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PLANNING

LAND TO THE WEST OF THE FORMER ROYAL
MAIL SORTING OFFICE,
LONDON ROAD, TWICKENHAM

Ecological Appraisal 2015
to address Condition U62138NS14 of the
planning permission (DC/CAM/13/1147/FUL/FUL)

September 2015
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1. INTRODUCTION

1.1. Background and Proposals

1.1.1. Aspect Ecology was commissioned by St James Group Ltd in August 2015 to undertake an update ecological appraisal of the site, located west of the former Royal Mail Sorting Office at London Road, Twickenham (see Plan 2720/MOL1). Aspect Ecology have previously undertaken work within the development site in June 2013 comprising an Extended Phase 1 Habitat Survey as set out within the report entitled 'Land to the West of the former Royal Mail Sorting Office, London Road, Twickenham. Ecological Assessment' dated June 2013. Additionally Aspect Ecology carried out survey work in relation to the former Twickenham Sorting Office in August 2011.

1.1.2. The site is proposed for change of use to public amenity land, including the provision of a new 3m wide footpath/cycleway and associated habitat management works, for which planning permission has been granted by The London Borough of Richmond Upon Thames (ref: DC/CAM/13/1147/FUL/FUL). The planning permission includes a number of conditions, including condition 'U62138NS14', which this report addresses. The condition states:

"An enhanced Phase 1 Habitat Survey and Bat Survey shall be submitted to and agreed in writing by the Local Planning Authority.

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land."

1.2. Site Location and Characteristics

1.2.1. The site is situated west of the former Royal Mail Sorting Office, accessed off London Road, within the centre of Twickenham, opposite Twickenham rail station. The site is located immediately south of the River Crane, which forms the northern site boundary, whilst much of the southern site boundary is located adjacent to an existing, active railway line, set on a steep embankment up from the site. West of the site is an area of allotments and an existing footpath that crosses a footbridge over the railway to the south. To the east of the site is the Former Royal Mail Sorting Office which at the time of survey was an active construction site.

1.2.2. The site itself is dominated by Bramble *Rubus fruticosus* thicket with colonising ruderal species and areas of dense scrub. These habitats appear to have received little in the way of recent management, such that the vegetation is tall and impenetrable in places. Since the survey work undertaken in June 2013 the Bramble thicket appears to have further dominated the site in parts, growing over the majority of the path that was recorded to be present in 2013. The eastern part of the site includes an area of woodland, along with cleared activity areas associated with an adjacent Youth Centre. A small patch of amenity grassland is additionally present in the far north-eastern corner of the site.

1.3. **Ecological Appraisal**

- 1.3.1. This document assesses the ecological interest of the site as a whole and addresses condition 'U62138NS14'. The importance of the habitats present is evaluated. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and where appropriate, reference is also made to both the National and Local Biodiversity Action Plans where appropriate.

2. SURVEY METHODOLOGY

- 2.1. The methodology utilised for the survey work can be split into 3 main areas: desktop study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desktop Study

- 2.2.1. Given that a desktop study was recently undertaken in June 2013 it was not considered necessary to undertake a full update desktop study. Details of the methodology of the desktop study undertaken in 2013 (updated in 2015 where appropriate) are set out below.
- 2.2.2. In order to compile background information on the site and its immediate surroundings, information on statutory nature conservation designations was reviewed on the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England. The database was originally reviewed in 2013, and updated in 2015. This information is reproduced at Appendix 1 and, where appropriate, on Plan 2720/MOL2.
- 2.2.3. In addition, the London Borough of Richmond planning proposals map, London Borough of Richmond Upon Thames Local Biodiversity Action Plan (BAP) and online information available from Greenspace Information for Greater London (GiGL) was reviewed in order to provide information on the locations and nature of non-statutory nature conservation designations. This information is discussed in the relevant sections below and reproduced, where appropriate, on Plan 2720/MOL2.
- 2.2.4. The National Biodiversity Network (NBN) database was also reviewed for up to date relevant records where appropriate in respect of the site and adjacent areas in order to fully inform the ecological assessment. Where records are held, these are available via the NBN, but cannot be specifically referenced without further permission from the information provider.
- 2.2.5. The Woodland Trust database was searched for any records of veteran trees within or adjacent to the site, while the Freshwater Habitats Trust database was searched for any records of priority ponds or important areas for ponds in the vicinity of the site. A search of the brownfields habitats database for Open Mosaic Habitats was also conducted in September 2015.

2.3. Habitat Survey

- 2.3.1. The site was originally surveyed in June 2013, with update survey undertaken in August 2015, in order to ascertain the current ecological value of the land contained within the boundaries of the site and to identify the main habitats and features present.
- 2.3.2. The site was surveyed based on extended Phase 1 survey methodology¹, as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be

¹ Handbook for Phase I habitat survey: A technique for environmental audit. JNCC, 2010.

examined in more detail. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal (GPEA)², to include recording details of notable or protected species present within the survey area, or habitats present that have the potential to support notable or protected species.

- 2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.4. Faunal Surveys

- 2.4.1. General faunal activity such as mammals or birds observed visually or by call during the course of the survey was recorded. Particular attention was paid to the potential presence of any protected, rare or notable species.

Bats³

- 2.4.2. **Building Inspections.** The single building within the site was subject to interior and exterior inspection surveys in August 2015 to check for potential bat use, using ladders, torches, mirrors and binoculars where necessary. This comprised an external assessment to identify any obvious access points or features providing roosting opportunities (e.g. hanging tiles, soffit boxes), and an internal investigation of the building to record any evidence of bats. Specific searches were made for bat droppings that can indicate present or past use and the extent of use, whilst other signs that can indicate the possible presence of bats were also searched for, e.g. presence of stained areas or feeding remains.

- 2.4.3. **Tree Assessment.** A number of trees were recorded to be present within the site and along its boundaries. These were assessed for their potential to support roosting bats, with particular attention paid to the following features, where these were recorded to be present:

- Obvious holes e.g. rot holes and old Woodpecker holes.
- Dark staining on the tree, below the hole.
- Tiny scratch marks around a hole from bats' claws.
- Cavities, splits and/or loose bark from broken or fallen branches, lightning strikes, etc.
- Very dense covering of mature ivy over trunk.

- 2.4.4. Accordingly, trees were investigated in regard to these features, where appropriate. In terms of potential to support roosting bats, trees were ranked in accordance with the criteria set out in the BCT's Good Practice Guidelines⁴:

- *Known or confirmed roost;*
- *Category 1* – trees with multiple, highly suitable features capable of supporting larger roosts;*

² Institute for Ecology and Environmental Management (IIFM) (2012) "Guidelines for Preliminary Ecological Appraisal"

³ Surveys based on: English Nature (2004) "Bat Mitigation Guidelines" & Bat Conservation Trust (2012) "Bat Surveys – Good Practice Guidelines" 2nd edition.

⁴ Hundt, L, ed. (2012) – *Bat Surveys Good Practice Guidelines*, 2nd edition. Bat Conservation Trust

- *Category 1* – trees with definite bat potential, although supporting fewer features than category 1* trees;
- *Category 2* – tree supporting some features with limited potential to support bats, or of a size and age that some cracks or crevices may be present;
- *Category 3* – trees with no potential to support bats.

2.5. Scoping

- 2.5.1. The scope of the above survey work was set out in a letter to the Local Planning Authority in August 2015 (as shown at Appendix 2) to which no objection or comment was received.

2.6. Survey Constraints

- 2.6.1. All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons. Areas of dense Bramble/scrub/vegetation are impenetrable and, accordingly, could not be directly accessed and clearly viewed, whilst the inaccessible areas were viewed from the margins and through surrounding vegetation and appeared of the same nature and character to those areas closely inspected, such that it is considered that a robust assessment could be made. The Phase 1 survey that forms the basis of the habitat descriptions was undertaken in August 2015, within the optimal seasonal period for such survey work and accordingly is considered to have allowed a robust assessment of the intrinsic ecological interest of the site to be made. Specific constraints or considerations, in particular associated with faunal survey work are discussed individually within the text where appropriate, although no significant constraints were encountered.

2.7. Ecological Evaluation

- 2.7.1. The evaluation of ecological features and resources has been based on that described in 'Guidelines for Ecological Impact Assessment in the United Kingdom' published by the Institute of Ecology and Environmental Management (IEEM) in 2006. In evaluating ecological features and resources the following key factors are taken into account:

Geographic Frame of Reference

- 2.7.2. The value of an ecological feature or resource is determined within a defined geographical context using the following frame of reference:

- International
- National
- Regional
- County (or Metropolitan)
- District (or Unitary Authority, City or Borough)
- Local (or Parish)
- At the Site level only

- 2.7.3. Within this frame of reference, certain sites may carry a statutory ecological designation, e.g. Special Area of Conservation (SAC) for internationally

important sites or Site of Special Scientific Interest (SSSI) for sites of national importance.

- 2.7.4. Sites of more localised nature conservation importance do not receive statutory protection but may be designated by Local Planning Authorities or other bodies, e.g. Wildlife Trusts. Such non-statutory designations or "Local Sites"⁵ include County Wildlife Sites (CWSs) and Sites of Nature Conservation Interest (SNCIs), for example.

Biodiversity Value

Habitats

- 2.7.5. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, "Guidelines for the selection of biological SSSIs" and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat can also be an important consideration, for example in the case of ancient woodland.
- 2.7.6. Regard should also be given to habitats listed as priorities for conservation under Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', as the likely effect of a development on such habitats is a potential material consideration within the planning process. Certain habitats may also be listed within more regionally or locally specific Biodiversity Action Plans (BAPs), albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.

Species

- 2.7.7. The assessment of the value of a species is based on factors including distribution, status, historical trends, population size and rarity. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.
- 2.7.8. For certain species groups, e.g. waterfowl, there are established criteria that can be used for defining nationally and internationally important populations.
- 2.7.9. Regard should also be given to species listed as priorities for conservation under Section 41 of the NERC Act 2006, so called 'Species of Principal Importance' or 'Priority Species'. Certain species may also be listed within more regionally or locally specific BAPs, albeit as with habitats the listing of a particular species under a BAP does not in itself imply any specific level of importance.

⁵ DEFRA (2006) 'Local Sites – Guidance on their Identification, Selection and Management'

Secondary or Supporting Value

- 2.7.10. Some habitats or features that are of no intrinsic biodiversity value may nonetheless perform an ecological function, e.g. as a buffer. In addition, certain features of the landscape which by virtue of their linear or continuous nature (e.g. rivers) or their function as "stepping stones" (e.g. small woods) may be of value for the migration, dispersal and genetic exchange of wild species.

Other Value

- 2.7.11. Other tertiary factors may also be relevant in evaluating the value of a particular ecological receptor including social and economic factors.

2.8. The Five Point Approach

- 2.8.1. The National Planning Policy Framework (NPPF) describes the Government's national policies on the protection of biodiversity (and geological) conservation through the planning system. NPPF emphasises the need for planning authorities to ensure that the potential effects of planning decisions on biodiversity conservation are fully considered. A five-point best practice approach^{6,7,8} to the assessment of such effects within the development control process is recommended:

1. **Information** – gathering a sufficient evidence base on which to make sound planning decisions
2. **Avoidance** – adverse effects on habitats and species should be avoided where possible
3. **Mitigation** – where it is unavoidable, mitigation measures should be employed to minimise adverse effects
4. **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm
5. **New benefits** – many planning decisions present the opportunity to deliver enhancements for habitats or species

- 2.8.2. The assessment of ecological effects set out within this report is based on the above five-point approach, where appropriate.

⁶ Royal Town Planning Institute (1999) "Planning for Biodiversity – Good Practice Guide"

⁷ ODPM (2006) "Planning for Biodiversity and Geological Conservation – A Guide to Good Practice"

⁸ PAS (2010) "Planning to Halt the Loss of Biodiversity, Biodiversity Conservation Standards for Planning in the United Kingdom – Code of Practice."

3. ECOLOGICAL DESIGNATIONS

- 3.1. The statutory and non-statutory designations of nature conservation interest that occur within the vicinity of the site are shown at Plan 2720/MOL2, and discussed below.

3.2. Statutory Designations

- 3.2.1. The site is not subject to, nor is it adjacent to any identified statutory nature conservation designations. The nearest such identified designation is Ham Lands Local Nature Reserve (LNR), which is located approximately 0.7 km south east of the site.
- 3.2.2. The site is situated adjacent to the River Crane. Two Local Nature Reserves (LNRs) at Pevensey Road LNR and Crane Park Island LNR are situated along the River Crane further to the west of the site. The nearest of these designations to the site is Crane Park Island LNR, which is located approximately 2.9 km south west of the site and is understood to be managed by the London Wildlife Trust (LWT) and comprises a number of habitats including reed beds, woodland, scrub and riparian edge.
- 3.2.3. The closest European level ecological designation identified to the site is Richmond Park Special Area of Conservation (SAC), which is located approximately 2.3km east of the site and is well separated from the site by extensive developed areas and the River Thames.

Evaluation

- 3.2.4. The site is well separated from Ham Lands LNR by extensive existing development within a heavily urbanised area, along with the River Thames. As such, any proposed works within the site is unlikely to result in any significant adverse effects on this designation. Similarly, Crane Park Island and Pevensey Road LNRs, along with all other identified statutory nature conservation designations, are well separated from the site, and accordingly, are unlikely to be adversely affected by the proposals at the site.

3.3. Non-statutory Designations

- 3.3.1. The site is situated within an area of land identified on the Richmond Upon Thames Borough proposals map as an '*other Site of Nature Importance*', which includes much of the River Crane corridor and apparently comprises examples of a number of habitats including riparian edge, woodland and scrub. Further, the site is included at the north-western end of a Site of Local Importance for Nature Conservation (SLINC) identified within the Richmond Upon Thames Borough BAP, whilst a section of the River Crane extending along part of the northern site boundary from the east is designated as a Site of Borough Importance (SBI) for Nature Conservation Grade 2 according to information from GiGL.
- 3.3.2. The site is also included under CP12 of the London Borough of Richmond upon Thames adopted Core Strategy (21st April 2009) as a 'River Crane Area of Opportunity'. As set out under CP12 of the Core Strategy:

'The Council will improve the strategic corridor to provide an attractive open space with improvements to the biodiversity. Developments in

and adjacent to the River Crane Corridor will be expected to contribute to improving the environment and access, in line with planning policy.'

- 3.3.3. A number of other non-statutory designations are present within the search area around the site, as indicated at Plan 2720/MOL2.

Evaluation

- 3.3.4. The proposals are for use as public amenity land, with development works limited to the provision of a new footpath/cycleway through the site. Currently little to no regular management of the site is understood to be in place such that the vegetation is dominated by dense, impenetrable scrub and Bramble and accordingly, the opportunity exists to provide improved management and maintenance at the site whilst retaining features of existing value such as individual trees and woodland areas which would likely benefit the SLINC designation in the long term and complement the adjacent river corridor habitats (SBI).
- 3.3.5. All other ecological designations are removed from the site such that they are unlikely to be affected by the proposals.

3.4. **Other Designated Features**

- 3.4.1. A search of the Woodland Trust database recorded no notable, veteran or ancient trees within or in close proximity to the site. No areas of ancient woodland are located within or adjacent to the site, as such it is not considered that ancient woodland will represent a constraint to the proposals.
- 3.4.2. The Freshwater Habitats Trust database returned no records of priority ponds within or adjacent to the site. Similarly, the Open Mosaic Habitat Inventory did not return any such habitat within or adjacent to the site.

4. HABITATS AND ECOLOGICAL FEATURES

4.1. The following habitats were identified within the site during the survey work undertaken:

- Bramble Thicket and Tall Ruderal Vegetation
- Dense Scrub, Scattered Scrub and Trees
- Bracken
- Woodland
- Amenity Grassland and Vegetable Plot
- Buildings and Hardstanding

4.2. In addition, an off-site watercourse, railway line and associated embankment and allotments are present to the north, south and west respectively.

4.3. The locations of these habitat types and features are represented on Plan 2720/MOL3 and described below.

Habitats of Principal Importance for Biodiversity

4.4. Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, the NERC Act requires the Secretary of State to publish a list of habitats which are of principal importance for conservation in the UK. This list largely reflects the 'priority habitats' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority habitats under the subsequent country-level biodiversity strategies.

4.5. Of the habitats within the site, the woodland is considered likely to qualify as UK Priority Habitat. This is discussed further in the relevant habitat sections below.

4.6. **Bramble Thicket and Tall Ruderal Vegetation**

4.6.1. Much of the site is dominated by dense Bramble thicket and tall ruderal vegetation (see Plan 2720/MOL3). These areas support dense thickets of vegetation, much of which is impenetrable, dominated by Bramble with scattered stands of tall ruderal and herbaceous species including Rosebay Willowherb *Chamerion angustifolium*, Common Nettle *Urtica dioica*, Hedge Bindweed *Calystegia sepium*, Lords-and-Ladies *Arum maculatum*, Woody Nightshade *Solanum dulcamara*, Cleavers *Galium aparine*, Field Horsetail *Equisetum arvense*, Hogweed *Heracleum sphondylium*, Broad-leaved Everlasting-pea *Lathyrus latifolius*, Mugwort *Artemisia vulgaris* and Japanese Honeysuckle *Lonicera japonica*. A large proportion of the ground cover beneath the Bramble is dominated by Ivy *Hedera helix*. To the far west of the site locally abundant Hop *Humulus lupulus* is present climbing over a large proportion of the Bramble and encroaching up the tree trunks.

4.6.2. During the survey work conducted in June 2013 impenetrable areas of the site were viewed from the accessible margins, including from along a cleared pathway, approximately 2m in width located along the southern site boundary adjacent to the offsite railway embankment. However during the survey work undertaken in August 2015, much of this path had been

substantially encroached by Bramble, despite this access was still gained along southern site margin, along the site boundary fence line.

- 4.6.3. The dense nature of the Bramble thicket is such that it suppresses growth of herbaceous species to some degree, albeit scattered scrub was recorded to have encroached in areas as set out below.
- 4.6.4. Areas at the extreme west of the site, immediately adjacent to the offsite allotments in this direction are inaccessible, surrounded by metal palisade fencing to the west and south, with dense impenetrable scrub and Bramble in the east. Accordingly, these areas were viewed from the margins. Based on this technique, review of aerial photography and survey results from June 2013 it appears this area is of similar nature to the rest of the site, dominated by Bramble.

Evaluation

- 4.6.5. The above habitat is dominated by Bramble with a small number of common and widespread tall ruderal and herbaceous species additionally recorded to be present. As such, the habitat provides little botanical interest and is considered to be of low ecological value at the site level.
- 4.6.6. The proposals incorporate the provision of a new footpath/cycleway extending through areas of Bramble thicket, which will require clearance of this habitat, however given the low ecological value of the habitat, it is not considered to pose a constraint to the proposals.

4.7. Dense Scrub, Scattered Scrub and Trees

- 4.7.1. A significant proportion of the site, particularly to the extreme west of the site is dominated by dense scrub and trees, particularly associated with the site margins and boundary fencing. These areas were recorded to be dominated by a mixture of Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna*, Wych Elm *Ulmus glabra*, Willow *Salix* sp., Butterfly-bush *Buddleja davidii*, Rowan *Sorbus aucuparia*, Wild Cherry *Prunus avium*, Dog-rose *Rosa canina* and occasional Holly *Ilex aquifolium*. The ground flora within this area of dense scrub is dominated by Bramble and Ivy extending throughout with occasional Bracken *Pteridium aquilinum* recorded to be present.
- 4.7.2. Individual trees present within the site include in particular a number of Birch *Betula pendula*, Willows and Sycamore *Acer pseudoplatanus*, with more occasional Apple *Malus* sp., and young to semi-mature Oak *Quercus* sp. In addition, a number of more mature specimen trees are present in the extreme eastern part of the site, within the grounds of amenity grassland described below, including in particular a very large, mature London Plane *Platanus x hispanica* (*x acerifolia*) 'Pyramidalis', Oak and Holm Oak *Quercus ilex*. No understorey scrub or other woody vegetation is present beneath the trees in this area.
- 4.7.3. Scattered scrub was also recorded to be present amongst the areas dominated by Bramble in the form of locally frequent Shadbush *Amelanchier* sp. and occasional Snowberry *Symphoricarpos* sp. in addition to the species listed above.

Evaluation

- 4.7.4. The scrub and trees within the site are comprised of common and widespread species, including in particular non-native Butterfly-bush and Shadbush, albeit it is noted that these areas provide cover and opportunities for a variety of faunal species at the site as discussed below. As such this habitat is considered to be of low ecological value at the site level
- 4.7.5. The proposed new footpath/cycleway will be routed to avoid mature trees, such that these will not be affected. It will be necessary to remove areas of scrub to facilitate access and footpath provision, albeit selective removal and control of the scrub would be desirable from an ecological perspective in order to provide greater habitat variety and opportunities for a wider range of species. Accordingly, partial removal of the scrub and associated vegetation is unlikely to be of particular ecological importance.

4.8. **Bracken**

- 4.8.1. Located centrally within the site, surrounded by the Bramble dominated habitat is a localised area of Bracken. The area is small in extent but almost entirely dominated by Bracken with a substantial amount of Japanese Honeysuckle growing over this. Ground flora species are similar to those described in the Bramble thicket and tall ruderal vegetation section above.

Evaluation

- 4.8.2. The Bracken habitat is almost entirely dominated by this species with invading non-native Japanese Honeysuckle and a similar range of common and widespread ground flora species to that described previously within the site. Additionally, the area is small in extent, as such, this habitat is considered to be of negligible ecological value at the site level and its potential loss to the proposals is unlikely to be of particular ecological importance.

4.9. **Woodland**

- 4.9.1. Much of the eastern part of the site is occupied by a small area of secondary woodland, bounded by existing built form including sports courts within the former sorting office site to the east and the railway embankment to the south. The north of the woodland area extends to the River Crane, which lies within a vertical sided concrete channel adjacent to the site, with a small upstand such that this forms a clear boundary.
- 4.9.2. Canopy trees within the woodland area are dominated by Sycamore and Ash *Fraxinus excelsior*, with occasional Oak *Quercus robur*. The woodland appears to have received little recent management, such that it is dense and overgrown, with a number of fallen trees and branches providing considerable clutter (see Plan 2720/MOL3). In addition, a dense understorey is present including Willows sp., young Ash, Elder and Holly with more occasional young Cherry *Prunus* sp., Dogwood *Cornus sanguinea*, Horse-chestnut *Aesculus hippocastanum*, Hazel *Corylus avellana*, Yew *Taxus baccata* and occasional Bamboo *Bambuseae* sp. noted. Across much of the woodland, ground flora is limited due to the dense nature of the woody vegetation, dominated by Ivy and Bramble, albeit

more open patches are present supporting frequent Cow Parsley *Anthriscus sylvestris*, Ground-ivy *Glechoma hederacea*, Bluebell *Hyacinthoides* sp., Herb Bennet *Geum urbanum*, Wood False-brome *Brachypodium sylvaticum*, Stinging Nettle *Urtica dioica*, Green Alkanet *Pentaglottis sempervirens*, Cleavers and Lords-and-Ladies, along with more occasional Barren Brome *Anisantha sterilis*, Hedgerow Cranes-bill *Geranium pyrenaicum*, Herb Robert *Geranium robertianum* and Ragwort *Jacobaea vulgaris*.

