



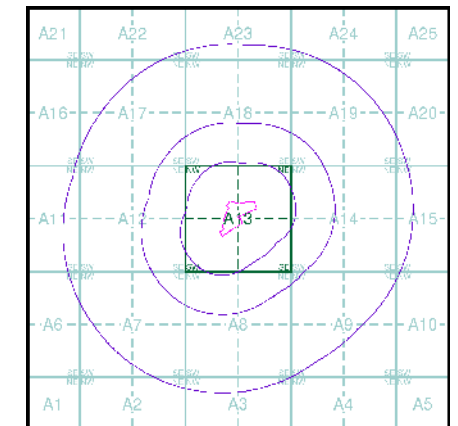
General

- Specified Site
- Specified Buffer(s)
- 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

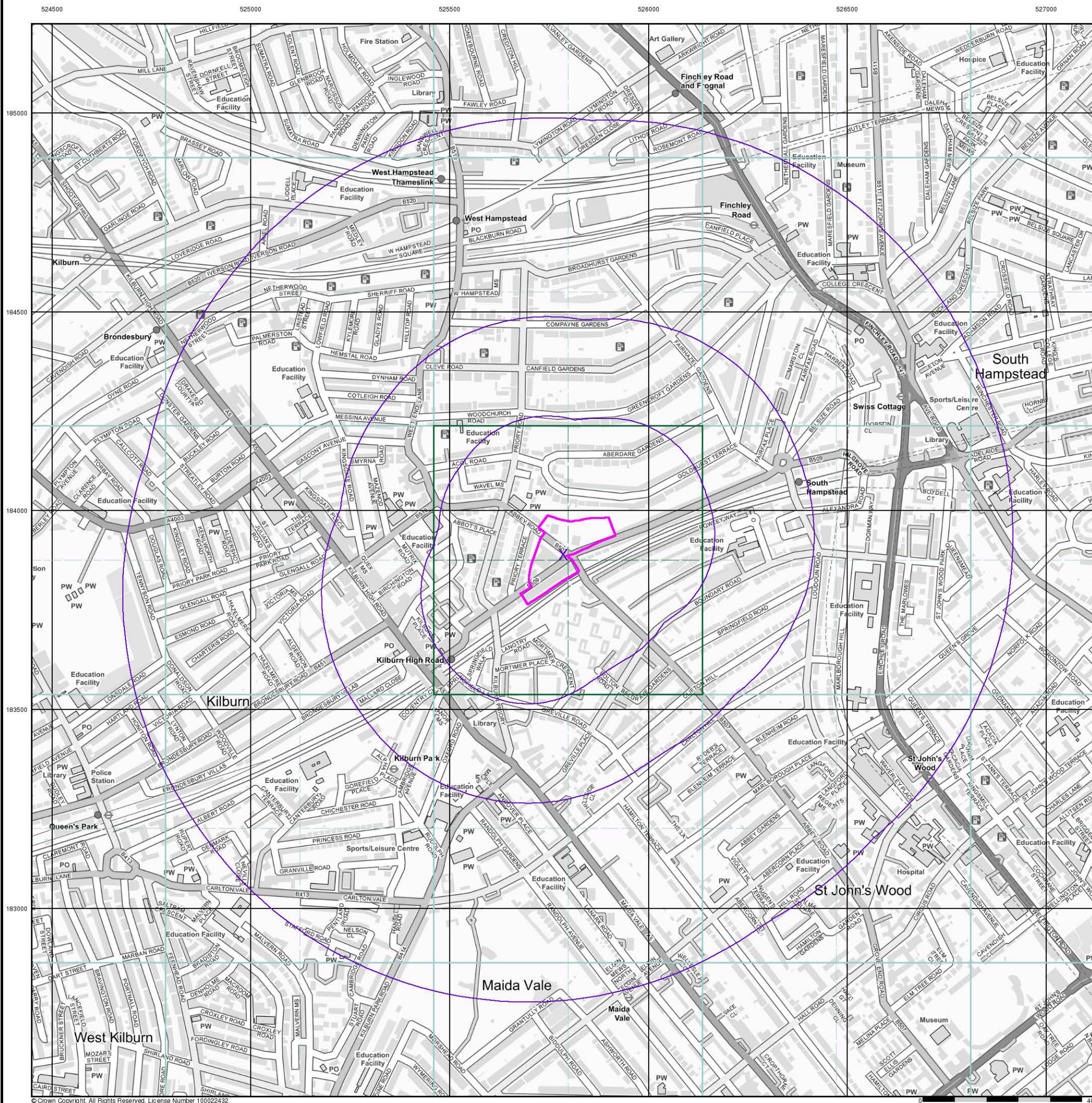
Order Number: 241962101_1_1
Customer Ref: 70071591
National Grid Reference: 525790, 183890
Slice: A
Site Area (Ha): 2.38
Search Buffer (m): 1000

Site Details

Abbey Road Estate, Belsize Road, LONDON, NW6 4DX



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





General

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

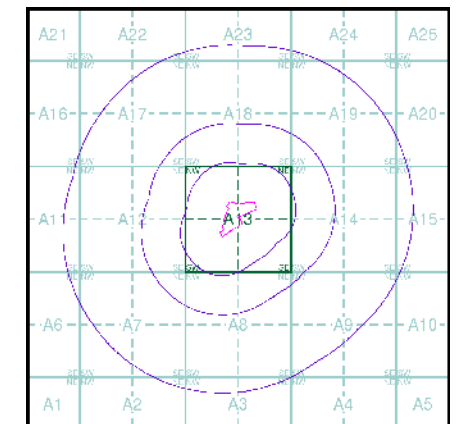
Agency and Hydrological (Boreholes)

- 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

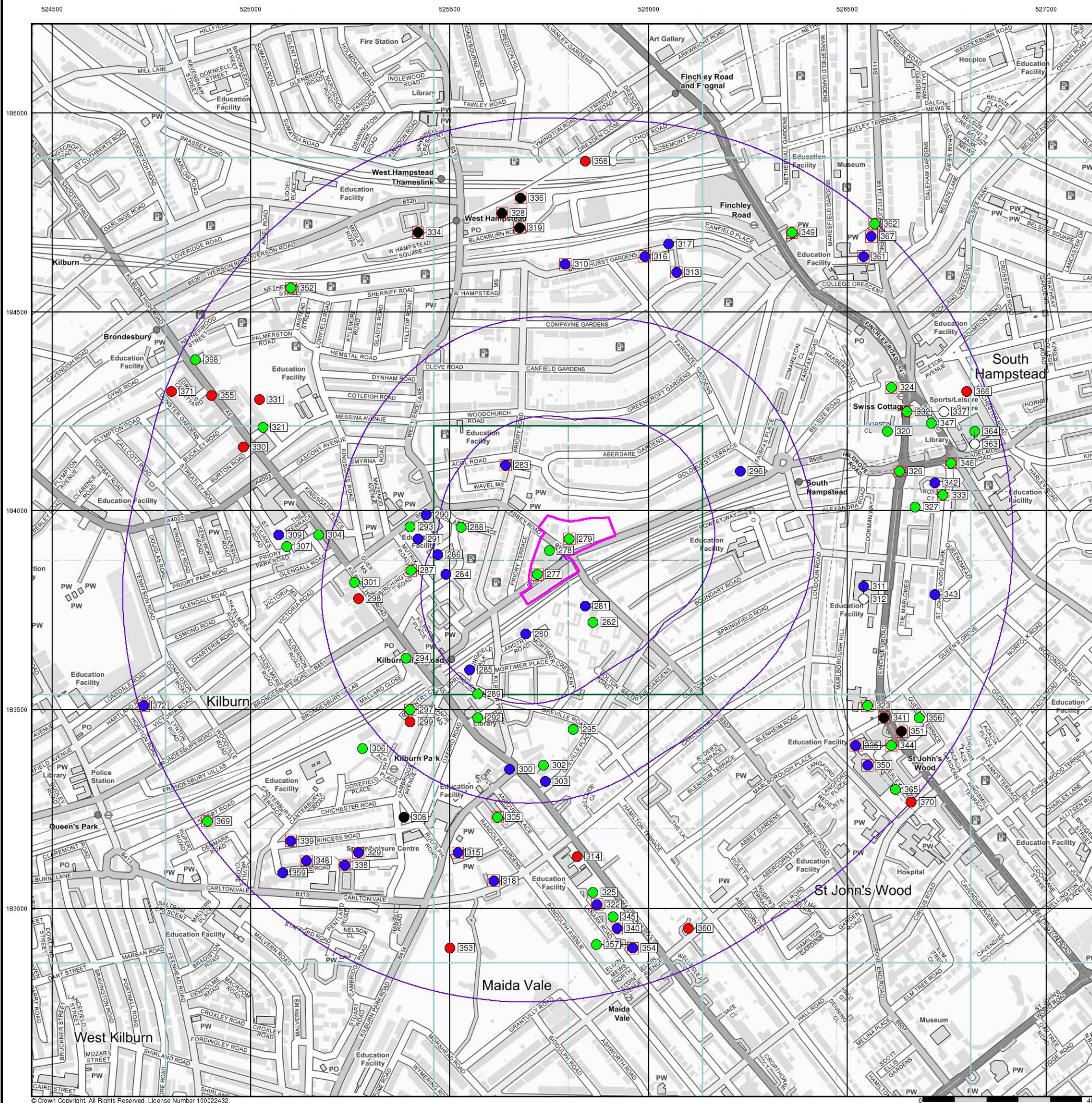
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Customer Ref: 70071591
National Grid Reference: 525790, 183890
Slice: A
Site Area (Ha): 2.38
Search Buffer (m): 1000

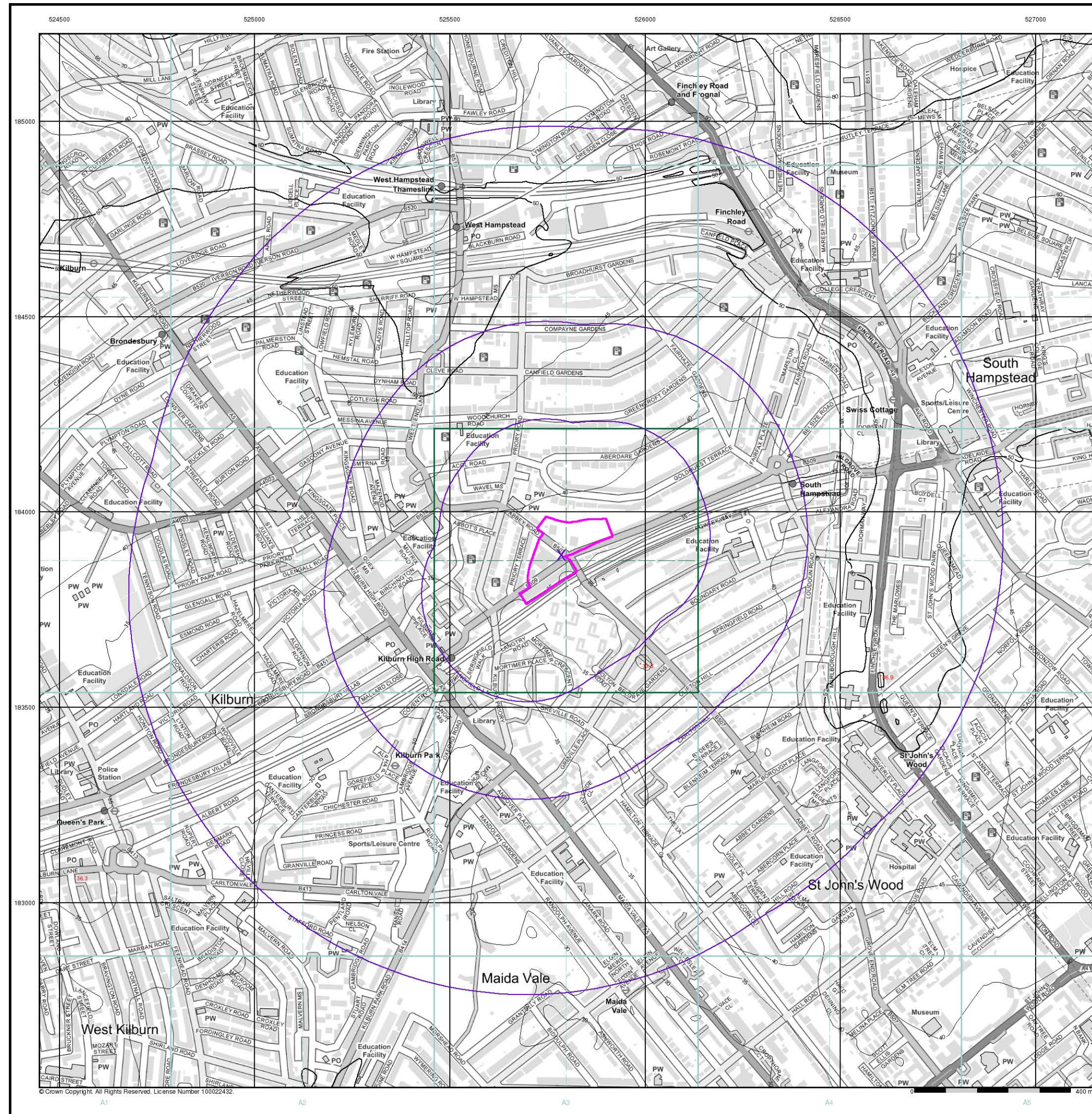
Site Details

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General

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

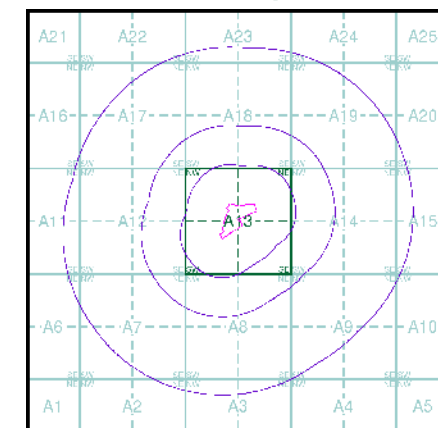
OS Water Network Data

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

Contours (height in meters)

