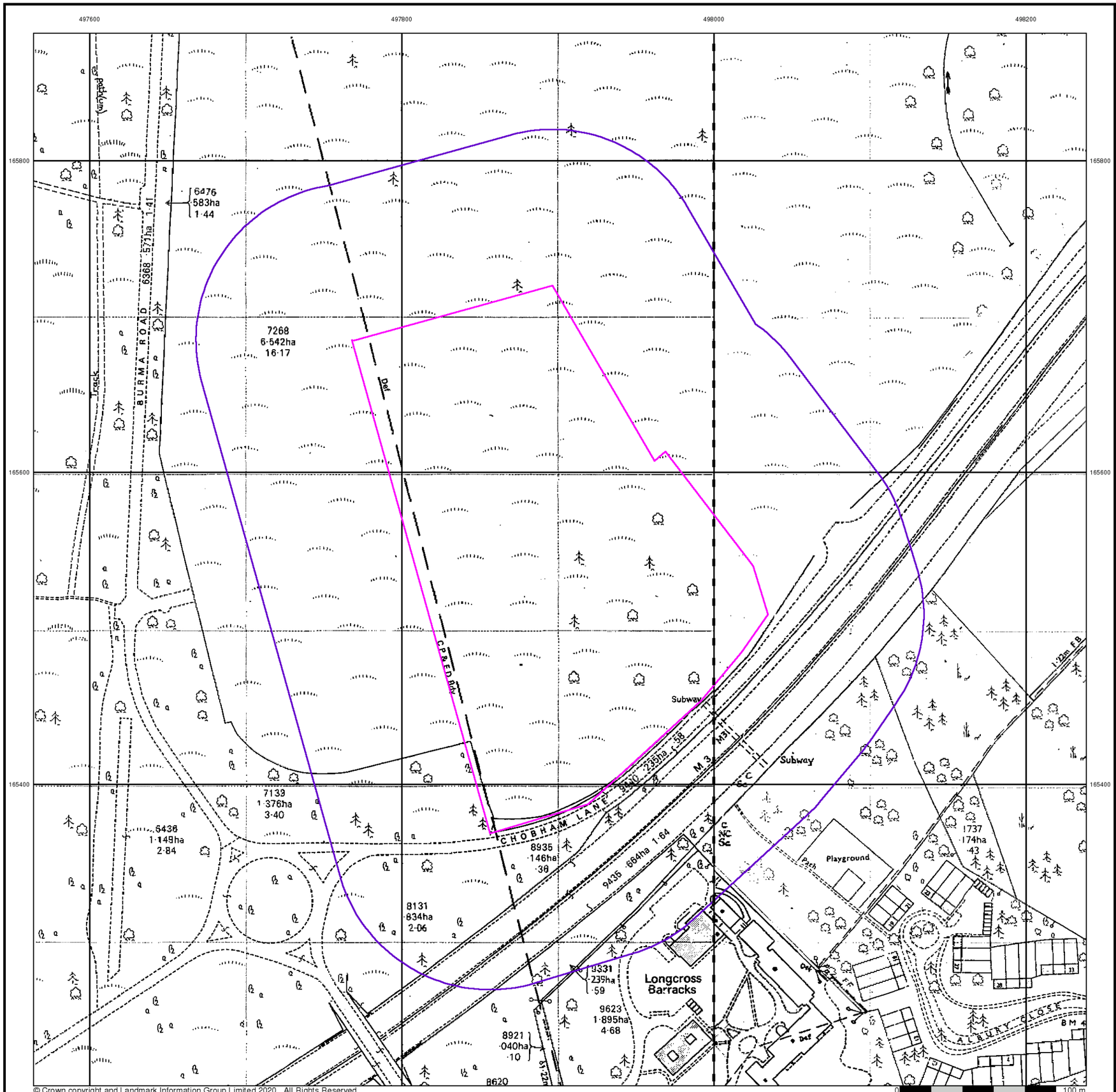
Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark® INFORMATION GROUP

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



Envirocheck®

LANDMARK INFORMATION GROUP®

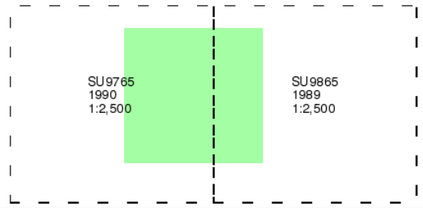
Additional SIMs

Published 1989 - 1990

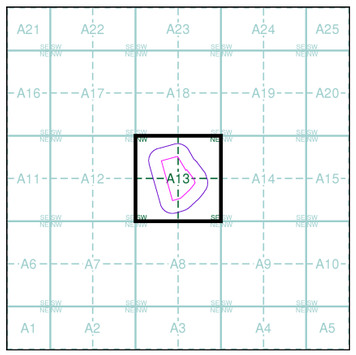
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