- 4.9.3. The southern boundary to the woodland adjacent to the offsite railway line includes grassy margins extending into the offsite railway embankment and forming a path along this site boundary. This woodland edge area support a range of common herbs and grasses, including non-natives such as Canadian Goldenrod *Solidago canadensis* and Michaelmas Daisy *Aster* sp., along with Cleavers, Creeping Thistle *Cirsium arvense*, Field Horsetail, Meadow Vetchling *Lathyrus pratensis*, False Oat-grass *Arrhenatherum elatius* and Perennial Ryegrass *Lolium perenne*.
- 4.9.4. The narrower section of woodland in the north-east of the site forms part of the land associated with the adjacent offsite Youth Centre to the north east, from which this area is accessed via existing pathways leading from the amenity grassland area described below and a small bridge over the River Crane. Accordingly, it is clear that this section of woodland is subject to occasional disturbance, with existing cleared pathways, whilst a number of clearings are present within which substantial play equipment is present.

Evaluation

- 4.9.5. The woodland habitat present is dense in nature and currently lacking in management, supporting a range of relatively common and widespread species in addition to a number of non-native species. However, the woodland likely provides some considerable ecological value in the context of the local area, including cover and habitats including frequent deadwood which will provide opportunities for a range of faunal species as discussed below. As such, this habitat is considered to be of moderate ecological value at the local level.
- 4.9.6. The proposals include the construction of a new footpath/cycleway at the site, including through the woodland area. It is understood that the pathway will be routed to avoid any mature trees within the woodland area (and elsewhere within the site), including using existing pathway routes where these are present, such that it will not result in the loss of any mature trees. As such, it is not considered that this habitat will represent any significant constraints for the proposals and there is significant scope to incorporate enhancements within the woodland to increase its ecological value as discussed in section 6 below.
- 4.10. **Amenity Grassland and Vegetable Plot**
- 4.10.1. Within the far north-eastern corner of the site the woodland thins out and the area is broadly representative of amenity grassland habitat, with areas of bare ground as a result of heavy over-shading and associated leaf-litter from the scattered mature trees, in particular the large London Plane, previously described. The amenity grassland has likely been used in association with the off-site use Youth Centre and is dominated by grassland and shade-

tolerant herbs, the majority of which forms a short-sward and appears to be subject to regular mowing. Species recorded to be present are dominated by Cock's-foot *Dactylis glomerata*, Meadow Foxtail *Alopecurus pratensis*, Meadow-grasses *Poa* sp, Perennial Rye-grass and False Oat-grass along with herbaceous species similar to elsewhere within the site including Creeping Buttercup *Ranunculus repens*, Bluebell, Herb Bennet, Cat's-ear *Hypochaeris radicata*, Common Vetch *Vicia sativa*, Daisy *Bellis perennis* and Ribwort Plantain *Plantago lanceolata*. Additionally, a small area of cultivated vegetable plots and planters is present within this area at the southern boundary.

Evaluation

- 4.10.2. This habitat supports a range of common and widespread species similar to those recorded elsewhere within the site with a higher proportion of grass species to elsewhere within the site. The area also supports significant areas of bare ground as a result of heavy overshadowing by mature trees within the area. As such this habitat is considered to be of negligible ecological importance at the site level.

4.11. Buildings and Hardstanding

- 4.11.1. A single small building is present within the south of the site at the margins of the woodland, which appears to represent a former shelter associated with the adjacent railway line. The building is of brick construction, supporting a flat concrete roof, with Ivy covering the majority of the building (see Plan 2720/MOL3).
- 4.11.2. In addition, a small hardstanding footpath leads across the extreme north eastern corner of the site, providing access from the offsite adjacent Youth Centre to the north, to the offsite sports courts immediately south of the site.

Evaluation

- 4.11.3. The building present is small in nature and does not provide any significant ecological value, whilst similarly the hardstanding pathway is largely devoid of vegetation. Accordingly, these habitats are of negligible ecological value and do not appear to represent a potential constraint on the proposals.

4.12. Offsite Habitats

- 4.12.1. Offsite habitats adjacent to the site include the River Crane along the northern site boundary, a railway line and associated steep embankment along the southern site boundary and an area of allotments to the west.
- 4.12.2. The River Crane forms a considerable watercourse corridor, with some vegetation, albeit this is currently contained within a vertical-sided concrete channel adjacent to the site, with a small upstand noted. Much of the upstand and associated boundary fencing are overgrown with Bramble and scrub in line with the remainder of vegetation within the site itself.
- 4.12.3. The offsite railway line along the southern site boundary is set at a higher level than the site, on a considerable embankment for much of the length of the site. The embankment supports rank grassland and colonising herbs with scattered scrub and Bramble extending in particular from the site.

- 4.12.4. The allotments present adjacent to the western end of the site appear in active use and are separated from the site by a secure boundary fence and dense scrub within the site.

Evaluation

- 4.12.5. The offsite habitats are located outside of the current site boundary and accordingly, will not be directly affected under the current proposals, whilst similarly it is understood that much of the existing boundary vegetation will remain in these areas. Safeguards in relation to the offsite watercourse are set out at section 6 below.
- 4.13. **Exotic / Invasive species included on Schedule 9 Part II of the Wildlife and Countryside Act 1981**
- 4.13.1. During the previous survey work undertaken at the site in June 2013 the presence of Japanese Knotweed *Fallopia japonica* was recorded in a number of locations within the east of the site, particularly situated along the site margin with the River Crane. At this time it was understood that chemical treatment of the Japanese Knotweed stands at the site was ongoing (pers. comm. London Borough of Richmond Upon Thames Ecologist) and the majority of stems were recorded to be dead, with only small growth towards the base, albeit occasional individual more healthy small stems were noted to be present. During the most recent site survey visit undertaken in August 2015 the remnants of Japanese Knotweed stands were all that were left of that previously recorded within the site (as shown in photograph 6 on Plan 2720/MOL3). In some locations where it was previously recorded to be present, no evidence of the species previously being there was visible.
- 4.13.2. In addition, occasional *Cotoneaster* species, including Wall Cotoneaster *Cotoneaster horizontalis* was noted within the woodland areas at the site (e.g. see Plan 2720/MOL3).

5. FAUNAL USE OF THE SITE

- 5.1. During the survey work, general observations were made of any faunal use of the site with specific attention paid to the potential presence of protected or notable species. In addition, specific survey work was undertaken for bats.

Species of Principal Importance for Biodiversity

- 5.2. Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in the UK. This list largely reflects the 'priority species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies. During the survey work undertaken no UK priority species were recorded.

5.3. **Mammals**

Bats

- 5.3.1. **Legislation.** All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2010, and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:
- Disturb any bat while occupying a structure or place which it uses for shelter or protection; or
 - Obstruct access to any structure or place which any bat uses for shelter or protection.
- 5.3.2. As such, both bats and their roosts (breeding sites and resting places) receive full protection under the legislation.
- 5.3.3. **Background Records.** No specific records of bats from within or adjacent to the site were returned from the desktop study.
- 5.3.4. **Survey Results and Evaluation - Roosting**
- 5.3.5. The only structure noted within the site is a single small building (B1), comprising an open shelter associated with the railway line. The building is small in nature, with a flat concrete roof and is open to the southern site such that it could be thoroughly accessed and inspected. The building provides negligible potential for use by roosting bats, whilst no evidence for any use by this group was recorded from a thorough inspection. In any event, the building is likely to be retained and accordingly it is not anticipated to be affected under the current proposals.
- 5.3.6. A number of trees are present within the site, in particular within the woodland areas in the east. The majority of these trees were not considered to offer any bat roosting potential. A small number of the trees within the denser wooded areas support a covering of Ivy and may support cavities or

features that could offer opportunities for roosting bats should these be present, albeit access throughout the woodland to inspect or view individual trees is limited due to the dense vegetation present. Additionally, a number of the more scattered trees across the site were considered to offer low bat roosting potential as shown on Plan 2720/MOL3 and set out at Table 1 below.

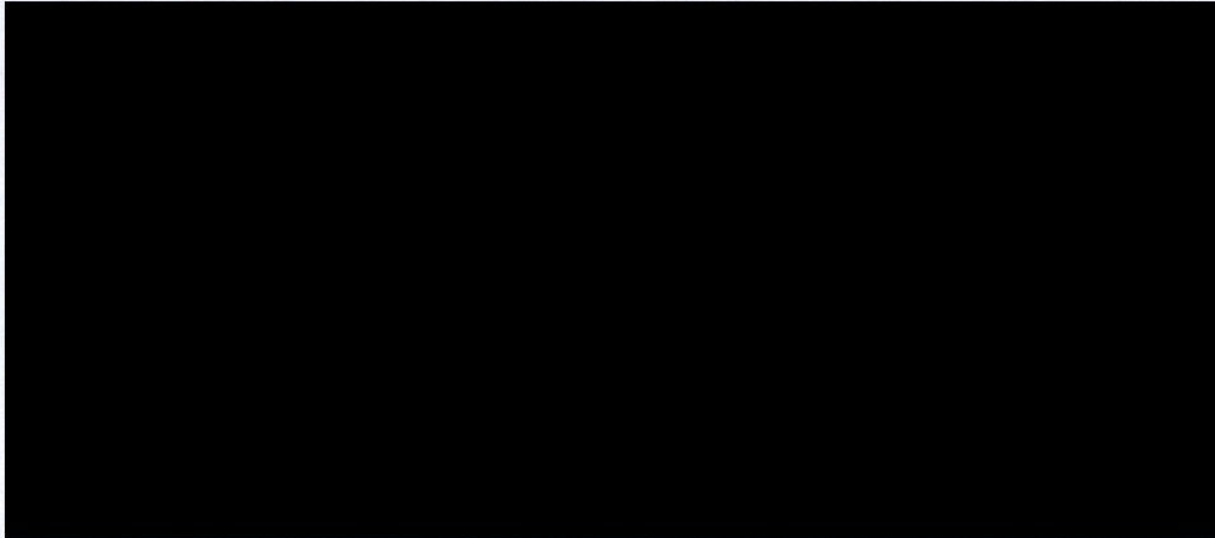
Tree	Species	Bat Roost Potential (according to BCT 2012 guidelines)	Notes
T1	Ash	Low (Category 2)	Semi-mature tree with considerable Ivy cover of which the stems have created crevices. Possible that Ivy cover is concealing further crevices within trunk.
T2	Sycamore	Low (Category 2)	Restricted access due to dense Bramble thicket but of an age and nature that could support bats.
T3	Ash	Low (Category 2)	Semi-mature tree with considerable Ivy cover of which the stems have created crevices. Possible that Ivy cover is concealing further crevices within trunk.

5.3.7. In any event, it is understood that the proposed footpath/cycleway will be routed to avoid any mature trees, which will therefore be fully retained under the proposals. Accordingly, on the basis of the above evidence, the proposals will not result in any adverse effects on any potential bat roosts and further survey work is not considered necessary. Further to this, the scope of the survey work undertaken was set out in a letter to the Local Planning Authority (as shown at Appendix 2) to which no objection was received. In any event, BCT's Good Practice Guidelines do not advise that further survey work is necessary for works affecting Category 2 trees, provided that appropriate felling safeguards are employed.

5.3.8. Survey Results and Evaluation – Foraging / Commuting

5.3.9. The site is dominated by dense vegetated areas including woodland and scrub, located adjacent to a watercourse corridor. Accordingly, the habitats present appear to provide potentially suitable opportunities for use by foraging/commuting bat species, including cover, linear features and likely supporting a range of invertebrate prey species, particularly given the linear nature of the site albeit any potential for this group may be limited by the wider urban surroundings.

5.3.10. Under the proposals, the existing woodland habitats will be retained, with the proposed footpath/cycleway routed to avoid any existing tree loss. In addition, areas of scrub and dense vegetation will be retained throughout the site such that a continuous linear corridor will remain for use by bats, whilst the incorporation of more open areas associated with the footpath/cycleway and positive management would likely provide additional foraging areas and opportunities for bats in the long term. As such, it is not considered that the proposals will significantly affect foraging and commuting habitat for bats and no further survey work is considered necessary. Recommendations to minimise adverse effects on bats as a result of light-spill are provided at Section 6.



Other Mammals

- 5.3.14. **Background Records.** No specific records of other mammal species within or adjacent to the site were returned within the information obtained from the desktop study. In addition, no records of other protected mammal species were returned in the proximity of the site.
- 5.3.15. **Survey Results and Evaluation.** The habitats within the site include dense vegetation and cover which are likely to be frequented by common mammal species, such as Rabbit *Oryctolagus cuniculus*, Hedgehog *Erinaceus europaeus* and Fox *Vulpes vulpes*, particularly given the proximity of the adjacent railway line and associated embankment which likely provides a wider corridor for movement between the nearby built-up areas. Previous survey work undertaken at the site in 2013 found mammal entrances most likely attributable to Fox and Fox tracks across the site. Survey work undertaken in 2015 recorded Grey Squirrel *Sciurus carolinensis* along the southern site boundary.
- 5.3.16. Mammal species likely to utilise the site, such as Fox and Rabbit remain common in both a local and national context. As such, these species carry no legal protection and the loss of potential opportunities for these species to the proposals would be of little importance. In any event, it is likely that these species would remain within the site following completion of works.
- 5.3.17. Hedgehog is a UK Priority Species, albeit this species remains common and widespread in England including within urban areas. However, abundant similar opportunities are present elsewhere within the local area and following the proposals, the site would continue to provide suitable opportunities for this species in the long term under the proposals. No evidence of Water Vole *Arvicola amphibius* or Otter *Lutra lutra* were recorded along the watercourse with the river held by concrete banks which are considered unsuitable to support these species.
- 5.3.18. The site is considered to be of low value to other mammals at the local level, and the proposals would not have any significant adverse effect on this species group.

5.4. Birds

- 5.4.1. **Legislation.** All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and offences relating to this species are subject to special penalties.
- 5.4.2. **Conservation Status.** The RSPB categorises British bird species in terms of conservation importance based on a number of criteria including the level of threat to a species' population status⁹. Species are listed as Green, Amber or Red depending on the level of importance. Red Listed species are considered to be of the highest conservation concern being either globally threatened and/or experiencing a high/rapid level of population decline (e.g. a reduction in breeding population size of approximately 50% over the past 25 years or since 1969, when the first species assessment was made).
- 5.4.3. **Background Records.** No records of birds were returned specifically from within the site, nor were any records with a sufficiently high resolution returned from within the site's proximity.
- 5.4.4. **Survey Results and Evaluation.** The vegetation within the site is likely to provide nesting and foraging opportunities for a number of common bird species. During the most recent survey work undertaken at the site Long-tailed Tit *Aegithalos caudatus*, Great Tit *Parus major* and Woodpigeon *Columba palumbus* were recorded to be present. Additionally during the survey work undertaken in 2013 Blackbird *Turdus merula*, Ring-necked Parakeet *Psittacula krameri*, Robin *Erithacus rubecula*, House Sparrow *Passer domesticus*, Greenfinch *Carduelis chloris*, Blackcap *Sylvia atricapilla*, Wren *Troglodytes troglodytes*, Dunnock *Prunella modularis* and Chiffchaff *Phylloscopus collybita* were recorded within the site.
- 5.4.5. House Sparrow, a priority species and Red-listed Bird of Conservation Concern, was recorded within the site in 2013. House Sparrow remains relatively common and widespread, having UK populations in excess of two million pairs/territories (data from RSPB website <http://www.rspb.org.uk/wildlife/birdguide/>). Furthermore, this species is associated with a wide range of habitats, including within urban areas often nesting on or within buildings. Accordingly, the habitats within the site are unlikely to be of specific importance to this species.
- 5.4.6. In addition, Dunnock is included on the Amber List of Birds of Conservation Concern due to recent breeding population declines. Nevertheless, the species remains common and widespread.
- 5.4.7. Overall, the site is considered to be of moderate value to birds at the local level. The proposals will incorporate the retention of the existing trees and woodland habitats, along with management as public open space such that they will continue to offer opportunities for use by bird species such as those currently present. Safeguards and enhancements in relation to nesting birds are set out within section 6 below.

⁹ RSPB 'The population status of birds in the UK - Birds of Conservation Concern: 2009'

5.5. Reptiles

- 5.5.1. **Legislation.** All reptile species receive protection under UK legislation. Due to their relatively common and widespread status, Slow-worm *Anguis fragilis*, Grass Snake *Natrix natrix*, Common Lizard *Lacerta vivipara* and Adder *Vipera berus* receive only partial protection under the Wildlife and Countryside Act 1981 (as amended) being protected from deliberate killing or injury, their habitat receiving no statutory protection. These species are also listed as priority species.
- 5.5.2. **Background Records.** No specific records of reptiles from within or adjacent to the site were returned from the desktop study.
- 5.5.3. **Survey Results and Evaluation.** No evidence for the presence of any reptile species was recorded at the site during the general survey work undertaken. The majority of the site is dominated by woodland and dense Bramble/scrub, which does not appear to provide suitable opportunities for reptiles, albeit the occasional more open areas and the adjacent offsite railway embankment appear to provide potential opportunities for this group. Further, previous specific survey work at the site for reptiles undertaken by a third-party consultancy in 2010¹⁰ based on standard guidelines reported no reptiles to be present and accordingly, this group appears to be absent from the site.
- 5.5.4. In any event, the proposals will incorporate the retention of much of the existing habitats, with the proposed footpath/cycleway removed from the offsite railway line.

5.6. Amphibians

- 5.6.1. **Legislation.** All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt *Triturus cristatus* is fully protected under Schedule 5 of this legislation, making it an offence to intentionally or recklessly:
- Disturb any Great Crested Newt while occupying a structure or place which it uses for shelter or protection; or
 - Obstruct access to any structure or place which any Great Crested Newt uses for shelter or protection.
- 5.6.2. It is also classed as a European Protected Species under the Conservation of Habitats and Species Regulations 2010. As such, both Great Crested Newt and habitats utilised by this species are afforded protection. This species is also listed as a priority species.
- 5.6.3. **Background Records.** No specific records of amphibians from within or adjacent to the site were returned from the desktop study.
- 5.6.4. **Survey Results and Evaluation.** No ponds or standing water bodies are present within the site. Further, a review of OS 1:25,000 scale map of the area identified no ponds or other standing water bodies within 500m of the site. Accordingly, no suitable breeding habitat for Great Crested Newt appears to be present within the vicinity of the site. In terms of terrestrial

¹⁰ River Park, Royal Mail Site, Twickenham. Reptile Survey. Report for MacGregor Smith. *The Ecology Consultancy*, 2011.

opportunities, the habitats present within the site likely provide some limited opportunities for amphibians; however given the lack of potential breeding habitats it is unlikely that the fully protected species Great Crested Newt would be present.

5.7. Invertebrates

5.7.1. **Background Records.** No records of invertebrates which relate specifically to the site were identified during the desktop study.

5.7.2. **Survey Results and Evaluation.** A number of common and widespread invertebrate species were recorded within the site during the 2015 survey work undertaken, including Common Blue Butterfly *Polyommatus icarus* and Common Wasp *Vespula vulgaris*. Further to this, additional species were recorded in 2013 comprising Early Bumblebee *Bombus pratorum*, White-tailed Bumblebee *Bombus lucorum*, Squash Bug *Coreus marginatus* and the non-native Harlequin Ladybird *Harmonia axyridis*. All of these species are common and widespread, whilst the habitats present are likely to provide a range of opportunities for a variety of other invertebrate species.

5.7.3. In particular the habitats present include a number of trees and deadwood, which could therefore provide potential opportunities for declining saproxylic species including Stag Beetle. Overall, the site is considered likely to be of low to moderate value to invertebrates at the local level. The proposals will incorporate the retention of the existing mature trees and woodland, whilst further recommendations in relation to invertebrates are set out within section 6.

6. RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENTS

- 6.1. The survey work undertaken has shown the majority of the site is of negligible to low ecological value, although the woodland is considered to be of moderate value. Additionally the adjacent off-site habitats to the north and south of the site comprising the River Crane and the railway embankment also offer elevated ecological value. As such, the habitats within the site appear largely unconstrained in relation to the current proposals, which comprise the construction of a new footpath/cycleway route which will avoid mature trees. In addition, further selective clearance and management of Bramble habitats within the site is recommended (as further set out within the ecological enhancement section below).
- 6.2. A number of trees considered to offer low bat roosting potential were identified within the site and the site offers potential foraging and commuting routes for bats. No evidence of Badger or any other notable mammal species was recorded on site, although habitats are present that could support such mammals. Suitable bird nesting habitat is also present in the form of trees, scrub and woodland.
- 6.3. As such, safeguarding and mitigation measures are proposed in relation to these habitats and species as set out below, to safeguard existing ecological features of interest and to ensure protection of faunal species where appropriate.

Recommendations and Safeguards

6.4. **Scrub, Trees and Woodland**

- 6.4.1. Scrub and scattered trees within the site are generally immature to semi-mature in nature and are considered to offer low ecological value whilst the woodland is considered to offer moderate ecological value. Nevertheless it is recommended that upon construction of the footpath/cycleway the woodland is retained where possible as are any mature trees elsewhere within the site, in addition to a proportion of the scrub and Bramble habitat.

6.5. **Off-site Habitats: The River Crane**

- 6.5.1. The nature of the proposed works is limited predominantly to the construction of a new footpath/cycleway and habitat management works. Accordingly, it is recommended that where possible any ground works be restricted to the line of the footpath/cycleway itself, particularly where (by necessity of the narrow site width) this lies within 8m of the watercourse channel. In addition, in order to minimise any effects on the watercourse it is recommended that a number of safeguards in relation to the off-site watercourse are put in place. In particular, these features should be safeguarded in accordance with the Environment Agency Pollution Prevention Guidelines with appropriate protection measures put in place during construction to avoid pollution and excessive siltation to the watercourse.
- 6.5.2. During construction, protection measures to manage the risk of pollution to surface water entering the drain should include:

- Contaminating substances, such as, fuels, oils and chemicals should be stored in leak-proof containers in a secure location from which they are safe from spillage, or vandalism;
- Washing plant and vehicles should take place in designated areas at least 10m from the watercourse;
- Mixing and washing areas for concrete and cement should be located at least 10m from the watercourse. If water is to be reused, appropriate settlement and re-circulation systems should be used;
- Exposed soil should be minimised and avoided wherever possible and spoil from soil stripping should be stored away from the watercourse;
- Site roads should be kept free from dust and mud;
- Vegetation buffers should be left around the watercourse;
- Liquid applications of herbicides, which may runoff, should not be used in close proximity to the watercourse.

6.6. Invasive Species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)

- 6.6.1. Although no apparent live areas of the Schedule 9 invasive species Japanese Knotweed were recorded during the latest survey work at the site it is possible that the root/rhizomes of this plant, present beneath the ground, could still be alive. Additionally Cotoneaster species, of which a number of species are listed under Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended), were recorded within the site.
- 6.6.2. As such, all relevant precautions should be taken during any works at the site in order to prevent the spread of these species in line with legislative requirements. It is further recommended that any eradication procedure be undertaken in line with a detailed method statement and methodology in order to prevent any potential for inadvertent spread of these species.
- 6.6.3. In practice, it is suggested this is likely to involve marking of the affected area and uprooting/chemical treatment/herbicide application of any plants and disposing of such plants appropriately (e.g. burning) prior to any clearance works.
- 6.6.4. These measures will ensure that these species are not spread as a result of the construction process within or beyond the site, thereby avoiding an offence under the legislation in respect of these species.

6.7. Bats

- 6.7.1. As set out above, a number of trees with low bat roosting potential were recorded on site and it possible further such trees are present within the woodland that could not be accessed. However as set out above, all such mature trees are to be retained and safeguarded under the proposals. As such, it is not considered roosting bats will be at risk.
- 6.7.2. It is understood that the Local Planning Authority were previously considering the potential need for lighting to come forward at the site in the future and it is recommended that this be avoided or minimised where possible in order to continue to prevent any potential disturbance or adverse effects on bats or other nocturnal/crepuscular wildlife in the future.