- Standard Contour 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

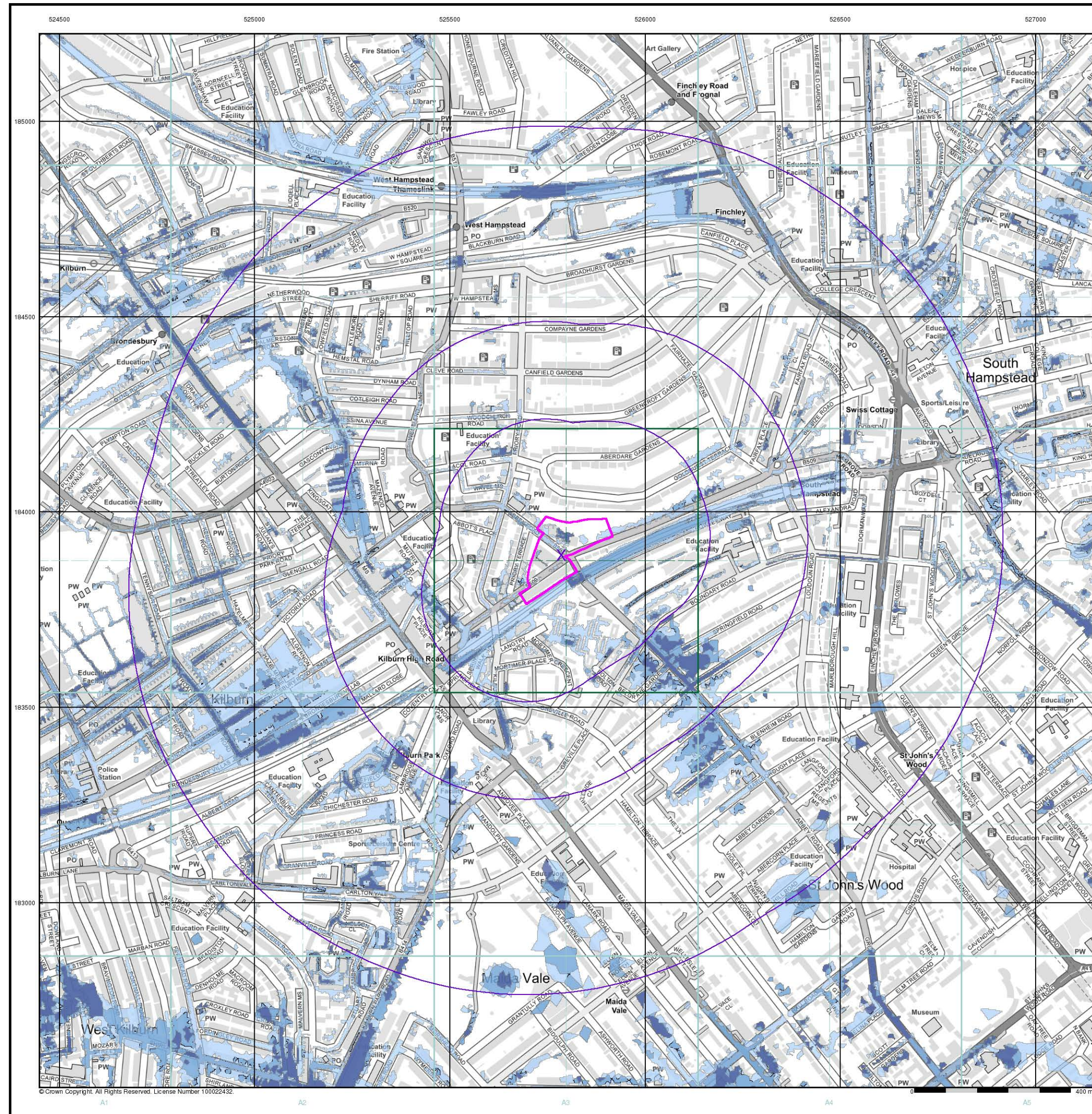
Order Number: 241962101_1_1
Customer Ref: 70071591
National Grid Reference: 525790, 183890
Slice: A
Site Area (Ha): 2.38
Search Buffer (m): 1000

Site Details

Abbey Road Estate, Belsize Road, LONDON, NW6 4DX



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General

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

Risk of Flooding from Surface Water

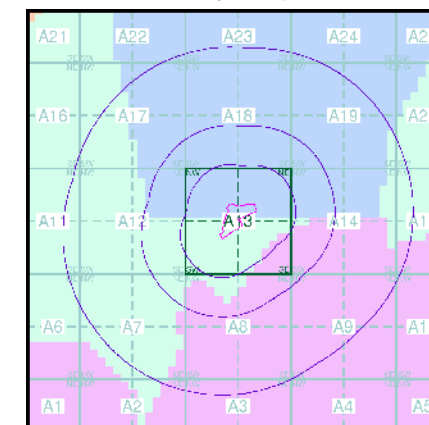
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

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

EANRW Suitability Map - Slice A



Order Details

Order Number: 241962101_1_1
Customer Ref: 70071591
National Grid Reference: 525790, 183890
Slice: A
Site Area (Ha): 2.38
Search Buffer (m): 1000

Site Details

Abbey Road Estate, Belsize Road, LONDON, NW6 4DX

Landmark
INFORMATION GROUP

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

Appendix E

BGS BOREHOLE LOGS



RECORD OF SHAFT OR BORE FOR MINERALS

Name of Shaft or Bore given by Geological Survey: Sony

TQ28SE/377

Name and Number given by owner:

Abbey estate no 15.

Nat. Grid Reference

2572.8384

For whom made

Town or Village

Hampstead

County

London

Exact site

see planAttach a tracing from
a map, or a sketch-
map, if possible.

Purpose for which made

TrialGround Level at shaft
bore relative to O.D.If not ground level give O.D. of beginning of shaft
bore

Made by

Date of sinking

Information from

Date received

Examined by

MINERS AND ADDITIONAL NOTES



(For Survey use only)

GEOLOGICAL
CLASSIFICATION

DESCRIPTION OF STRATA

THICKNESS

DEPTH

Ft.

IN.

Ft.

IN.

3'6"-5'0"

Brown fissured clay, blue in fissures
with selenite crystals

8'6"-10'0"

Brown fissured clay with selenite
crystals

13'6"-15'0"

Brown fissured clay with selenite
crystals

18'6"-20'0"

Brown fissured clay with selenite
crystals

23'6"-25'0"

Blue fissured clay

28'6"-30'0"

Blue fissured clay

33'6"-35'0"

Blue fissured clay

38'6"-40'0"

Blue fissured clay

RECORD OF SHAFT OR BORE FOR MINERALS

Name of Shaft or Bore given by Geological Survey:

TQ28SE/378

Name and Number given by owner:

Abbey estate no. 16.

Nat. Grid Reference

25758390

For whom made

C.C.C.

Town or Village

Hampstead

County

London

Exact site

See plan filed under TQ28SE/377

Attach a tracing from a map, or a sketch-map, if possible.

Purpose for which made

Tnal

Ground Level at

shaft bore

relative to O.D.

If not ground level give O.D. of beginning of

shaft bore

Made by

Date of sinking

Information from

Date received

Examined by

SPECIMEN NUMBERS AND ADDITIONAL NOTES

(For Survey use only)

GEOLOGICAL
CLASSIFICATION

DESCRIPTION OF STRATA

THICKNESS

DEPTH

FT.

IN.

FT.

IN.

3'6"-5'0"

Brown fissured clay with fine roots

8'6"-10'0"

Brown fissured clay, blue in fissures with selenite crystals

13'6"-15'0"

Brown fissured clay, blue in fissures with selenite crystals

18'6"-20'0"

Brown fissured clay with selenite crystals

23'6"-25'0"

Brown fissured clay with selenite crystals

28'6"-30'0"

Blue fissured clay

33'6"-35'0"

Blue fissured clay

38'6"-40'0"

Blue fissured clay

RECORD OF SHAFT OR BORE FOR MINERALS

Name of Shaft or Bore given by Geological Survey:

TQ28SE/379

Name and Number given by owner:

Abbey estate no 17

Nat. Grid Reference

2571.8380

For whom made

LCC

Town or Village

Hampstead

County

London

Exact site

See plan with TQ28SE/379

Attach a tracing from a map, or a sketch-map, if possible.

1" N.S. Map No.

256

1" O.S. Map No.

Confidential or not

Purpose for which made

Trial

Ground Level at shaft bore relative to O.D.

If not ground level give O.D. of beginning of shaft bore

Made by

Date of sinking

Information from

Date received

Examined by

SPECIMEN NUMBERS AND ADDITIONAL NOTES

(For Survey use only)

GEOLOGICAL CLASSIFICATION

DESCRIPTION OF STRATA

THICKNESS

DEPTH

Ft.

IN.

Ft.

IN.

4'6"-6'0"

Brown fissured clay with fine roots

9'6"-11'0"

Brown fissured clay, blue in fissures with selenite crystals

14'6"-16'0"

Brown fissured clay, blue in fissures with selenite crystals

19'6"-21'0"

Brown fissured clay with selenite crystals

24'6"-26'0"

Brown fissured clay with selenite crystals

29'6"-31'0"

Brown fissured clay with selenite crystals

34'6"-36'0"

Blue fissured clay

39'6"-41'0"

Blue fissured clay

44'6"-46'0"

Blue fissured clay

RECORD OF SHAFT OR BORE FOR MINERALS

Name of Shaft or Bore given by Geological Survey:

TQ285E/380

Name and Number given by owner:

Abbey estate no. 18

Nat. Grid Reference

2575.8383

For whom made

L.C.C.

Town or Village

Hampstead

County

London

Exact site

See plan with TQ285E/377

Attach a tracing from a map, or a sketch-map, if possible.

Purpose for which made

Trial

Ground Level at shaft bore relative to O.D.

If not ground level give O.D. of beginning of shaft bore

Made by

Date of sinking

Information from

Date received

Examined by

SPECIMEN NUMBERS AND ADDITIONAL NOTES

(For Survey use only)

GEOLOGICAL
CLASSIFICATION

DESCRIPTION OF STRATA

THICKNESS

DEPTH

FT.

IN.

FT.

IN.

9'6"-11'0"

Brown fissured clay, blue in fissures with selenite crystals and fine roots

14'6"-16'0"

Brown fissured clay, blue in fissures with selenite crystals

19'6"-21'0"

Brown fissured clay, blue in fissures with selenite crystals

24'6"-26'0"

Brown fissured clay with selenite crystals

29'6"-31'0"

Brown fissured clay with selenite crystals

24'6"-36'0"

Blue fissured clay

38'6"-40'0"

Blue fissured clay

Appendix F

UXO ASSESSMENT



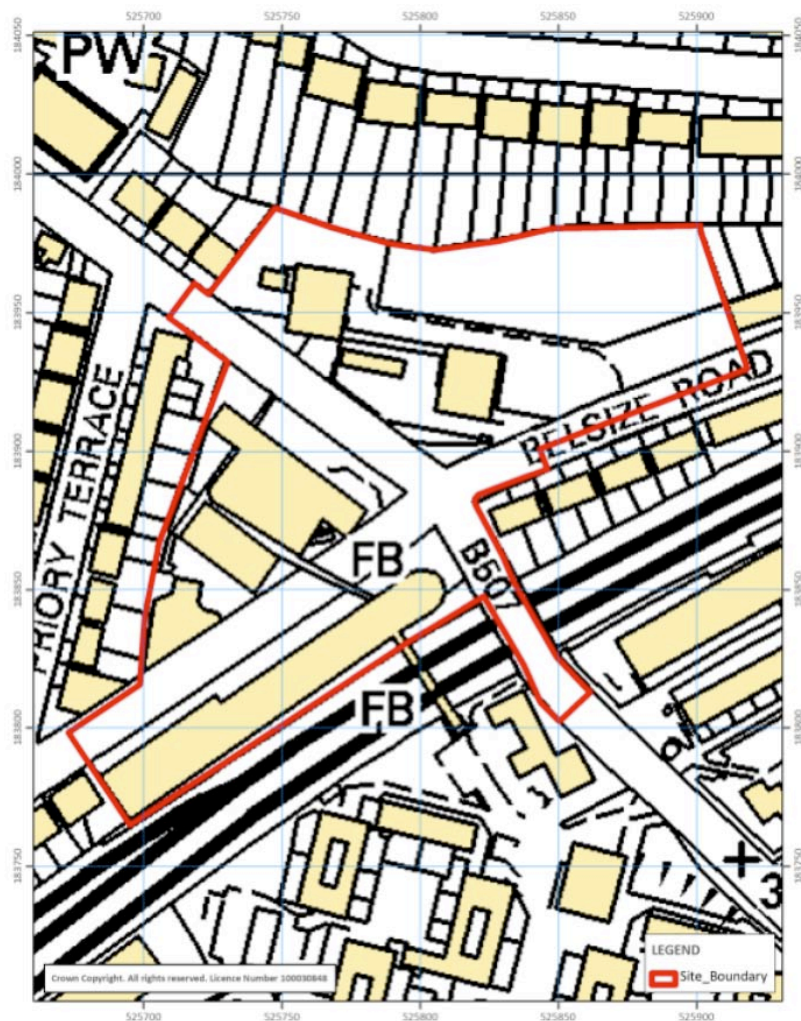
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Camberley, Surrey
GU16 7ER