Envirocheck®

LANDMARK INFORMATION GROUP®

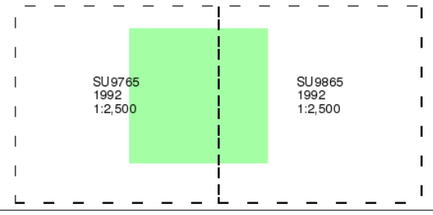
Large-Scale National Grid Data

Published 1992

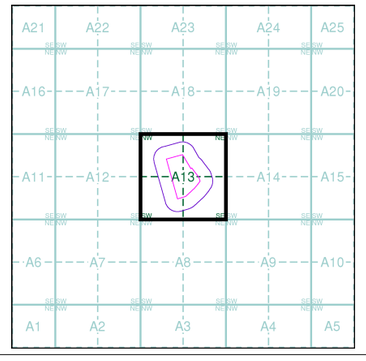
Source map scale - 1:2,500

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

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

Landmark INFORMATION GROUP

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

Envirocheck®

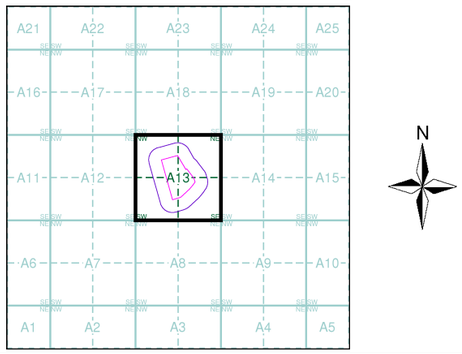
LANDMARK INFORMATION GROUP®

Historical Aerial Photography

Published 1999

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

Historical Aerial Photography - Segment A13



Order Details

Order Number:	243144954_1_1
Customer Ref:	GLA16254
National Grid Reference:	497890, 165550
Slice:	A
Site Area (Ha):	5.4
Search Buffer (m):	100

Site Details

Site at 497900, 165540

APPENDIX E

EA NATURE AND HERITAGE CONSERVATION SCREENING REPORT

Nature and Heritage Conservation

Screening Report: Bespoke installations

Reference	**EPR/SP3004SB/A001**
NGR	**SU9789665526**
Buffer (m)	**100**
Date report produced	**02/06/2020**
Number of maps enclosed	**8**

The nature conservation sites identified in the table below must be considered in your application.

Nature and heritage conservation sites	Screening distance (km)	Further information
Special Areas of Conservation (cSAC or SAC) **Thursley, Ash, Pirbright & Chobham (SAC)** **Windsor Forest & Great Park (SAC)**	10	Joint Nature Conservation Committee
Special Protection Area (pSPA or SPA) **Thames Basin Heaths (SPA)** **South West London Waterbodies (SPA)**	10	Joint Nature Conservation Committee
Ramsar **South West London Waterbodies (Ramsar)**	10	Joint Nature Conservation Committee

Sites of Special Scientific Interest (SSSI) **Chobham Common (SSSI)**	2	Natural England
National Nature Reserve (NNR) **Chobham Common (NNR)**	2	Natural England
Local Wildlife Sites (LWS) **Wentworth Golf Course South and Land East of Heather Drive SNCI** **Wentworth Golf Courses - West Wood SNCI** **Wentworth Golf Courses - Valley Wood (inc. Great Wood) SNCI** **Wentworth Golf Courses - Fish Ponds Wood SNCI** **Wentworth Golf Courses - Knowle Hill SNCI** **Longcross Churchyard SNCI** **Knowle Grove SNCI** **Chobham Common (non-SSSI) SNCI** **Chobham Place Woods SNCI** **Sunningdale Golf Course SNCI** **Monk's Walk North & West (incl. M3 Exchange Land) SNCI**	2	Appropriate Local Record Centre (LRC)
Ancient Woodland **Unknown**	2	Woodland Trust Forestry Commission Natural England

Protected Habitats	Screening distance (m)	Further Information
Lowland Fens	up to 500m	Natural England

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

Please note we have screened this application for protected and priority sites, habitats and species for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