- 6.7.3. Nonetheless, no additional lighting is included under the current proposals and accordingly, the current proposals would be unlikely to result in any additional disturbance or effects on bats using the corridor through increased light spill. Should lighting be proposed in the future, this should comprise low-level, directional lighting, focussed on the area which requires illumination. Downward-facing LED lighting with a low UV component should be used where possible to minimise the effects of upward light-spill which may disrupt bat activity.

6.8. Nesting Birds

- 6.8.1. Bramble thicket, scrub, scattered trees and woodland all provide opportunities for nesting by common bird species. In order to avoid any potential offence under the Wildlife & Countryside Act 1981 (as amended), it is recommended that any clearance of woody vegetation be undertaken outside of the bird-nesting season (i.e. outside of March to August inclusive). Should this not be possible, areas due to be worked on should first be checked by a suitably qualified ecologist in order to confirm the absence of any active nests prior to removal. Any active nests identified would need to be retained and protected until the end of the nesting season or until the birds have fledged.

Ecological Enhancements

- 6.8.2. National planning policy in the form of the National Planning Policy Framework sets out that opportunities to incorporate biodiversity in and around developments should be encouraged. In addition, reason for Planning Condition U62138NS14, which this report addresses, is to 'enhance the nature conservation value of the site'. The proposals present opportunities to deliver ecological enhancements at the site for the benefit of local wildlife, thereby making a positive contribution towards the broad objectives of the national and local BAPs. A number of recommendations for enhancements are set out below, which are considered to be appropriate in the context of the site.
- 6.8.3. **Habitat Clearance and Management.** In addition to the clearance of vegetation in order to facilitate construction of the footpath/cycleway, further selective clearance and management of Bramble habitats and scrub within the site is recommended. This will help provide a variety of opportunities for wildlife, whilst maintaining discrete areas of habitat such that it continues to provide cover and opportunities in the long term. Further, selective thinning of such habitats, including the woodland, may allow more natural light to enter the watercourse corridor which is currently heavily overshadowed by scrub and trees. These management techniques appear to fall in line with the aims and objectives of the London Borough of Ealing's aspirations in regard to the River Crane Area of Opportunity.
- 6.8.4. **Bats.** It is recommended that enhancements be provided in the form of bat boxes. These could be targeted towards Soprano Pipistrelle *Pipistrellus pygmaeus* and Noctule *Nyctalus noctula*, both of which are priority species which may be present in the locality. New bat boxes should be located close to well vegetated features with minimal light-spill where possible, ideally within the woodland or in proximity to the River Crane. A total of five bat boxes is considered appropriate to provide an enhancement to bats, which should be installed on mature trees at a height of at least 3m, in areas free

from dense vegetation clutter. Examples of suitable bat boxes are provided at Appendix 3.

- 6.8.5. **Birds.** It is recommended that bird boxes be incorporated into the site. It is recommended that garden bird boxes are provided to benefit a number of species likely to make use of the area. These would be well placed within the woodland or other retained vegetative features and should be orientated north or east to avoid over-heating or prevailing winds. A total of three bird boxes is considered appropriate, which should be sited on mature trees at a height of at least 3m. Examples of suitable bird boxes are provided at Appendix 4.
- 6.8.6. **Reptiles.** The provision of the footpath/cycleway and incorporation of habitat management/clearance works will likely provide more open areas and grassland habitats which would potentially provide greater opportunities for reptile species should they colonise the site in the future.
- 6.8.7. **Invertebrates.** Standing deadwood should be retained wherever possible, however given the nature of the proposals, for use as public open space, health and safety requirements would need to be taken into account and any such features requiring removal should be retained within discrete piles within the site. Retention of such habitats, particularly piles or larger logs would benefit invertebrates, potentially including Stag Beetle, in line with the aims of national and local BAPs with regard to this species.

Summary of Recommendations

- Safeguarding of mature trees and woodland;
- Safeguarding of the River Crane through pollution prevention measures;
- Precautions with regard to Schedule 9 invasive species;
- Bird sensitive timing of any vegetation clearance;
- Additional habitat clearance and management for the benefit of wildlife (including reptiles should they colonise the site in the future);
- Provision of enhancement roost boxes for bats;
- Provision of nest boxes for birds;
- Retention of standing deadwood for the benefit of invertebrates.

7. SUMMARY AND CONCLUSIONS

- 7.1. Aspect Ecology has been commissioned by St James Group to undertake an ecological assessment of the site, located west of the former Royal Mail Sorting Office at London Road, Twickenham.
- 7.2. The site was surveyed in August 2015 based around extended Phase 1 methodology. In addition, a general assessment of faunal species was undertaken with particular attention paid to the potential presence of any protected, rare or notable species. Specific survey work was undertaken for bats.
- 7.3. **Ecological Designations.** All statutory ecological designations are situated sufficiently far away from the site such that they are unlikely to be adversely effected by the proposals. The site itself forms part of a SLINC identified within the Richmond Upon Thames Borough BAP and is identified within local planning documents as an 'area of opportunity', whilst a section of the adjacent River Crane is identified as a Site of Borough Importance (Grade 2) within information from GiGL. However, the nature of the proposals is such that, subject to the measures and enhancements set out in this report, the ecological value associated with these designations is unlikely to be adversely affected under the proposals.
- 7.4. **Habitats.** The site is dominated by a mixture of dense impenetrable Bramble thicket, scrub and woodland, which provides cover and opportunities for a variety of faunal species, albeit is lacking in management, such that the habitats are overgrown and dominated by a small number of species (predominantly Bramble). Under the proposals, the woodland areas, trees and substantial areas of Bramble/scrub will be retained, whilst the potential exists through future management to ensure the ecological value of the habitats present is enhanced and retained in the long term.
- 7.5. **Fauna.** The habitats within the site provide opportunities for a range of faunal species, in particular common nesting birds, foraging / commuting bats and invertebrates. Accordingly, a number of recommendations and measures are set out in regard to faunal species in order to ensure that they are fully safeguarded under the proposals.
- 7.6. **Enhancements.** A number of enhancement opportunities are available under the proposals in particular based on the provision of management activities for the benefit of wildlife at the site, in addition to specific faunal enhancements. Such measures aim to maximise opportunities for wildlife at the site.
- 7.7. **Conclusions.** In conclusion, based on the evidence obtained from the ecological survey work undertaken and with the implementation of the recommendations set out in this report, there is no reason to suggest that any ecological designations, habitats of nature conservation interest or any protected species would be adversely affected by the proposals at the site, which are for open space, incorporating the construction of a new footpath/cycleway. As such, there is no evidence to suggest that there are any overriding ecological constraints to the proposals, whilst a number of recommendations are provided in this report which would provide an overall enhancement to biodiversity. Accordingly, the requirements of Condition U62138NS14 are considered to be fulfilled.

PLANS

PLAN 2720/MOL1

Site Location



KEY:



SITE LOCATION

aspect ecology

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 North Way - Danbury - Oxfordshire - OX16 2AF
 01235 270080 - info@aspectecology.com - www.aspectecology.com

LAND WEST OF FORMER ROYAL
 MAIL SORTING OFFICE
 TWICKENHAM
 SITE LOCATION

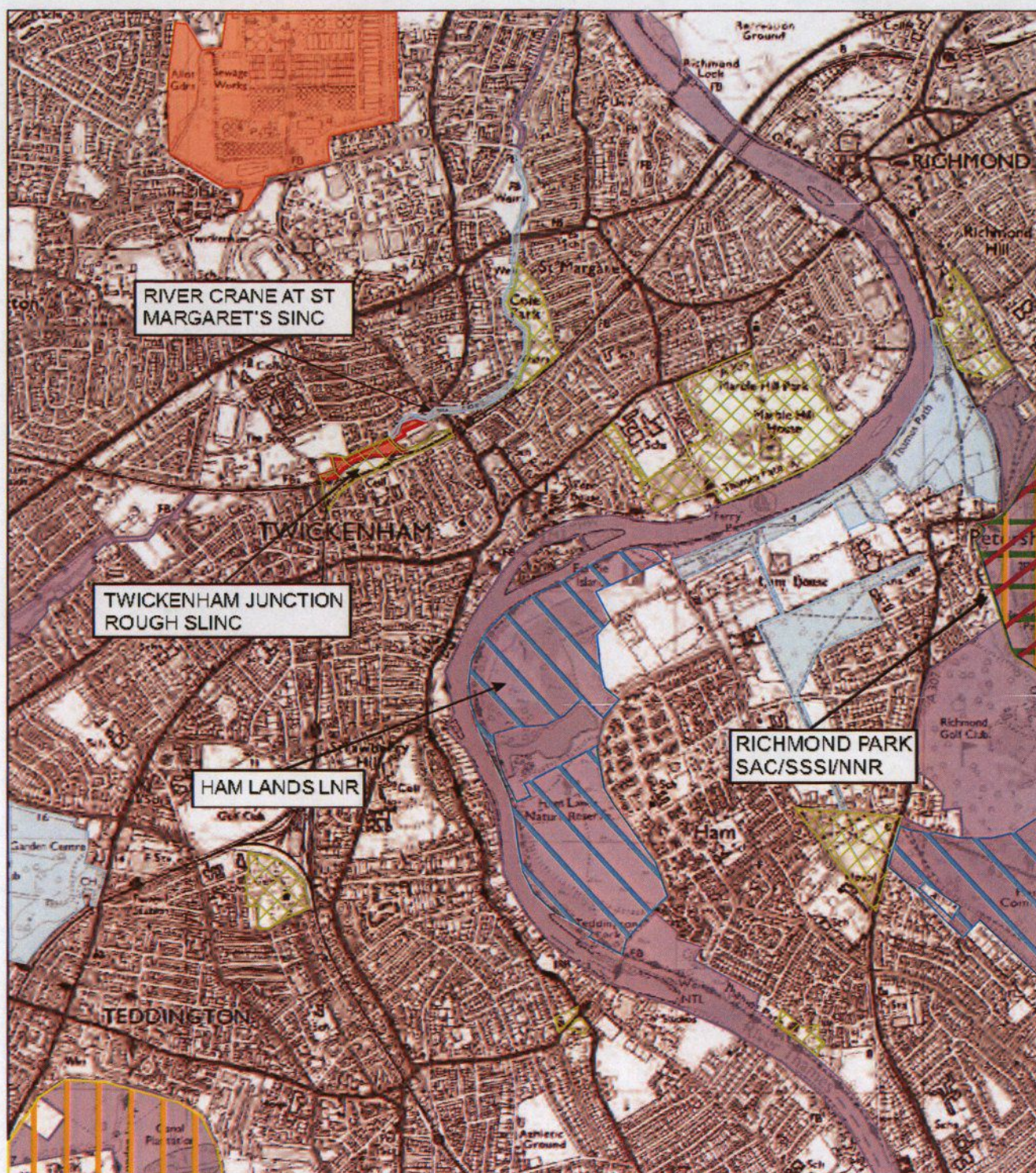
2720/MOL1












SEPTEMBER 2015

PLAN 2720/MOL2

Ecological Designations



KEY:

-  SITE LOCATION
-  SPECIAL AREA OF CONSERVATION (SAC)
-  SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
-  NATIONAL NATURE RESERVE (NNR)
-  LOCAL NATURE RESERVE (LNR)
-  SITE OF IMPORTANCE FOR NATURE CONSERVATION (METROPOLITAN IMPORTANCE) (SINC)
-  SITE OF IMPORTANCE FOR NATURE CONSERVATION (BOROUGH IMPORTANCE) (GRADE 1) (SINC)
-  SITE OF IMPORTANCE FOR NATURE CONSERVATION (BOROUGH IMPORTANCE) (GRADE 2) (SINC)
-  SITE OF LOCAL IMPORTANCE FOR NATURE CONSERVATION (SINC - IDENTIFIED IN RICHMOND LRP)

aspect ecology

Aspect Ecology Limited - Wind Creek - Henfield, Brighton, East Sussex, BN1 9AF
01253 276009 - info@aspectecology.com - www.aspectecology.com

LAND WEST OF FORMER ROYAL
MAIL SORTING OFFICE
TWICKENHAM
ECOLOGICAL DESIGNATIONS

2720/MOL2



SEPTEMBER 2015

PLAN 2720/MOL3

Habitats, Ecological Features and Photographs



KEY:

- SITE BOUNDARY
- BUILDING
- HARDSTANDING
- BRAMBLE THICKET/TALL RUDERAL VEGETATION
- DENSE SCRUB
- BRACKEN
- SCATTERED SCRUB
- WOODLAND
- PLAY EQUIPMENT
- VEGETABLE PLOT
- AMENITY GRASSLAND
- EVIDENCE OF FORMER STANDS OF JAPANESE KNOTWEED (NOW TREATED/REMOVED)
- COTONEASTER SP
- TREE
- CATEGORY 2 BAT POTENTIAL TREE
- WATERCOURSE
- PATHWAY
- PHOTOGRAPH LOCATION

LAND WEST OF FORMER ROYAL
MAIL SORTING OFFICE
TWICKENHAM
HABITATS, ECOLOGICAL
FEATURES AND PHOTOGRAPHS

2720/MOL3

SEPTEMBER 2015



Aspect Ecology Limited - West Court - Hardwick Business Park
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aspect ecology

APPENDICES

APPENDIX 1

Information obtained from Multi-Agency Geographic Information for the
Countryside (MAGIC) online database



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones – to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)
- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB 36

xmin = 505100

ymin = 167900

xmax = 527200

ymax = 179300

Map produced by MAGiC on 14 September, 2015.

Copyright resides with the data suppliers and the map must not be reproduced without their permission. Some information in MAGiC is a snapshot of the information that is being maintained or continually updated by the originating organisation. Please refer to the metadata for details as information may be illustrative or representative rather than definitive at this stage.

9/11/2015

Site Check Report Report generated on Mon Sep 14 2015

You selected the location: Centroid Grid Ref: TQ157735

The following features have been found in your search area:

Local Nature Reserves (England)

Reference	1C09919
Name	BLONDIN NATURE AREA
Hectares	2.34
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1009919
Reference	1C08856
Name	CRANE PARK ISLAND
Hectares	2.67
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1008856
Reference	1C09769
Name	ISLEWORTH AIT
Hectares	3.49
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1009769
Reference	1C09353
Name	KEMPTON NATURE RESERVES
Hectares	22.8
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1009353
Reference	1C09448
Name	HAM COMMON, RICHMOND, LONDON
Hectares	40.27
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1009448
Reference	1C08934
Name	HAM LANDS
Hectares	60.01
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1008934
Reference	1C08967
Name	HOUNSLOW HEATH
Hectares	83.14
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1008967
Reference	1C09069
Name	PEVENSEY ROAD
Hectares	10.21
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1009069
Reference	1C09055
Name	OAK AVENUE HAMPTON
Hectares	1.85
Hyperlink	http://www.ln.naturalengland.org.uk/special/lnr/lnr_details.asp?frameid=1009055

National Nature Reserves (England)

Name	RICHMOND PARK
Reference	1C07634
Hectares	846.62
Hyperlink	http://www.naturalengland.org.uk/ourwork/conservation/designations/nnr/1C07634.aspx

Rainwater Sites (England)

Name	SOUTH WEST LONDON WATERBODIES
Reference	UK11065
Hectares	829.69

Sites of Special Scientific Interest (England)

Name	
Reference	1C00342
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	846.62

9/11/2015

Citation	1C02388
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1002388

Name	
Reference	1C00134
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	22.07
Citation	1C04281
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1004281

Name	
Reference	1477753
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	540.39
Citation	2000738
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000738

Name	
Reference	1C07242
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	25.29
Citation	2000385
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000385

Special Areas of Conservation (England)

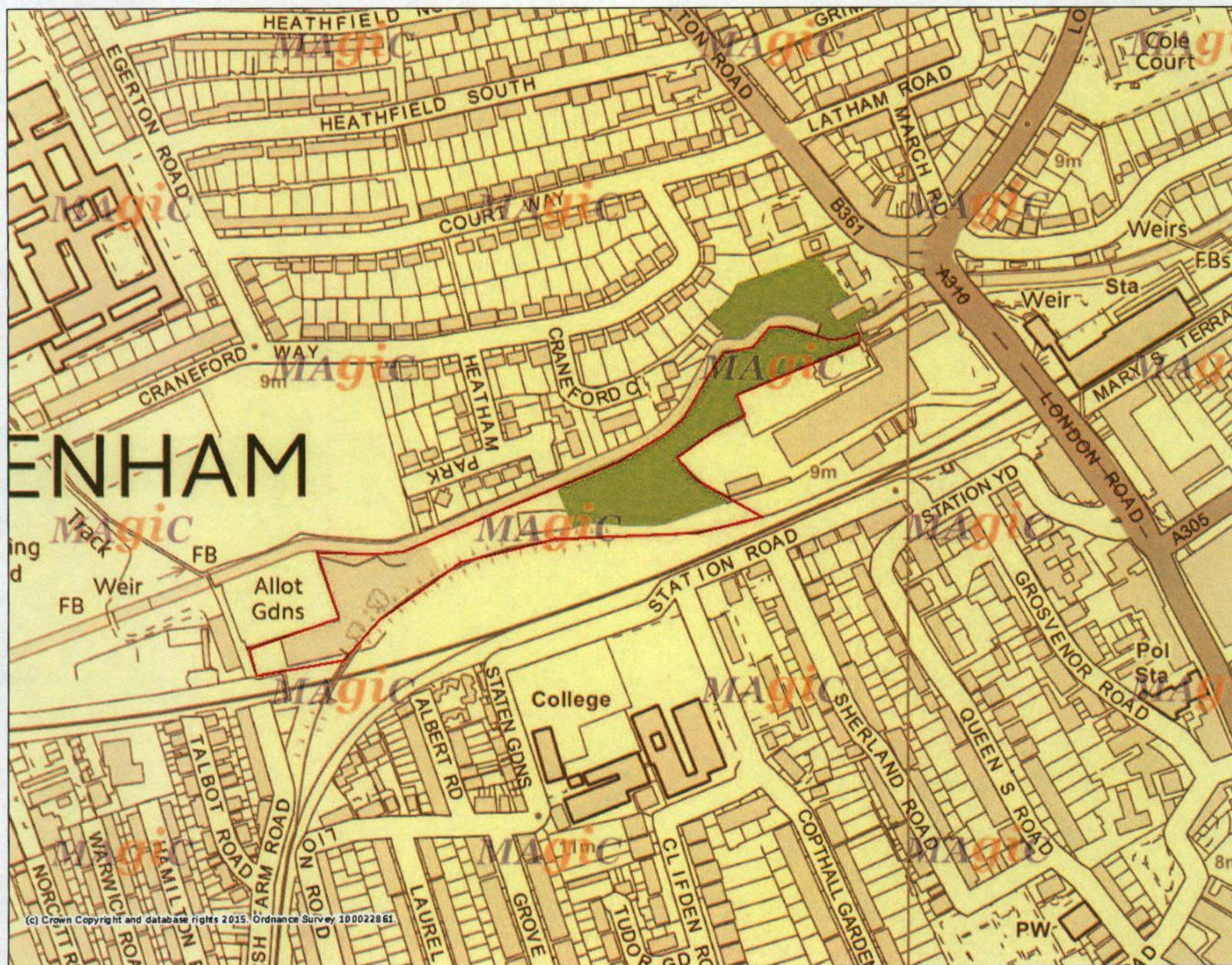
Name	RICHMOND PARK
Reference	UK0030246
Hectares	846.62
Hyperlink	http://www.naturalengland.org.uk/naturalengland/sites/sac/select/cas.aspx?code=UK0030246

Special Protection Areas (England)

Name	SOUTH WEST LONDON WATERBODIES
Reference	UK9012171
Hectares	829.69

Ancient Woodland (England)

No Features found



Legend

- Priority Habitat Inventory -
Deciduous Woodland (England)

Projection ~ OSGB 36
 xmin ~ 515100
 ymin ~ 173200
 xmax ~ 516500
 ymax ~ 173900

Map produced by MAGiC on 14 September, 2015.
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 information in MAGiC is a snapshot of the information
 that is being maintained or continually updated by the
 originating organisation. Please refer to the metadata for
 details as information may be illustrative or representative
 rather than definitive at this stage.

APPENDIX 2

Survey Scoping letter to Local Planning Authority
[ECO2720/TS/HG.010.let.ra]

Our ref: ECO2720/TS/HG.010.let.ra
Your ref:

21 August 2015

Robert Angus
Development Control Manager
Planning (Environment Directorate)
London Borough of Richmond Upon Thames
Civic Centre
44 York Street
Twickenham
TW1 3BZ

Aspect Ecology Ltd
West Court
Hardwick Business Park
Noral Way
Banbury
Oxfordshire OX16 2AF

T: 01295 276066
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E: info@aspect-ecology.com
W: www.aspect-ecology.com

SENT BY E-MAIL ONLY

Dear Robert,

**TWICKENHAM ROUGH, LAND TO THE WEST OF TWICKENHAM SORTING OFFICE,
TWICKENHAM – ECOLOGY SCOPING**

Aspect Ecology is advising St James Group Ltd with regard to ecological matters relating to the installation of a new 3m wide footpath to address the below condition of the planning permission (DC/CAM/13/1147/FUL/FUL);

'U62138NS14' - Further Surveys

An enhanced Phase 1 Habitat Survey and Bat Survey shall be submitted to and agreed in writing by the Local Planning Authority.

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land.'

Aspect Ecology have previously undertaken work within the development site in June 2013 comprising an Extended Phase 1 Habitat Survey as set out within the report entitled 'Land to the West of the former Royal Mail Sorting Office, London Road, Twickenham. Ecological Assessment' dated June 2013, which was submitted as part of the planning application. Additionally Aspect Ecology carried out survey work in relation to the former Twickenham Sorting Office in August 2011 [ECO2720.BN1 EcoReview+Plan.pdf].

The purpose of this correspondence is to formally scope out the level of survey work required to discharge the above planning condition set out by the London Borough of Richmond Upon Thames planning department.

I set out a brief overview of our proposed approach for your consideration under the following headings:

- Phase 1 Habitat Survey
- Bat Survey
- Reporting
- Conclusion

1. Extended Phase 1 Habitat Survey

It is proposed that an update Phase 1 habitat survey and general faunal survey is undertaken at the site, to provide up-to-date information on the habitats and ecological features present within the site. Particular regard will be had to the potential use of the site by any protected species, based on the habitats present and their condition.

2. Bat Inspection Survey

The survey will include specific survey work in relation to bats, comprising ground-level inspections of trees. All trees within the site will be examined from the ground to identify any features with bat roost potential, such as splits, cracks, rot holes, coverings of ivy, peeling bark or similar. The potential for the trees to support roosting bats will be ranked in accordance with the criteria set out in the publication entitled 'Bat Surveys - Good Practice Guidelines,' by the Bat Conservation Trust (BCT) (2012) and a schedule will be produced documenting the presence of any such features. It does not appear that any built structures are present within the site, however should such structures be discovered these will also be inspected for the presence of bats.

It is not considered that activity survey work will be required given the relatively small size of the site and nature of the proposals, whilst appropriate safeguards in relation to roosting bats will be undertaken as required.

3. Reporting

Following the completion of surveys, an evaluation and assessment of the site will be undertaken based on the information collated and ecology surveys undertaken.

Any ecological constraints will be identified and evaluated and a strategy proposed to address these issues in relation to the proposed development, with these placed in an easily understood form with realistic but detailed mitigation measures. Any opportunities for the site in ecological terms will be highlighted and measures proposed to offset any impacts identified. This may include an ecological enhancements plan, to show the location and specifications of ecological enhancements.

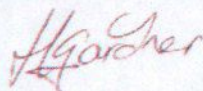
The results of the survey work will be set out within an Ecological Appraisal report, complete with colour plans and appendices as necessary, and will include recommendations for mitigation measures that may be required.

