

# **TFL\_PSF\_9131 SITE INVESTIGATIONS: SMALL SITES INITIATIVE LAND TO THE NORTH SIDE OF ROYAL MINT STREET AND CABLE STREET, TOWER HAMLETS, E1 8LG**

**Site Ref. 2363**

## **Summary Report**

SEPTEMBER 2017

Incorporating

**EC HARRIS**  
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# Land to the North Side of Royal Mint Street and Cable Street, Tower Hamlets, E1 8LG

## Summary Report

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## 1 Introduction

Arcadis Consulting (UK) Limited (Arcadis) has been commissioned by Transport for London (TfL) 'the Client' to undertake a number of technical surveys for a site known as Land to the North side of Royal Mint Street and Cable Street, Tower Hamlets, E1 8LG ('the Site'). This will be referred to as Cable Street.

TfL is aiming to divest a number of small sites to enable prospective regeneration. The objective of the survey work is to provide robust and pragmatic advice associated with topography and buried services, ecology, arboriculture, archaeology and geotechnical and geo-environmental conditions. This report provides a summary of the technical surveys commissioned for the Site and reference should be made to the individual reports for further detailed information.

The Site is located immediately north of the B126 / Royal Mint Street / Cable Street and west of Cannon Street Road, in the London Borough of Tower Hamlets. The Site is centred at Grid Reference 534587, 180926 and is approximately 0.3 hectares in area. The Site is currently vacant with trees along the southern boundary. The Site includes land that is intended for disposal and land that will be retained by TfL/DLR.

The surveys undertaken at Cable Street include the following;

- Topographical and Buried Services Survey (Ref 1);
- Ecology Survey (Ref 2)
- Arboricultural Survey (Ref 3);
- Archaeological Desktop Review (Ref 4), and
- Geotechnical and Geo-Environmental Desk Study (Ref 5).

A summary of the findings of these surveys are detailed in the following sections.

## **2 Topographical and Buried Services Survey**

The topographical survey indicates that the Site is generally flat with levels recorded between 12m OS and 13m OS.

Three manhole covers are indicated at the eastern and western end of the site. An asset assumed to be surface water drainage is shown crossing the site with associated manhole covers. Consideration will need to be given to these services during development of the Site.

### 3 Ecology Survey

The ecological assessment comprised a desk-based study using publicly available information and an ecological constraints survey to identify potential constraints present on Site.

Ecology is not considered to present a significant constraint to the development of the Site.

No Statutory or non-statutory designated sites (including ancient woodlands or woodlands listed on the Ancient Woodland Inventory (AWI)) were identified within the vicinity of the Site to have the potential to be significantly impacted by development on the Site.

The Site supported a limited range of habitats. The northern and western sections of the site supported a mosaic of tall ruderal and ephemeral/short perennial vegetation with occasional low-lying scrub, grasses and tree saplings. A line of mature deciduous trees was located along part of the southern boundary of the Site.

Although the habitats on Site are generally of poor quality due to the lack of positive management, these habitats are valuable in terms of general green infrastructure, likely performing important ecosystem services (such as water quality and volume attenuation, air quality attenuation etc.).

Within the Site, there was limited potential for protected or notable species. Nesting birds are likely to be utilising the mature deciduous trees on the Site, including potentially species listed on the London Biodiversity Action Plan (BAP) as Priority Species, such as bullfinch and dunnock. Removal of vegetation on the Site will need to be conducted outside of the bird nesting season (March – August inclusive) or under an ecological watching brief.

A mature Purple Leaved Sycamore (*Acer pseudoplatanus purpureum*) tree located in the south-east section of the Site (within the area to be retained by DLR) supported two cavities, each of which were assessed as having a low potential to support roosting/hibernating bats. Suitable foraging and commuting habitat for bats in the wider landscape is limited. If the Purple Leaved Sycamore tree is to be affected by new development (i.e. require removal), it is recommended that the cavities are inspected with an endoscope by a licenced bat worker to confirm the status of the tree with regards to roosting bats.

