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# **Express** Preliminary UXO Risk Assessment

Client	GEA Ltd.
Project	58a Redington Road
Site Address	58a Redington Road, London, NW3 7RS
Report Reference	EP6811-00
Date	28/06/18
Originator	PB / AB

### **Assessment Objective**

This preliminary risk assessment is a qualitative screening exercise to assess the likely potential of encountering unexploded ordnance (UXO) at the 58a Redington Road site. The assessment involves the consideration of the basic factors that affect the potential for UXO to be present at a site as outlined in Stage One of the UXO risk management process.

### Background

This assessment uses the sources of information available in-house to 1<sup>st</sup> Line Defence Ltd to enable the placement of a development site in context with events that may have led to the presence of German air-delivered or Allied military UXO. The report will identify any immediate necessity for risk mitigation or additional research in the form of a Detailed UXO Risk Assessment. It makes use of 1<sup>st</sup> Line Defence's extensive historical archives, library and unique geo-databases, as well as internet resources, and is researched and compiled by UXO specialists and graduate researchers.

The assessment directly follows CIRIA C681 guidelines "Unexploded Ordnance, a Guide for the Construction Industry". The document will therefore assess the following factors:

- Basic Site Data
- Previous Military Use
- Indicators of potential aerial delivered UXO threat
- Consideration of any Mitigating Factors
- Extent of Proposed Intrusive Works
- Any requirement for Further Work

It should be noted that the vast majority of construction sites in the UK will have a low or negligible risk of encountering UXO and should be able to be screened out at this preliminary stage. The report is meant as a common sense 'first step' in the UXO risk management process. The content of the report and conclusions drawn are based on basic, preliminary research using the information available to 1<sup>st</sup> Line Defence at the time this report was produced. It should be noted that the only way to entirely negate risk from UXO to a project would be to support the works proposed with appropriate UXO risk mitigation measures. It is rarely possible to state that there is absolutely 'no' risk from UXO to a project.



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RISK Assessment Considera	itions
Site location and description/current use	The site is located in a residential area in the London Borough of Camden. It is currently occupied by a residential structure and associated garden area, with the southern section of the garden occupied by trees. It is bordered by Redington Road to the north, with gardens associated with the rows of residential housing along Redington Road and Templewood Avenue situated to the east, south and west of the site. The site is approximately centred on the OS grid reference: <b>TQ 2565886173</b> .
Are there any indicators of current/historical military activity on/close to the site?	1 <sup>st</sup> Line Defence holds no records in-house to suggest any current or historic military activity within the site boundary. The closest area of historic military activity to the site was a weapons pit, located approximately 300m to the north-west of the site, in a rear garden on West Heath Close, now removed. A 'Z' battery was also located on Parliament Hill, approximately 1.4km to the east of the site. Additionally, records indicate that a starfish bombing decoy site for London was located at Hampstead Heath, located approximately 1.3km to the north-east of the site. It should be noted that the presence of the weapons pit, 'Z' battery and decoy site, while worth noting, do not significantly increase the risk from Allied Ordnance on site.
What was the pre- and post- WWII history of the site?	A comparison of pre- and post-war OS mapping indicates that the site remained occupied by a residential building in the north of the site, one house in a row of residential houses along Redington Road, with the remainder of the site occupied by gardens associated with the residential housing both within the site and in the vicinity of the site. In the wider area, no significant changes are shown to the residential streets in the immediate vicinity of the site.
Was the area subject to bombing during WWII?	During WWII, the site was situated within the Metropolitan Borough of Hampstead, which sustained a very high density of bombing. An average of 166 items of ordnance were recorded per 1,000 acres, including 321 HE (High Explosive) bombs, 6 parachute mines, 31 oil bombs, 5 phosphorus bombs, 10 pilotless aircraft (V1s) and 3 long range rocket bombs (V2s). Despite this high density of bombing, London Bomb Census mapping & local bomb mapping do not indicate that the site sustained any bombing incidents throughout the war. The closest recorded bombing incident to the site was recorded approximately 150m to the east of the site near Templewood Avenue.
Is there any evidence of bomb damage on/close to the site?	Neither the LCC Bomb Damage mapping nor low-resolution WWII-era aerial photography indicate that the site sustained any significant damage, with no features indicative of bomb damage, such as missing structures or damage to buildings and roofing, visible on the available photography.
To what degree would the site have been subject to access?	The site was occupied by an undamaged residential house with an associated garden, situated within an urban area typified by residential structures, bordered on three sides by either undamaged housing or a roadway. As such, it is anticipated that the site would have been subject to a frequent level of access, and that any items of UXO falling within the site would have been seen and reported at the time.



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To what degree has the site been developed post-WWII?	Post-war redevelopment has been minimal, with no obvious structural changes visible to the house shown within the site. It is not clear whether any development has occurred within the garden area in the southern section of the site.
What is the nature and extent of the intrusive works proposed?	The proposed works are understood to include trial pits and boreholes to a maximum depth of 15m.

### **Summary and Conclusions**

During WWII, the site was situated within the Metropolitan Borough of Hampstead, which sustained a very high density of bombing, with an average of 166 items of ordnance recorded per 1,000 acres. Despite this high density of bombing, none of the sources consulted at this preliminary stage indicate that the site sustained any direct bombing incidents.

No damage is recorded to the site on the LCC Damage mapping and low-resolution WWII-era aerial photography indicates that the site survived the war in a good condition. The site was situated within a residential area surrounded by roadways and undamaged structures, making it likely that the site was accessed frequently throughout the war and that any items of ordnance would have been seen and reported at the time.

## Recommendations

Given the findings of this preliminary report, no significant risk of encountering any items of UXO at the site could be identified beyond the background level of risk for this area of the UK. Whilst 1<sup>st</sup> Line Defence cannot entirely discount the possibility that items of ordnance could have fallen on the site undetected, it is not considered likely that further research undertaken in the form of a Detailed Risk Assessment would significantly alter the assessed risk level of Low/Minimal. It is therefore **not recommended that any further action** is taken for this site.

If the client has any anecdotal or empirical evidence of UXO risk on site, please contact 1<sup>st</sup> Line Defence.



#### Geotechnical & Environmental Associates

(GEA) is an engineer-led and clientfocused independent specialist providing a complete range of geotechnical and contaminated land investigation, analytical and consultancy services to the property and construction industries.

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