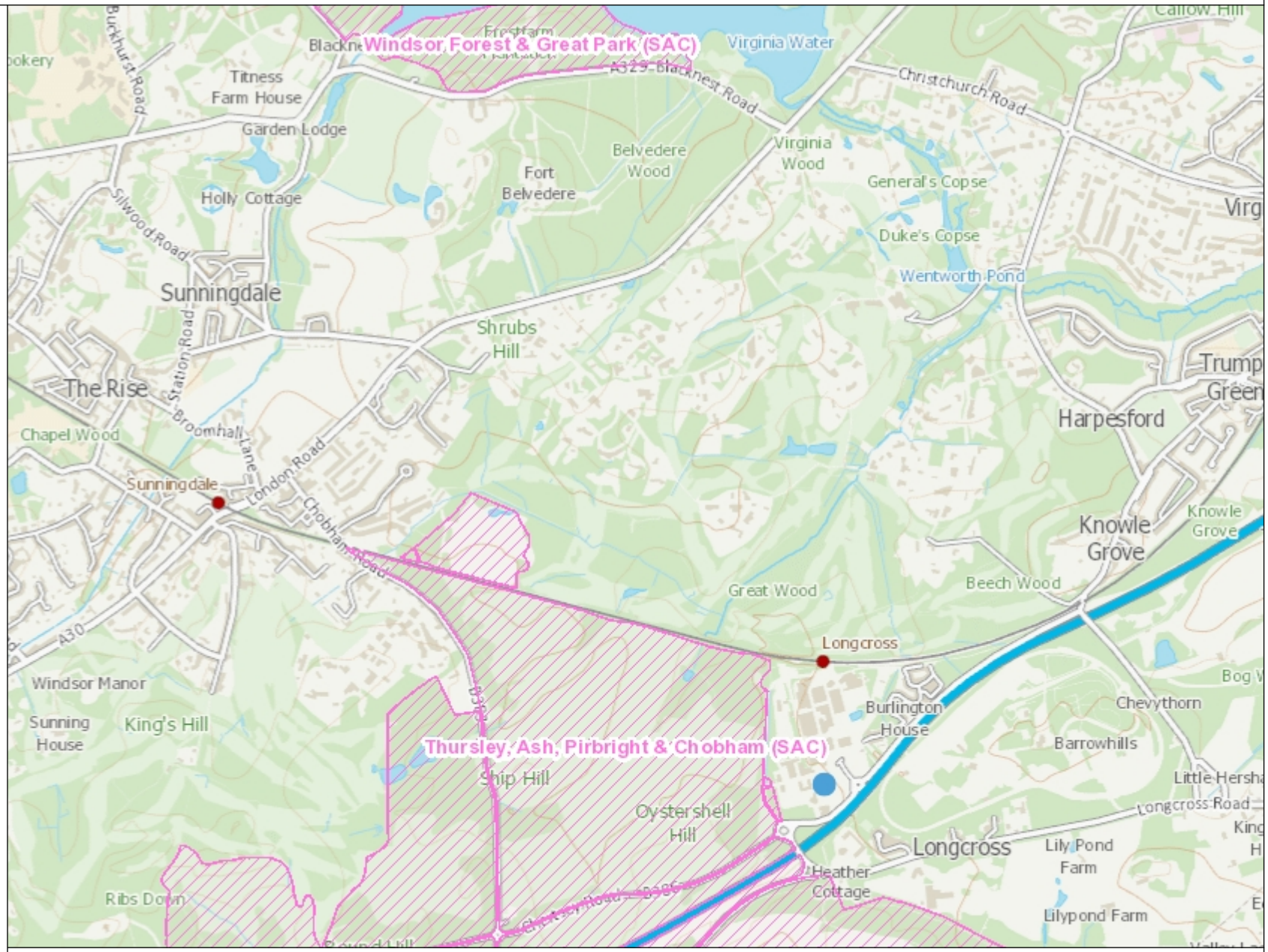
Please note, the enclosed pre-application map(s) is valid for a period of **6 months**. If you plan to submit your application more than 6 months after the map(s) was generated, you must request that the screen is re-run. This will ensure that you have used the most current information on heritage and nature conservation interests in your application.

Special Areas of Conservation

Environment Agency

Legend

SAC (England)