4. Conclusion

We would be pleased to receive any comments from yourselves on the above proposed approach and your agreement with the scope to address condition U62138NS14 of the planning permission (reference DC/CAM/13/1147/FUL/FUL).

I trust the above is of assistance. Should you have any queries please do not hesitate to contact me.

Yours sincerely



Hannah Gardner

Ecologist

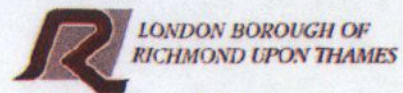
(hannah.gardner@aspect-ecology.com)

**Electronic copies of reports will be provided as required. If hard copies are required time and printing costs will be charged in addition. Amendments to reports due to scheme revisions will be charged in addition. Any liaison with the team or input into the design process required or attendance at any meetings would be charged in addition in accordance with our standard rates. If the potential for protected species or other species or habitat issues were identified, further detailed Phase II surveys may be recommended which, if required, would be costed in addition. Similarly, should any further or other issues be raised the above fee estimate may need to be revised accordingly. Aspect Ecology's ecologists may be bound by the Chartered Institute of Ecology and Environmental Management's code of conduct.*

Encl. Site Location Plan
Decision Notice – Application 13/1147/FUL

Environment Directorate

Civic Centre, 44 York Street, Twickenham TW1 3BZ
tel: 020 8891 7300 text phone 020 8891 7120
fax: 020 8891 7789
email: envprotection@richmond.gov.uk
website: www.richmond.gov.uk



PLANNING

TOWN AND COUNTRY PLANNING ACT 1990: DECISION NOTICE

Miss Georgina Atkinson
St James Group Ltd
Berkeley House
15B St George Wharf
Vauxhall
London
SW8 2LE

Please contact Planning Support

Please telephone: 0845 612 2660

Your ref: Footpath/Cycleway
Application

Our ref:
DC/CAM/13/1147/FUL/FUL

Letter Printed: 19 August 2013

FOR DECISION DATED
19.08.2013

Applicant: Miss Georgina Atkinson

Agent:

WHEREAS in accordance with the provisions of the Town and Country Planning Act 1990 and the orders made thereunder, you have made an application received on **8 April 2013** and illustrated by plans for the permission of the Local Planning Authority to develop land situated at:

Land Known As Twickenham Rough To The West Of Twickenham Sorting Office, London Road, Twickenham, .

for

Proposed change of use of land to provide public amenity land and the provision of a 3m wide footpath/cycleway and associated landscaping and fencing.

NOW THEREFORE WE THE MAYOR AND BURGESSES OF THE LONDON BOROUGH OF RICHMOND UPON THAMES acting by the Council of the said Borough, the Local Planning Authority HEREBY GIVE YOU NOTICE pursuant to the said Act and the Orders made thereunder that permission to develop the said land in accordance with the said application is hereby **GRANTED** subject to the conditions and informatives summarised and listed on the attached schedule:-

Yours faithfully

A handwritten signature in black ink, appearing to read 'R. Angus', written over a horizontal line.

Robert Angus
Development Control Manager

APPLICANT NAME	AGENT NAME
Miss Georgina Atkinson Berkeley House 15B St George Wharf Vauxhall London SW8 2LE	

SITE:

Land Known As Twickenham Rough To The West Of Twickenham Sorting Office, London Road, Twickenham, .

PROPOSAL:

Proposed change of use of land to provide public amenity land and the provision of a 3m wide footpath/cycleway and associated landscaping and fencing.

SUMMARY OF CONDITIONS AND INFORMATIVES

CONDITIONS:

AT01 Development begun within 3 years	U62132NS08 - Archaeology
DV29E Potentially Contaminated Sites	U62133NS09 - 8m Buffer Zone
U62124DV48 - Approved drawings	U62134NS10 - Woodland Management Plan
U62125NS01 Excavation Works	U62135NS11 - Fencing/Gates Details
U62126NS02 - Arboricultural Method Statement	U62136NS12 - Pathway Details
U62127NS03 - Tree Protection	U62137NS13 - Eradication Programme - Weeds
U62128NS04 - Prohibited Activities	U62138NS14 - Further Surveys
U62129NS05 - Site Supervision	U62139NS15 - Hard and Soft Landscaping Works
U62130NS06 - Hand Held Tools	U62639 Construction Method Statement
U62131NS07 - Dawn to Dusk Access Only	

INFORMATIVES:

U70641 Relevant policies/proposals FUL~	U70648 Ground contamination
U70642 Summary Reasons for Granting PP~	U70649 Archaeology
U70644 Trees - Protective fencing	U70650 London Cycle Design Standards
U70645 Trees - Size of new stock	U70651 Landscaping details
U70646 Nature Conservation	U70653 Noise Control - Building Sites
U70655 Consultation with Amenity Groups	U70647 Bats

DETAILED CONDITIONS

AT01 Development begun within 3 years

The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of this permission.

REASON: To conform with the requirements of Section 91 of the Town and Country Planning Act 1990 as amended by the Planning and Compulsory Purchase Act 2004.

DV29E Potentially Contaminated Sites

1. No development shall take place until:

a) a desk study detailing the history of the site, hazardous materials, substances used together with details of a site investigation strategy based on the information revealed in the desk study has been submitted to and approved in writing by the local planning authority

b) an intrusive site investigation has been carried out comprising: sampling of soil, soil vapour, ground gas, surface water and groundwater in locations and at depths stipulated by the local planning authority. Such work to be carried out by suitably qualified and accredited geo-environmental consultants in accordance with the current U.K. requirements for sampling and testing.

c) written reports of i) the findings of the above site investigation and ii) a risk assessment for sensitive receptors together with a detailed remediation strategy designed to mitigate the risk posed by the identified contamination to sensitive receptors have been submitted to and approved in writing by the local planning authority

Note: some demolition work, if required, could be allowed beforehand for enabling the above requirement (1b), subject to the agreement of the Local Planning Authority.

2. None of the dwellings/buildings hereby approved shall be occupied until:

a) the remediation works approved as part of the remediation strategy have been carried out in full and in compliance with the approved strategy. If during the remediation or development work new areas of contamination are encountered, which have not been previously identified, then the additional contamination should be fully assessed in accordance with condition [1(b, c)] above and an adequate remediation scheme shall be submitted to and approved in writing by the local planning authority and fully implemented thereafter.

b) a verification report, produced on completion of the remediation work, has been submitted to and approved in writing by the local planning authority. Such report to include i) details of the remediation works carried out and ii) results of verification sampling, testing and monitoring and iii) all waste management documentation showing the classification of waste, its treatment, movement and disposal in order to demonstrate compliance with the approved remediation strategy.

REASON: To protect future users of the site and the environment.

U62124DV48 - Approved drawings

The development hereby permitted shall be carried out in accordance with the following approved plans and documents, where applicable.

REASON: To accord with the terms of the application, for the avoidance of doubt and in the interests of proper planning.

O.S Extract received on 8 April 2013, Woodland Strategy and Arboricultural Impact Assessment dated 20 June 2013 prepared by Ian Keen Limited and Ecological Assessment prepared by Aspect Ecology dated June 2013, all received 24th June 2013

U62125NS01 Excavation Works

A) All excavations in preparation of foundations, drainage, ducting, and all works or development within the Root Protection Area of (retained trees) shall be carried out in a manner to ensure that all major roots uncovered in excess of 25mm shall be retained, bridged around and treated in accordance with section 7.2 of BS5837 2012.

B) Roots with a diameter less than 25mm may be removed if necessary: this should be done in accordance with BS3998 2010 (Tree Work - Recommendations) and section 7.2.3 of BS5837 2012

C) Any tree root exposed which is in excess of 5cm in diameter shall be reported to the Council's tree officer within 48 hours of exposure in order that advice may be obtained with regard to adequate treatment.

D) Any exposed roots must be immediately wrapped or covered to prevent desiccation and to protect them from rapid temperature change. Wrapping must be removed prior to backfilling.

E) Backfilling should be undertaken in accordance with section 7.2.4 of BS5837 2012

Reason: To ensure that trees are not damaged or otherwise adversely affected by the building operations.

U62126NS02 - Arboricultural Method Statement

Prior to any works associated with the approved scheme commencing on site, a scheme specific Arboricultural Method Statement shall be submitted to and agreed in writing by the Local Planning Authority: this is to include details of all special engineering within the RPA and other relevant construction details. The AMS shall include a Tree Protection Plan

The Tree Protection Plan and Arboricultural Method Statement must be written in accordance with section 6.1 of BS5837 2012 (Trees in relation to design, demolition and construction - recommendations)

No materials or machinery shall be brought onto the site prior to the approval of the Arboricultural Method Statement.

The scheme shall be undertaken in accordance with the approved Arboricultural Method Statement and Tree Protection Plan at all times.

Reason: To ensure that trees are not damaged or otherwise adversely affected by the building operations.

U62127 NS03 - Tree Protection

No works or development shall take place until a scheme for the protection of the retained trees (section 7, BS5837, the Tree Protection Plan) has been agreed in writing with the LPA. This scheme shall include:

- a. a plan to a scale and level of accuracy appropriate to the proposal that shows the position, crown spread and Root Protection Area (para. 5.2.2 of BS5837) of every retained tree on site and on neighbouring or nearby ground to the site in relation to the approved plans and particulars. The positions of all trees to be removed shall be indicated on this plan.
- b. the details of each retained tree as required at para. 4.2.6 of BS5837 in a separate schedule.
- c. a schedule of tree works for all the retained trees in paragraphs (a) and (b) above, specifying pruning and other remedial or preventative work, whether for physiological, hazard abatement, aesthetic or operational reasons. All tree works shall be carried out in accordance with BS3998, 1989, Recommendations for tree work.
- d. the details and positions (shown on the plan at paragraph (a) above) of the Ground Protection Zones (section 9.3 of BS5837).
- e. the details and positions (shown on the plan at paragraph (a) above) of the Tree Protection Barriers (section 9.2 of BS5837), identified separately where required for different phases of construction work (e.g. demolition, construction, hard landscaping). The Tree Protection Barriers must be erected prior to each construction phase commencing and remain in place, and undamaged for the duration of that phase. No works shall take place on the next phase until the Tree Protection Barriers are repositioned for that phase.
- f. the details and positions (shown on the plan at paragraph (a) above) of the Construction Exclusion Zones (section 9 of BS5837).
- g. the details and positions (shown on the plan at paragraph (a) above) of the underground service runs (section 11.7 of BS5837).
- h. the details of any changes in levels or the position of any proposed excavations within 5 metres of the Root Protection Area (para. 5.2.2 of BS5837) of any retained tree, including those on neighbouring or nearby ground.
- i. the details of the working methods to be employed for the installation of drives and paths within the RPAs of retained trees in accordance with the principles of "No-Dig" construction.
- j. the details of the working methods to be employed with regard to the access for and use of heavy, large, difficult to manoeuvre plant (including cranes and their loads, dredging machinery, concrete pumps, piling rigs, etc) on site.
- k. the details of tree protection measures for the hard landscaping phase (sections 13 and 14 of BS5837).
- l. the timing of the various phases of the works or development in the context of the tree protection measures.

Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62128 NS04 - Prohibited Activities

Prohibited Activities

The following activities must not be carried out under any circumstances:

- a) No fires shall be lit within 10 metres of the nearest point of the canopy of any retained tree
- b) No works shall proceed until appropriate Tree Protection Barriers are in place, with the exception of initial tree works

- c) No equipment, signage, fencing, tree protection barriers, materials, components, vehicles or structures shall be attached to or supported by a retained tree
 - d) No mixing of cement or use of other materials or substances shall take place within a RPA, or close enough to a RPA that seepage or displacement of those materials or substances could cause them to enter a RPA
 - e) No alterations or variations to the approved works or tree protection schemes shall be carried out without the prior written approval of the LPA.
- Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62129NS05 - Site Supervision

Site Supervision

No works or development shall take place until a scheme of supervision for the arboricultural protection measures has been approved in writing by the LPA. This scheme will be appropriate to the scale and duration of the works and may include details of:

- a) Induction and personnel awareness of arboricultural matters.
- b) Identification of individual responsibilities and key personnel.
- c) Statement of delegated powers.
- d) Timing and methods of site visiting and record keeping, including updates.
- e) Procedures for dealing with variations and incidents.
- f) How copies of site inspection records are to be supplied to the Arboricultural team to

help monitor tree protection measures.

Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62130NS06 - Hand Held Tools

Any excavation within tree protection areas of trees shall be carried out using non-mechanised hand tools only and shall not result in the lowering of existing soil levels unless otherwise agreed by the Local Planning Authority.

Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62131NS07 - Dawn to Dusk Access Only

No access shall occur to the land other than between dawn and dusk on any day except in a case of emergency or for maintenance purposes.

Reason: To ensure that neighbouring amenity is adequately safeguarded and to secure a safe form of development

U62132NS08 - Archaeology

No development shall take place until the applicant (or their heirs and successors in title) has secured the implementation of a programme of archaeological investigation (watching brief) in accordance with a Written Scheme of Investigation which has been submitted by the applicant and approved in writing by the local planning authority. No development shall take place other than in accordance with the Written Scheme of Investigation.

Reason: Heritage assets of archaeological interest are expected to survive along the route and appropriate archaeological investigation need to be secured, including the publication of results, in accordance with Section 12 of the NPPF.

U62133NS09 - 8m Buffer Zone

No development shall take place until a scheme for the provision and management of at least an 8m wide buffer zone (unless otherwise agreed in writing by the Local Planning Authority) alongside the River Crane shall be submitted to and agreed in writing by the local planning authority. Thereafter the development shall be carried out in accordance with the approved scheme and any subsequent amendments shall be agreed in writing by the local planning authority. The buffer zone scheme shall be free from built development including lighting and formal landscaping. The details shall include:

- a) plans showing the extent and layout of the buffer zone
- b) details of the proposed planting scheme
- c) details demonstrating how the buffer zone will be protected during development and managed/maintained over the longer term including adequate financial provision and named body responsible for management plus production of detailed management plan

Reason: To ensure the development conserves and enhances the natural and local environment by minimising impacts on biodiversity in accordance with paras 109 and 118 of the NPPF, local planning policy and Art 10 of the Habitats Directive.

U62134NS10 - Woodland Management Plan

No development shall take place until a woodland management plan and landscape management plan, including long-term design objectives, management responsibilities and maintenance schedules for all landscaped areas (except private owned domestic gardens), shall be submitted to and approved in writing by the local planning authority. The wood land and landscape management plans shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority.

The scheme shall include the following elements:

- a) details of the extent and type of new planting (native species to predominate)
- b) details of maintenance regimes
- c) details of any new habitat created on site
- d) details of treatment of site boundaries and /or buffers around d water bodies
- e) details of management responsibilities

Reason: To ensure the site is adequately managed for the benefit of biodiversity, in particular wildlife and habitat protection, and public amenity.

U62135NS11 - Fencing/Gates Details

Details of the means of enclosure/fencing/gates to the southern, eastern and western boundaries of the site shall be submitted to and agreed in writing prior to the commencement of development, such fencing/enclosure shall then be constructed in accordance with these approved details.

Reason: To provide appropriate security to neighbouring residential properties, the Marsh Farm allotments and Heatham House and to ensure that neighbouring amenity is adequately safeguarded and to deliver a safe pathway/form of development

U62136NS12 - Pathway Details

No development shall take place until details of the route of the 3m wide pathway/cycleway have been submitted to and agreed in writing by the Local Planning Authority and thereafter constructed in accordance with these details, such details to include alignment, levels, construction and surfacing of pathway, underground ducting for electric cables, seating, resting benches, litter bins, signage, ecological information boards, means of enclosure and timing of construction in relation to the development of adjoining land. The route of the footpath shall accord with the Secured by Design and Safer Places principles and the London Borough of Richmond upon Thames Public Space Design Guide.

Reason: To ensure that neighbouring amenity, arboricultural and nature conservation interests are adequately safeguarded.

U62137NS13 - Eradication Programme - Weeds

As part of the development hereby approved, a method statement and programme for the removal and/or chemical treatment of any Japanese Knotweed, Giant Hogweed and Wall Cotoneaster discovered on site shall be submitted to and agreed in writing by the Local Planning Authority. An eradication guarantee shall be provided to the Local Planning Authority following treatment.

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land.

U62138NS14 - Further Surveys

An enhanced Phase 1 Habitat Survey and Bat Survey shall be submitted to and agreed in writing by the Local Planning Authority

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land.

U62139NS15 - Hard and Soft Landscaping Works

A) No development shall take place until full details of both hard and soft landscaping works have been submitted to and approved in writing by the local planning authority. These details shall include all ecological enhancements recommended in the Ecological Assessment report hereby approved by Aspect Ecology, proposed finished levels or contours; means of enclosure; car parking layouts; other vehicle and pedestrian access and circulation areas; hard surfacing materials; minor artifacts and structures (e.g. furniture, play

equipment, refuse or other storage units, signs, lighting etc.); proposed and existing utility services above and below ground (e.g. drainage, power, communications cables, pipelines etc, indicating lines, manholes, supports etc); retained historic landscape features and proposals for restoration, where relevant a program or timetable of the proposed works.

B) Where within the Root Protection Area of retained trees hard landscape design, small structure installation and service installation should be formulated in accordance with section 7.4, 7.5 and 7.7 of British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations.

C) Soft landscape works shall include planting plans, written specifications (including cultivation and other operations associated with plant and grass establishment) the specification is to include details of the quantity, size, species, position, planting methodology, proposed time of planting and anticipated routine maintenance of all trees to be planted. Any proposed tree planting should be undertaken in accordance with section 5.6 of British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations.

D) All tree/plant/shrub planting included within the approved specification shall be carried out in accordance with that specification and in accordance with BS 3936:1986 (parts 1, 1992, Nursery Stock, Specification for trees and shrubs, and 4, 1984, Specification for forest trees); BS 4043: 1989, Transplanting root-balled trees; and BS 4428:1989, Code of practice for general landscape operations (excluding hard surfaces).

E) All hard and soft landscape works shall be carried out in accordance with the approved details and in any event prior to the commencement of use of the land and pathway/cycleway

Reason: To ensure that the proposed development does not prejudice the appearance of the locality and to preserve and enhance nature conservation interests

U62639 Construction Method Statement

No development shall take place, including any demolition, until a Construction Method Statement has been submitted to and approved in writing by the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:

1. the parking of vehicles of site operatives & visitors
2. loading/unloading of plant & materials
3. storage of plant and materials used in constructing the development
4. the erection and maintenance of security hoardings including decorative displays and facilities for public viewing, where appropriate.
5. wheel washing facilities
6. measures to control the emission of dust and dirt during construction
7. a scheme for recycling/disposing of waste resulting from demolition & construction works.
8. routing of delivery vehicles to and from the site

Reason: in the interests of highway and pedestrian safety together with the amenity of the area

DETAILED INFORMATIVES

U70641 Relevant policies/proposals FUL~

This decision has taken into account the relevant policies of the London Plan and, in particular, the following have been taken into account in the consideration of this proposal:-

London Plan 2.18, 3.2, 3.6, 5.12, 5.13, 5.21, 6.1, 6.9, 6.10, 7.1, 7.2, 7.3, 7.4, 7.5, 7.8, 7.15, 7.17, 7.18, 7.19, 7.21, 7.24, 7.25, 7.27, 7.28, 7.30, 8.2, Local Development Framework - Core Strategy CP1, CP3, CP4, CP5, CP7, CP8, CP9, CP10, CP12, CP16, CP17 and CP20, Local Development Framework Development Management Plan DM SD 1, DM SD 6, DM SD 7, DM SD 8, DM SD 9, DM OS 2, DM OS 5, DM OS 6, DM OS 7, DM OS 8, DM OS 10, DM OS 12, DM HD 2, DM HD 3, DM HD 4, DM TP 3, DM TP 4, DM TP 6, DM TP 7, DM DC 1, DM DC 2, DM DC 4, DM DC 5

Local Development Framework Twickenham Action Area Plan: Principles 1, 4, 5, Policy TWP3, Proposal Site TW1

Crane Valley Planning Guidelines: SPG Design Quality SPD, Twickenham Station and Surrounding Sites SPD

U70642 Summary Reasons for Granting PP~

The change of use of this site to public amenity land offers an opportunity to secure an important link in the

SCHEDULE OF REASONS FOR APPLICATION 13/1147/FUL

West London Green Chain as specifically identified in the Crane Valley Planning Guidelines, the TW1 Site Allocation in Twickenham Action Area Plan and the Supplementary Planning Document: Twickenham Station and Other Surrounding Sites. As well as the link to the Crane Valley Park and open spaces around the River Crane, the new link will improve connectivity to Heath Road and Twickenham Green, Craneford Playing Fields, Richmond upon Thames College and the Twickenham Stoop Stadium. The footpath, which will act as a shared surface for pedestrians and cyclists, is proposed to be gravel bound and 3m in width with a 1m mown edge to either side. The natural, landscaped setting to the footpath will be retained to ensure the important nature conservation value of the land is not prejudiced while future encroachment towards the river is prevented by the imposition of a condition requiring the retention of an 8m buffer zone between the footpath and the riverbanks. Conditions are imposed that require the soil decontamination and the chemical

treatment or removal of Japanese Knotweed or other pernicious weeds that are found on site. The precise route of the footpath is a reserved matter at this stage. This approach allows the consent to have the necessary flexibility to best respond and protect the arboricultural and nature conservation value of the site. Due to its overgrown state, many parts of the site are simply impenetrable and further survey work will be required before robust decisions can be made on the exact alignment of the path. Nonetheless, in recognition of local residents concerns and on the basis of the site information able to be gathered from the site perimeters, it is clear that certain restrictions on public access to the land are required to prevent neighbour amenity being prejudiced and as such the footpath will be:

- closed on event days at the RFU stadium
- closed before dawn and after dusk on all days
- will be unlit
- will be gated (lockable) and fenced/cctv camera at London Road entrance
- additional tree/vegetation planting will take place on the northern boundary with the river crane

The proposal has been considered in the light of the Development Plan, comments from statutory consultees and third parties (where relevant) and compliance with Supplementary Planning Guidance as appropriate. It has been concluded that there is not a demonstrable harm to interests of acknowledged importance caused by the development that justifies withholding planning permission.

U70644 Trees - Protective fencing

In order to protect trees during building works the Local Planning Authority would normally expect the erection of Chestnut pale fencing to a height of not less than 1.2m around the trees in question to the extent of their existing crown spread or, where circumstances prevent this, to a minimum radius of 2m from the trunk of the tree.

U70645 Trees - Size of new stock

The Local Planning Authority would normally expect all new trees to be planted to be a minimum size of SELECTED STANDARD which shall have a sturdy reasonably straight stem with a clear height from ground level to the lowest branch of 1.8m, an overall height of between 3m and 3.5m and a stem circumference measured at 1m from ground level of 10-12cm. The tree shall, according to the species and intended use, have either a well-balanced branching head or a well defined, straight and upright central leader with the branches growing out from the stem with reasonable symmetry.

U70646 Nature Conservation

When submitting proposals for landscaping the site applicants are advised that in determining the suitability of such proposals the Local Planning Authority will take into account the scope for enhancing the nature conservation interest of the site.

U70655 Consultation with Amenity Groups

The applicant is advised to consult with local amenity groups (including FORCE (Friends of the River Crane Environment)) when preparing details for submission in relation to the pathway conditions.

U70648 Ground contamination

The possibility of ground contamination should always be considered, regardless of past land uses and the applicant is advised to follow guidance set out in the NPPF

U70649 Archaeology

SCHEDULE OF REASONS FOR APPLICATION 13/1147/FUL

The written scheme of investigation submitted pursuant to condition NS05 will need to be prepared and implemented by a suitably qualified archaeological practice in accordance with English Heritage Greater London Archaeology guidelines. It must be approved by the planning authority before any on-site development related activity occurs.