A squirrel drey was recorded in the south-east section of the Site. Although grey squirrel is regarded as an invasive non-native species included on Schedule 9 Wildlife and Countryside Act, they are protected against inhumane killing under the Wild Mammal (Protection) Act 1996. The Act protects mammals against being inhumanly killed or harmed. Typically, there are two main breeding seasons when young are in the drey (February to August inclusive). Reasonable avoidance includes soft felling the tree, pest control methods (e.g. live trapping and poisoning).

Should tree removal be required trees should ideally be re-provisioned on the Site within any development, if on-Site re-provisioning is not possible off-Site mitigation should be considered. These should be of a suitable species, preferably native species of local origin. In addition, consideration to biodiversity roofs, rain gardens and other green infrastructure should be included in any development.

There will be some ecological benefit from the removal of non-native and invasive species listed on the LISI (London Invasive Species Initiative) list which are present on the site including Butterfly-bush. There is no legal obligation to control or remove these species however it is good practice to do so. Removal of the vegetation from the site to facilitate the development would likely adequately eradicate the majority of the LISI species from the site.

## 4 Arboricultural Survey

An arboricultural survey was conducted in accordance with British Standard 5837: 2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

The Site is not within a Conservation Area and none of the trees surveyed are protected by Tree Preservation Orders.

A total of 31 arboricultural items were recorded within the study area (the Site and its immediate surroundings). These were all recorded as individual on-site trees of which 18 have been identified as Category B (trees of moderate quality) and should be considered for retention where possible, 13 have been identified as Category C (trees of low quality). These trees should not place a constraint on the development layout but should be considered for replacement should they be removed. The dominant tree species within the Site is the Norway maple (*Acer platanoides*). The location of these trees shields the flats adjacent to Cable Street's view of the rail tracks and are likely to contribute to reduction in noise and light levels. This should be considered during development proposals.

While unlikely to prevent development, tree protection for trees to be retained and tree re-provisioning for any trees lost due to development are a material consideration for planning determination. If trees cannot be replaced on-Site due to development, off-Site options for tree re-provisioning to ensure no net loss should be considered. Individual Local Planning Authorities may ask for re-provisioning in excess of 1 to 1 for trees of Category A or B.

Should any future development proposal require the removal of trees or incursions into the Root Protection Areas (RPAs) of any trees, an Arboricultural Impact Assessment (AIA) would be required in support of any planning application.

A bespoke AMS may be required post planning and when the construction details are known by the local planning authority (LPA) to protect the retained trees within and adjoining the Site.

All new tree planting should be in accordance with British Standard 8545: Trees: From Nursery to Independence in the Landscape – Recommendations, 2014; and all tree works must be carried out by a qualified contractor in accordance with BS3998:2010: Tree Work – Recommendations.

## 5 Archaeological Desktop Review

An archaeology desktop review for a site on the north side of Mint Street and Cable Street, Tower Hamlets has been carried out. This was a rapid information-gathering exercise on the Site and a 500m study area using information from publicly held sources. A brief assessment of potential heritage/archaeological constraints and opportunities at the Site has been made.

The Site lies within an archaeologically rich area and the review has assessed that there is a medium potential for buried archaeological remains to be present. The Site lies within the western part of the Tower Hamlets Archaeology Priority Area (APA) due to being within the Roman 'Eastern Cemetery'. It lies to the north of a Roman road (The Highway) which was a principal route leading eastwards from the Roman city walls. There are also medieval occupation and industrial remains along Cable Street and the Highway and to the west, along Dock Street. Although the Site has potential for buried archaeological remains to exist, these heritage assets are not considered likely to be a barrier to development on the Site.

There are no Scheduled Monuments within the study area. There are 43 Listed Buildings (one Grade I, one Grade II\*, the rest Grade II) within the study area but none within the Site boundary. There are nine Locally Listed Buildings, or rows of buildings, within the study area but none within the Site boundary. The Site does not lie within a Conservation Area, however it is adjacent to the St George in the East Conservation Area.