1: 25,000

0 625

Metres

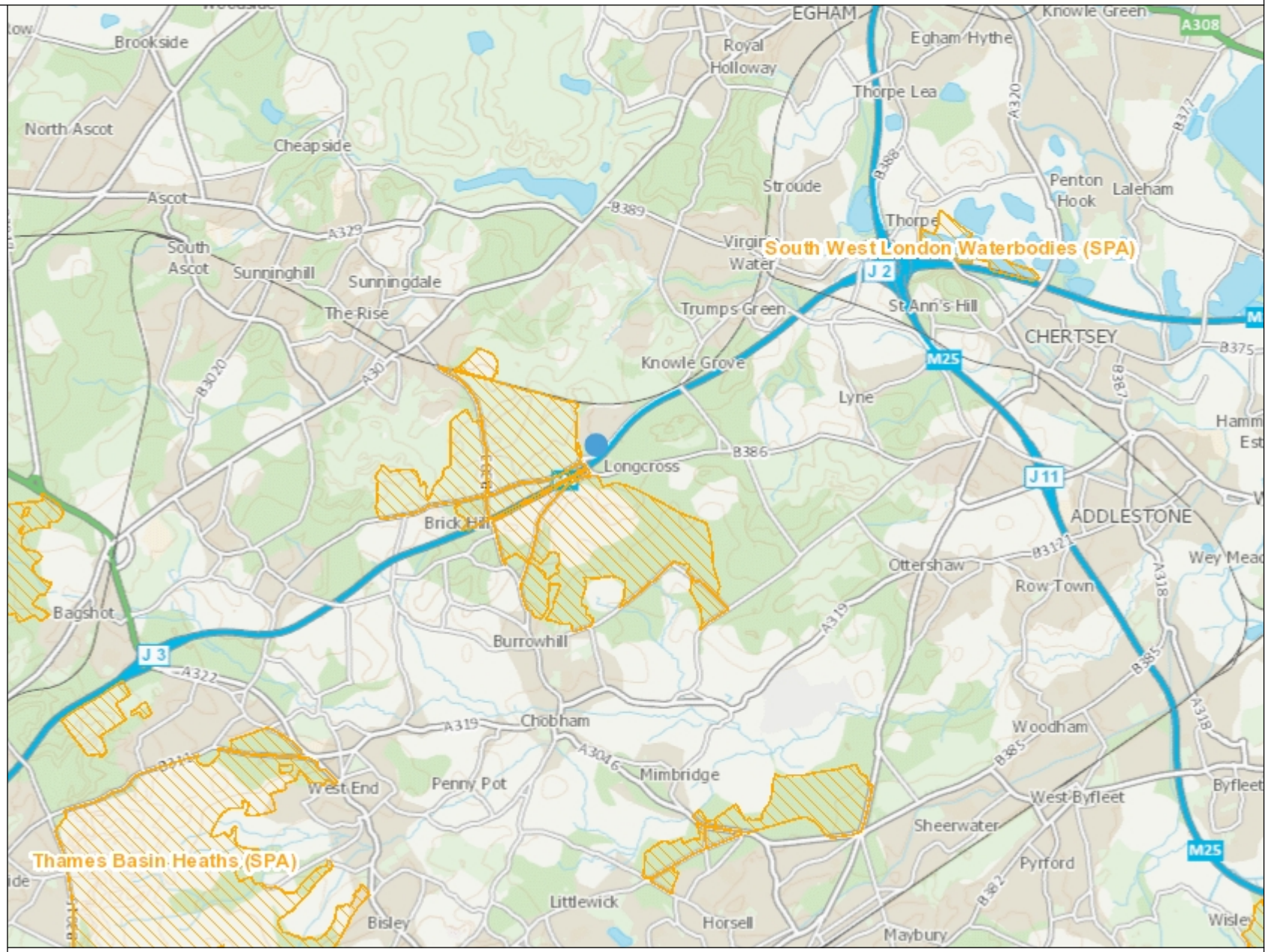
N W E S

Special Protection Area

Environment Agency

Legend

SPA (England)



1: 75,000

0 1,875

Metres

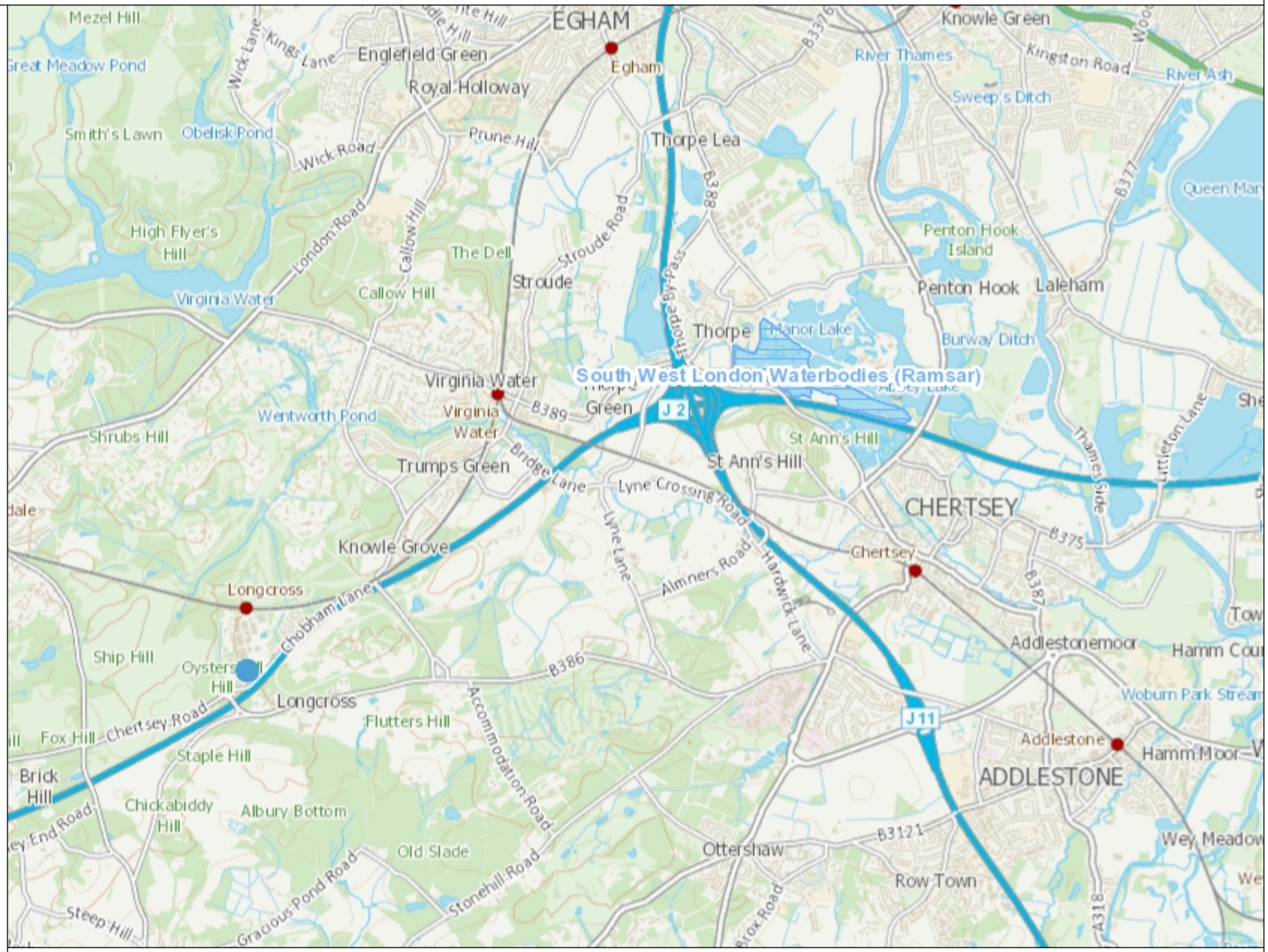
N W E S

Ramsar

Environment Agency

Legend

Ramsar (England)