U70650 London Cycle Design Standards

The applicant is recommended by TfL to consult the London Cycle Design Standards at the detailed design stage and delivery of this link hereby approved.

U70651 Landscaping details

The applicant is advised that landscaping details submitted pursuant to condition NS09 and NS15 should include ecological enhancements to protect and enhance the river corridor and in-channel habitat.

U70653 Noise Control - Building Sites

The attention of the applicant is drawn to the requirements of section 60 of the Control of Pollution Act 1974 in respect of the minimisation of noise and vibration on construction and demolition sites. Application, under section 61 of the Act for prior consent to the works, can be made to the Environmental Health Department.

Under the Act the Council has certain powers to control noise from construction sites. Typically the council will limit the times during which sites are permitted to make noise that their neighbours can hear.

For general construction works the Council usually imposes (when necessary) the following limits on noisy works:-

Monday to Friday 8am to 6pm

Saturdays 8am to 1pm

Sundays and Public Holidays- No noisy activities allowed

Applicants should also be aware of the guidance contained in British Standard 5228:2009- Noise and vibration control on construction and open sites.

Any enquiries for further information should be made to the Commercial Environmental Health Team, 2nd Floor Civic Centre, 44 York Street, Twickenham TW1 3AB.

U70647 Bats

The applicant is advised that bats are European Protected Species under the Wildlife and Countryside Act 1991 (as amended) and the Natural Habitats

Regulations 1994 and therefore any works effecting roosts, habitats and foraging areas will need to first be approved by DEFRA.

END OF SCHEDULE OF CONDITIONS AND INFORMATIVES FOR APPLICATION 13/1147/FUL

APPENDIX 3

Examples of Bat Boxes

Bat Boxes

Schwegler bat boxes are made from 'woodcrete' and have the highest rates of occupation of all types of box.

The 75% wood sawdust, clay and concrete mixture is ideal, being durable whilst allowing natural respiration and temperature stability. These boxes are rot and predator proof and extremely long lasting.

Boxes can be hung from a branch near the tree trunk or fixed using 'tree-friendly' aluminum nails.



1F Bat Box

A larger than standard bat box, with two additional roughened wooden panels inside to be used by the bats as perches.

Woodcrete construction, 16cm diameter, height 36cm.

1FF Bat Box

The rectangular shape makes the 1FF suitable for attaching to the sides of buildings or in sites such as bridges, though it may also be used on trees. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats.

Woodcrete construction, 27cm width, 43cm height, 7.3kg weight



Schwegler 2F Bat Box

The 2F from Schwegler is the most popular general purpose bat box. It is particularly attractive to the smaller British bats. A simple design made from strong, natural WoodcretePLUS material, with a narrow entrance slit on the front. Hang from a tree branch near the trunk, or fix to a trunk with the supplied 'tree-friendly' aluminium nail.

Woodcrete construction, 16cm diameter, 33cm height, 4kg weight.

APPENDIX 4

Examples of Bird Boxes

Bird Boxes

Schwegler bird boxes have the highest rates of occupation of all types of box.

They are designed to mimic natural nest sites and provide a stable environment with the right thermal properties for chick rearing and winter roosting.

Boxes are made from 'Woodcrete'. This 75% wood sawdust, clay and concrete mixture is breathable and very durable making these bird boxes extremely long lasting.



1B Bird Box

This is the most popular box for garden birds and appeals to a wide range of species. The box can be hung from a branch or nailed to the trunk of a tree with a 'tree-friendly' aluminium nail.

Available in four colours and three entrance hole sizes: 26mm for small tits, 32mm standard size, and oval for redstarts.

landscape planning • ecology • arboriculture

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RECEIVED

- 5 OCT 2015

PLANNING

LAND TO THE WEST OF THE FORMER ROYAL
MAIL SORTING OFFICE,
LONDON ROAD, TWICKENHAM

Ecological Appraisal 2015
to address Condition U62138NS14 of the
planning permission (DC/CAM/13/1147/FUL/FUL)

September 2015
ECO2720.EcoApp2015.Dv2

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APPENDICES

APPENDIX 1	Information obtained from Multi-Agency Geographic Information for the Countryside (MAGIC) online database.
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APPENDIX 3	Examples of Bat Boxes
APPENDIX 4	Examples of Bird Boxes

1. INTRODUCTION

1.1. Background and Proposals

1.1.1. Aspect Ecology was commissioned by St James Group Ltd in August 2015 to undertake an update ecological appraisal of the site, located west of the former Royal Mail Sorting Office at London Road, Twickenham (see Plan 2720/MOL1). Aspect Ecology have previously undertaken work within the development site in June 2013 comprising an Extended Phase 1 Habitat Survey as set out within the report entitled 'Land to the West of the former Royal Mail Sorting Office, London Road, Twickenham. Ecological Assessment' dated June 2013. Additionally Aspect Ecology carried out survey work in relation to the former Twickenham Sorting Office in August 2011.

1.1.2. The site is proposed for change of use to public amenity land, including the provision of a new 3m wide footpath/cycleway and associated habitat management works, for which planning permission has been granted by The London Borough of Richmond Upon Thames (ref: DC/CAM/13/1147/FUL/FUL). The planning permission includes a number of conditions, including condition 'U62138NS14', which this report addresses. The condition states:

"An enhanced Phase 1 Habitat Survey and Bat Survey shall be submitted to and agreed in writing by the Local Planning Authority.

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land."

1.2. Site Location and Characteristics

1.2.1. The site is situated west of the former Royal Mail Sorting Office, accessed off London Road, within the centre of Twickenham, opposite Twickenham rail station. The site is located immediately south of the River Crane, which forms the northern site boundary, whilst much of the southern site boundary is located adjacent to an existing, active railway line, set on a steep embankment up from the site. West of the site is an area of allotments and an existing footpath that crosses a footbridge over the railway to the south. To the east of the site is the Former Royal Mail Sorting Office which at the time of survey was an active construction site.

1.2.2. The site itself is dominated by Bramble *Rubus fruticosus* thicket with colonising ruderal species and areas of dense scrub. These habitats appear to have received little in the way of recent management, such that the vegetation is tall and impenetrable in places. Since the survey work undertaken in June 2013 the Bramble thicket appears to have further dominated the site in parts, growing over the majority of the path that was recorded to be present in 2013. The eastern part of the site includes an area of woodland, along with cleared activity areas associated with an adjacent Youth Centre. A small patch of amenity grassland is additionally present in the far north-eastern corner of the site.

1.3. **Ecological Appraisal**

- 1.3.1. This document assesses the ecological interest of the site as a whole and addresses condition 'U62138NS14'. The importance of the habitats present is evaluated. Where necessary, mitigation measures are recommended so as to safeguard any significant existing ecological interest within the site and where appropriate, reference is also made to both the National and Local Biodiversity Action Plans where appropriate.

2. SURVEY METHODOLOGY

- 2.1. The methodology utilised for the survey work can be split into 3 main areas: desktop study, habitat survey and faunal survey. These are discussed in more detail below.

2.2. Desktop Study

- 2.2.1. Given that a desktop study was recently undertaken in June 2013 it was not considered necessary to undertake a full update desktop study. Details of the methodology of the desktop study undertaken in 2013 (updated in 2015 where appropriate) are set out below.
- 2.2.2. In order to compile background information on the site and its immediate surroundings, information on statutory nature conservation designations was reviewed on the online Multi-Agency Geographic Information for the Countryside (MAGIC) database, which utilises data provided by Natural England. The database was originally reviewed in 2013, and updated in 2015. This information is reproduced at Appendix 1 and, where appropriate, on Plan 2720/MOL2.
- 2.2.3. In addition, the London Borough of Richmond planning proposals map, London Borough of Richmond Upon Thames Local Biodiversity Action Plan (BAP) and online information available from Greenspace Information for Greater London (GiGL) was reviewed in order to provide information on the locations and nature of non-statutory nature conservation designations. This information is discussed in the relevant sections below and reproduced, where appropriate, on Plan 2720/MOL2.
- 2.2.4. The National Biodiversity Network (NBN) database was also reviewed for up to date relevant records where appropriate in respect of the site and adjacent areas in order to fully inform the ecological assessment. Where records are held, these are available via the NBN, but cannot be specifically referenced without further permission from the information provider.
- 2.2.5. The Woodland Trust database was searched for any records of veteran trees within or adjacent to the site, while the Freshwater Habitats Trust database was searched for any records of priority ponds or important areas for ponds in the vicinity of the site. A search of the brownfields habitats database for Open Mosaic Habitats was also conducted in September 2015.

2.3. Habitat Survey

- 2.3.1. The site was originally surveyed in June 2013, with update survey undertaken in August 2015, in order to ascertain the current ecological value of the land contained within the boundaries of the site and to identify the main habitats and features present.
- 2.3.2. The site was surveyed based on extended Phase 1 survey methodology¹, as recommended by Natural England, whereby the habitat types present are identified and mapped, together with an assessment of the species composition of each habitat. This technique provides an inventory of the basic habitat types present and allows identification of areas of greater potential which require further survey. Any such areas identified can then be

¹ Handbook for Phase I habitat survey: A technique for environmental audit. JNCC, 2010.

examined in more detail. This method was extended, in line with the Guidelines for Preliminary Ecological Appraisal (GPEA)², to include recording details of notable or protected species present within the survey area, or habitats present that have the potential to support notable or protected species.

- 2.3.3. Using the above method, the site was classified into areas of similar botanical community types, with a representative species list compiled for each habitat identified.

2.4. Faunal Surveys

- 2.4.1. General faunal activity such as mammals or birds observed visually or by call during the course of the survey was recorded. Particular attention was paid to the potential presence of any protected, rare or notable species.

Bats³

- 2.4.2. **Building Inspections.** The single building within the site was subject to interior and exterior inspection surveys in August 2015 to check for potential bat use, using ladders, torches, mirrors and binoculars where necessary. This comprised an external assessment to identify any obvious access points or features providing roosting opportunities (e.g. hanging tiles, soffit boxes), and an internal investigation of the building to record any evidence of bats. Specific searches were made for bat droppings that can indicate present or past use and the extent of use, whilst other signs that can indicate the possible presence of bats were also searched for, e.g. presence of stained areas or feeding remains.

- 2.4.3. **Tree Assessment.** A number of trees were recorded to be present within the site and along its boundaries. These were assessed for their potential to support roosting bats, with particular attention paid to the following features, where these were recorded to be present:

- Obvious holes e.g. rot holes and old Woodpecker holes.
- Dark staining on the tree, below the hole.
- Tiny scratch marks around a hole from bats' claws.
- Cavities, splits and/or loose bark from broken or fallen branches, lightning strikes, etc.
- Very dense covering of mature ivy over trunk.

- 2.4.4. Accordingly, trees were investigated in regard to these features, where appropriate. In terms of potential to support roosting bats, trees were ranked in accordance with the criteria set out in the BCT's Good Practice Guidelines⁴:

- *Known or confirmed roost;*
- *Category 1* – trees with multiple, highly suitable features capable of supporting larger roosts;*

² Institute for Ecology and Environmental Management (IIFM) (2012) "Guidelines for Preliminary Ecological Appraisal"

³ Surveys based on: English Nature (2004) "Bat Mitigation Guidelines" & Bat Conservation Trust (2012) "Bat Surveys – Good Practice Guidelines" 2nd edition.

⁴ Hundt, L, ed. (2012) – *Bat Surveys Good Practice Guidelines*, 2nd edition. Bat Conservation Trust

- *Category 1* – trees with definite bat potential, although supporting fewer features than category 1* trees;
- *Category 2* – tree supporting some features with limited potential to support bats, or of a size and age that some cracks or crevices may be present;
- *Category 3* – trees with no potential to support bats.

2.5. Scoping

- 2.5.1. The scope of the above survey work was set out in a letter to the Local Planning Authority in August 2015 (as shown at Appendix 2) to which no objection or comment was received.

2.6. Survey Constraints

- 2.6.1. All of the species that occur in each habitat would not necessarily be detectable during survey work carried out at any given time of the year, since different species are apparent at different seasons. Areas of dense Bramble/scrub/vegetation are impenetrable and, accordingly, could not be directly accessed and clearly viewed, whilst the inaccessible areas were viewed from the margins and through surrounding vegetation and appeared of the same nature and character to those areas closely inspected, such that it is considered that a robust assessment could be made. The Phase 1 survey that forms the basis of the habitat descriptions was undertaken in August 2015, within the optimal seasonal period for such survey work and accordingly is considered to have allowed a robust assessment of the intrinsic ecological interest of the site to be made. Specific constraints or considerations, in particular associated with faunal survey work are discussed individually within the text where appropriate, although no significant constraints were encountered.

2.7. Ecological Evaluation

- 2.7.1. The evaluation of ecological features and resources has been based on that described in 'Guidelines for Ecological Impact Assessment in the United Kingdom' published by the Institute of Ecology and Environmental Management (IEEM) in 2006. In evaluating ecological features and resources the following key factors are taken into account:

Geographic Frame of Reference

- 2.7.2. The value of an ecological feature or resource is determined within a defined geographical context using the following frame of reference:

- International
- National
- Regional
- County (or Metropolitan)
- District (or Unitary Authority, City or Borough)
- Local (or Parish)
- At the Site level only

- 2.7.3. Within this frame of reference, certain sites may carry a statutory ecological designation, e.g. Special Area of Conservation (SAC) for internationally

important sites or Site of Special Scientific Interest (SSSI) for sites of national importance.

- 2.7.4. Sites of more localised nature conservation importance do not receive statutory protection but may be designated by Local Planning Authorities or other bodies, e.g. Wildlife Trusts. Such non-statutory designations or "Local Sites"⁵ include County Wildlife Sites (CWSs) and Sites of Nature Conservation Interest (SNCIs), for example.

Biodiversity Value

Habitats

- 2.7.5. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, "Guidelines for the selection of biological SSSIs" and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat can also be an important consideration, for example in the case of ancient woodland.
- 2.7.6. Regard should also be given to habitats listed as priorities for conservation under Section 41 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', as the likely effect of a development on such habitats is a potential material consideration within the planning process. Certain habitats may also be listed within more regionally or locally specific Biodiversity Action Plans (BAPs), albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.

Species

- 2.7.7. The assessment of the value of a species is based on factors including distribution, status, historical trends, population size and rarity. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.
- 2.7.8. For certain species groups, e.g. waterfowl, there are established criteria that can be used for defining nationally and internationally important populations.
- 2.7.9. Regard should also be given to species listed as priorities for conservation under Section 41 of the NERC Act 2006, so called 'Species of Principal Importance' or 'Priority Species'. Certain species may also be listed within more regionally or locally specific BAPs, albeit as with habitats the listing of a particular species under a BAP does not in itself imply any specific level of importance.

⁵ DEFRA (2006) 'Local Sites – Guidance on their Identification, Selection and Management'

Secondary or Supporting Value

- 2.7.10. Some habitats or features that are of no intrinsic biodiversity value may nonetheless perform an ecological function, e.g. as a buffer. In addition, certain features of the landscape which by virtue of their linear or continuous nature (e.g. rivers) or their function as "stepping stones" (e.g. small woods) may be of value for the migration, dispersal and genetic exchange of wild species.

Other Value

- 2.7.11. Other tertiary factors may also be relevant in evaluating the value of a particular ecological receptor including social and economic factors.

2.8. The Five Point Approach

- 2.8.1. The National Planning Policy Framework (NPPF) describes the Government's national policies on the protection of biodiversity (and geological) conservation through the planning system. NPPF emphasises the need for planning authorities to ensure that the potential effects of planning decisions on biodiversity conservation are fully considered. A five-point best practice approach^{6,7,8} to the assessment of such effects within the development control process is recommended:

1. **Information** – gathering a sufficient evidence base on which to make sound planning decisions
2. **Avoidance** – adverse effects on habitats and species should be avoided where possible
3. **Mitigation** – where it is unavoidable, mitigation measures should be employed to minimise adverse effects
4. **Compensation** – where residual effects remain after mitigation it may be necessary to provide compensation to offset any harm
5. **New benefits** – many planning decisions present the opportunity to deliver enhancements for habitats or species

- 2.8.2. The assessment of ecological effects set out within this report is based on the above five-point approach, where appropriate.

⁶ Royal Town Planning Institute (1999) "Planning for Biodiversity – Good Practice Guide"

⁷ ODPM (2006) "Planning for Biodiversity and Geological Conservation – A Guide to Good Practice"

⁸ PAS (2010) "Planning to Halt the Loss of Biodiversity, Biodiversity Conservation Standards for Planning in the United Kingdom – Code of Practice."

3. ECOLOGICAL DESIGNATIONS

- 3.1. The statutory and non-statutory designations of nature conservation interest that occur within the vicinity of the site are shown at Plan 2720/MOL2, and discussed below.

3.2. Statutory Designations

- 3.2.1. The site is not subject to, nor is it adjacent to any identified statutory nature conservation designations. The nearest such identified designation is Ham Lands Local Nature Reserve (LNR), which is located approximately 0.7 km south east of the site.
- 3.2.2. The site is situated adjacent to the River Crane. Two Local Nature Reserves (LNRs) at Pevensey Road LNR and Crane Park Island LNR are situated along the River Crane further to the west of the site. The nearest of these designations to the site is Crane Park Island LNR, which is located approximately 2.9 km south west of the site and is understood to be managed by the London Wildlife Trust (LWT) and comprises a number of habitats including reed beds, woodland, scrub and riparian edge.
- 3.2.3. The closest European level ecological designation identified to the site is Richmond Park Special Area of Conservation (SAC), which is located approximately 2.3km east of the site and is well separated from the site by extensive developed areas and the River Thames.

Evaluation

- 3.2.4. The site is well separated from Ham Lands LNR by extensive existing development within a heavily urbanised area, along with the River Thames. As such, any proposed works within the site is unlikely to result in any significant adverse effects on this designation. Similarly, Crane Park Island and Pevensey Road LNRs, along with all other identified statutory nature conservation designations, are well separated from the site, and accordingly, are unlikely to be adversely affected by the proposals at the site.

3.3. Non-statutory Designations

- 3.3.1. The site is situated within an area of land identified on the Richmond Upon Thames Borough proposals map as an '*other Site of Nature Importance*', which includes much of the River Crane corridor and apparently comprises examples of a number of habitats including riparian edge, woodland and scrub. Further, the site is included at the north-western end of a Site of Local Importance for Nature Conservation (SLINC) identified within the Richmond Upon Thames Borough BAP, whilst a section of the River Crane extending along part of the northern site boundary from the east is designated as a Site of Borough Importance (SBI) for Nature Conservation Grade 2 according to information from GiGL.
- 3.3.2. The site is also included under CP12 of the London Borough of Richmond upon Thames adopted Core Strategy (21st April 2009) as a 'River Crane Area of Opportunity'. As set out under CP12 of the Core Strategy:

'The Council will improve the strategic corridor to provide an attractive open space with improvements to the biodiversity. Developments in

and adjacent to the River Crane Corridor will be expected to contribute to improving the environment and access, in line with planning policy.'

- 3.3.3. A number of other non-statutory designations are present within the search area around the site, as indicated at Plan 2720/MOL2.

Evaluation

- 3.3.4. The proposals are for use as public amenity land, with development works limited to the provision of a new footpath/cycleway through the site. Currently little to no regular management of the site is understood to be in place such that the vegetation is dominated by dense, impenetrable scrub and Bramble and accordingly, the opportunity exists to provide improved management and maintenance at the site whilst retaining features of existing value such as individual trees and woodland areas which would likely benefit the SLINC designation in the long term and complement the adjacent river corridor habitats (SBI).
- 3.3.5. All other ecological designations are removed from the site such that they are unlikely to be affected by the proposals.

3.4. **Other Designated Features**

- 3.4.1. A search of the Woodland Trust database recorded no notable, veteran or ancient trees within or in close proximity to the site. No areas of ancient woodland are located within or adjacent to the site, as such it is not considered that ancient woodland will represent a constraint to the proposals.
- 3.4.2. The Freshwater Habitats Trust database returned no records of priority ponds within or adjacent to the site. Similarly, the Open Mosaic Habitat Inventory did not return any such habitat within or adjacent to the site.

4. HABITATS AND ECOLOGICAL FEATURES

4.1. The following habitats were identified within the site during the survey work undertaken:

- Bramble Thicket and Tall Ruderal Vegetation
- Dense Scrub, Scattered Scrub and Trees
- Bracken
- Woodland
- Amenity Grassland and Vegetable Plot
- Buildings and Hardstanding

4.2. In addition, an off-site watercourse, railway line and associated embankment and allotments are present to the north, south and west respectively.

4.3. The locations of these habitat types and features are represented on Plan 2720/MOL3 and described below.

Habitats of Principal Importance for Biodiversity

4.4. Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, the NERC Act requires the Secretary of State to publish a list of habitats which are of principal importance for conservation in the UK. This list largely reflects the 'priority habitats' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority habitats under the subsequent country-level biodiversity strategies.

4.5. Of the habitats within the site, the woodland is considered likely to qualify as UK Priority Habitat. This is discussed further in the relevant habitat sections below.

4.6. **Bramble Thicket and Tall Ruderal Vegetation**

4.6.1. Much of the site is dominated by dense Bramble thicket and tall ruderal vegetation (see Plan 2720/MOL3). These areas support dense thickets of vegetation, much of which is impenetrable, dominated by Bramble with scattered stands of tall ruderal and herbaceous species including Rosebay Willowherb *Chamerion angustifolium*, Common Nettle *Urtica dioica*, Hedge Bindweed *Calystegia sepium*, Lords-and-Ladies *Arum maculatum*, Woody Nightshade *Solanum dulcamara*, Cleavers *Galium aparine*, Field Horsetail *Equisetum arvense*, Hogweed *Heracleum sphondylium*, Broad-leaved Everlasting-pea *Lathyrus latifolius*, Mugwort *Artemisia vulgaris* and Japanese Honeysuckle *Lonicera japonica*. A large proportion of the ground cover beneath the Bramble is dominated by Ivy *Hedera helix*. To the far west of the site locally abundant Hop *Humulus lupulus* is present climbing over a large proportion of the Bramble and encroaching up the tree trunks.

4.6.2. During the survey work conducted in June 2013 impenetrable areas of the site were viewed from the accessible margins, including from along a cleared pathway, approximately 2m in width located along the southern site boundary adjacent to the offsite railway embankment. However during the survey work undertaken in August 2015, much of this path had been

substantially encroached by Bramble, despite this access was still gained along southern site margin, along the site boundary fence line.

- 4.6.3. The dense nature of the Bramble thicket is such that it suppresses growth of herbaceous species to some degree, albeit scattered scrub was recorded to have encroached in areas as set out below.
- 4.6.4. Areas at the extreme west of the site, immediately adjacent to the offsite allotments in this direction are inaccessible, surrounded by metal palisade fencing to the west and south, with dense impenetrable scrub and Bramble in the east. Accordingly, these areas were viewed from the margins. Based on this technique, review of aerial photography and survey results from June 2013 it appears this area is of similar nature to the rest of the site, dominated by Bramble.

Evaluation

- 4.6.5. The above habitat is dominated by Bramble with a small number of common and widespread tall ruderal and herbaceous species additionally recorded to be present. As such, the habitat provides little botanical interest and is considered to be of low ecological value at the site level.
- 4.6.6. The proposals incorporate the provision of a new footpath/cycleway extending through areas of Bramble thicket, which will require clearance of this habitat, however given the low ecological value of the habitat, it is not considered to pose a constraint to the proposals.