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W: www.6alpha.com



Detailed Unexploded Ordnance (UXO) Risk Assessment

Meeting the requirements of CIRIA C681 "Unexploded Ordnance (UXO) – A guide for the Construction Industry" Risk Management Framework



6 Alpha Project Number: P3263
Client: London Borough of Camden
Site: Abbey Road, Camden

Originator: Gary Hubbard (27th March 2013)
Quality Review: Graeme Warden (9th April 2013)
Released By: Lisa Askham (10th April 2013)

Delivered by


alpha
ASSOCIATES
special risks consultancy

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- Figure Four – 1945 Aerial Photography
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- Figure Six – WWII High Explosive Bomb Strikes
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- Figure Eight – WWII High Explosive Bombing Density
- Figure Nine – Probability of UXO Encounter

EXECUTIVE SUMMARY – RISK ASSESSMENT

Study Site	The Client has specified the Study Site as “Abbey Road and Belsize Road, Kilburn, NW6”. The Site is located at National Grid Reference (NGR) 525786, 183895. The Site location and Site boundary are presented at <i>Figures 1</i> and <i>2</i> respectively.	
Key Findings	<p><i>London</i> experienced substantial levels of bombing during <i>World War Two</i> (WWII), with locations such as industry, transport links, communication and residential areas being targeted. <i>The London Borough of Hampstead</i> was no exception; sustaining a bomb density of 139 High Explosive (HE) bombs per 1,000 acres.</p> <p>The <i>Luftwaffe</i> conducted numerous reconnaissance missions over <i>Britain</i>, recording and photographing potential bombing targets in the event war. Whilst there have been no primary target identified within close proximity to the Study Sites, there are numerous “opportunistic” targets in the vicinity, such as “railway infrastructure”, which is located to the north and south of the Study Site.</p> <p>During WWII the <i>Air Raid Precaution</i> (ARP) wardens maintained detailed records concerning many aspects of <i>Luftwaffe</i> bombing. These records have identified two HE bomb strikes within the western area, with an additional bomb strike located on the southern boundary. These records do not contain information regarding incendiary bombs (IBs), which may also have struck the Site. IBs were deployed in such vast quantities that the locations were rarely recorded.</p> <p>The <i>London County Council</i> (LCC) compiled numerous maps identifying the levels of damage sustained by property during WWII, although many commercial facilities were not included as they compiled their own records. The LCC maps identify significant localised damage within the western and southern areas of the Study Site. This damage ranges from “Total Destruction” to “General Blast Damage”. Given the level of damage sustained within these locations, it is possible that UXBs could have entered the Site unrecorded, particularly as rubble and debris could potentially mask a UXB entry hole.</p> <p>There has been significant post WWII redevelopment located within all areas of the Study Site, in particular, within the areas sustaining the most severe damage. However, given the unknown nature of the engineering methodologies employed during construction, there is a potential for deep buried unexploded bombs (UXBs) to remain undiscovered within the Study Site. It is considered that shallow buried items such as Anti Aircraft Artillery (AAA) projectiles and IBs are likely to have been discovered during shallow excavations within the “footprints” of the post WWII structures located within the Site.</p>	
Potential Threat Source	The most probable UXO threat items for this Site are <i>German</i> HE bombs, IBs and <i>British</i> AAA. The consequences of initiating <i>German</i> HE bombs are more severe than initiating IBs or AAA projectiles, and thus they pose the greatest threat to the Site.	
Risk Pathway	Given the type of munitions that might be present on Site, all types of aggressive intrusive engineering activities may generate a significant risk pathway.	
Risk Level	LOW/MEDIUM	MEDIUM/HIGH

EXECUTIVE SUMMARY – RISK MITIGATION STRATEGY

Recommended Risk Mitigation

1. Operational UXO Risk Management Plan; appropriate Site management documentation should be held on Site to plan for and guide upon the actions to be carried out in the event of a suspected or real UXO discovery.

2. UXO Safety & Awareness Briefings; the briefings are essential when there is a possibility of explosive ordnance encounter and are a vital part of the general safety requirement. All personnel working on the Site should receive a general briefing on the identification of UXB, what actions they should take to keep people and equipment away from the hazard and to alert Site management. Posters and information of the general nature of the UXB threat should be held in the Site office for reference and as a reminder. The safety awareness briefing is an essential part of the Health & Safety Plan for the Site and conforms to CDM regulations 2007.

Additional measures for MEDIUM/HIGH probability of encounter area:

3. Specialist UXO Survey; both non-intrusive and intrusive survey methods might be trialled and, if successful, subsequently employed to clear the site of any potential UXB/UXO in advance of intrusive ground works.

4. Specialist UXO Banksman Support; if specialist survey work proves unsuccessful, intrusive works should be supervised by a specialist UXO banksman in order to identify and dispose of any items of UXO as the work proceeds.

ASSESSMENT METHODOLOGY

<p>Approach</p>	<p>6 Alpha Associates is an independent, specialist risk management consultancy practice, which has assessed the risk of encountering UXO (as well as buried bulk high explosives) at this site, by employing a process advocated for this purpose by the Construction Industry Research & Information Association (CIRIA). The CIRIA guide for managing UXO risks (C681) not only represents best practice but has also been endorsed by the Health & Safety Executive (HSE). Therefore, any risk levels identified in this assessments are considered objective, quantifiable and not simply designed (as some report are), to generate “follow on survey or contracting work”. Any risk mitigation solution is recommended <i>only</i> because it delivers the Client a risk reduced to As Low As Reasonably Practicable (ALARP) at best value.</p> <p>Potential UXO hazards have been identified through investigation of Local and National archives covering the Site, Ministry of Defence (MoD) archives, local historical sources, historical mapping as well as contemporaneous aerial photography (as and if, it is available). Potential hazards have only been recorded if there is specific information that could reasonably place them within the boundaries of the Site. Key source material is referenced within this document, whilst data of lesser relevance (which may have been properly considered and discounted by 6 Alpha), is available upon request. The assessment of UXO risk is a measure of probability of encounter and consequence of encounter; the former being a function of the identified hazard and proposed development methodology; the latter being a function of the type of hazard and the proximity of personnel (and/or other “sensitive receptors”), to the hazard at the moment of encounter.</p> <p>Should a measurable UXO risk be identified, the methods of mitigation we have recommended are reasonably and sufficiently robust to reduce these to As Low As Reasonably Practicable (ALARP). We believe that the adoption of the legal ALARP principle is a key factor in efficiently and effectively ameliorating UXO risks. It also provides a ready means for assessing the Client’s tolerability of UXO risk. In essence the principle states that if the cost of reducing a risk significantly outweighs the benefit, then the risk may be considered tolerable. Clearly this does not mean that there is never a requirement for UXO risk mitigation, but that any mitigation must demonstrate that it is beneficial. Any additional mitigation that delivers diminishing benefits and that consume disproportionate time, money and effort are considered <i>de minimis</i> and thus unnecessary. Because of this principle unexploded bomb (UXB) and UXO risks will rarely be reduced to zero (nor need they be).</p>
<p>Important Notes</p>	<p>Although this report is up to date and accurate, our databases are continually being populated as and when additional information becomes available. Nonetheless, 6 Alpha have exercised all reasonable care, skill and due diligence in providing this service and producing this report.</p> <p>The assessment levels are based upon our professional opinion and have been supported by our interpretation of historical records and third party data sources. Wherever possible, 6 Alpha has sought to corroborate and to verify the accuracy of all data we have employed, but we are not accountable for any inherent errors that may be contained in third party data sets (e.g. National Archive or other library sources), and over which 6 Alpha cannot exercise control.</p>

STAGE ONE – SITE LOCATION AND DESCRIPTION

Study Site	The Client has specified the Study Site as “Abbey Road and Belsize Road, Kilburn, NW6”. The Site is located a NGR 525786, 183895. The Site location and Site boundary are presented at <i>Figures 1</i> and <i>2</i> respectively.
Location Description	<p>The Study Site is situated within the <i>London Borough of Camden</i> and is located approximately 680m to the south of <i>West Hampstead Railway Station</i> and 490m to the west of <i>South Hampstead Railway Station</i>.</p> <p>The Study Site covers an area of approximately 2.64 hectares (Ha) and is of an irregular shape. The Site is bisected by <i>Abbey Road (B507)</i> centrally (from north to south) and <i>Belsize Road</i> from east to west.</p> <p>The Study Site is bounded by residential property located on <i>Goldhurst Terrace</i> (north), <i>Belsize Road</i> (southeast), <i>London Overground Railway</i> (southwest) and residential property located on <i>Priory Terrace</i> (west).</p> <p>There is a mixture of development located within the Study Site, which comprises of; two “High-Rise Blocks”, associated parking and an area of “Grassland” bounded by “Woodland” to the east of <i>Abbey Road</i> and north of <i>Belsize Road</i>. To the west of <i>Abbey Road</i> and north of <i>Belsize Road</i> is a complex of buildings up to seven storeys including <i>Belsize Priory Health Centre</i>, <i>Abbey Community Centre</i> and a Restaurant. The area located to the west of <i>Abbey Road</i> and south of <i>Belsize Road</i> is dominated by a large structure identified as a “Multi-Storey Car Park”.</p>
Proposed Works	<p>The Client has not specified the proposed works that are to be conducted within the Study Site.</p> <p>For completeness of the risk assessment process, 6 Alpha will assume a number of generic engineering methodologies within this document, including trial pits, window sampling, trenching, bulk excavations, boreholes and piling.</p>
Ground Conditions	<p>The Client has not provided 6 Alpha with expected ground conditions, but 6 Alpha has identified a previously conducted borehole log (TQ28SE378 – <i>Abbey estate No 16 Hampstead</i>) at NGR 525750, 183900 located within the western area of the Study Site. The date of this operation is not recorded. A summary of this log is presented below;</p> <ul style="list-style-type: none"> • Ground Level to 1.52m bgl – Brown fissured clay with fine roots; • 1.52m to 3.05m bgl – Brown fissured clay, blue in fissures with selenite crystals; • 3.05m to 4.57m bgl – Brown fissured clay, blue in fissures with selenite crystals; • 4.57m to 6.10m bgl – Brown fissured clay with selenite crystals; • 6.10m to 7.62m bgl – Brown fissured clay with selenite crystals; • 7.62m to 12.19m bgl – Blue fissured clay. <p>It is important to establish the ground conditions in order to determine both the maximum <i>German</i> Unexploded Bomb (UXB) penetration depth as well as the potential for other types of munitions to be buried on this Site.</p>

STAGE TWO – REVIEW OF HISTORICAL DATASETS

Sources of Information Consulted	<p>The following primary information sources have been used in order to establish the background UXO threat.</p> <ol style="list-style-type: none"> 1. Home Office WWII Bomb Census Maps; 2. WWII & post-WWII Aerial Photography; 3. Official Abandoned Bomb Register; 4. Internet based research; 5. National Archives at Kew; 6. Historic UXO information provided by 33 Engineer Regiment (Explosive Ordnance Disposal) at Carver Barracks, Wimbish. <p>Military providers have extremely long lead times for the delivery of information (typically extending to months), and at the time of reporting project specific data has not been received. If any relevant data is subsequently received that changes the risk assessment and/or the risk mitigation methodology, 6 Alpha will contact the Client.</p>
Site History	<p>According to the Client provided historic mapping and aerial photography, the following Site history can be deduced:</p> <p>Pre-WWII CS Mapping</p> <p>1915 – The Study Site comprises of numerous residential properties and associated gardens fronting onto two “Public Highways”; <i>Abbey Road</i> (bisecting the Site from north to south) and <i>Belsize Road</i> (bisecting the Site from east to west), which intersect within the southern area of the Study Site centrally forming three areas; north, south and west. The northern area comprises of a mixture of “Terrace” (<i>Abbey Road</i>) and “Detached” (<i>Belsize Road</i>) property. The southern area comprises of a single row of “Terraced” properties situated between <i>Belsize Road</i> and the <i>London and North Western Railway</i>, which is located immediately to the south of the Study Site. The western area comprises of “Terraced” property to the north (<i>Abbey Road</i>) and south (<i>Belsize Road</i>), <i>Albert Mews</i> located centrally and a large “Hotel” is located to the east at the intersection. The southern boundary encompasses a “Road Bridge” crossing the railway located to the south;</p> <p>1935 to 1936 – There appears to be no significant change within the Study Site, but <i>Albert Mews</i> is now identified as <i>Abbey Mews</i>, which has undergone some minor development. The <i>London and North Western Railway</i> is now identified as the <i>London Midland and Scottish Railway</i>;</p> <p>1937 to 1939 – There is no noticeable change within the Study Site;</p> <p>Post WWII OS Mapping</p> <p>1955 – The northern and southern areas of the Study Site appear unchanged from previous mapping. The western area has undergone significant change, which comprises of the removal of approximately five properties located to the north of <i>Belsize Road</i>;</p> <p>1967 to 1968 – There has been significant development located within the north of the Study Site, which has comprised of the removal of all structures within the Site boundary located to the east of <i>Abbey Road</i> and north of <i>Belsize Road</i>;</p> <p>1970 – There has been significant development located within the north and south of the Study Site. There have been two “H” shaped buildings constructed within the north, which are identified as <i>Snowman House</i> and <i>Casterbridge</i>. The “Terrace” housing located within the south of the Site has been replaced by a single linear building that is unidentified;</p>