1: 50,000

0 1,250

Metres

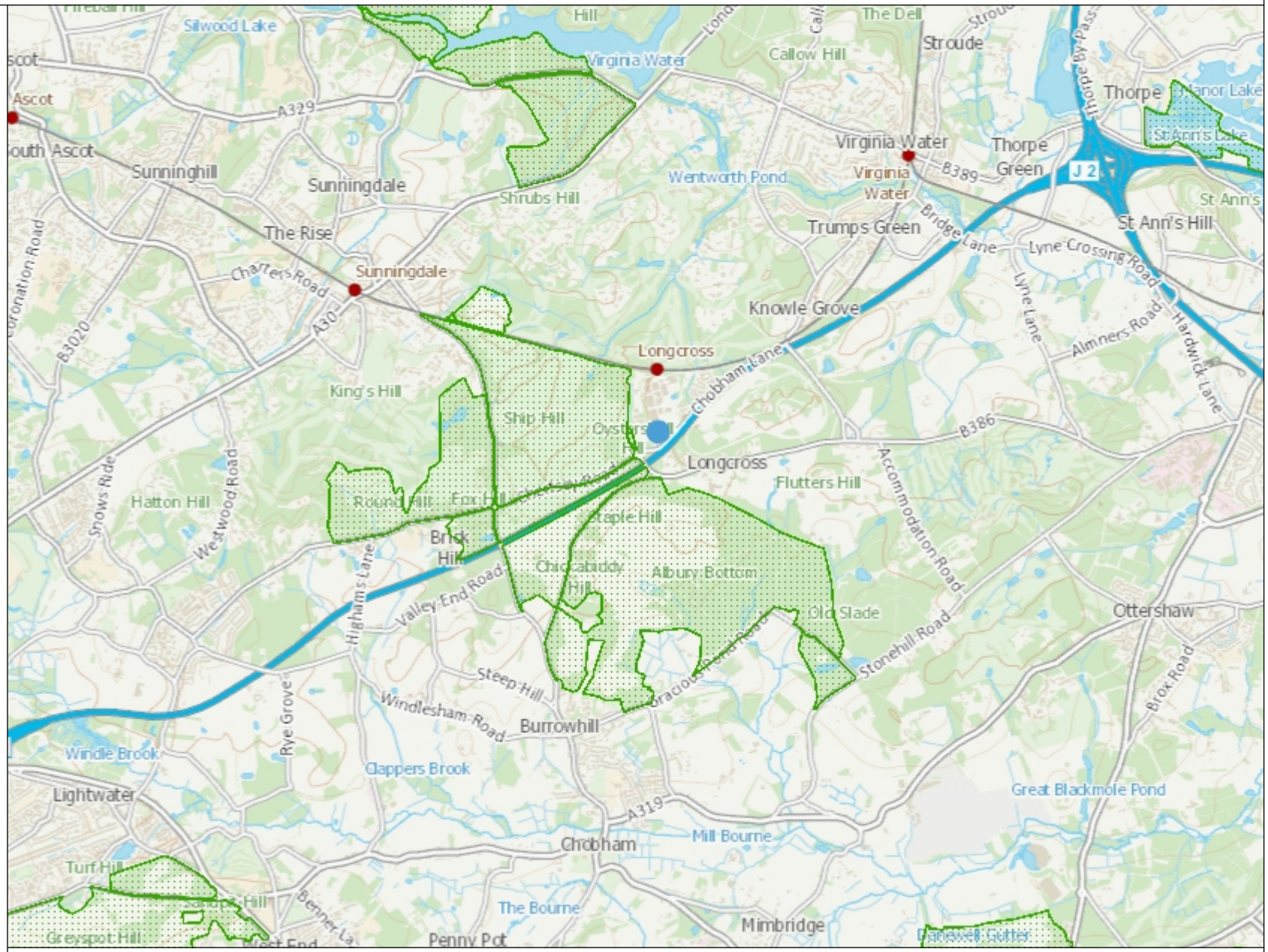
N W E S

SSSI

Environment Agency

Legend

SSSI (England)



