

# TFL\_PSF\_9131 SITE INVESTIGATIONS: SMALL SITES INITIATIVE SITE 13 WESTERN AVENUE, LONDON, W3 7EF

## Summary Report

FEBRUARY 2019

Incorporating

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# Site 13 Western Avenue, London, W3 7EF

## Summary Report

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# 1 Introduction

Arcadis Consulting (UK) Limited (Arcadis) has been commissioned by Transport for London (TfL) to undertake a number of technical surveys for a site referred to as Western Avenue, London ('the Site').

TfL is aiming to divest a number of small sites to enable prospective regeneration. The objective of the Small Sites Initiative is to provide robust and pragmatic advice that sensibly de-risks each of the sites such that unreasonable "abnormal" development costs are not incurred by developers.

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 covers approximately 0.1 hectares and is centred at National Grid reference (NGR) 21420 80873. The Site is bounded by a brick wall along a pathway along Western Avenue to the north. Glendum Road and pathway to the east, a metal fence and pathway along a road to a block of flats to the south and an area associated with the flat complex to the west. The Site is currently occupied by an area of over grown trees and shrubs.

The surveys carried out for Western Avenue comprise the following;

- Topographical and Buried Services Survey (Ref 1);
- Archaeological Desktop Review (Ref 2);
- Ecology Assessment (Ref 3);
- Arboricultural Survey (Ref 4); and
- Geotechnical and Geo-Environmental Desk Study Report (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 slopes downwards to the east. Levels measured in the western part of the Site are around 12.99m whilst on the eastern boundary they are measured at 11.44m (Ordnance Survey Datum).

Trees are indicated along the northern part of the Site, with the south western part being overgrown with vegetation. A concrete area is shown on the eastern part of the Site.

Water and Electricity services are indicated to cross the Site at the eastern end. On the pavement around the Site and especially at the western end, there are several control cabinets (CC) and inspection covers (IC) indicated. There is telecommunications mast at the western end.

### 3 Archaeology Desktop Review

An archaeological desk-top review for the Site has been undertaken. This involved a rapid information gathering and review of the Site and a 500m study area using information from publicly held sources. The work comprised a review of potential heritage/archaeological constraints and opportunities.

There are no scheduled monuments, listed buildings, world heritage sites, registered parks and gardens or battle fields within the Site or study area. There are, however, two conservation areas: Acton Park (with one locally listed building, the Goldsmiths Arms), located to the south west of the Site and Old Oak and Wornholt, to the east. The Greater London Historic Environment Record (GLHER) has identified no non-designated assets within the Site but 10 within the study area. These date from the Prehistoric to Modern periods. These assets will not be impacted by the proposed development as they are too far away and screened from view by Modern buildings.

There has been one archaeological event on the Site, and four within the study area. The event on the Site was a desk-based assessment on fifteen sites either side of the A40. Some of these sites have potential for previously unrecorded archaeological remains. The rest of the archaeological events in the study area have little bearing on the archaeological potential of the Site or its study area as no archaeological remains were encountered.

Overall the review has identified that there is a low to medium potential for buried Medieval remains, medium to high potential for Modern and a low to medium potential for all other time periods to survive on the Site. This potential mainly resides in the close proximity that the Site has to the Medieval East Acton archaeological priority area and the artefacts and archaeology found within the study area. However due to the construction and demolition of a Modern block flats on the Site it is not clear how well the remains would have survived. The Modern period is well represented on the Site as it once contained a flat complex. This housing could remain as below ground archaeological remains in the form of brick foundations and occupation debris. At present it is not considered that the archaeological potential on the Site would impinge on any future development.

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 that the Site is archaeologically evaluated. This is mainly due to the close proximity of the archaeology priority area to the Site.

## 4 Ecology Assessment

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

Based on the assessment undertaken to date, there are no likely significant ecological constraints with regards to the development of this Site.

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

Constraints are listed below:

- The Site was dominated by dense scrub and scattered trees. The habitats on Site were generally un-diverse due to the lack of positive management. However, these habitats have value in terms of green infrastructure, likely performing important ecosystem services (such as water quality and volume attenuation and air quality attenuation etc.).
- Given the presence of four birds' nests (unoccupied at the time of the survey) It is highly likely that nesting birds will continue to utilise the vegetation on the Site, including species listed on London BAP and Priority Species S41 such as house sparrow. Removal or management of trees and scrub on the Site will need to be conducted outside of the bird nesting season (March – August inclusive) or under an ecological watching brief.
- There is potential for fox and hedgehogs which is a London BAP and Priority Species S41 (also protected from inhumane killing or injury) to use the Site. Employ a two-stage removal of scrub suitable for hibernating hedgehogs should this be required during the hibernation season (November to March seasonally dependant).
- Despite habitat potentially suitable for reptiles being present on Site, the presence of reptiles is considered unlikely due to the size and lack of habitat connectivity to other potentially suitable habitats.
- Trees and other vegetation should be replaced within any proposed soft landscaping and these designs should be evolved in liaison with an ecologist and arboriculturist. In addition, rain gardens, biodiversity roofs and other green infrastructure should be considered within any development.
- There are also opportunities for enhancements for London BAP species. Bird boxes for sparrows would be a valuable enhancement, along with bat roosting boxes. Implementation permeable fencing would be of benefit to small mammals, such as hedgehog, which is a priority species currently in decline.