STAGE TWO – REVIEW OF HISTORICAL DATASETS (...continued)

Site History (...continued)	<p>1974 to 1976 – The northern and southern areas remain unchanged, although evidence of “Woodland” to the north of <i>Snowman House</i> and <i>Casterbridge</i>. The western area of the Study Site has undergone significant change, which has comprised of the removal of all structures located within this area;</p> <p>1991 to 1996 – The northern and southern areas of the Study Site remain unchanged. There has been significant construction within the western area of the Study Site, which now contains three large unidentified structures.</p>
1945 Aerial Photography	It is evident from this aerial photography (1945) that the structures removed from the western area as indicated by post WWII (1955) OS mapping are likely to have been removed much earlier. It is clearly visible that there is a “break” within the “Terrace Housing” located to the north of <i>Belsize Road</i> .
WWII Bombing of London	<p>During WWII the area had a high concentration of “industrial facilities” and “railway infrastructure” making large areas of the borough a significant bombing target.</p> <p><i>London Boroughs</i> positioned civil defence preparations concentrically around a series of decentralized ‘hubs’. This proved successful in increasing operational efficiency and decreasing the number of local casualties.</p> <p>The most intensive period of bombing over <i>London</i> was the nine months between October 1940 and May 1941, known as “the Blitz”. During this period the <i>Luftwaffe</i> attempted to overwhelm <i>Britain’s</i> air defenses, destroy key military and industrial facilities as well as logistical capabilities, prior to invasion. A total of 18,000 tons of bombs were dropped on <i>London</i> between 1940 and 1945. Thousands of civilians were killed and many more injured and many buildings, both residential and commercial, were completely, or partially destroyed. Public services also sustained intensive targeting with gas, electricity and water supplies often cut-off following damage to either the installations themselves or to the supply infrastructure.</p>
WWII Site Use	It is evident from pre-WWII (1937 – 1939) OS mapping that the Study Site comprised predominantly of “Residential Housing” and two busy “Public Highways”. Additionally, “Railway Infrastructure” was located immediately to the south of the Study Site, with <i>Kilburn High Road Railway Station</i> located approximately 230m to the southwest.
WWII Luftwaffe Bombing Targets	<p>Prior to WWII, the <i>Luftwaffe</i> had conducted numerous aerial photographic reconnaissance missions over <i>Britain</i>, recording key military, industrial and commercial targets for use in the event of war.</p> <p>There have been no <i>Luftwaffe</i> aerial reconnaissance photographs located to identify primary bombing targets within this area. However, in addition to primary targets the <i>Luftwaffe</i> had also identified specific “types” of facilities that were considered viable targets. These “opportunistic” bombing targets included a mass of “Railway Infrastructure” (located between 650m to 1,000m to the north), a “Railway Station” (450m to the east) and a “Coal depot” (located 340m to the southwest).</p>

STAGE TWO – REVIEW OF HISTORICAL DATASETS (...continued)

WWII HE Bomb Strikes	<p>During WWII, the local authority's ARP wardens compiled detailed records of bomb strikes across their respective districts. These records have identified two HE bomb strikes located within the Site boundary, and one HE strike located centrally on the southern boundary. The two HE strikes located within the Site boundary are located to the west of the Study Site, positioned centrally within <i>Belsize Road</i> and on the site of the current "Community Centre". The HE bomb strike positioned on the southern boundary is located to the south of the "Railway Tracks" on the east side of <i>Abbey Road</i>. In addition to HE bombs, <i>London</i> sustained numerous attacks from V1 and V2 missiles. There is one V2 strike located approximately 790m to the northwest, which occurred on 8th January 1945.</p> <p>Whilst IBs may have fallen within the Site boundary, it is important to note that they were not generally recorded, because they fell in such high numbers that accurate record keeping was impossible.</p>
WWII Bomb Damage	<p>The LCC bomb damage maps are considered a definitive source of information concerning WWII bomb damage. An analysis of these maps has identified significant damage was sustained by structures located within the western area of the Study Site. This damage was sustained by residential property located to the north and south of <i>Belsize Road</i>. The most severe damage was sustained by four properties located on the north of <i>Belsize Road</i>, which were "Totally Destroyed". One property located to the east of these "destroyed properties" is identified as "Seriously Damaged; Doubtful if Repairable", with the remaining properties sustaining "Blast Damage; Minor in Nature". The damage to property located on the south of <i>Belsize Road</i> comprises of nine properties sustaining damage identified as "Seriously Damaged; Doubtful if Repairable". There are no other buildings located within the Study Site boundary identified as sustaining bomb damage.</p> <p>Furthermore, there are six properties located to the south of the Site located which have sustained a varying degree of bomb damage ranging from "Total Destruction" to Minor Blast Damage".</p> <p>Whilst these maps identify the extent of damage sustained by structures, they do not identify the cause, although V1 and V2 strikes are identified.</p>
WWII HE Bomb Density	<p>The Study Site was located within <i>Hampstead Metropolitan Borough</i>, which recorded 139 HE bombs per 1,000 acres during WWII. This figure does not include IBs, as they were often released in such large numbers that they were seldom recorded.</p>
Abandoned Bombs	<p>There are no officially recorded abandoned bombs located within <i>Hampstead Metropolitan Borough</i>.</p>
Explosive Ordnance Disposal (EOD) Tasks	<p>There has been one recorded incident of an EOD task conducted within the vicinity of the Study Site. This task was conducted on 24th February 1944 at the "Recreation Ground" near <i>Carlton Vale</i> located approximately 750m to the south of the Study Site. A 50kg <i>German</i> HE bomb was located and "burnt in situ" before being removed.</p>

STAGE THREE – DATA ANALYSIS

Was the ground undeveloped during WWII?	No; the Study Site comprised of three densely populated residential areas separated by two “Public Highways”.
Is there a reason to suspect that the immediate area was a bombing target during WWII?	<p>Yes; although there have been no primary <i>Luftwaffe</i> bombing targets located within the vicinity of the Study Site, there are a number of “opportunistic” bombing targets located within the local area including a “Coal Depot” and “Railway infrastructure”. Railway infrastructure was important for the transportation of “Troops”, “Supplies” and “Raw Materials” vital for the war effort.</p> <p>It should be noted that as WWII progressed major “towns” and “cities” became targets within their own right (<i>London</i> in particular). As the <i>Luftwaffe</i> moved away from specific targeting of individual facilities to a more general method of bombing (“carpet bombing”), “general areas” were bombed, particularly highly populated residential areas.</p>
Is there firm evidence that ordnance landed on Site?	<p>Yes; ARP records identify two HE bomb strikes located within the western area of the Study Site, with a further HE bomb strike located on the Study Site’s southern boundary.</p> <p>Whilst IBs may have fallen within the Site boundary, they were dropped in such large numbers they were ubiquitous and were rarely recorded.</p>
Is there evidence of bomb damage sustained on Site?	<p>Yes; the LCC bomb damage mapping identifies that bomb damage was sustained by residential property located within the western area of the Study Site, which varies from “Total Destruction” to “Minor Blast Damage”. In total twenty-five residential properties were affected, including four “Totally Destroyed”, ten “Seriously Damaged; Doubtful if Repairable” and ten affected by “Blast Damage; Minor in Nature”.</p> <p>Further properties sustained varying degrees of bomb damage, which were located immediately to the south of the Study Site.</p> <p>There is correlation between both the ARP bomb strike mapping and the LCC bomb damage mapping. This would indicate that all damage sustained by property located within the Study Site was caused by HE bombs.</p>
Would a UXB entry hole have been observed and reported during WWII?	<p>Highly likely; the Study Site was a densely developed residential area bisected by two busy “Public Highways”, which indicate a high “Footfall” within the local area. Considering this level of occupation and use of the Study Site it is considered very likely that any UXB entry hole would have been witnessed and subsequently reported to the appropriate authorities.</p> <p>However, following significantly high levels of bomb damage, it is possible for a UXB entry hole to have been masked by rubble and debris and remained undetected.</p>

STAGE THREE – DATA ANALYSIS (...continued)

Is there any reason to suspect that Live Firing or military training may have occurred at this location?	No; there is no record of military training or live firing on, or in the immediate vicinity of the Study Site. Given the density of the civilian population, any military activity conducted within this area would have presented an intolerable risk to the local population.
What is the expected UXO contamination?	The most likely source of UXO contamination is from <i>German</i> aerial delivered ordnance, which ranges from small IBs through to large HE bombs; of which the latter forms the principal threat. Additional contamination may be present from <i>British</i> AAA projectiles, which were used to defend against <i>German</i> bombing raids.
Would previous earthwork have removed the potential for UXO to be present?	Possibly; given there has been significant redevelopment of the Study Site post WWII, it is considered that earthworks may have potentially mitigated the potential for UXO encounter within the Study Site, particularly within the areas sustaining bomb damage. However, the precise construction methodologies and the depth of these works are undetermined and thus a UXO threat may remain.
Does the probability of a UXO discovery vary across the Site?	Yes; the western area of the Study Site sustained significant levels of bomb damage, which would indicate an increased potential for a UXO discovery. There is no record of bomb strikes, or damage within the northeast of the Site – thus the probability for a UXO encounter within this area is less likely.

STAGE FOUR – RISK ASSESSMENT

Threat Items	The threat is predominately posed by WWII <i>German</i> HE bombs, IBs and <i>British</i> AAA projectiles (the latter were used to defend against <i>German</i> bombing raids).
Maximum Penetration	<p>Considering the ground conditions (highlighted in Stage 1), the maximum Bomb Penetration Depth (BPD) for a 250kg bomb in is assessed to be 15.55m below ground level (bgl), with an average penetration depth of 6.86m bgl. The <i>Luftwaffe</i> are known to have deployed large bombs in the area due to the presence of significant targets.</p> <p>Due to ground cover present during WWII, bomb penetration depths are expected to be less than stated above, as these do not consider possible hard geology that may have been present within the Study Sites during WWII. The structures and depth of “Made Ground” present on Site during WWII would significantly retard the penetration ability of an item of UXO.</p> <p>Additionally, both IBs and AAA projectiles will not have the same penetration capabilities as UXBs, and would likely be encountered within 1.0m from ground level.</p>
Risk Pathway	Given the type of munitions that might be present on Site, all types of aggressive intrusive engineering activities (i.e. groundwork) may generate a significant risk pathway. Whilst not all munitions encountered aggressively will initiate upon contact, such a discovery could lead to serious impact on the project especially in terms of delay and blight.
Consequence	<p>Consequences of UXO initiation include:</p> <ol style="list-style-type: none"> 1. Kill and/or critically injure personnel; 2. Severe damage to plant and equipment; 3. Blast damage to nearby buildings; 4. Rupture and damage underground services. <p>Consequences of UXO discovery include:</p> <ol style="list-style-type: none"> 1. Delay the project; 2. Disruption to local community/infrastructure; 3. Incurring additional costs.

UXO RISK CALCULATION

Site Activities	A number of construction methodologies have been identified for analysis on this Site. There is a large amount of variation in the probability of encountering, or initiating items of UXO when conducting different activities on Site. Additionally the consequences of initiating UXO vary greatly depending on how the item of UXO was initiated on Site. For this reason, 6 Alpha has determined that by conducting separate Risk Rating calculations for each construction methodology that may be used on Site.
Threat Items	The most probable UXO threat items for this Site are <i>German</i> HE bombs, IBs and <i>British</i> AAA. The consequences of initiating <i>German</i> HE bombs are more severe than initiating IBs or AAA projectiles, and thus they pose the greatest threat to the Site.
Risk Rating Calculation	6 Alpha’s Semi-Quantitative Risk Assessment identifies the Risk Rating posed by the most probable threat items when conducting a number of different construction activities on the Site. Risk Rating is determined by calculating the probability of encountering UXO and the consequences of initiating it.