4.7. Dense Scrub, Scattered Scrub and Trees

- 4.7.1. A significant proportion of the site, particularly to the extreme west of the site is dominated by dense scrub and trees, particularly associated with the site margins and boundary fencing. These areas were recorded to be dominated by a mixture of Elder *Sambucus nigra*, Hawthorn *Crataegus monogyna*, Wych Elm *Ulmus glabra*, Willow *Salix* sp., Butterfly-bush *Buddleja davidii*, Rowan *Sorbus aucuparia*, Wild Cherry *Prunus avium*, Dog-rose *Rosa canina* and occasional Holly *Ilex aquifolium*. The ground flora within this area of dense scrub is dominated by Bramble and Ivy extending throughout with occasional Bracken *Pteridium aquilinum* recorded to be present.
- 4.7.2. Individual trees present within the site include in particular a number of Birch *Betula pendula*, Willows and Sycamore *Acer pseudoplatanus*, with more occasional Apple *Malus* sp., and young to semi-mature Oak *Quercus* sp. In addition, a number of more mature specimen trees are present in the extreme eastern part of the site, within the grounds of amenity grassland described below, including in particular a very large, mature London Plane *Platanus x hispanica* (*x acerifolia*) 'Pyramidalis', Oak and Holm Oak *Quercus ilex*. No understorey scrub or other woody vegetation is present beneath the trees in this area.
- 4.7.3. Scattered scrub was also recorded to be present amongst the areas dominated by Bramble in the form of locally frequent Shadbush *Amelanchier* sp. and occasional Snowberry *Symphoricarpos* sp. in addition to the species listed above.

Evaluation

- 4.7.4. The scrub and trees within the site are comprised of common and widespread species, including in particular non-native Butterfly-bush and Shadbush, albeit it is noted that these areas provide cover and opportunities for a variety of faunal species at the site as discussed below. As such this habitat is considered to be of low ecological value at the site level
- 4.7.5. The proposed new footpath/cycleway will be routed to avoid mature trees, such that these will not be affected. It will be necessary to remove areas of scrub to facilitate access and footpath provision, albeit selective removal and control of the scrub would be desirable from an ecological perspective in order to provide greater habitat variety and opportunities for a wider range of species. Accordingly, partial removal of the scrub and associated vegetation is unlikely to be of particular ecological importance.

4.8. **Bracken**

- 4.8.1. Located centrally within the site, surrounded by the Bramble dominated habitat is a localised area of Bracken. The area is small in extent but almost entirely dominated by Bracken with a substantial amount of Japanese Honeysuckle growing over this. Ground flora species are similar to those described in the Bramble thicket and tall ruderal vegetation section above.

Evaluation

- 4.8.2. The Bracken habitat is almost entirely dominated by this species with invading non-native Japanese Honeysuckle and a similar range of common and widespread ground flora species to that described previously within the site. Additionally, the area is small in extent, as such, this habitat is considered to be of negligible ecological value at the site level and its potential loss to the proposals is unlikely to be of particular ecological importance.

4.9. **Woodland**

- 4.9.1. Much of the eastern part of the site is occupied by a small area of secondary woodland, bounded by existing built form including sports courts within the former sorting office site to the east and the railway embankment to the south. The north of the woodland area extends to the River Crane, which lies within a vertical sided concrete channel adjacent to the site, with a small upstand such that this forms a clear boundary.
- 4.9.2. Canopy trees within the woodland area are dominated by Sycamore and Ash *Fraxinus excelsior*, with occasional Oak *Quercus robur*. The woodland appears to have received little recent management, such that it is dense and overgrown, with a number of fallen trees and branches providing considerable clutter (see Plan 2720/MOL3). In addition, a dense understorey is present including Willows sp., young Ash, Elder and Holly with more occasional young Cherry *Prunus* sp., Dogwood *Cornus sanguinea*, Horse-chestnut *Aesculus hippocastanum*, Hazel *Corylus avellana*, Yew *Taxus baccata* and occasional Bamboo *Bambuseae* sp. noted. Across much of the woodland, ground flora is limited due to the dense nature of the woody vegetation, dominated by Ivy and Bramble, albeit

more open patches are present supporting frequent Cow Parsley *Anthriscus sylvestris*, Ground-ivy *Glechoma hederacea*, Bluebell *Hyacinthoides* sp., Herb Bennet *Geum urbanum*, Wood False-brome *Brachypodium sylvaticum*, Stinging Nettle *Urtica dioica*, Green Alkanet *Pentaglottis sempervirens*, Cleavers and Lords-and-Ladies, along with more occasional Barren Brome *Anisantha sterilis*, Hedgerow Cranes-bill *Geranium pyrenaicum*, Herb Robert *Geranium robertianum* and Ragwort *Jacobaea vulgaris*.

- 4.9.3. The southern boundary to the woodland adjacent to the offsite railway line includes grassy margins extending into the offsite railway embankment and forming a path along this site boundary. This woodland edge area support a range of common herbs and grasses, including non-natives such as Canadian Goldenrod *Solidago canadensis* and Michaelmas Daisy *Aster* sp., along with Cleavers, Creeping Thistle *Cirsium arvense*, Field Horsetail, Meadow Vetchling *Lathyrus pratensis*, False Oat-grass *Arrhenatherum elatius* and Perennial Ryegrass *Lolium perenne*.
- 4.9.4. The narrower section of woodland in the north-east of the site forms part of the land associated with the adjacent offsite Youth Centre to the north east, from which this area is accessed via existing pathways leading from the amenity grassland area described below and a small bridge over the River Crane. Accordingly, it is clear that this section of woodland is subject to occasional disturbance, with existing cleared pathways, whilst a number of clearings are present within which substantial play equipment is present.

Evaluation

- 4.9.5. The woodland habitat present is dense in nature and currently lacking in management, supporting a range of relatively common and widespread species in addition to a number of non-native species. However, the woodland likely provides some considerable ecological value in the context of the local area, including cover and habitats including frequent deadwood which will provide opportunities for a range of faunal species as discussed below. As such, this habitat is considered to be of moderate ecological value at the local level.
- 4.9.6. The proposals include the construction of a new footpath/cycleway at the site, including through the woodland area. It is understood that the pathway will be routed to avoid any mature trees within the woodland area (and elsewhere within the site), including using existing pathway routes where these are present, such that it will not result in the loss of any mature trees. As such, it is not considered that this habitat will represent any significant constraints for the proposals and there is significant scope to incorporate enhancements within the woodland to increase its ecological value as discussed in section 6 below.
- 4.10. **Amenity Grassland and Vegetable Plot**
- 4.10.1. Within the far north-eastern corner of the site the woodland thins out and the area is broadly representative of amenity grassland habitat, with areas of bare ground as a result of heavy over-shading and associated leaf-litter from the scattered mature trees, in particular the large London Plane, previously described. The amenity grassland has likely been used in association with the off-site use Youth Centre and is dominated by grassland and shade-

tolerant herbs, the majority of which forms a short-sward and appears to be subject to regular mowing. Species recorded to be present are dominated by Cock's-foot *Dactylis glomerata*, Meadow Foxtail *Alopecurus pratensis*, Meadow-grasses *Poa* sp, Perennial Rye-grass and False Oat-grass along with herbaceous species similar to elsewhere within the site including Creeping Buttercup *Ranunculus repens*, Bluebell, Herb Bennet, Cat's-ear *Hypochaeris radicata*, Common Vetch *Vicia sativa*, Daisy *Bellis perennis* and Ribwort Plantain *Plantago lanceolata*. Additionally, a small area of cultivated vegetable plots and planters is present within this area at the southern boundary.

Evaluation

- 4.10.2. This habitat supports a range of common and widespread species similar to those recorded elsewhere within the site with a higher proportion of grass species to elsewhere within the site. The area also supports significant areas of bare ground as a result of heavy overshadowing by mature trees within the area. As such this habitat is considered to be of negligible ecological importance at the site level.

4.11. Buildings and Hardstanding

- 4.11.1. A single small building is present within the south of the site at the margins of the woodland, which appears to represent a former shelter associated with the adjacent railway line. The building is of brick construction, supporting a flat concrete roof, with ivy covering the majority of the building (see Plan 2720/MOL3).
- 4.11.2. In addition, a small hardstanding footpath leads across the extreme north eastern corner of the site, providing access from the offsite adjacent Youth Centre to the north, to the offsite sports courts immediately south of the site.

Evaluation

- 4.11.3. The building present is small in nature and does not provide any significant ecological value, whilst similarly the hardstanding pathway is largely devoid of vegetation. Accordingly, these habitats are of negligible ecological value and do not appear to represent a potential constraint on the proposals.

4.12. Offsite Habitats

- 4.12.1. Offsite habitats adjacent to the site include the River Crane along the northern site boundary, a railway line and associated steep embankment along the southern site boundary and an area of allotments to the west.
- 4.12.2. The River Crane forms a considerable watercourse corridor, with some vegetation, albeit this is currently contained within a vertical-sided concrete channel adjacent to the site, with a small upstand noted. Much of the upstand and associated boundary fencing are overgrown with Bramble and scrub in line with the remainder of vegetation within the site itself.
- 4.12.3. The offsite railway line along the southern site boundary is set at a higher level than the site, on a considerable embankment for much of the length of the site. The embankment supports rank grassland and colonising herbs with scattered scrub and Bramble extending in particular from the site.

- 4.12.4. The allotments present adjacent to the western end of the site appear in active use and are separated from the site by a secure boundary fence and dense scrub within the site.

Evaluation

- 4.12.5. The offsite habitats are located outside of the current site boundary and accordingly, will not be directly affected under the current proposals, whilst similarly it is understood that much of the existing boundary vegetation will remain in these areas. Safeguards in relation to the offsite watercourse are set out at section 6 below.
- 4.13. **Exotic / Invasive species included on Schedule 9 Part II of the Wildlife and Countryside Act 1981**
- 4.13.1. During the previous survey work undertaken at the site in June 2013 the presence of Japanese Knotweed *Fallopia japonica* was recorded in a number of locations within the east of the site, particularly situated along the site margin with the River Crane. At this time it was understood that chemical treatment of the Japanese Knotweed stands at the site was ongoing (pers. comm. London Borough of Richmond Upon Thames Ecologist) and the majority of stems were recorded to be dead, with only small growth towards the base, albeit occasional individual more healthy small stems were noted to be present. During the most recent site survey visit undertaken in August 2015 the remnants of Japanese Knotweed stands were all that were left of that previously recorded within the site (as shown in photograph 6 on Plan 2720/MOL3). In some locations where it was previously recorded to be present, no evidence of the species previously being there was visible.
- 4.13.2. In addition, occasional *Cotoneaster* species, including Wall Cotoneaster *Cotoneaster horizontalis* was noted within the woodland areas at the site (e.g. see Plan 2720/MOL3).

5. FAUNAL USE OF THE SITE

- 5.1. During the survey work, general observations were made of any faunal use of the site with specific attention paid to the potential presence of protected or notable species. In addition, specific survey work was undertaken for bats.

Species of Principal Importance for Biodiversity

- 5.2. Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places duties on public bodies to have regard to the conservation of biodiversity in the exercise of their normal functions. In particular, the NERC Act requires the Secretary of State to publish a list of species which are of principal importance for conservation in the UK. This list largely reflects the 'priority species' listed under the former UK Biodiversity Action Plan (BAP), which continue to be regarded as priority species under the subsequent country-level biodiversity strategies. During the survey work undertaken no UK priority species were recorded.

5.3. **Mammals**

Bats

- 5.3.1. **Legislation.** All British bats are classed as European Protected Species under the Conservation of Habitats and Species Regulations 2010, and are also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) which contains further provisions making it an offence to intentionally or recklessly:
- Disturb any bat while occupying a structure or place which it uses for shelter or protection; or
 - Obstruct access to any structure or place which any bat uses for shelter or protection.
- 5.3.2. As such, both bats and their roosts (breeding sites and resting places) receive full protection under the legislation.
- 5.3.3. **Background Records.** No specific records of bats from within or adjacent to the site were returned from the desktop study.
- 5.3.4. **Survey Results and Evaluation - Roosting**
- 5.3.5. The only structure noted within the site is a single small building (B1), comprising an open shelter associated with the railway line. The building is small in nature, with a flat concrete roof and is open to the southern site such that it could be thoroughly accessed and inspected. The building provides negligible potential for use by roosting bats, whilst no evidence for any use by this group was recorded from a thorough inspection. In any event, the building is likely to be retained and accordingly it is not anticipated to be affected under the current proposals.
- 5.3.6. A number of trees are present within the site, in particular within the woodland areas in the east. The majority of these trees were not considered to offer any bat roosting potential. A small number of the trees within the denser wooded areas support a covering of Ivy and may support cavities or

features that could offer opportunities for roosting bats should these be present, albeit access throughout the woodland to inspect or view individual trees is limited due to the dense vegetation present. Additionally, a number of the more scattered trees across the site were considered to offer low bat roosting potential as shown on Plan 2720/MOL3 and set out at Table 1 below.

Tree	Species	Bat Roost Potential (according to BCT 2012 guidelines)	Notes
T1	Ash	Low (Category 2)	Semi-mature tree with considerable Ivy cover of which the stems have created crevices. Possible that Ivy cover is concealing further crevices within trunk.
T2	Sycamore	Low (Category 2)	Restricted access due to dense Bramble thicket but of an age and nature that could support bats.
T3	Ash	Low (Category 2)	Semi-mature tree with considerable Ivy cover of which the stems have created crevices. Possible that Ivy cover is concealing further crevices within trunk.

5.3.7. In any event, it is understood that the proposed footpath/cycleway will be routed to avoid any mature trees, which will therefore be fully retained under the proposals. Accordingly, on the basis of the above evidence, the proposals will not result in any adverse effects on any potential bat roosts and further survey work is not considered necessary. Further to this, the scope of the survey work undertaken was set out in a letter to the Local Planning Authority (as shown at Appendix 2) to which no objection was received. In any event, BCT's Good Practice Guidelines do not advise that further survey work is necessary for works affecting Category 2 trees, provided that appropriate felling safeguards are employed.

5.3.8. Survey Results and Evaluation – Foraging / Commuting

5.3.9. The site is dominated by dense vegetated areas including woodland and scrub, located adjacent to a watercourse corridor. Accordingly, the habitats present appear to provide potentially suitable opportunities for use by foraging/commuting bat species, including cover, linear features and likely supporting a range of invertebrate prey species, particularly given the linear nature of the site albeit any potential for this group may be limited by the wider urban surroundings.

5.3.10. Under the proposals, the existing woodland habitats will be retained, with the proposed footpath/cycleway routed to avoid any existing tree loss. In addition, areas of scrub and dense vegetation will be retained throughout the site such that a continuous linear corridor will remain for use by bats, whilst the incorporation of more open areas associated with the footpath/cycleway and positive management would likely provide additional foraging areas and opportunities for bats in the long term. As such, it is not considered that the proposals will significantly affect foraging and commuting habitat for bats and no further survey work is considered necessary. Recommendations to minimise adverse effects on bats as a result of light-spill are provided at Section 6.



Other Mammals

- 5.3.14. **Background Records.** No specific records of other mammal species within or adjacent to the site were returned within the information obtained from the desktop study. In addition, no records of other protected mammal species were returned in the proximity of the site.
- 5.3.15. **Survey Results and Evaluation.** The habitats within the site include dense vegetation and cover which are likely to be frequented by common mammal species, such as Rabbit *Oryctolagus cuniculus*, Hedgehog *Erinaceus europaeus* and Fox *Vulpes vulpes*, particularly given the proximity of the adjacent railway line and associated embankment which likely provides a wider corridor for movement between the nearby built-up areas. Previous survey work undertaken at the site in 2013 found mammal entrances most likely attributable to Fox and Fox tracks across the site. Survey work undertaken in 2015 recorded Grey Squirrel *Sciurus carolinensis* along the southern site boundary.
- 5.3.16. Mammal species likely to utilise the site, such as Fox and Rabbit remain common in both a local and national context. As such, these species carry no legal protection and the loss of potential opportunities for these species to the proposals would be of little importance. In any event, it is likely that these species would remain within the site following completion of works.
- 5.3.17. Hedgehog is a UK Priority Species, albeit this species remains common and widespread in England including within urban areas. However, abundant similar opportunities are present elsewhere within the local area and following the proposals, the site would continue to provide suitable opportunities for this species in the long term under the proposals. No evidence of Water Vole *Arvicola amphibius* or Otter *Lutra lutra* were recorded along the watercourse with the river held by concrete banks which are considered unsuitable to support these species.
- 5.3.18. The site is considered to be of low value to other mammals at the local level, and the proposals would not have any significant adverse effect on this species group.

5.4. Birds

- 5.4.1. **Legislation.** All wild birds and their nests receive protection under Section 1 of the Wildlife and Countryside Act 1981 (as amended) in respect of killing and injury, and their nests, whilst being built or in use, cannot be taken, damaged or destroyed. Species included on Schedule 1 of the Act receive greater protection and offences relating to this species are subject to special penalties.
- 5.4.2. **Conservation Status.** The RSPB categorises British bird species in terms of conservation importance based on a number of criteria including the level of threat to a species' population status⁹. Species are listed as Green, Amber or Red depending on the level of importance. Red Listed species are considered to be of the highest conservation concern being either globally threatened and/or experiencing a high/rapid level of population decline (e.g. a reduction in breeding population size of approximately 50% over the past 25 years or since 1969, when the first species assessment was made).
- 5.4.3. **Background Records.** No records of birds were returned specifically from within the site, nor were any records with a sufficiently high resolution returned from within the site's proximity.
- 5.4.4. **Survey Results and Evaluation.** The vegetation within the site is likely to provide nesting and foraging opportunities for a number of common bird species. During the most recent survey work undertaken at the site Long-tailed Tit *Aegithalos caudatus*, Great Tit *Parus major* and Woodpigeon *Columba palumbus* were recorded to be present. Additionally during the survey work undertaken in 2013 Blackbird *Turdus merula*, Ring-necked Parakeet *Psittacula krameri*, Robin *Erithacus rubecula*, House Sparrow *Passer domesticus*, Greenfinch *Carduelis chloris*, Blackcap *Sylvia atricapilla*, Wren *Troglodytes troglodytes*, Dunnock *Prunella modularis* and Chiffchaff *Phylloscopus collybita* were recorded within the site.
- 5.4.5. House Sparrow, a priority species and Red-listed Bird of Conservation Concern, was recorded within the site in 2013. House Sparrow remains relatively common and widespread, having UK populations in excess of two million pairs/territories (data from RSPB website <http://www.rspb.org.uk/wildlife/birdguide/>). Furthermore, this species is associated with a wide range of habitats, including within urban areas often nesting on or within buildings. Accordingly, the habitats within the site are unlikely to be of specific importance to this species.
- 5.4.6. In addition, Dunnock is included on the Amber List of Birds of Conservation Concern due to recent breeding population declines. Nevertheless, the species remains common and widespread.
- 5.4.7. Overall, the site is considered to be of moderate value to birds at the local level. The proposals will incorporate the retention of the existing trees and woodland habitats, along with management as public open space such that they will continue to offer opportunities for use by bird species such as those currently present. Safeguards and enhancements in relation to nesting birds are set out within section 6 below.

⁹ RSPB 'The population status of birds in the UK - Birds of Conservation Concern: 2009'

5.5. Reptiles

- 5.5.1. **Legislation.** All reptile species receive protection under UK legislation. Due to their relatively common and widespread status, Slow-worm *Anguis fragilis*, Grass Snake *Natrix natrix*, Common Lizard *Lacerta vivipara* and Adder *Vipera berus* receive only partial protection under the Wildlife and Countryside Act 1981 (as amended) being protected from deliberate killing or injury, their habitat receiving no statutory protection. These species are also listed as priority species.
- 5.5.2. **Background Records.** No specific records of reptiles from within or adjacent to the site were returned from the desktop study.
- 5.5.3. **Survey Results and Evaluation.** No evidence for the presence of any reptile species was recorded at the site during the general survey work undertaken. The majority of the site is dominated by woodland and dense Bramble/scrub, which does not appear to provide suitable opportunities for reptiles, albeit the occasional more open areas and the adjacent offsite railway embankment appear to provide potential opportunities for this group. Further, previous specific survey work at the site for reptiles undertaken by a third-party consultancy in 2010¹⁰ based on standard guidelines reported no reptiles to be present and accordingly, this group appears to be absent from the site.
- 5.5.4. In any event, the proposals will incorporate the retention of much of the existing habitats, with the proposed footpath/cycleway removed from the offsite railway line.

5.6. Amphibians

- 5.6.1. **Legislation.** All British amphibian species receive a degree of protection under the Wildlife and Countryside Act 1981 (as amended). Great Crested Newt *Triturus cristatus* is fully protected under Schedule 5 of this legislation, making it an offence to intentionally or recklessly:
- Disturb any Great Crested Newt while occupying a structure or place which it uses for shelter or protection; or
 - Obstruct access to any structure or place which any Great Crested Newt uses for shelter or protection.
- 5.6.2. It is also classed as a European Protected Species under the Conservation of Habitats and Species Regulations 2010. As such, both Great Crested Newt and habitats utilised by this species are afforded protection. This species is also listed as a priority species.
- 5.6.3. **Background Records.** No specific records of amphibians from within or adjacent to the site were returned from the desktop study.
- 5.6.4. **Survey Results and Evaluation.** No ponds or standing water bodies are present within the site. Further, a review of OS 1:25,000 scale map of the area identified no ponds or other standing water bodies within 500m of the site. Accordingly, no suitable breeding habitat for Great Crested Newt appears to be present within the vicinity of the site. In terms of terrestrial

¹⁰ River Park, Royal Mail Site, Twickenham. Reptile Survey. Report for MacGregor Smith. *The Ecology Consultancy*, 2011.

opportunities, the habitats present within the site likely provide some limited opportunities for amphibians; however given the lack of potential breeding habitats it is unlikely that the fully protected species Great Crested Newt would be present.

5.7. Invertebrates

5.7.1. **Background Records.** No records of invertebrates which relate specifically to the site were identified during the desktop study.

5.7.2. **Survey Results and Evaluation.** A number of common and widespread invertebrate species were recorded within the site during the 2015 survey work undertaken, including Common Blue Butterfly *Polyommatus icarus* and Common Wasp *Vespula vulgaris*. Further to this, additional species were recorded in 2013 comprising Early Bumblebee *Bombus pratorum*, White-tailed Bumblebee *Bombus lucorum*, Squash Bug *Coreus marginatus* and the non-native Harlequin Ladybird *Harmonia axyridis*. All of these species are common and widespread, whilst the habitats present are likely to provide a range of opportunities for a variety of other invertebrate species.

5.7.3. In particular the habitats present include a number of trees and deadwood, which could therefore provide potential opportunities for declining saproxylic species including Stag Beetle. Overall, the site is considered likely to be of low to moderate value to invertebrates at the local level. The proposals will incorporate the retention of the existing mature trees and woodland, whilst further recommendations in relation to invertebrates are set out within section 6.

6. RECOMMENDATIONS AND ECOLOGICAL ENHANCEMENTS

- 6.1. The survey work undertaken has shown the majority of the site is of negligible to low ecological value, although the woodland is considered to be of moderate value. Additionally the adjacent off-site habitats to the north and south of the site comprising the River Crane and the railway embankment also offer elevated ecological value. As such, the habitats within the site appear largely unconstrained in relation to the current proposals, which comprise the construction of a new footpath/cycleway route which will avoid mature trees. In addition, further selective clearance and management of Bramble habitats within the site is recommended (as further set out within the ecological enhancement section below).
- 6.2. A number of trees considered to offer low bat roosting potential were identified within the site and the site offers potential foraging and commuting routes for bats. No evidence of Badger or any other notable mammal species was recorded on site, although habitats are present that could support such mammals. Suitable bird nesting habitat is also present in the form of trees, scrub and woodland.
- 6.3. As such, safeguarding and mitigation measures are proposed in relation to these habitats and species as set out below, to safeguard existing ecological features of interest and to ensure protection of faunal species where appropriate.