For any future planning application, the potential for below ground remains need to be fully evaluated. The Greater London Archaeological Advisory Service (GLAAS) who advise the local planning authority are likely to recommend a full archaeological desk-based assessment (DBA) for the Site as well as an evaluation to be undertaken prior to planning permission being determined. The DBA would include a specific archaeology Site walkover, a visit to the record office to gather historic maps and relevant documentary evidence, a map regression exercise as well as preparation of distribution maps showing designated and un-designated heritage assets. The evaluation would likely consist of a programme of trial trenching and subsequent reporting. If heritage assets of significance are encountered during the evaluation stage, there may be a requirement for further recording in the form of an excavation or watching brief. This may be delivered through a post-determination condition.



## 6 Geotechnical and Geo-Environmental Desk Study and Preliminary Investigation

The geo-environmental and geotechnical desk study comprised a review of existing historical and current information on the Site. The Site is a vacant parcel of land currently overgrown with grass and trees in the south. The Site is located within a largely residential area (predominantly apartments) with local amenities and commercial uses. The Docklands Light Railway is located to the north of the Site on a viaduct parallel to the site. The history indicates developments within the Site including residential / possibly commercial properties which were later demolished and a coal depot was recorded.

A preliminary site investigation was undertaken comprising two cable percussive boreholes to investigate ground conditions and to provide an indication of the levels of contaminants in the Site.

Potential risks to human health, controlled waters and the built environment have been identified from on-Site Made Ground and hydrocarbons and vapours are possible risks to human health from the off-Site sources such as works, tanks and garages. The proposals for the Site are unknown and, therefore, a conservative assumption of residential housing with private gardens has been used for the assessment. Gross contamination was not encountered during the preliminary ground investigation, however, concentrations of contaminants (lead and asbestos) within the Made Ground were recorded in excess of applicable guideline values.

Further development-specific ground investigation will be required to confirm any mitigation requirements. Workstreams may include (but not limited to):

- Confirming concrete design for sulphate resistance for foundations and services;
- Determining the extent and depth of buried obstructions within the Site;
- Further gas monitoring and assessment of the potential risk of ground gases to receptors, and determining whether gas protection measures would be required for future development;
- Consideration of shrinkage and swelling, trees, potential for relict shear slip surfaces and buried services may need to be considered during the design; and
- UXO mitigation.

Based on the findings of the desk study and investigation report, and assuming that the Site will be developed for residential use, it is anticipated that some remediation (off-site disposal, clean cover, gas membrane, basic asbestos monitoring and pipe upgrade but excluding foundation) may be required.

Material re-used on-site would need to be assessed in terms of its chemical and geotechnical suitability for reuse as engineering or landscaping fill. If off-site disposal is required, a waste assessment for the Made Ground and shallow soil materials would need to be undertaken to determine whether they are classified as hazardous or non-hazardous waste. Based on a preliminary assessment, Made Ground associated with the structures in the west of the Site may be hazardous due to elevated lead concentrations, and other Made Ground material may be hazardous depending on the quantity of asbestos present.

The western part of the Site is classified as 'moderate' potential of encountering unexploded ordnance (UXO) and UXO mitigation will be required where excavations or piling / boreholes are proposed. The remainder of the site is classified as low UXO risk.

## 7 References

1. 40Seven (August 2017) Topographical Survey.
2. Arcadis Consulting (UK) Limited (September 2017) Land to The North Side Of Royal Mint Street And Cable Street, Tower Hamlets, E1 8LG. Ecology Assessment (Report Number 1102-UA009686-UE21R-01)
3. Arcadis Consulting (UK) Limited (September 2017) Land to The North Side Of Royal Mint Street And Cable Street, Tower Hamlets, E1 8LG Preliminary BS5837 :2012 Tree Survey (Report 1103-UA009686-UE21R-01)
4. Arcadis Consulting (UK) Limited (July 2017) Land to The North Side Of Royal Mint Street And Cable Street, Tower Hamlets, E1 8LG Archaeology Desktop Review (Report 1104-UA009686-UE21R-01)
5. Arcadis Consulting (UK) Limited (September 2017) Land to The North Side Of Royal Mint Street And Cable Street, Tower Hamlets, E1 8LG. Geotechnical and Geo Environmental Desk Study (Report Number 1601-UA009686-UP32R-01)

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