STAGE FOUR - RISK ASSESSMENT (...continued)

UXO RISK CALCULATION TABLE – Low/Medium Probability of Encounter

Activity	Threat Item	Probability (SHxEM=P)	Consequence (DxPSR=C)	Risk Rating (Px C=RR)
Trial Pits and Window Sampling	HE Bombs	1x1=1	3x2=6	1x6=6
	IBs	1x1=1	1x1=1	1x1=1
	AAA Projectiles	1x1=1	1x2=2	1x2=2
Borehole Drilling	HE Bombs	1x2=2	2x2=4	2x4=8
	IBs	1x2=2	1x1=1	2x1=2
	AAA Projectiles	1x2=2	2x1=2	2x2=4
Trenching	HE Bombs	1x2=2	2x2=4	2x4=8
	IBs	1x2=2	1x1=1	2x1=2
	AAA Projectiles	1x2=2	2x1=2	2x2=4
Bulk Excavations	HE Bombs	1x3=3	2x2=4	3x4=12
	IBs	1x3=3	1x1=1	3x1=3
	AAA Projectiles	1x3=3	2x1=2	3x2=6
Piling	HE Bombs	1x2=2	2x2=4	2x4=8
	IBs	1x2=2	1x1=1	2x1=2
	AAA Projectiles	1x2=2	2x1=2	2x2=4

UXO RISK CALCULATION TABLE – Medium/High Probability of Encounter

Activity	Threat Item	Probability (SHxEM=P)	Consequence (DxPSR=C)	Risk Rating (Px C=RR)
Trial Pits and Window Sampling	HE Bombs	2x1=2	3x2=6	2x6=12
	IBs	2x1=2	1x1=1	2x1=2
	AAA Projectiles	2x1=2	1x2=2	2x2=4
Borehole Drilling	HE Bombs	2x2=4	2x2=4	4x4=16
	IBs	2x2=4	1x1=1	4x1=4
	AAA Projectiles	2x2=4	2x1=2	4x2=8
Trenching	HE Bombs	2x2=4	2x2=4	4x4=16
	IBs	2x2=4	1x1=1	4x1=4
	AAA Projectiles	2x2=4	2x1=2	4x2=8
Bulk Excavations	HE Bombs	2x3=6	2x2=4	6x4=24
	IBs	2x3=6	1x1=1	6x1=6
	AAA Projectiles	2x3=6	2x1=2	6x2=12
Piling	HE Bombs	2x2=4	2x2=4	4x4=16
	IBs	2x2=4	1x1=1	4x1=4
	AAA Projectiles	2x2=4	2x1=2	4x2=8

Abbreviations – Site History (SH), Engineering Methodology (EM), Probability (P), Depth (D), Consequence (C), Proximity to Sensitive Receptors (PSR) and Risk Rating (RR).

STAGE FIVE – RECOMMENDED RISK MITIGATION MEASURES WITH RESULTING RISK RATING

If a geophysical survey is required are the ground conditions an issue?

Non-Intrusive Methods of Mitigation; May be possible, but magnetometer results are likely to be affected by ferro-magnetic contamination due to previous construction activities.

Intrusive Methods of Mitigation; Intrusive magnetometry is expected to be possible on this Site, prior to works. However, ferro-contamination of the made ground/fill material, is likely to adversely affect detection capability of the equipment, as it passes through the fill layer.

MITIGATION MEASURES TO REDUCE RISK TO 'ALARP'

Activity	Risk Mitigation Measures	Risk Rating
All Activities	<p>1. Operational UXO Risk Management Plan; appropriate Site management documentation should be held on Site to plan for and guide upon the actions to be carried out in the event of a suspected or real UXO discovery.</p> <p>2. UXO Safety & Awareness Briefings; the briefings are essential when there is a possibility of explosive ordnance encounter and are a vital part of the general safety requirement. All personnel working on the Site should receive a general briefing on the identification of UXB, what actions they should take to keep people and equipment away from the hazard and to alert Site management. Posters and information of the general nature of the UXB threat should be held in the Site office for reference and as a reminder. The safety awareness briefing is an essential part of the Health & Safety Plan for the Site and conforms to CDM regulations 2007.</p> <p>Additional measures for MEDIUM/HIGH probability of encounter area:</p> <p>3. Specialist UXO Survey; both non-intrusive and intrusive survey methods might be trialled and, if successful, subsequently employed to clear the site of any potential UXB/UXO in advance of intrusive ground works;</p> <p>4. Specialist UXO Banksman Support; if specialist survey work proves unsuccessful, intrusive works should be supervised by a specialist UXO banksman in order to identify and dispose of any items of UXO as the work proceeds.</p>	ALARP
This assessment has been conducted based on the information provided by the Client, should the proposed works change then 6 Alpha should be re-engaged to refine this risk assessment.		

Report Figures

Figure One

Site Location

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 Site Location

Figure 1

BRITISH NATIONAL GRID

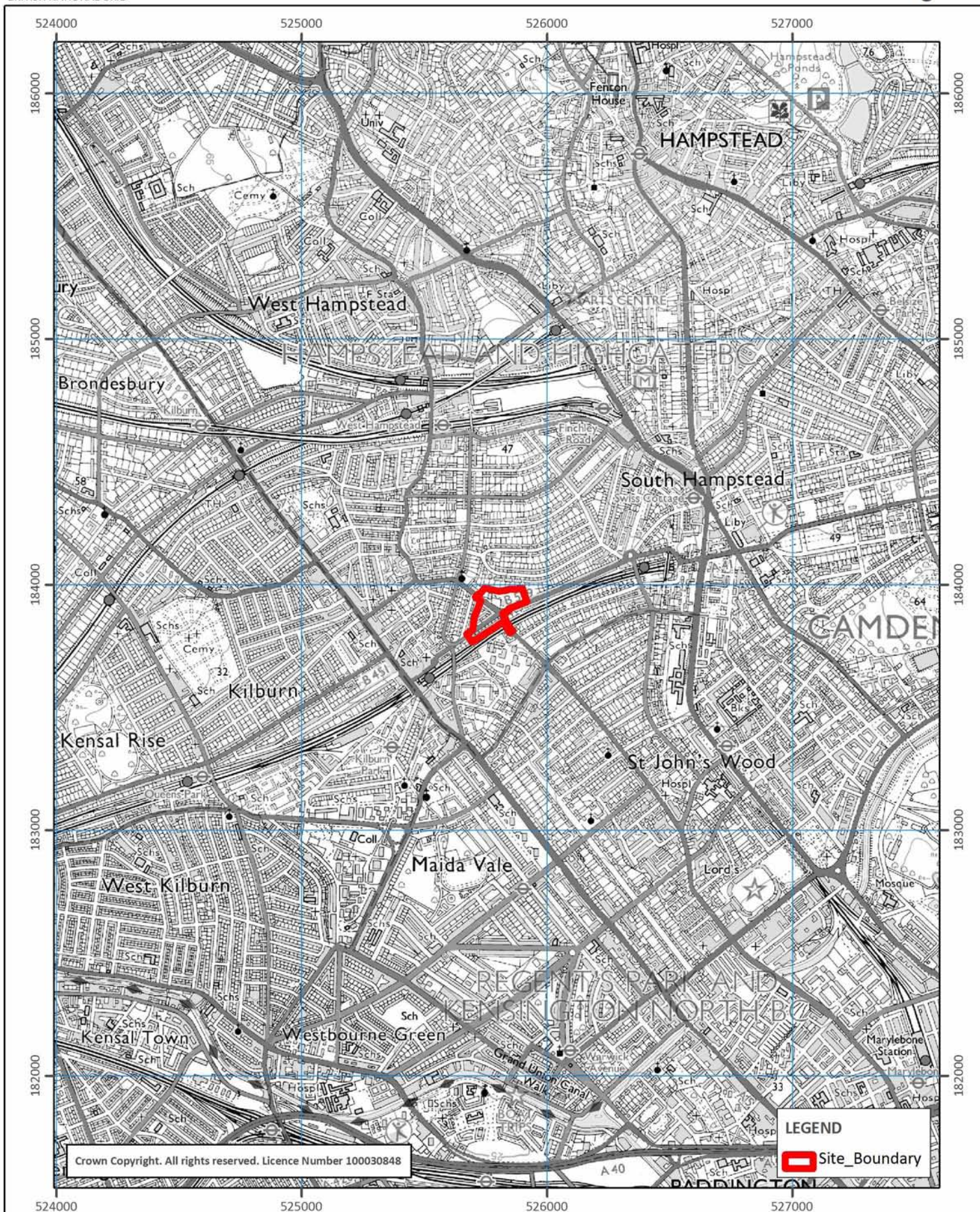


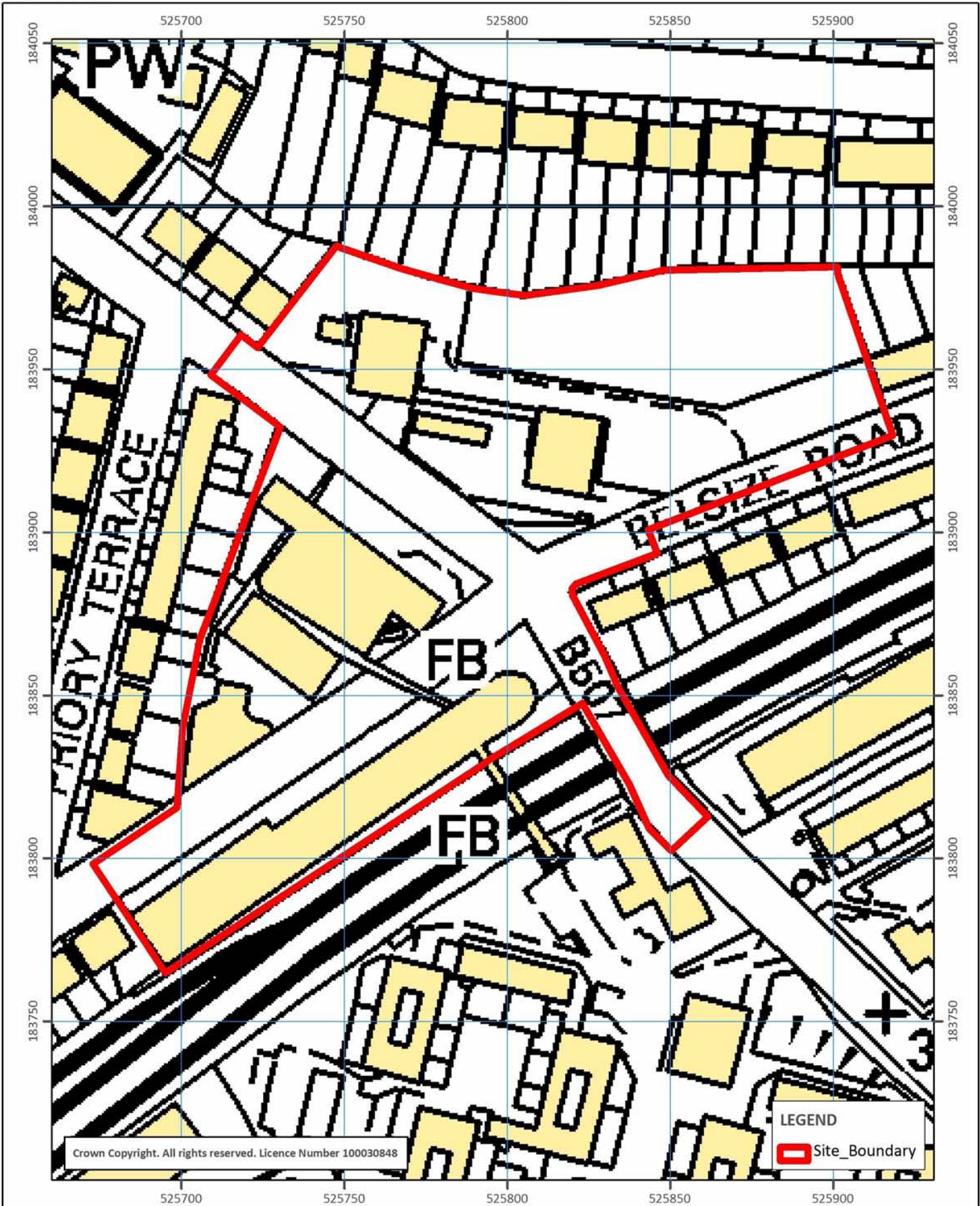
Figure Two

Site Boundary

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 **Site Boundary**

Figure 2

BRITISH NATIONAL GRID






 <p>BOMB SEARCH WWW.6ALPHA.COM</p>		<p>0 5 10 20 30 40 50 Meters</p> <p>Produced by and Copyright to 6 Alpha Associates Ltd. Users noting any errors please forward to 6 Alpha. Background data supplied by Ordnance Survey under licence.</p>	<p>N</p> 	PROJECT NO.	P3263
				DRAWN BY	DR
				CHECKED BY	GW
				DATE	21st March 2013