Recommendations and Safeguards

6.4. **Scrub, Trees and Woodland**

- 6.4.1. Scrub and scattered trees within the site are generally immature to semi-mature in nature and are considered to offer low ecological value whilst the woodland is considered to offer moderate ecological value. Nevertheless it is recommended that upon construction of the footpath/cycleway the woodland is retained where possible as are any mature trees elsewhere within the site, in addition to a proportion of the scrub and Bramble habitat.

6.5. **Off-site Habitats: The River Crane**

- 6.5.1. The nature of the proposed works is limited predominantly to the construction of a new footpath/cycleway and habitat management works. Accordingly, it is recommended that where possible any ground works be restricted to the line of the footpath/cycleway itself, particularly where (by necessity of the narrow site width) this lies within 8m of the watercourse channel. In addition, in order to minimise any effects on the watercourse it is recommended that a number of safeguards in relation to the off-site watercourse are put in place. In particular, these features should be safeguarded in accordance with the Environment Agency Pollution Prevention Guidelines with appropriate protection measures put in place during construction to avoid pollution and excessive siltation to the watercourse.
- 6.5.2. During construction, protection measures to manage the risk of pollution to surface water entering the drain should include:

- Contaminating substances, such as, fuels, oils and chemicals should be stored in leak-proof containers in a secure location from which they are safe from spillage, or vandalism;
- Washing plant and vehicles should take place in designated areas at least 10m from the watercourse;
- Mixing and washing areas for concrete and cement should be located at least 10m from the watercourse. If water is to be reused, appropriate settlement and re-circulation systems should be used;
- Exposed soil should be minimised and avoided wherever possible and spoil from soil stripping should be stored away from the watercourse;
- Site roads should be kept free from dust and mud;
- Vegetation buffers should be left around the watercourse;
- Liquid applications of herbicides, which may runoff, should not be used in close proximity to the watercourse.

6.6. Invasive Species included on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended)

- 6.6.1. Although no apparent live areas of the Schedule 9 invasive species Japanese Knotweed were recorded during the latest survey work at the site it is possible that the root/rhizomes of this plant, present beneath the ground, could still be alive. Additionally Cotoneaster species, of which a number of species are listed under Schedule 9 Part II of the Wildlife and Countryside Act 1981 (as amended), were recorded within the site.
- 6.6.2. As such, all relevant precautions should be taken during any works at the site in order to prevent the spread of these species in line with legislative requirements. It is further recommended that any eradication procedure be undertaken in line with a detailed method statement and methodology in order to prevent any potential for inadvertent spread of these species.
- 6.6.3. In practice, it is suggested this is likely to involve marking of the affected area and uprooting/chemical treatment/herbicide application of any plants and disposing of such plants appropriately (e.g. burning) prior to any clearance works.
- 6.6.4. These measures will ensure that these species are not spread as a result of the construction process within or beyond the site, thereby avoiding an offence under the legislation in respect of these species.

6.7. Bats

- 6.7.1. As set out above, a number of trees with low bat roosting potential were recorded on site and it possible further such trees are present within the woodland that could not be accessed. However as set out above, all such mature trees are to be retained and safeguarded under the proposals. As such, it is not considered roosting bats will be at risk.
- 6.7.2. It is understood that the Local Planning Authority were previously considering the potential need for lighting to come forward at the site in the future and it is recommended that this be avoided or minimised where possible in order to continue to prevent any potential disturbance or adverse effects on bats or other nocturnal/crepuscular wildlife in the future.

- 6.7.3. Nonetheless, no additional lighting is included under the current proposals and accordingly, the current proposals would be unlikely to result in any additional disturbance or effects on bats using the corridor through increased light spill. Should lighting be proposed in the future, this should comprise low-level, directional lighting, focussed on the area which requires illumination. Downward-facing LED lighting with a low UV component should be used where possible to minimise the effects of upward light-spill which may disrupt bat activity.

6.8. Nesting Birds

- 6.8.1. Bramble thicket, scrub, scattered trees and woodland all provide opportunities for nesting by common bird species. In order to avoid any potential offence under the Wildlife & Countryside Act 1981 (as amended), it is recommended that any clearance of woody vegetation be undertaken outside of the bird-nesting season (i.e. outside of March to August inclusive). Should this not be possible, areas due to be worked on should first be checked by a suitably qualified ecologist in order to confirm the absence of any active nests prior to removal. Any active nests identified would need to be retained and protected until the end of the nesting season or until the birds have fledged.

Ecological Enhancements

- 6.8.2. National planning policy in the form of the National Planning Policy Framework sets out that opportunities to incorporate biodiversity in and around developments should be encouraged. In addition, reason for Planning Condition U62138NS14, which this report addresses, is to 'enhance the nature conservation value of the site'. The proposals present opportunities to deliver ecological enhancements at the site for the benefit of local wildlife, thereby making a positive contribution towards the broad objectives of the national and local BAPs. A number of recommendations for enhancements are set out below, which are considered to be appropriate in the context of the site.
- 6.8.3. **Habitat Clearance and Management.** In addition to the clearance of vegetation in order to facilitate construction of the footpath/cycleway, further selective clearance and management of Bramble habitats and scrub within the site is recommended. This will help provide a variety of opportunities for wildlife, whilst maintaining discrete areas of habitat such that it continues to provide cover and opportunities in the long term. Further, selective thinning of such habitats, including the woodland, may allow more natural light to enter the watercourse corridor which is currently heavily overshadowed by scrub and trees. These management techniques appear to fall in line with the aims and objectives of the London Borough of Ealing's aspirations in regard to the River Crane Area of Opportunity.
- 6.8.4. **Bats.** It is recommended that enhancements be provided in the form of bat boxes. These could be targeted towards Soprano Pipistrelle *Pipistrellus pygmaeus* and Noctule *Nyctalus noctula*, both of which are priority species which may be present in the locality. New bat boxes should be located close to well vegetated features with minimal light-spill where possible, ideally within the woodland or in proximity to the River Crane. A total of five bat boxes is considered appropriate to provide an enhancement to bats, which should be installed on mature trees at a height of at least 3m, in areas free

from dense vegetation clutter. Examples of suitable bat boxes are provided at Appendix 3.

- 6.8.5. **Birds.** It is recommended that bird boxes be incorporated into the site. It is recommended that garden bird boxes are provided to benefit a number of species likely to make use of the area. These would be well placed within the woodland or other retained vegetative features and should be orientated north or east to avoid over-heating or prevailing winds. A total of three bird boxes is considered appropriate, which should be sited on mature trees at a height of at least 3m. Examples of suitable bird boxes are provided at Appendix 4.
- 6.8.6. **Reptiles.** The provision of the footpath/cycleway and incorporation of habitat management/clearance works will likely provide more open areas and grassland habitats which would potentially provide greater opportunities for reptile species should they colonise the site in the future.
- 6.8.7. **Invertebrates.** Standing deadwood should be retained wherever possible, however given the nature of the proposals, for use as public open space, health and safety requirements would need to be taken into account and any such features requiring removal should be retained within discrete piles within the site. Retention of such habitats, particularly piles or larger logs would benefit invertebrates, potentially including Stag Beetle, in line with the aims of national and local BAPs with regard to this species.

Summary of Recommendations

- Safeguarding of mature trees and woodland;
- Safeguarding of the River Crane through pollution prevention measures;
- Precautions with regard to Schedule 9 invasive species;
- Bird sensitive timing of any vegetation clearance;
- Additional habitat clearance and management for the benefit of wildlife (including reptiles should they colonise the site in the future);
- Provision of enhancement roost boxes for bats;
- Provision of nest boxes for birds;
- Retention of standing deadwood for the benefit of invertebrates.

7. SUMMARY AND CONCLUSIONS

- 7.1. Aspect Ecology has been commissioned by St James Group to undertake an ecological assessment of the site, located west of the former Royal Mail Sorting Office at London Road, Twickenham.
- 7.2. The site was surveyed in August 2015 based around extended Phase 1 methodology. In addition, a general assessment of faunal species was undertaken with particular attention paid to the potential presence of any protected, rare or notable species. Specific survey work was undertaken for bats.
- 7.3. **Ecological Designations.** All statutory ecological designations are situated sufficiently far away from the site such that they are unlikely to be adversely effected by the proposals. The site itself forms part of a SLINC identified within the Richmond Upon Thames Borough BAP and is identified within local planning documents as an 'area of opportunity', whilst a section of the adjacent River Crane is identified as a Site of Borough Importance (Grade 2) within information from GiGL. However, the nature of the proposals is such that, subject to the measures and enhancements set out in this report, the ecological value associated with these designations is unlikely to be adversely affected under the proposals.
- 7.4. **Habitats.** The site is dominated by a mixture of dense impenetrable Bramble thicket, scrub and woodland, which provides cover and opportunities for a variety of faunal species, albeit is lacking in management, such that the habitats are overgrown and dominated by a small number of species (predominantly Bramble). Under the proposals, the woodland areas, trees and substantial areas of Bramble/scrub will be retained, whilst the potential exists through future management to ensure the ecological value of the habitats present is enhanced and retained in the long term.
- 7.5. **Fauna.** The habitats within the site provide opportunities for a range of faunal species, in particular common nesting birds, foraging / commuting bats and invertebrates. Accordingly, a number of recommendations and measures are set out in regard to faunal species in order to ensure that they are fully safeguarded under the proposals.
- 7.6. **Enhancements.** A number of enhancement opportunities are available under the proposals in particular based on the provision of management activities for the benefit of wildlife at the site, in addition to specific faunal enhancements. Such measures aim to maximise opportunities for wildlife at the site.
- 7.7. **Conclusions.** In conclusion, based on the evidence obtained from the ecological survey work undertaken and with the implementation of the recommendations set out in this report, there is no reason to suggest that any ecological designations, habitats of nature conservation interest or any protected species would be adversely affected by the proposals at the site, which are for open space, incorporating the construction of a new footpath/cycleway. As such, there is no evidence to suggest that there are any overriding ecological constraints to the proposals, whilst a number of recommendations are provided in this report which would provide an overall enhancement to biodiversity. Accordingly, the requirements of Condition U62138NS14 are considered to be fulfilled.

PLANS

PLAN 2720/MOL1

Site Location



KEY:



SITE LOCATION

aspect ecology

Aspect Ecology Limited - West Coast - Harrogate, Yorkshire, UK
 North Way - Danbury - Oxfordshire - OX16 2AF
 01235 270080 - info@aspectecology.com - www.aspectecology.com

LAND WEST OF FORMER ROYAL
 MAIL SORTING OFFICE
 TWICKENHAM
 SITE LOCATION

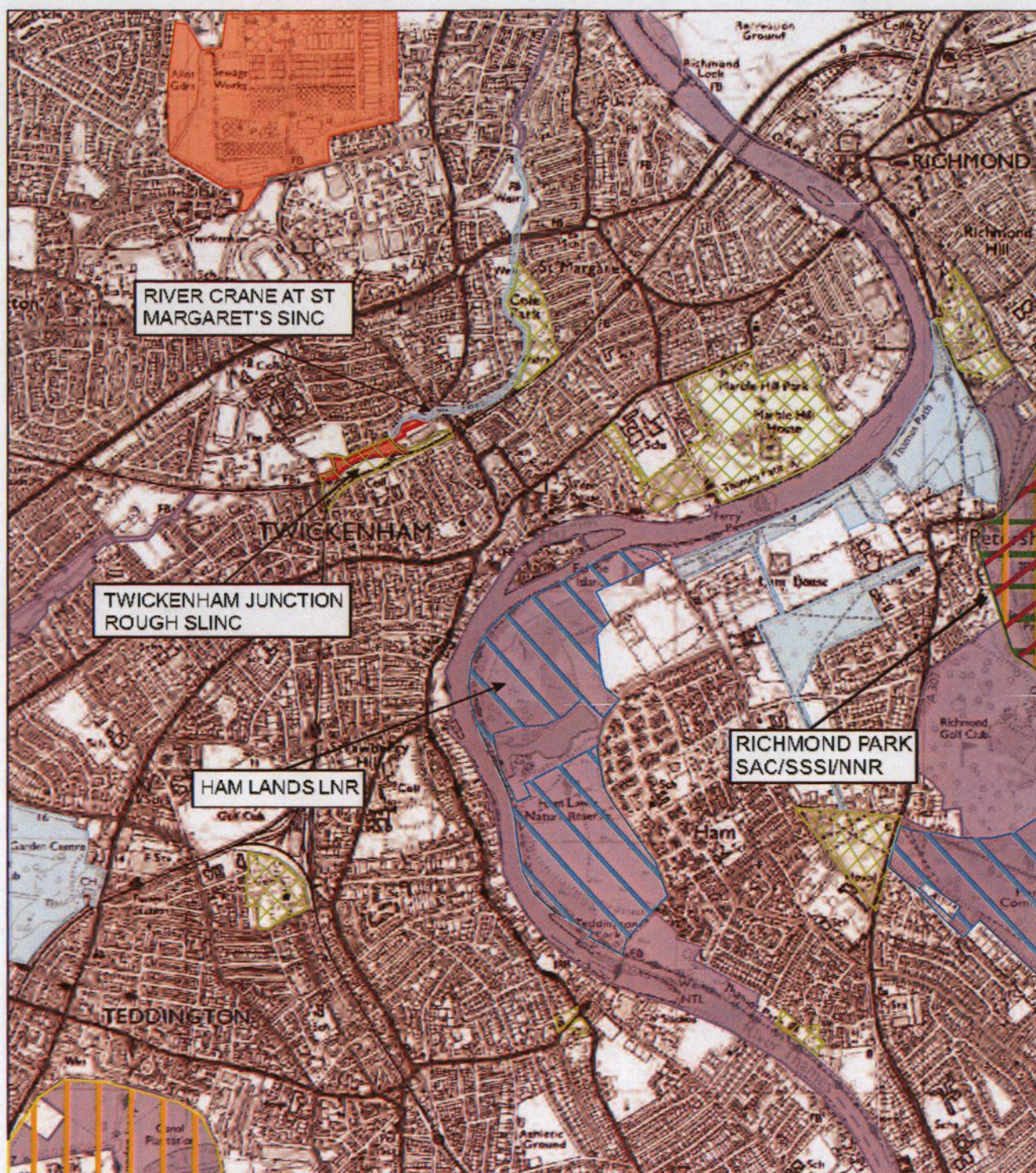
2720/MOL1



SEPTEMBER 2015

PLAN 2720/MOL2

Ecological Designations



KEY:

- SITE LOCATION
- SPECIAL AREA OF CONSERVATION (SAC)
- SITE OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- NATIONAL NATURE RESERVE (NNR)
- LOCAL NATURE RESERVE (LNR)
- SITE OF IMPORTANCE FOR NATURE CONSERVATION (METROPOLITAN IMPORTANCE) (SINC)
- SITE OF IMPORTANCE FOR NATURE CONSERVATION (BOROUGH IMPORTANCE) (GRADE 1) (SINC)
- SITE OF IMPORTANCE FOR NATURE CONSERVATION (BOROUGH IMPORTANCE) (GRADE 2) (SINC)
- SITE OF LOCAL IMPORTANCE FOR NATURE CONSERVATION (SINC - IDENTIFIED IN RICHMOND LRP)

aspect ecology

Aspect Ecology Limited - Wind Creek - Metchley, Richmond, Park
North Way - Danbury - Oxfordshire - OX10 2AF
01235 276009 - info@aspectecology.com - www.aspectecology.com

LAND WEST OF FORMER ROYAL
MAIL SORTING OFFICE
TWICKENHAM
ECOLOGICAL DESIGNATIONS

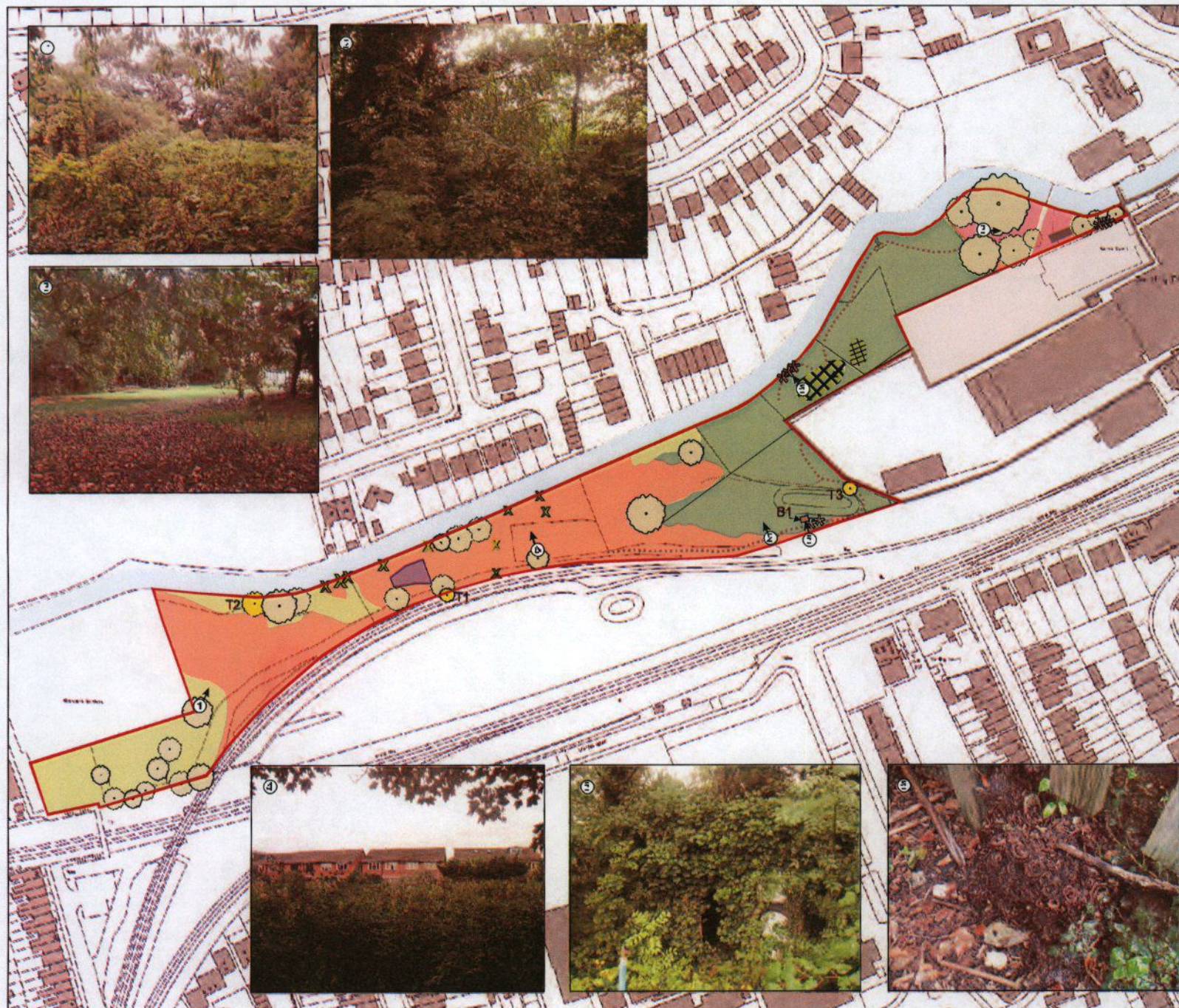
2720/MOL2

SEPTEMBER 2015



PLAN 2720/MOL3

Habitats, Ecological Features and Photographs



KEY:

- SITE BOUNDARY
- BUILDING
- HARDSTANDING
- BRAMBLE THICKET/TALL RUDERAL VEGETATION
- DENSE SCRUB
- BRACKEN
- SCATTERED SCRUB
- WOODLAND
- PLAY EQUIPMENT
- VEGETABLE PLOT
- AMENITY GRASSLAND
- EVIDENCE OF FORMER STANDS OF JAPANESE KNOTWEED (NOW TREATED/REMOVED)
- COTONEASTER SP
- TREE
- CATEGORY 2 BAT POTENTIAL TREE
- WATERCOURSE
- PATHWAY
- PHOTOGRAPH LOCATION

LAND WEST OF FORMER ROYAL
MAIL SORTING OFFICE
TWICKENHAM
HABITATS, ECOLOGICAL
FEATURES AND PHOTOGRAPHS

2720/MOL3

SEPTEMBER 2015



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aspect ecology

APPENDICES

APPENDIX 1

Information obtained from Multi-Agency Geographic Information for the
Countryside (MAGIC) online database



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones – to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)
- Ancient and Semi-Natural Woodland
- Ancient Replanted Woodland

Projection = OSGB 36

xmin = 505100

ymin = 167900

xmax = 527200

ymax = 179300

Map produced by MAGiC on 14 September, 2015.