1: 50,000

0 1,250

Metres

N

W E

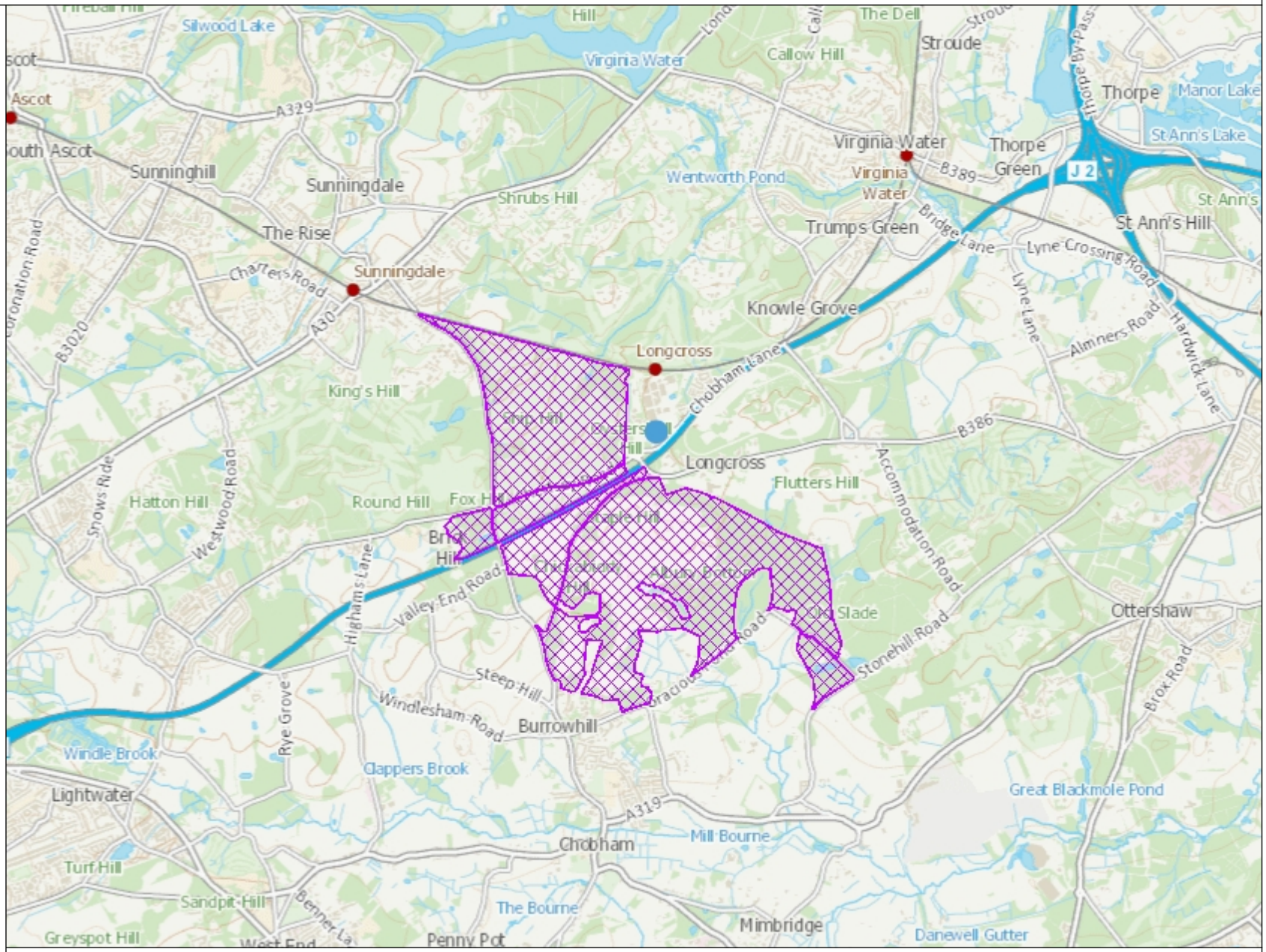
S

National Nature Reserve

Environment Agency

Legend

NNR (England)