Figure Three

Current Aerial Photography

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 Current Aerial Photography

Figure 3

BRITISH NATIONAL GRID

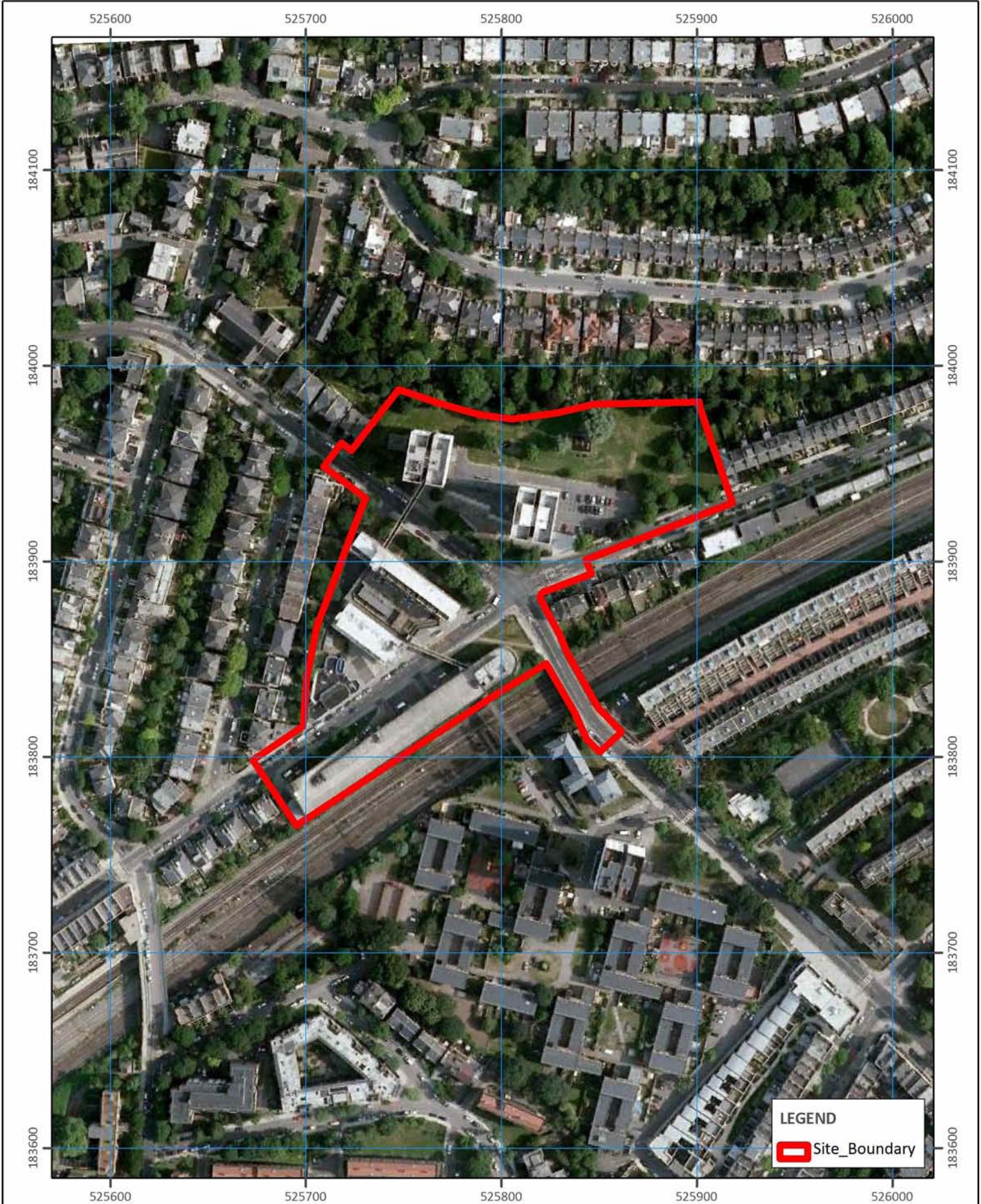


Figure Four

1945 Aerial Photography

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 1945 Aerial Photography

Figure 4

BRITISH NATIONAL GRID

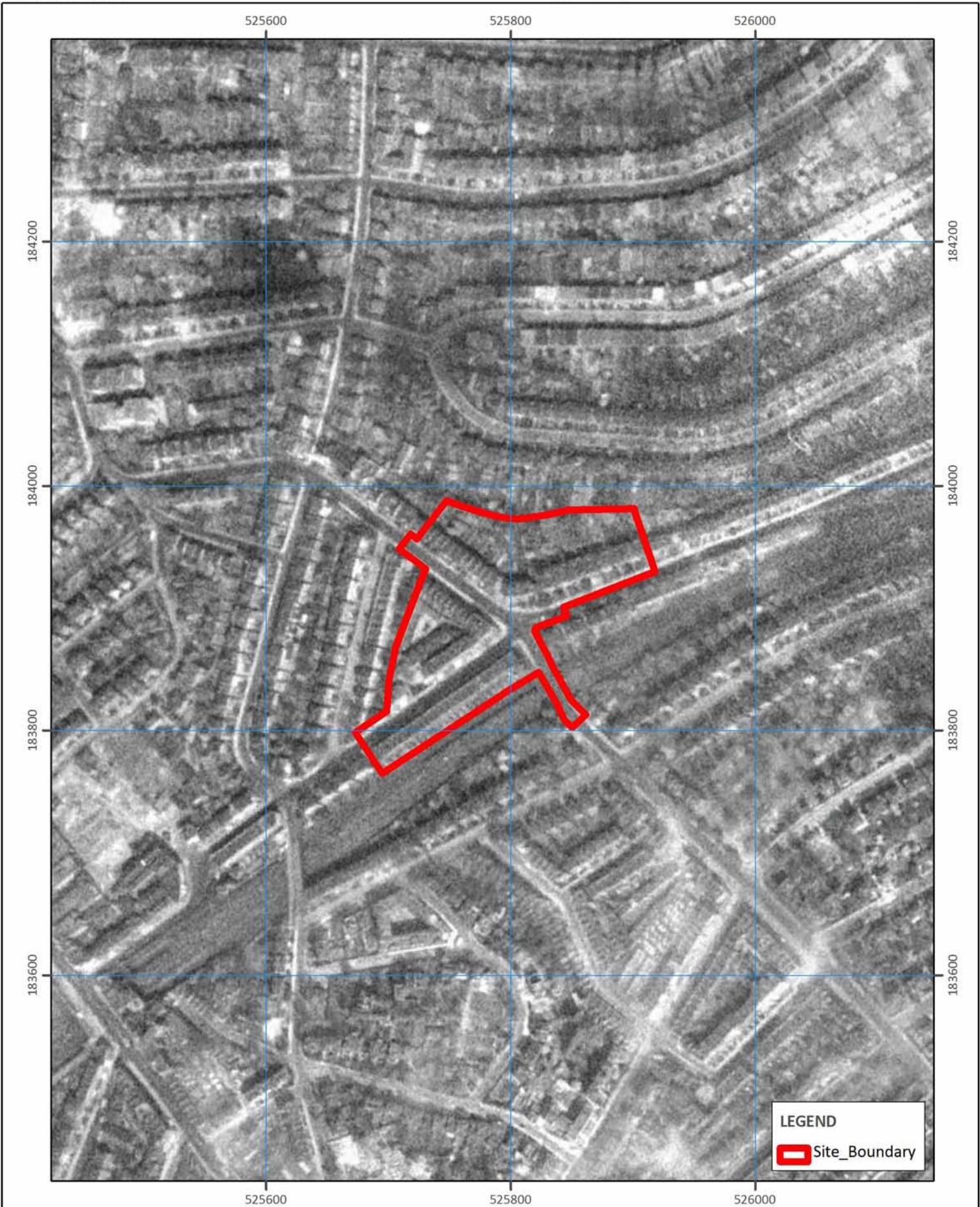


Figure Five

WWII Luftwaffe Bombing Targets

Figure 5

[illegible]

Figure Six

WWII High Explosive Bomb Strikes

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 WWII High Explosive Bomb Strikes

Figure 6

BRITISH NATIONAL GRID

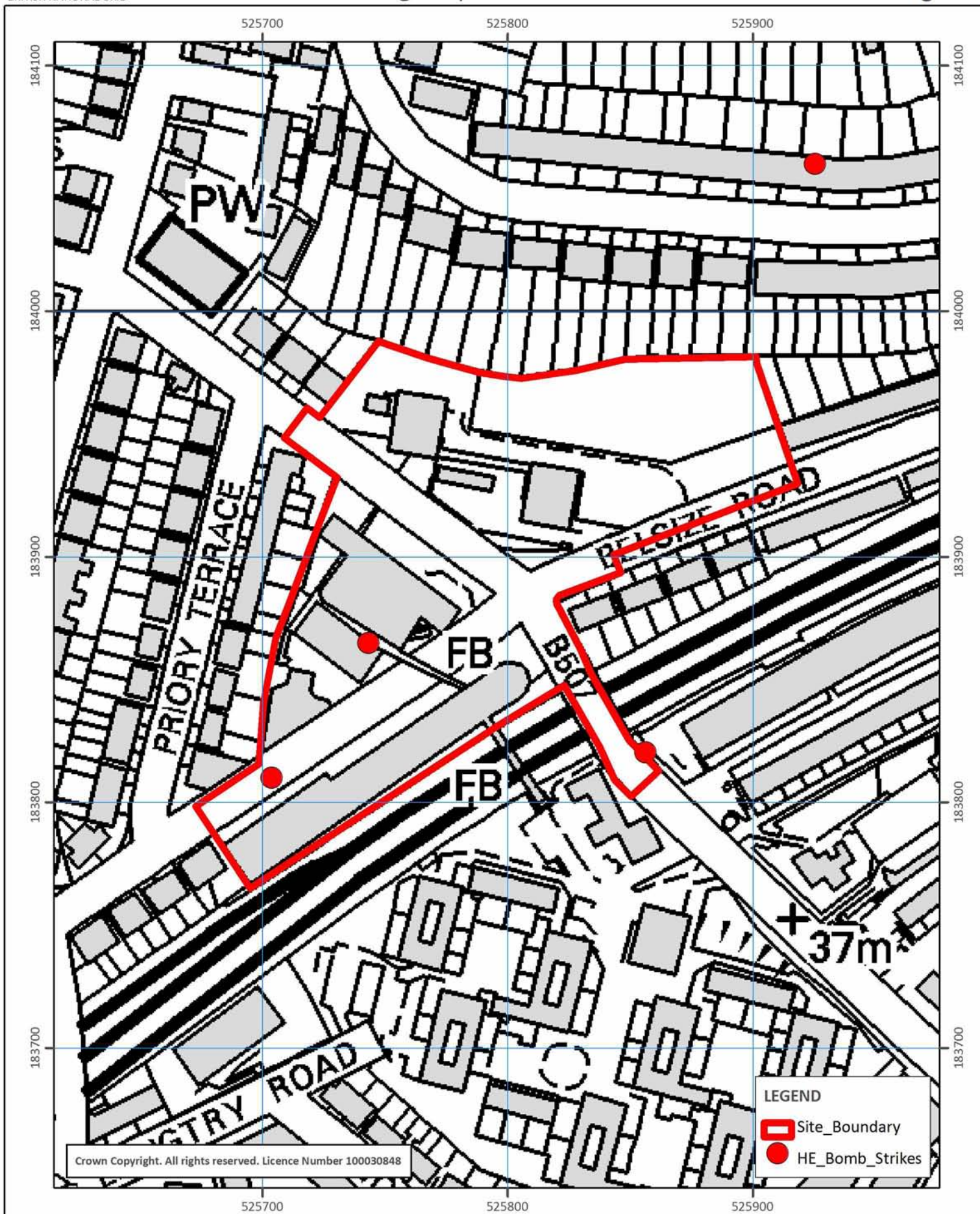


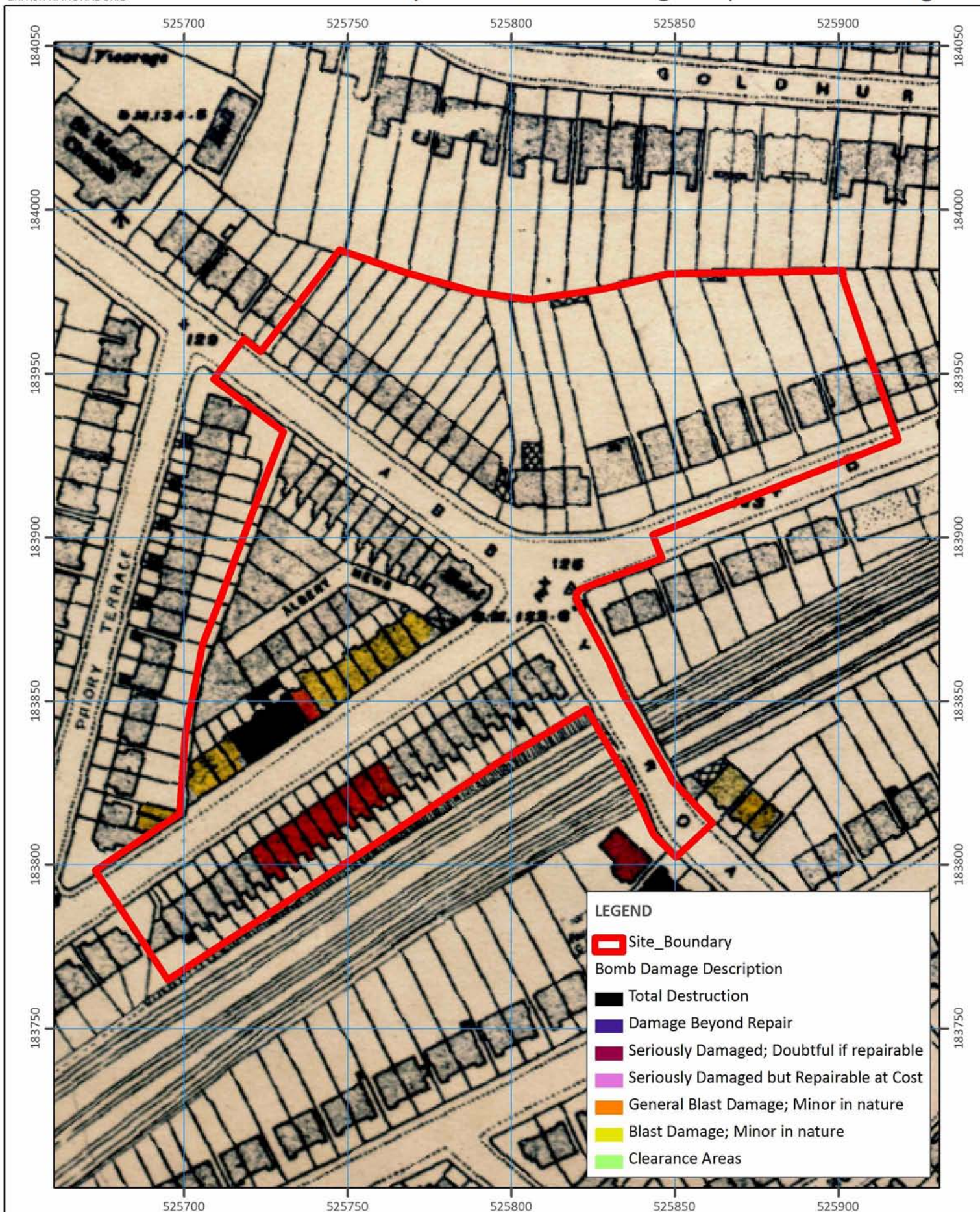
Figure Seven

London County Council Bomb Damage Map

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 **London County Council Bomb Damage Map**

