



## Express Preliminary UXO Risk Assessment

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| <b>Client</b>           | Harrow Council                  |
| <b>Project</b>          | Antoneys Close, Harrow          |
| <b>Site Address</b>     | Antoneys Close, Harrow, HA5 3LP |
| <b>Report Reference</b> | EP10691-00                      |
| <b>Date</b>             | 23/03/20                        |
| <b>Originator</b>       | SB                              |

### Assessment Objective

This preliminary risk assessment is a qualitative screening exercise to assess the likely potential of encountering unexploded ordnance (UXO) at the Antoneys Close, Harrow 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.



| Risk Assessment Considerations   |   |
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| Site location and description/current use  | <p>The site is located in Pinner, within the London Borough of Harrow.</p> <p>The site is primarily occupied by Antoneys Close. A residential house is situated in the western section of the site. It is bordered to the north and west by further residential housing situated on Antoneys Close, a wooded area to the east and an area of vegetated land to the south.</p> <p>The site is approximately centred on the OS grid reference: <b>TQ 11654 90207</b>.</p>    |
| Are there any indicators of current/historical military activity on/close to the site? | <p>In-house records do not indicate that the site footprint had any former military use. No features such as WWII defensive positions, encampments or firing ranges are recorded to have been located within or in the immediate vicinity of the site. In addition, no evidence of ordnance being stored, produced, or disposed of within the proposed site boundary could be found.</p> <p>The closest recorded Heavy Anti-Aircraft (HAA) battery was situated approximately 7.7km to the south of the site in the vicinity of open area land. The conditions in which unexploded anti-aircraft ordnance may have fallen unrecorded within the proposed site are analogous to that of aerially delivered Luftwaffe bombs. For a discussion on these conditions, see the relevant sections below.</p>   |
| What was the pre- and post-WWII history of the site?                                   | <p>According to pre-war OS mapping, dated 1932, the site consisted of open and wooded land. The immediate surrounding areas of the site were occupied by areas of open land. Some structures were situated in the vicinity of the site, including a School, located just north of the site.</p> <p>Post-war OS mapping, dated 1964, indicates that no significant changes have occurred on site. The site remains occupied by an area of open land. However, there has been some development in the surrounding area – residential structures have been built to the south and west of the site. An Open Air Altar was constructed to the south-east of the site.</p>   |
| Was the area subject to bombing during WWII?   | <p>The proposed site was situated in the Urban District of Harrow during WWII. Harrow sustained an overall low-moderate density of bombing according to Home Office statistics, with an average of 37 items of ordnance recorded per 1,000 acres. A total of 411 high explosive (HE) bombs, three parachute mines, 30 oil bombs, five phosphorous bombs, 13 V1 pilotless aircraft and four V2 long range rockets were recorded.</p> <p>London bomb census mapping does not record any HE bomb strikes either within, or in the direct vicinity of the site. However, an incendiary bomb ‘shower’ is recorded over the site area and the surrounding vicinity.</p> <p>Local bomb mapping for Harrow indicates that a stick of bombs fell just east of the site boundary, but no further information is available on this incident at this stage.</p> |
| Is there any evidence of bomb damage on/close to the site?                             | <p>Middlesex County Council (MCC) war damage mapping does not record any damage within the site or its vicinity. However, given that the site was occupied by an open area of land, there were no structures on site which damage could be attributed to.</p>   |

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| To what degree would the site have been subject to access?     | Generally, access to large areas of open land is considered to have been infrequent during the war. This may have decreased the likelihood that items of UXO would have been spotted, reported and dealt with.  |
| To what degree has the site been developed post-WWII?          | <p>The site has been redeveloped following the war. The site boundary is now occupied by a hardstanding roadway and two residential houses.</p> <p>The risk of encountering UXO is only considered mitigated at the locations of, and to the depths of, post-war excavations and foundations.</p> |
| What is the nature and extent of the intrusive works proposed? | The exact nature and extent of intrusive works proposed was not available at the time of writing.   |

### Summary and Conclusions

During WWII, the site was situated in the Urban District of Harrow, which sustained an overall low-moderate bombing campaign density according to Home Office statistics, with an average of 37 items recorded per 1,000 acres.

Although London bomb census mapping does not record any HE bombs on or within immediate proximity to the site, local bomb mapping records a stick of bombs just east of the site footprint. What is of concern is that the site, and much of the surrounding area, consisted open land/wooded land during the war period. Access to open areas of land during the war is generally considered to be infrequent, and this may have resulted in an increased likelihood that obvious indications of UXO may have gone unnoticed.

### Recommendations

Given the findings of this preliminary report it is recommended that **further research** be undertaken in the form of a **Detailed UXO Risk Assessment**. Further research would involve visits to local and national archives to gain all relevant information relating to the site. In addition, aerial photography would be obtained in order to determine the conditions on site following the war and to identify any obvious indications of bomb damage. Notably, it would allow further investigation of the recorded bombing incident to the east of the site to see if any more records are available regarding this and to what effect if any it might have had on the site.

**Prior to or in lieu of a Detailed Assessment, it is recommended that appropriate UXO Risk Mitigation Measures are provided for intrusive works proposed.**

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