1: 50,000

0 1,250

Metres

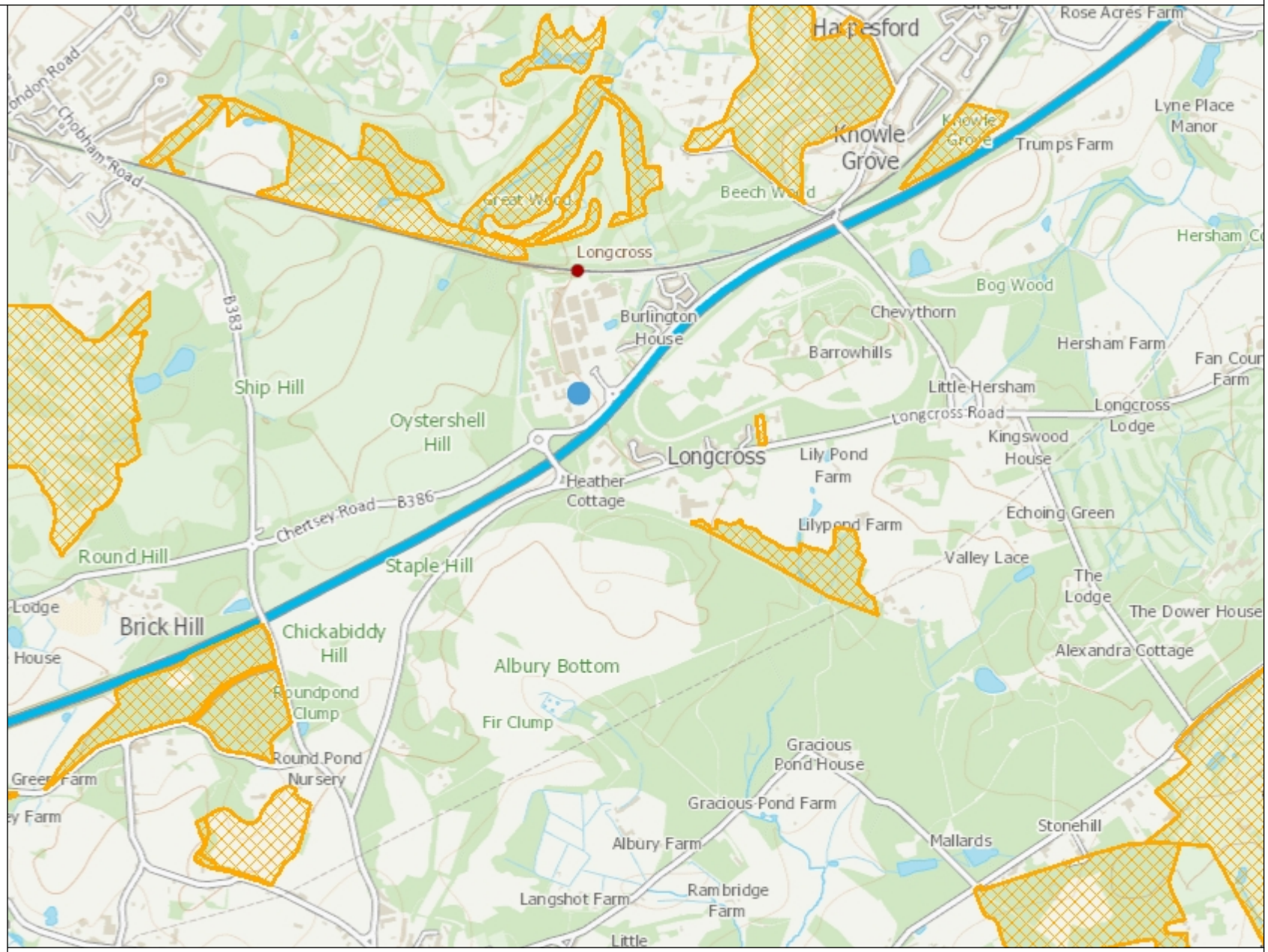
N W E S

Local Wildlife Sites

Environment Agency

Legend

Local Wildlife Sites



1: 25,000

0 625

Metres

N

W E

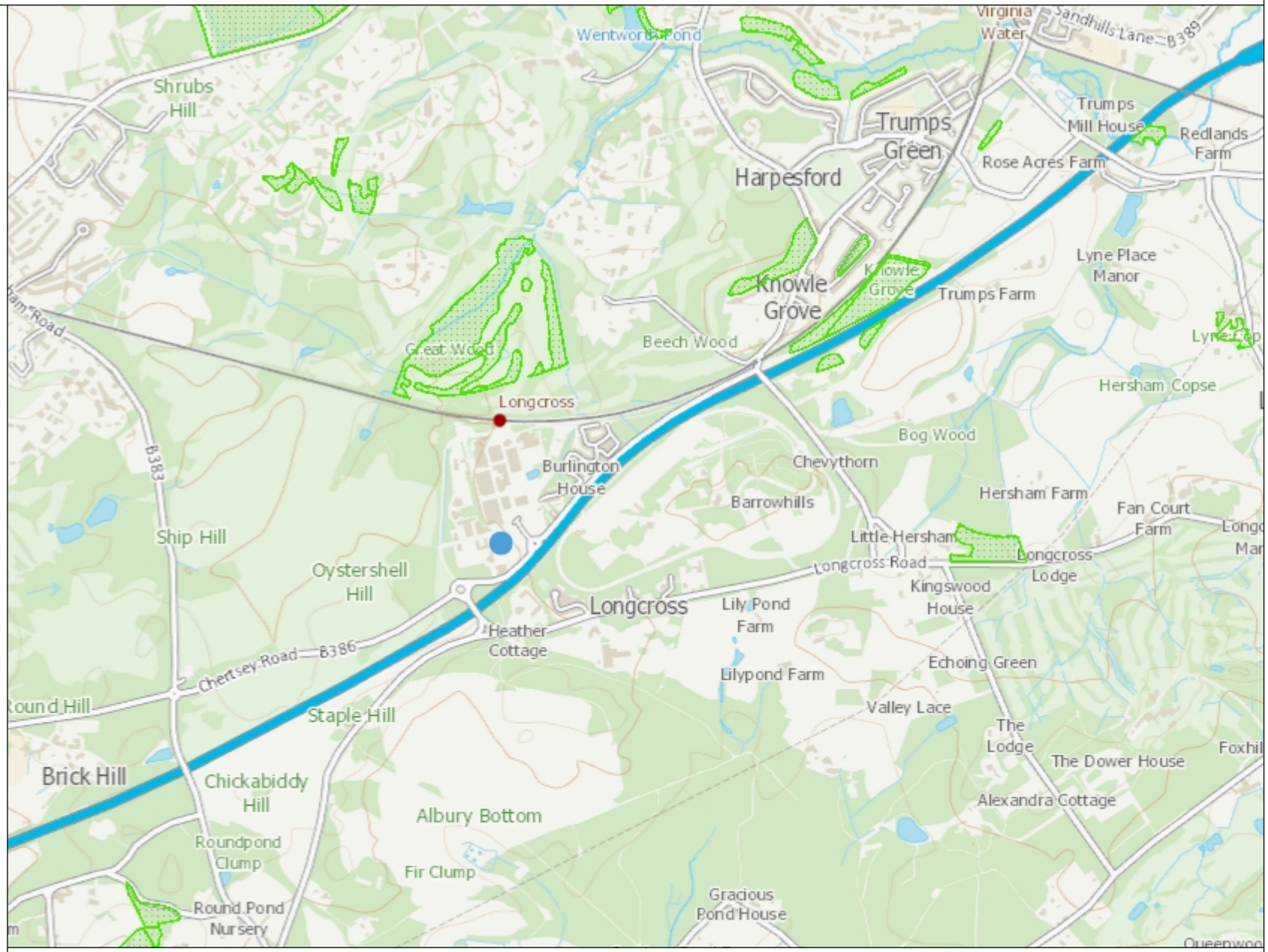
S

Ancient Woodland