Figure 7

BRITISH NATIONAL GRID



LEGEND

- Site_Boundary
- Bomb Damage Description**
- Total Destruction
- Damage Beyond Repair
- Seriously Damaged; Doubtful if repairable
- Seriously Damaged but Repairable at Cost
- General Blast Damage; Minor in nature
- Blast Damage; Minor in nature
- Clearance Areas

Figure Eight

WWII High Explosive Bombing Density

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 **WWII High Explosive Bomb Density**

Figure 8

BRITISH NATIONAL GRID

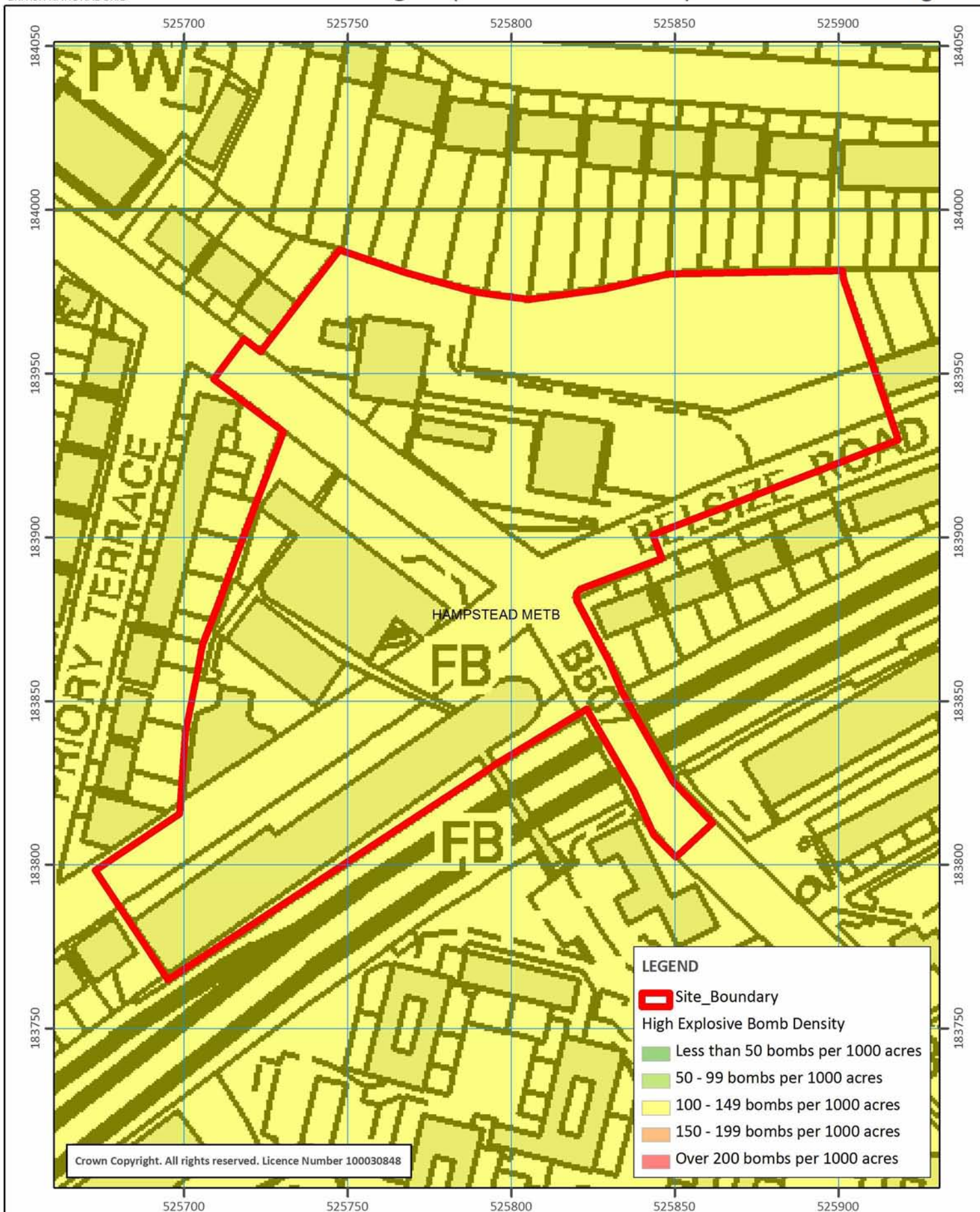


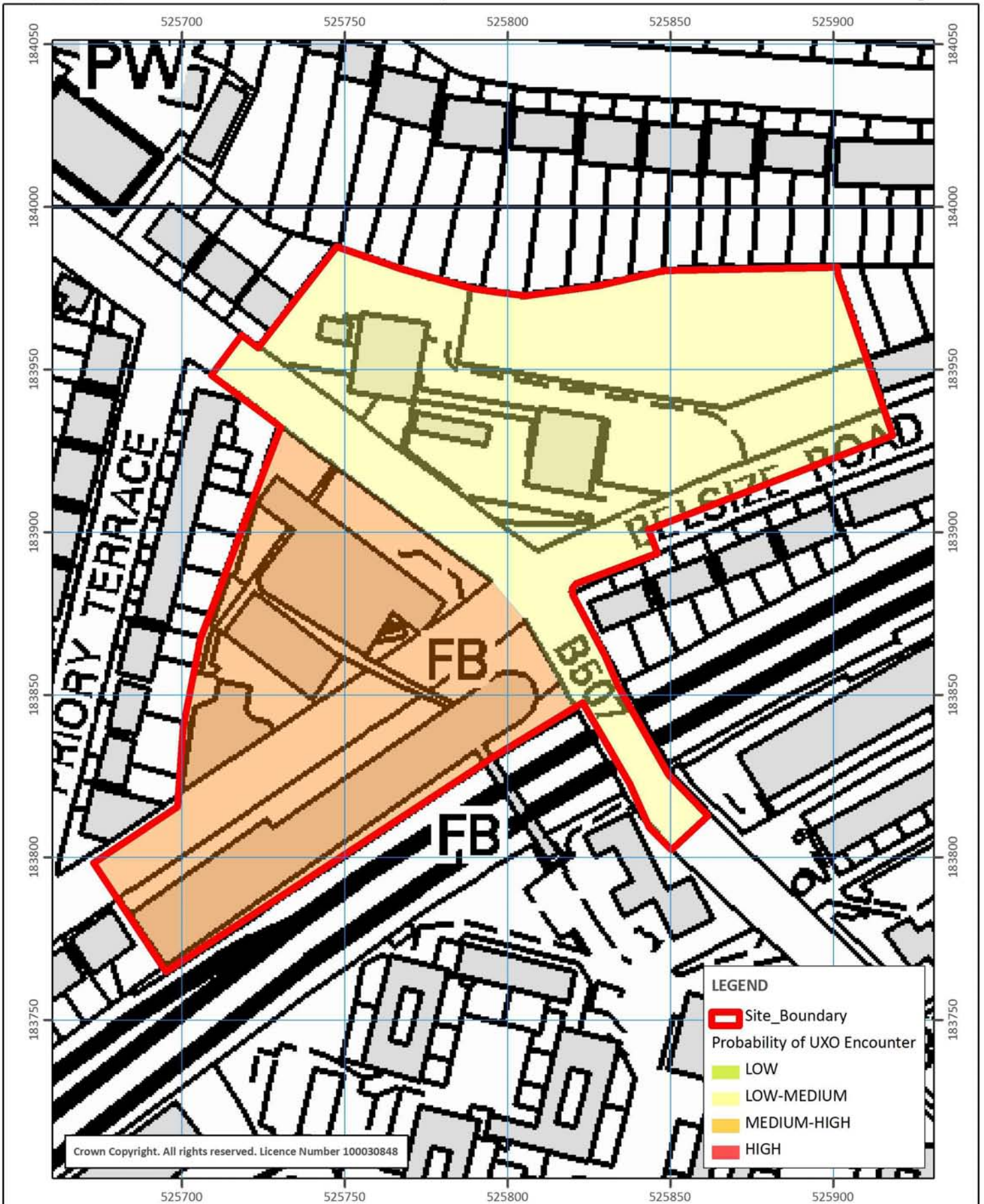
Figure Nine

Probability of UXO Encounter

ABBEY ROAD AND BELSIZE ROAD, KILBURN, NW6 Probability of UXO Encounter

Figure 9

BRITISH NATIONAL GRID



0 5 10 20 30 40 50
Meters

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CHECKED BY	GW
DATE	21st March 2013

Appendix G

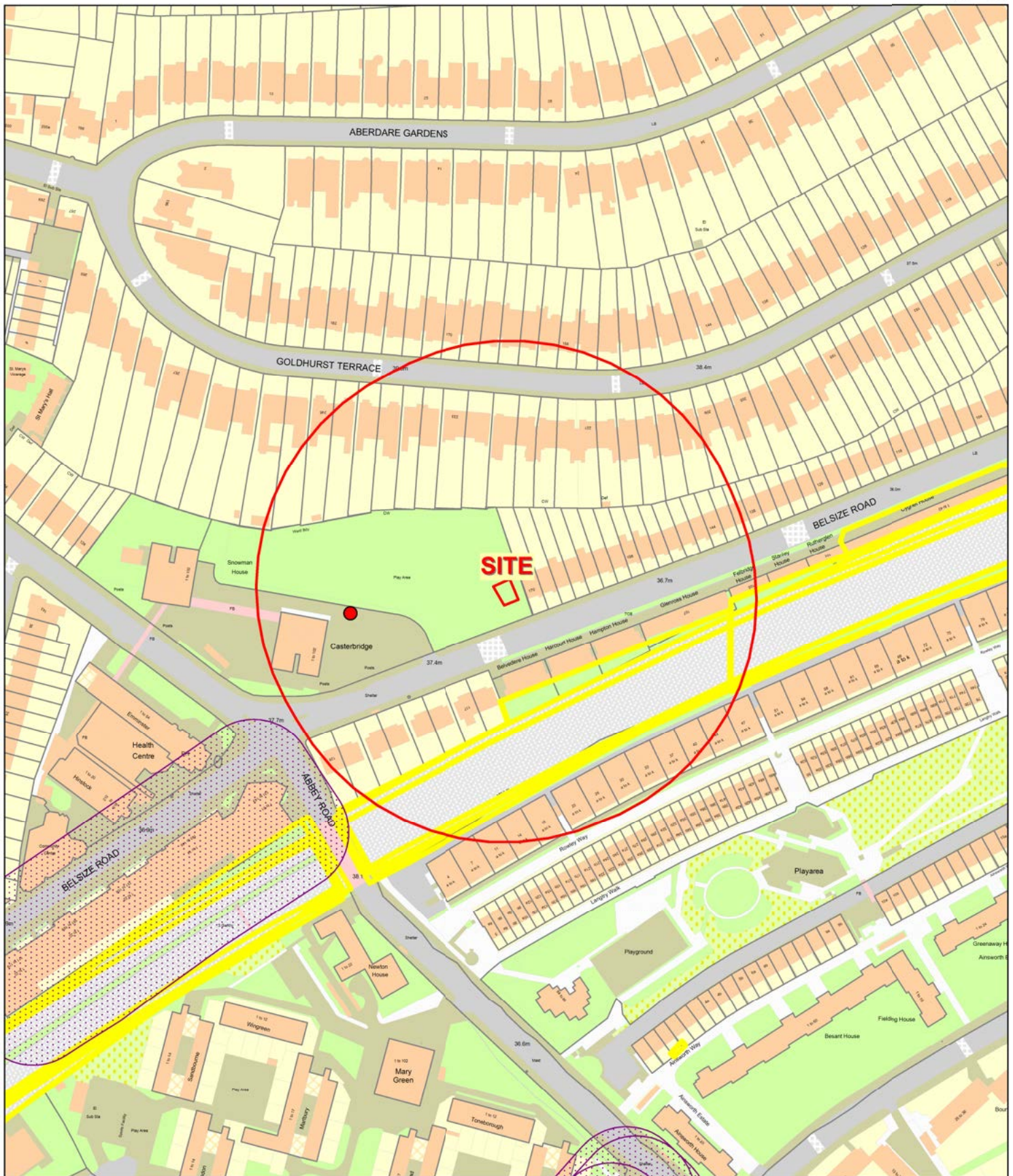
CORRESPONDENCE



Appendix G.1

CORRESPONDENCE 2020





LUHistGeom - Source Risk

- 15 to 27 (119)
- 11 to 14 (641)
- 5 to 10 (785)
- 0 to 4 (374)