## 5 Arboricultural Survey

A constraints walkover and assessment was conducted to describe the general arboricultural features and potential constraints with regards to trees on Site.

A total of 19 arboricultural items were recorded within the study area as follows:

- Fourteen individual trees on-Site;
- Five individual trees on the south side of Western Avenue

Within the Site fourteen individual trees and one off Site individual tree were graded as Category B (trees of moderate quality) and five off Site individual trees have been identified as Category C (trees of low quality).

In the absence of a design layout for the site, it is difficult to say whether the trees would need to be removed and if there is space for any new trees to be re-provisioned on the site. Once designs are developed then this could be determined.

There is currently no proposed design layout and therefore it is not possible to say whether the trees would need to be removed and if there is space for any new trees to be re-provisioned on the site. This can be determined once designs are developed.

The dominant tree species within the Site is Common lime (*Tilia x europaea*).

While the Site is not within a Conservation Area nor are any of the trees covered by a TPO, the location of the on-Site trees shields the properties adjacent to Western Avenue view of the busy road and are likely to contribute to noise and light level reduction. 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 B grade.

The main development considerations for the trees are:

- Over-hanging crowns;
- The planting location, height, width and density of the crowns will cast shade on to the Site;
- The RPA of the trees within the Site; and
- According to British Geological Survey on-line map the Site is on London Clay. Therefore, the foundation design of any proposed new structure will have to reduce the risk of vegetation induced clay shrinkage subsidence damage occurring.

Should any future proposed development require tree removals or RPA incursions within RPAs of the retained trees an Arboricultural Impact Assessment (AIA) will be required by the LPA in support of a planning application.

A bespoke Arboricultural Method Statement may be required post planning and when the construction details are known 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

## 6 Geotechnical and Geo-Environmental Desk Study

The geo-environmental and geotechnical desk study comprises a review of existing historical and current information on the Site. No intrusive site investigations have taken place.

The historical review revealed previous development on the Site to be residential buildings and an electricity substation in the south-eastern corner of the Site, both of which were built and demolished between circa 1955-2006. This indicates the potential presence of Made Ground, Polychlorinated Biphenyls (PCBs) and hydrocarbons. Several potential offsite sources of contamination have been identified, however these are all considered unlikely to impact the Site due to their location down hydraulic gradient or the length of time since their presence.

Potential risks to human health and the built environment have been identified associated with potential on-site sources of Made Ground, rubbish / fly tipping and a historical electricity substation. No sensitive controlled water receptors have been identified.

It is recommended that an intrusive site investigation is carried out prior to redevelopment to quantify these risks. This should include the contamination testing of soils and leachates, groundwater monitoring (if encountered) and gas monitoring in accordance with best practices and current guidance.

Potential founding solutions will be dependent on the encountered thickness of Made Ground and the geotechnical properties of the natural deposits. Made Ground is generally considered unsuitable for foundations due to its variable composition and its potential for high total and differential settlement. Deeper trench fill may be possible although the maximum practical extent of this type of foundation is in the region of 2-2.5m. In areas of deeper Made Ground, or where deeper soft / loose bands are recorded either piling or ground treatment e.g. vibro-stone columns should provide a suitable foundation solution. The advice of a specialist ground improvement contractor should be sought to verify the suitability of the ground for treatment. The presence of existing and future trees should be considered, as well as the risks associated with London Clay.

The Site is located in an area where there is a 'moderate' risk of encountering unexploded ordnance. Further assessment of the potential for encountering UXO is recommended.

## 7 References

- 1) 40Seven (2019) TfL Sites Phase 2 Small Sites Western Avenue Pas128 M4p Underground Utility Mapping Survey (1670\_P\_Western\_Avenue)
- 2) Arcadis Consulting (UK) Limited (2019) TfL Phase 2 Site Investigations: Small Sites Initiative Western Avenue, 10024781-ARC-05-XX-RP-YY-0001-01-Archaeology Desktop Review
- 3) Arcadis Consulting (UK) Limited (2019) Western Avenue, Ecology Assessment (Report Number 10024781-ARC-05-XX-RP-YY-0001-01-Ecological Assessment)
- 4) Arcadis Consulting (UK) Limited (2019) Western Avenue, Preliminary BS5837:2012 Tree Survey Report (Report Number 10024781-ARC-05-XX-RP-YY-0001-01-Arboricultural Report)
- 5) Arcadis Consulting (UK) Limited ((2019) Western Avenue, Geotechnical and Geo Environmental Desk Study (Report Number 10024781-ARC-05-XX-RP-YY-0001-01-Geo Report)

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