Environment Agency

Legend

Ancient Woodland (England)



1: 25,000

0 625

Metres

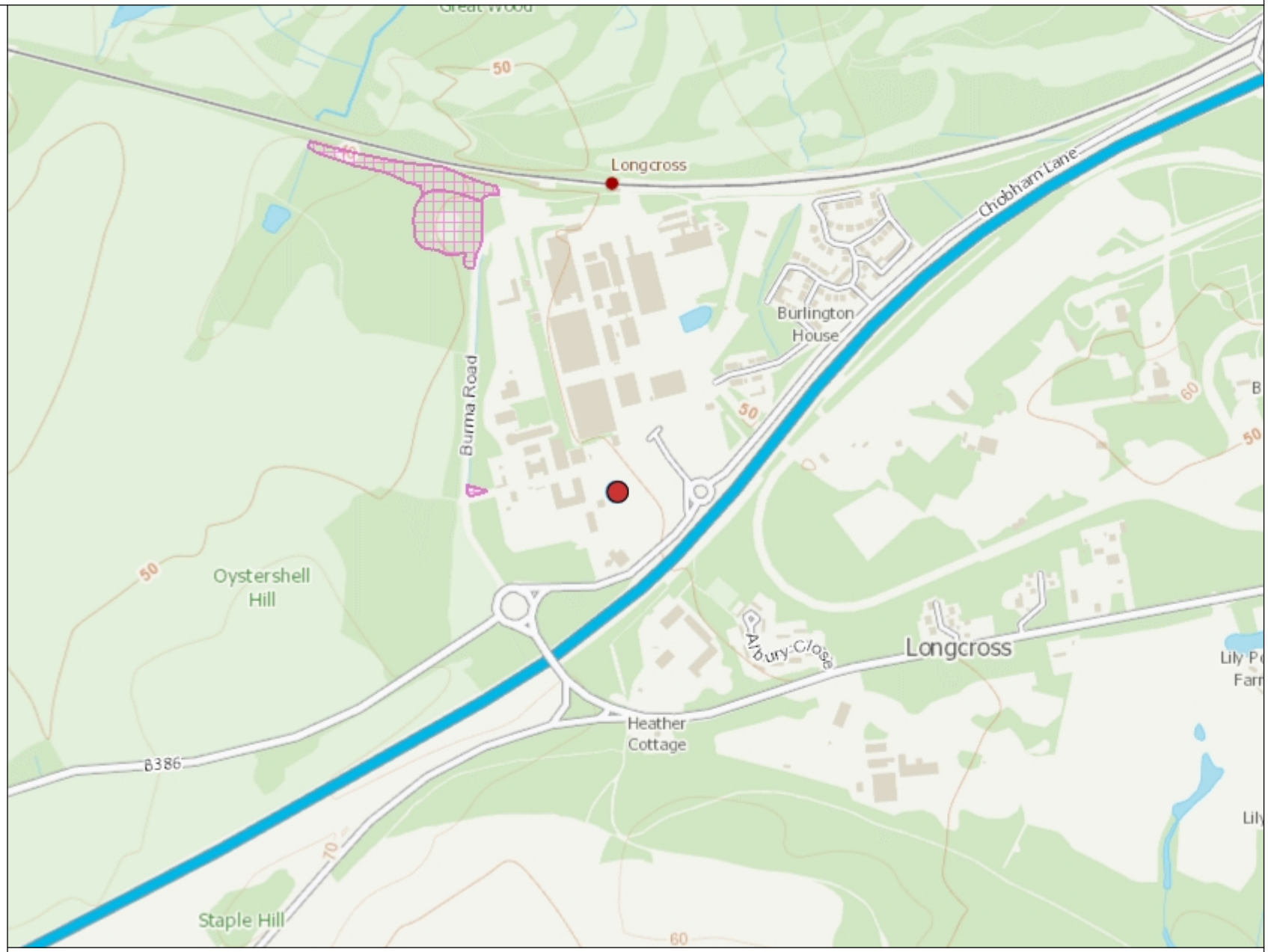
N W E S

Protected Habitats

Environment Agency

Legend

Protected Habitats screened for Env Permits



1: 10,000

0 250

Metres

N W E S