Pollution Incident



Part B Sites



Heavy Metals B/G Surv



Kellys Data Buffer25m



HistoricLandfillSite

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Licence number: 100019726 Year:2019



Camden



HistLandfillSite250mBuffer

Survey results	SAMPLE_NO	DESCRIPTION	X	Y	
	38	Casterbridge Belsize Rd 18.4.00	525840	183950	
Arsenic_mg_kg	cadmium_mg_kg	chromium_mg_kg	copper_mg_kg	lead_mg_kg	
17	<1		57	76	870
mercury_mg_kg	nickel_mg_kg	zinc_mg_kg			
	1.2	37	460		

100m Landuse Activities							
UID	UID_Landmark	Desc	MetaData	Epoch	LandUse	LU_model	PredictedSeverity_SV
1789	200276272	1871-1877: Railway Lands	http://svr-app-gis01/metadata/detail.aspx?id=101559	1871-1877	Railway Lands	Railway Land- siding (Medium Risk)	3
1827	200277561	1894-1896: Railway Lands	http://svr-app-gis01/metadata/detail.aspx?id=101559	1894-1896	Railway Lands	Railway Land- siding (Medium Risk)	3
1856	200292642	1909-1922: Railway Lands	http://svr-app-gis01/metadata/detail.aspx?id=101559	1909-1922	Railway Lands	Railway Land- siding (Medium Risk)	3
1851	200282672	1934-1939: Railway Lands	http://svr-app-gis01/metadata/detail.aspx?id=101559	1934-1939	Railway Lands	Railway Land- siding (Medium Risk)	3
1312	200279845	1952-1955: Railway land	http://svr-app-gis01/metadata/detail.aspx?id=101559	1952-1955	Railway land	Railway Land- siding (Medium Risk)	3
624	200281359	1965-1971: Railway land	http://svr-app-gis01/metadata/detail.aspx?id=101559	1965-1971	Railway land	Railway Land- siding (Medium Risk)	3
281	20027567	1971-1988: Railway Land	http://svr-app-gis01/metadata/detail.aspx?id=101559	1971-1988	Railway Land	Railway Land- siding (Medium Risk)	3
873	200279846	1952-1955: Railway land	http://svr-app-gis01/metadata/detail.aspx?id=101559	1952-1955	Railway land	Railway Land- siding (Medium Risk)	3
UID	PredictedPresence_EI	SourceRisk	X	Y	LPG_ResBndryCHK		LPG_grdenChk
1789	3	9	528667.3693	184406.7	2608		999
1827	3	9	528667.4353	184406.4	4040		1736
1856	3	9	528666.4459	184410.4	5003		2061
1851	3	9	528666.4459	184410.4	4638		2026
1312	3	9	525916.9489	183882.7	79		8
624	3	9	525916.652	183882.7	79		8
281	3	9	526069.9937	183953.6	67		0
873	3	9	526066.2917	183952.2	86		0
UID	area_m2						
1789	1221998.18						
1827	1687872.209						
1856	1871287.753						
1851	1828683.952						
1312	5653.008304						
624	5653.008314						
281	6694.218383						
873	7562.231978						

			GQRA Results				
	SAMPLE_ID	DESCRIPTION	Arsenic_mg_kg	cadmium_mg_kg	chromium_mg_kg	copper_mg_kg	lead_mg_kg
Survey results	38	Casterbridge Belsize Rd 18.4.00	17	<1	57	76	870
Generic Assessment Critiera for Public Open Space (Parks) using C4SL (mg/kg)			170	880	250		1300
Generic Assessment Critiera for Public Open Space (Parks) using S4UL (mg/kg).						44000	
			Soil Contaminant <GAC	Soil Contaminant <GAC	Soil Contaminant <GAC	Soil Contaminant <GAC	Soil Contaminant <GAC
Survey results			mercury_mg_kg	nickel_mg_kg	zinc_mg_kg		
			1.2	37	460		
Generic Assessment Critiera for Public Open Space (Parks) using C4SL (mg/kg)							
Generic Assessment Critiera for Public Open Space (Parks) using S4UL (mg/kg).							
			26	3400	170000		
			Soil Contaminant <GAC	Soil Contaminant <GAC	Soil Contaminant <GAC		

Appendix G.2

CORRESPONDENCE 2011



Jones, Samantha

From: Buckland, Vanessa
Sent: 21 February 2011 11:08
To: Logan, Matthew; Jones, Samantha
Subject: FW: Environmental Search - Abbey Road Estate
Attachments: 94-LandUseHistoric.csv; 94-PartBM.csv; 94-KellysLandUse.csv

From: Arthur, Anona [mailto:Anona.Arthur@camden.gov.uk]
Sent: 17 February 2011 18:48
To: Buckland, Vanessa
Cc: O'Hagan, Lisa; Philip, Robert
Subject: Environmental Search - Abbey Road Estate

Dear Vanessa

I have reviewed our records and can provide the following information in relation to your questions

- Any landfill sites within 1000 metres; There are no current landfills located in the London Borough of Camden.
-
- Any private water supplies within 1000 metres; There are no private water supplies located in the London Borough of Camden.
-
- Any Part B Processes (or equivalent) within 1000 metres; Yes, please see attached.
-
- Any reason to believe the site is contaminated or has the site been remediated; Please see historical land uses within 100m attached.
-
- Has the site ever been the source of public complaint? The Contaminated Land Officer does not hold this information.
-
- Is the site to be investigated under the contaminated land regime? The London Borough of Camden has not yet produced a list of sites to investigate under Part 2A of the Environmental Protection Act 1990. This list will only consist of sites deemed high risk.
-
- Are there any other environmental issues associated with the above named site? We are specifically interested in anything that could have lead to contamination of soil or groundwater either beneath the site, in the surrounding area? Our records do not indicate that there have been any pollution or contamination issues surrounding this property. A motor garage is located on the site which has the potential to cause contamination of the ground.
Please refer to the Environment Agency in relation to groundwater.

The above response is provided from such information that is readily available to the Council and in its possession. It is believed to be correct but the Council expressly gives no warranty in this respect nor will the Council accept any liability whatsoever for any error, omission or loss occasioned thereby to any person (whether or not the person requested the information) and in

particular the Council gives no warranty that it has researched all its relevant archives in order to respond to the request for information.

Please contact the undersigned if you wish to discuss this further.

Regards

Anona Arthur
Enviromental Health Officer

Telephone: 020 7974 2990

This e-mail may contain information which is confidential, legally privileged and/or copyright protected. This e-mail is intended for the addressee only. If you receive this in error, please contact the sender and delete the material from your computer

Desc	Date	Old_Road_Name	Old_Road_Number	Site_Specific_Use
Motor Garage Repairers	1989	Belsize Road	131-177	Motor Repairers
Motor Garage Repairs	1951	Belsize Road	197	Motor Garage Repairs & Engineers

UID	Desc	Linkage	MetaData	LandUse	Epoch
200276272	1871-1877: Railway Lands	http://www.camden.gov.uk/green/sections/urban/contamination.html	http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway Lands	1871-1877
200277561	1894-1896: Railway Lands		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway Lands	1894-1896
200279842	1952-1955: Railway land		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1952-1955
200279844	1952-1955: Railway land		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1952-1955
200279845	1952-1955: Railway land		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1952-1955
200279846	1952-1955: Railway land		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1952-1955
200282672	1934-1939: Railway Lands		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway Lands	1934-1939
200292642	1909-1922: Railway Lands		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway Lands	1909-1922
20027567	1971-1988: Railway Land		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway Land	1971-1988
200281357	1965-1971: Railway land		http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1965-1971
200281358	1965-1971: Railway land	http://www.camden.gov.uk/green/sections/urban/contamination.html	http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1965-1971
200281359	1965-1971: Railway land	http://www.camden.gov.uk/green/sections/urban/contamination.html	http://svr-app-gis01/metadata/detail.aspx?id=101559	Railway land	1965-1971

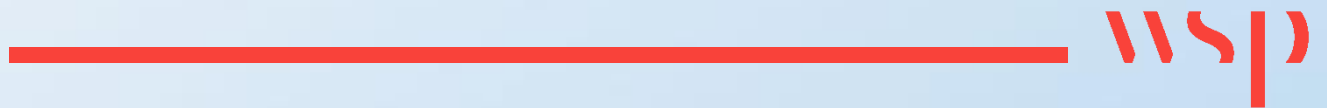
UID	Code	Action	Validation	VDate	User	Linkage	UPRN
13	Hampstead Express Dry Cleaning	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5104917
14	Ariana Hand Laundry Ltd	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5076175
18	Swiss Cottage Dry Cleaners	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5071353
28	Connoisseur Dry Cleaners	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5083951
30	Crest Dry Cleaners	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5046376
33	I.S.Dry Cleaners	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5054274
34	Madame George Dry Cleaners	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5069033
35	Sqweaky Clean Professional Dry Cleaners	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5061692
36	Masterclean Dry Cleanres	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5025096
60	BP Harmony	NO	CC	20070725	envaw09	http://www.camden.gov.uk/ccm/navigation/environment/pollution/air-quality/	5075252

InstallationName	Address1	Address2	Address3	PostCodeAreaDistrict	PostCodeSectorUnit	InstallationType	PGnote	Status	PermitRef
Hampstead Express Dry Cleaning	279a	Finchley Road	London	NW3	6LT	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC6/06
Janet's Hand Laundry Ltd	281a	Finchley Road	London	NW3	6ND	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC14/06
Swiss Cottage Dry Cleaners		121 Finchley Road	London	NW3	6HY	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC10/06
Connoisseur Dry Cleaners		03-May Fairhazel Gardens	London	NW6	3QE	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC11/06
Crest Dry Cleaners		220 Kilburn High Road	London	NW6	4JL	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC24/06
I.S.Dry Cleaners		6 Canfield Gardens	London	NW6	3BS	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC18/06
Madame George Dry Cleaners		227 West End Lane	London	NW6	1XJ	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC15/06
Sqweaky Clean Professional Dry Cleaners		13 Fairhazel Gardens	London	NW6	3QE	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC37/06
Masterclean Dry Cleanres		6 Langtry Walk	London	NW8	0DU	Dry Cleaner	PG6/46 (04)	Operating	PPC/DC38/06
BP Harmony	104a	Finchley Road	London	NW3	5EY	Unloading of Petrol into Storage at Petrol Stations	Pg1/14(06)	Operating	PPC18/07

PermitIssued	x	y	Pollutant
20070112	526178	184902	VOC
20070112	526167	184924	VOC
20070112	526626	184270	VOC
20070112	526262	184119	VOC
20070205	525080	184106	VOC
20070205	526257	184662	VOC
20070112	525499	184882	VOC
20070112	526237	184134	VOC
20070112	526352	184004	VOC
20060321	526459	184554	Benzene

Appendix H

LEGISLATIVE AND PLANNING FRAMEWORK



THE REGULATORY FRAMEWORK FOR OUR ASSESSMENT

Our assessment is made within the framework of the Contaminated Land Regime defined by Part 2A of the Environmental Protection Act and the Contaminated Land Statutory Guidance 2012. We have considered the contaminated land guidance documents issued by the Department for Environment, Food and Rural Affairs (DEFRA) including Model Procedures for the Management of Land Contamination (CLR11) (Environment Agency 2004a).

Our method is to create a clear conceptual model of the potential Pollutant Linkages present on site, consider the Sources (potential contaminants on site) which may cause harm, via Pathways, to Receptors such as human health (e.g. that of site users), the water environment (groundwater) and the built environment (buildings, services). Contaminated Land has a precise definition, and does not include all land which contains contaminants, but only land where there is a Pollutant Linkage causing (or giving rise to a significant risk of) a degree of harm.

Our approach to the assessment of risks to Human Health is consistent with that established in CLR11. This establishes a tiered approach including:

- Preliminary Risk Assessment (e.g. the establishment of potential pollutant linkages) – normally through desk based work;
- Generic Quantitative Risk Assessment (GQRA) (e.g. the comparison of contaminant concentrations against Soil Guideline Values (SGV) or other Generic Assessment Criteria (GAC)); and,

Detailed Quantitative Risk Assessment (DQRA) (e.g. the comparison of contaminant concentrations against site specific assessment criteria).



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