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9/14/2015

Site Check Report Report generated on Mon Sep 14 2015

You selected the location: Centroid Grid Ref: TQ157735

The following features have been found in your search area:

Local Nature Reserves (England)

Reference	1C09919
Name	BLONDIN NATURE AREA
Hectares	2.34
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1009919
Reference	1C08856
Name	CRANE PARK ISLAND
Hectares	2.67
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1008856
Reference	1C09769
Name	ISLEWORTH AIT
Hectares	3.49
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1009769
Reference	1C09353
Name	KEMPTON NATURE RESERVES
Hectares	22.8
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1009353
Reference	1C09448
Name	HAM COMMON, RICHMOND, LONDON
Hectares	40.27
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1009448
Reference	1C08934
Name	HAM LANDS
Hectares	60.01
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1008934
Reference	1C08967
Name	HOUNSLOW HEATH
Hectares	83.14
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1008967
Reference	1C09069
Name	PEVENSEY ROAD
Hectares	10.21
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1009069
Reference	1C09055
Name	OAK AVENUE HAMPTON
Hectares	1.85
Hyperlink	http://www.naturalengland.org.uk/special/nr/nr_details.asp?frameid=1009055

National Nature Reserves (England)

Name	RICHMOND PARK
Reference	1C07634
Hectares	846.62
Hyperlink	http://www.naturalengland.org.uk/ourwork/conservation/designations/nnr/1C07634.aspx

Rainwater Sites (England)

Name	SOUTH WEST LONDON WATERBODIES
Reference	UK11065
Hectares	829.69

Sites of Special Scientific Interest (England)

Name	
Reference	1C00342
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	846.62

9/11/2015

Citation	1C02388
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1002388

Name	
Reference	1C00134
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	22.07
Citation	1C04281
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1004281

Name	
Reference	1477753
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	540.39
Citation	2000738
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000738

Name	
Reference	1C07242
Natural England Contact	
Natural England Phone Number	0845 600 3078
Hectares	25.29
Citation	2000385
Hyperlink	http://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s2000385

Special Areas of Conservation (England)

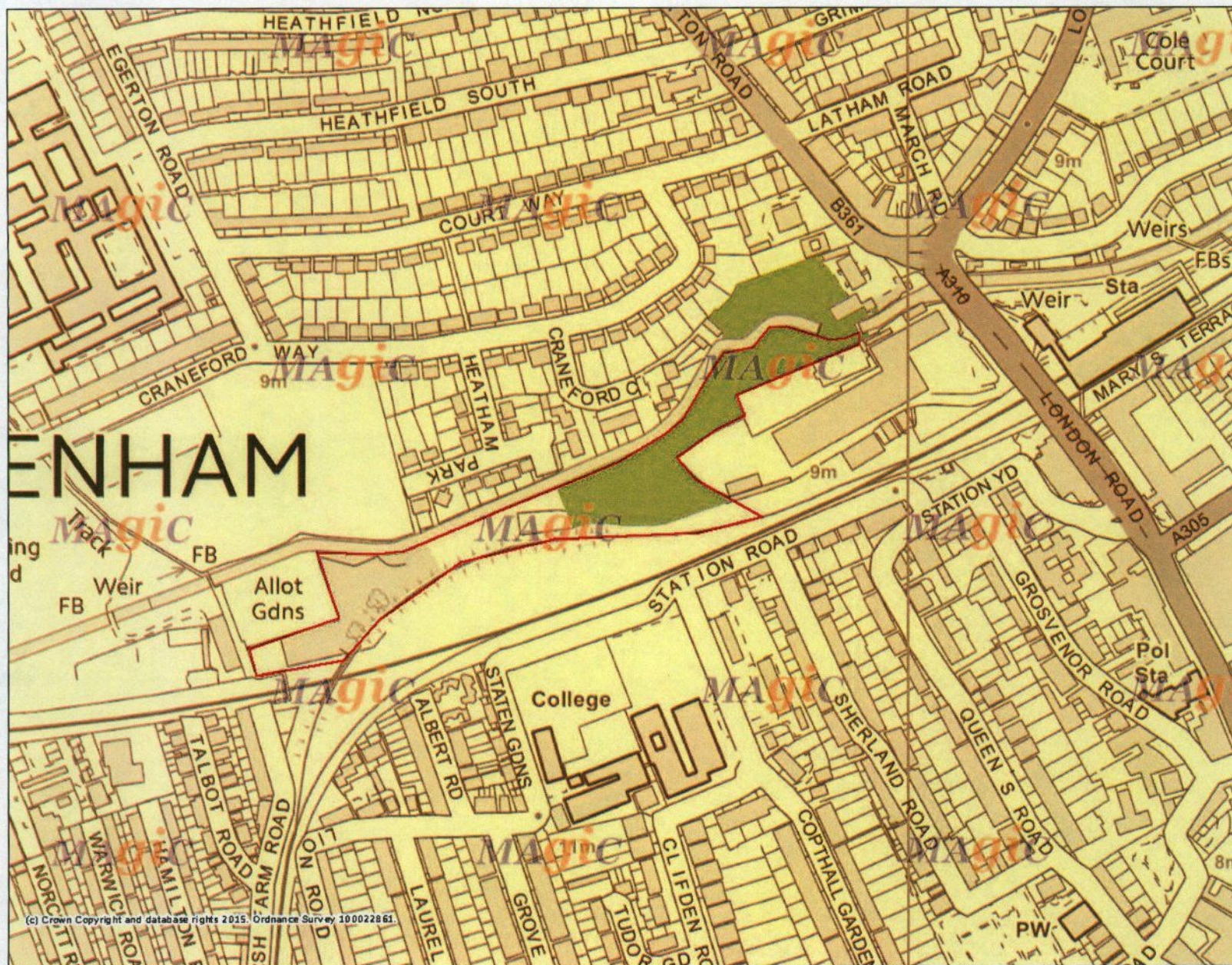
Name	RICHMOND PARK
Reference	UK0030246
Hectares	846.62
Hyperlink	http://www.naturalengland.org.uk/naturalengland/sites/sacselect.cfm?code=UK0030246

Special Protection Areas (England)

Name	SOUTH WEST LONDON WATERBODIES
Reference	UK9012171
Hectares	829.69

Ancient Woodland (England)

No Features found



Legend

- Priority Habitat Inventory -
Deciduous Woodland (England)

Projection ~ OSGB 36
 xmin ~ 515100
 ymin ~ 173200
 xmax ~ 516500
 ymax ~ 173900

Map produced by MAGiC on 14 September, 2015.
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 that is being maintained or continually updated by the
 originating organisation. Please refer to the metadata for
 details as information may be illustrative or representative
 rather than definitive at this stage.

APPENDIX 2

Survey Scoping letter to Local Planning Authority
[ECO2720/TS/HG.010.let.ra]

Our ref: ECO2720/TS/HG.010.let.ra
Your ref:

21 August 2015

Robert Angus
Development Control Manager
Planning (Environment Directorate)
London Borough of Richmond Upon Thames
Civic Centre
44 York Street
Twickenham
TW1 3BZ

Aspect Ecology Ltd
West Court
Hardwick Business Park
Noral Way
Banbury
Oxfordshire OX16 2AF

T: 01295 276066
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E: info@aspect-ecology.com
W: www.aspect-ecology.com

SENT BY E-MAIL ONLY

Dear Robert,

**TWICKENHAM ROUGH, LAND TO THE WEST OF TWICKENHAM SORTING OFFICE,
TWICKENHAM – ECOLOGY SCOPING**

Aspect Ecology is advising St James Group Ltd with regard to ecological matters relating to the installation of a new 3m wide footpath to address the below condition of the planning permission (DC/CAM/13/1147/FUL/FUL);

'U62138NS14' - Further Surveys

An enhanced Phase 1 Habitat Survey and Bat Survey shall be submitted to and agreed in writing by the Local Planning Authority.

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land.'

Aspect Ecology have previously undertaken work within the development site in June 2013 comprising an Extended Phase 1 Habitat Survey as set out within the report entitled 'Land to the West of the former Royal Mail Sorting Office, London Road, Twickenham. Ecological Assessment' dated June 2013, which was submitted as part of the planning application. Additionally Aspect Ecology carried out survey work in relation to the former Twickenham Sorting Office in August 2011 [ECO2720.BN1 EcoReview+Plan.pdf].

The purpose of this correspondence is to formally scope out the level of survey work required to discharge the above planning condition set out by the London Borough of Richmond Upon Thames planning department.

I set out a brief overview of our proposed approach for your consideration under the following headings:

- Phase 1 Habitat Survey
- Bat Survey
- Reporting
- Conclusion

1. Extended Phase 1 Habitat Survey

It is proposed that an update Phase 1 habitat survey and general faunal survey is undertaken at the site, to provide up-to-date information on the habitats and ecological features present within the site. Particular regard will be had to the potential use of the site by any protected species, based on the habitats present and their condition.

2. Bat Inspection Survey

The survey will include specific survey work in relation to bats, comprising ground-level inspections of trees. All trees within the site will be examined from the ground to identify any features with bat roost potential, such as splits, cracks, rot holes, coverings of ivy, peeling bark or similar. The potential for the trees to support roosting bats will be ranked in accordance with the criteria set out in the publication entitled 'Bat Surveys - Good Practice Guidelines,' by the Bat Conservation Trust (BCT) (2012) and a schedule will be produced documenting the presence of any such features. It does not appear that any built structures are present within the site, however should such structures be discovered these will also be inspected for the presence of bats.

It is not considered that activity survey work will be required given the relatively small size of the site and nature of the proposals, whilst appropriate safeguards in relation to roosting bats will be undertaken as required.

3. Reporting

Following the completion of surveys, an evaluation and assessment of the site will be undertaken based on the information collated and ecology surveys undertaken.

Any ecological constraints will be identified and evaluated and a strategy proposed to address these issues in relation to the proposed development, with these placed in an easily understood form with realistic but detailed mitigation measures. Any opportunities for the site in ecological terms will be highlighted and measures proposed to offset any impacts identified. This may include an ecological enhancements plan, to show the location and specifications of ecological enhancements.

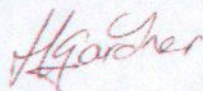
The results of the survey work will be set out within an Ecological Appraisal report, complete with colour plans and appendices as necessary, and will include recommendations for mitigation measures that may be required.

4. Conclusion

We would be pleased to receive any comments from yourselves on the above proposed approach and your agreement with the scope to address condition U62138NS14 of the planning permission (reference DC/CAM/13/1147/FUL/FUL).

I trust the above is of assistance. Should you have any queries please do not hesitate to contact me.

Yours sincerely



Hannah Gardner

Ecologist

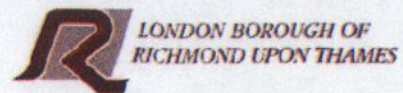
(hannah.gardner@aspect-ecology.com)

**Electronic copies of reports will be provided as required. If hard copies are required time and printing costs will be charged in addition. Amendments to reports due to scheme revisions will be charged in addition. Any liaison with the team or input into the design process required or attendance at any meetings would be charged in addition in accordance with our standard rates. If the potential for protected species or other species or habitat issues were identified, further detailed Phase II surveys may be recommended which, if required, would be costed in addition. Similarly, should any further or other issues be raised the above fee estimate may need to be revised accordingly. Aspect Ecology's ecologists may be bound by the Chartered Institute of Ecology and Environmental Management's code of conduct.*

Encl. Site Location Plan
Decision Notice – Application 13/1147/FUL

Environment Directorate

Civic Centre, 44 York Street, Twickenham TW1 3BZ
tel: 020 8891 7300 text phone 020 8891 7120
fax: 020 8891 7789
email: envprotection@richmond.gov.uk
website: www.richmond.gov.uk



PLANNING

TOWN AND COUNTRY PLANNING ACT 1990: DECISION NOTICE

Miss Georgina Atkinson
St James Group Ltd
Berkeley House
15B St George Wharf
Vauxhall
London
SW8 2LE

Please contact Planning Support

Please telephone: 0845 612 2660

Your ref: Footpath/Cycleway
Application

Our ref:
DC/CAM/13/1147/FUL/FUL

Letter Printed: 19 August 2013

FOR DECISION DATED
19.08.2013

Applicant: Miss Georgina Atkinson

Agent:

WHEREAS in accordance with the provisions of the Town and Country Planning Act 1990 and the orders made thereunder, you have made an application received on **8 April 2013** and illustrated by plans for the permission of the Local Planning Authority to develop land situated at:


Land Known As Twickenham Rough To The West Of Twickenham Sorting Office, London Road, Twickenham, .

for

Proposed change of use of land to provide public amenity land and the provision of a 3m wide footpath/cycleway and associated landscaping and fencing.

NOW THEREFORE WE THE MAYOR AND BURGESSES OF THE LONDON BOROUGH OF RICHMOND UPON THAMES acting by the Council of the said Borough, the Local Planning Authority HEREBY GIVE YOU NOTICE pursuant to the said Act and the Orders made thereunder that permission to develop the said land in accordance with the said application is hereby **GRANTED** subject to the conditions and informatives summarised and listed on the attached schedule:-

Yours faithfully


Robert Angus
Development Control Manager

APPLICANT NAME	AGENT NAME
Miss Georgina Atkinson Berkeley House 15B St George Wharf Vauxhall London SW8 2LE	

SITE:

Land Known As Twickenham Rough To The West Of Twickenham Sorting Office, London Road, Twickenham, .

PROPOSAL:

Proposed change of use of land to provide public amenity land and the provision of a 3m wide footpath/cycleway and associated landscaping and fencing.

SUMMARY OF CONDITIONS AND INFORMATIVES

CONDITIONS:

AT01 Development begun within 3 years	U62132NS08 - Archaeology
DV29E Potentially Contaminated Sites	U62133NS09 - 8m Buffer Zone
U62124DV48 - Approved drawings	U62134NS10 - Woodland Management Plan
U62125NS01 Excavation Works	U62135NS11 - Fencing/Gates Details
U62126NS02 - Arboricultural Method Statement	U62136NS12 - Pathway Details
U62127NS03 - Tree Protection	U62137NS13 - Eradication Programme - Weeds
U62128NS04 - Prohibited Activities	U62138NS14 - Further Surveys
U62129NS05 - Site Supervision	U62139NS15 - Hard and Soft Landscaping Works
U62130NS06 - Hand Held Tools	U62639 Construction Method Statement
U62131NS07 - Dawn to Dusk Access Only	

INFORMATIVES:

U70641 Relevant policies/proposals FUL~	U70648 Ground contamination
U70642 Summary Reasons for Granting PP~	U70649 Archaeology
U70644 Trees - Protective fencing	U70650 London Cycle Design Standards
U70645 Trees - Size of new stock	U70651 Landscaping details
U70646 Nature Conservation	U70653 Noise Control - Building Sites
U70655 Consultation with Amenity Groups	U70647 Bats

DETAILED CONDITIONS

AT01 Development begun within 3 years

The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of this permission.

REASON: To conform with the requirements of Section 91 of the Town and Country Planning Act 1990 as amended by the Planning and Compulsory Purchase Act 2004.

DV29E Potentially Contaminated Sites

1. No development shall take place until:

a) a desk study detailing the history of the site, hazardous materials, substances used together with details of a site investigation strategy based on the information revealed in the desk study has been submitted to and approved in writing by the local planning authority

b) an intrusive site investigation has been carried out comprising: sampling of soil, soil vapour, ground gas, surface water and groundwater in locations and at depths stipulated by the local planning authority. Such work to be carried out by suitably qualified and accredited geo-environmental consultants in accordance with the current U.K. requirements for sampling and testing.

c) written reports of i) the findings of the above site investigation and ii) a risk assessment for sensitive receptors together with a detailed remediation strategy designed to mitigate the risk posed by the identified contamination to sensitive receptors have been submitted to and approved in writing by the local planning authority

Note: some demolition work, if required, could be allowed beforehand for enabling the above requirement (1b), subject to the agreement of the Local Planning Authority.

2. None of the dwellings/buildings hereby approved shall be occupied until:

a) the remediation works approved as part of the remediation strategy have been carried out in full and in compliance with the approved strategy. If during the remediation or development work new areas of contamination are encountered, which have not been previously identified, then the additional contamination should be fully assessed in accordance with condition [1(b, c)] above and an adequate remediation scheme shall be submitted to and approved in writing by the local planning authority and fully implemented thereafter.

b) a verification report, produced on completion of the remediation work, has been submitted to and approved in writing by the local planning authority. Such report to include i) details of the remediation works carried out and ii) results of verification sampling, testing and monitoring and iii) all waste management documentation showing the classification of waste, its treatment, movement and disposal in order to demonstrate compliance with the approved remediation strategy.

REASON: To protect future users of the site and the environment.

U62124DV48 - Approved drawings

The development hereby permitted shall be carried out in accordance with the following approved plans and documents, where applicable.

REASON: To accord with the terms of the application, for the avoidance of doubt and in the interests of proper planning.

O.S Extract received on 8 April 2013, Woodland Strategy and Arboricultural Impact Assessment dated 20 June 2013 prepared by Ian Keen Limited and Ecological Assessment prepared by Aspect Ecology dated June 2013, all received 24th June 2013

U62125NS01 Excavation Works

A) All excavations in preparation of foundations, drainage, ducting, and all works or development within the Root Protection Area of (retained trees) shall be carried out in a manner to ensure that all major roots uncovered in excess of 25mm shall be retained, bridged around and treated in accordance with section 7.2 of BS5837 2012.

B) Roots with a diameter less than 25mm may be removed if necessary: this should be done in accordance with BS3998 2010 (Tree Work - Recommendations) and section 7.2.3 of BS5837 2012

C) Any tree root exposed which is in excess of 5cm in diameter shall be reported to the Council's tree officer within 48 hours of exposure in order that advice may be obtained with regard to adequate treatment.

D) Any exposed roots must be immediately wrapped or covered to prevent desiccation and to protect them from rapid temperature change. Wrapping must be removed prior to backfilling.

E) Backfilling should be undertaken in accordance with section 7.2.4 of BS5837 2012

Reason: To ensure that trees are not damaged or otherwise adversely affected by the building operations.

U62126NS02 - Arboricultural Method Statement

Prior to any works associated with the approved scheme commencing on site, a scheme specific Arboricultural Method Statement shall be submitted to and agreed in writing by the Local Planning Authority: this is to include details of all special engineering within the RPA and other relevant construction details. The AMS shall include a Tree Protection Plan

The Tree Protection Plan and Arboricultural Method Statement must be written in accordance with section 6.1 of BS5837 2012 (Trees in relation to design, demolition and construction - recommendations)

No materials or machinery shall be brought onto the site prior to the approval of the Arboricultural Method Statement.

The scheme shall be undertaken in accordance with the approved Arboricultural Method Statement and Tree Protection Plan at all times.

Reason: To ensure that trees are not damaged or otherwise adversely affected by the building operations.

U62127 NS03 - Tree Protection

No works or development shall take place until a scheme for the protection of the retained trees (section 7, BS5837, the Tree Protection Plan) has been agreed in writing with the LPA. This scheme shall include:

- a. a plan to a scale and level of accuracy appropriate to the proposal that shows the position, crown spread and Root Protection Area (para. 5.2.2 of BS5837) of every retained tree on site and on neighbouring or nearby ground to the site in relation to the approved plans and particulars. The positions of all trees to be removed shall be indicated on this plan.
- b. the details of each retained tree as required at para. 4.2.6 of BS5837 in a separate schedule.
- c. a schedule of tree works for all the retained trees in paragraphs (a) and (b) above, specifying pruning and other remedial or preventative work, whether for physiological, hazard abatement, aesthetic or operational reasons. All tree works shall be carried out in accordance with BS3998, 1989, Recommendations for tree work.
- d. the details and positions (shown on the plan at paragraph (a) above) of the Ground Protection Zones (section 9.3 of BS5837).
- e. the details and positions (shown on the plan at paragraph (a) above) of the Tree Protection Barriers (section 9.2 of BS5837), identified separately where required for different phases of construction work (e.g. demolition, construction, hard landscaping). The Tree Protection Barriers must be erected prior to each construction phase commencing and remain in place, and undamaged for the duration of that phase. No works shall take place on the next phase until the Tree Protection Barriers are repositioned for that phase.
- f. the details and positions (shown on the plan at paragraph (a) above) of the Construction Exclusion Zones (section 9 of BS5837).
- g. the details and positions (shown on the plan at paragraph (a) above) of the underground service runs (section 11.7 of BS5837).
- h. the details of any changes in levels or the position of any proposed excavations within 5 metres of the Root Protection Area (para. 5.2.2 of BS5837) of any retained tree, including those on neighbouring or nearby ground.
- i. the details of the working methods to be employed for the installation of drives and paths within the RPAs of retained trees in accordance with the principles of "No-Dig" construction.
- j. the details of the working methods to be employed with regard to the access for and use of heavy, large, difficult to manoeuvre plant (including cranes and their loads, dredging machinery, concrete pumps, piling rigs, etc) on site.
- k. the details of tree protection measures for the hard landscaping phase (sections 13 and 14 of BS5837).
- l. the timing of the various phases of the works or development in the context of the tree protection measures.

Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62128 NS04 - Prohibited Activities

Prohibited Activities

The following activities must not be carried out under any circumstances:

- a) No fires shall be lit within 10 metres of the nearest point of the canopy of any retained tree
- b) No works shall proceed until appropriate Tree Protection Barriers are in place, with the exception of initial tree works

- c) No equipment, signage, fencing, tree protection barriers, materials, components, vehicles or structures shall be attached to or supported by a retained tree
 - d) No mixing of cement or use of other materials or substances shall take place within a RPA, or close enough to a RPA that seepage or displacement of those materials or substances could cause them to enter a RPA
 - e) No alterations or variations to the approved works or tree protection schemes shall be carried out without the prior written approval of the LPA.
- Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62129NS05 - Site Supervision

Site Supervision

No works or development shall take place until a scheme of supervision for the arboricultural protection measures has been approved in writing by the LPA. This scheme will be appropriate to the scale and duration of the works and may include details of:

- a) Induction and personnel awareness of arboricultural matters.
- b) Identification of individual responsibilities and key personnel.
- c) Statement of delegated powers.
- d) Timing and methods of site visiting and record keeping, including updates.
- e) Procedures for dealing with variations and incidents.
- f) How copies of site inspection records are to be supplied to the Arboricultural team to

help monitor tree protection measures.

Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62130NS06 - Hand Held Tools

Any excavation within tree protection areas of trees shall be carried out using non-mechanised hand tools only and shall not result in the lowering of existing soil levels unless otherwise agreed by the Local Planning Authority.

Reason: To ensure that trees are not damaged or otherwise adversely affected by building operations and soil compaction.

U62131NS07 - Dawn to Dusk Access Only

No access shall occur to the land other than between dawn and dusk on any day except in a case of emergency or for maintenance purposes.

Reason: To ensure that neighbouring amenity is adequately safeguarded and to secure a safe form of development.

U62132NS08 - Archaeology

No development shall take place until the applicant (or their heirs and successors in title) has secured the implementation of a programme of archaeological investigation (watching brief) in accordance with a Written Scheme of Investigation which has been submitted by the applicant and approved in writing by the local planning authority. No development shall take place other than in accordance with the Written Scheme of Investigation.

Reason: Heritage assets of archaeological interest are expected to survive along the route and appropriate archaeological investigation need to be secured, including the publication of results, in accordance with Section 12 of the NPPF.

U62133NS09 - 8m Buffer Zone

No development shall take place until a scheme for the provision and management of at least an 8m wide buffer zone (unless otherwise agreed in writing by the Local Planning Authority) alongside the River Crane shall be submitted to and agreed in writing by the local planning authority. Thereafter the development shall be carried out in accordance with the approved scheme and any subsequent amendments shall be agreed in writing by the local planning authority. The buffer zone scheme shall be free from built development including lighting and formal landscaping. The details shall include:

- a) plans showing the extent and layout of the buffer zone
- b) details of the proposed planting scheme
- c) details demonstrating how the buffer zone will be protected during development and managed/maintained over the longer term including adequate financial provision and named body responsible for management plus production of detailed management plan

Reason: To ensure the development conserves and enhances the natural and local environment by minimising impacts on biodiversity in accordance with paras 109 and 118 of the NPPF, local planning policy and Art 10 of the Habitats Directive.

U62134NS10 - Woodland Management Plan

No development shall take place until a woodland management plan and landscape management plan, including long-term design objectives, management responsibilities and maintenance schedules for all landscaped areas (except private owned domestic gardens), shall be submitted to and approved in writing by the local planning authority. The wood land and landscape management plans shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority.

The scheme shall include the following elements:

- a) details of the extent and type of new planting (native species to predominate)
- b) details of maintenance regimes
- c) details of any new habitat created on site
- d) details of treatment of site boundaries and /or buffers around d water bodies
- e) details of management responsibilities

Reason: To ensure the site is adequately managed for the benefit of biodiversity, in particular wildlife and habitat protection, and public amenity.

U62135NS11 - Fencing/Gates Details

Details of the means of enclosure/fencing/gates to the southern, eastern and western boundaries of the site shall be submitted to and agreed in writing prior to the commencement of development, such fencing/enclosure shall then be constructed in accordance with these approved details.

Reason: To provide appropriate security to neighbouring residential properties, the Marsh Farm allotments and Heatham House and to ensure that neighbouring amenity is adequately safeguarded and to deliver a safe pathway/form of development

U62136NS12 - Pathway Details

No development shall take place until details of the route of the 3m wide pathway/cycleway have been submitted to and agreed in writing by the Local Planning Authority and thereafter constructed in accordance with these details, such details to include alignment, levels, construction and surfacing of pathway, underground ducting for electric cables, seating, resting benches, litter bins, signage, ecological information boards, means of enclosure and timing of construction in relation to the development of adjoining land. The route of the footpath shall accord with the Secured by Design and Safer Places principles and the London Borough of Richmond upon Thames Public Space Design Guide.

Reason: To ensure that neighbouring amenity, arboricultural and nature conservation interests are adequately safeguarded.

U62137NS13 - Eradication Programme - Weeds

As part of the development hereby approved, a method statement and programme for the removal and/or chemical treatment of any Japanese Knotweed, Giant Hogweed and Wall Cotoneaster discovered on site shall be submitted to and agreed in writing by the Local Planning Authority. An eradication guarantee shall be provided to the Local Planning Authority following treatment.

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land.

U62138NS14 - Further Surveys

An enhanced Phase 1 Habitat Survey and Bat Survey shall be submitted to and agreed in writing by the Local Planning Authority

Reason: To enhance the nature conservation value of the site and to prevent migration to adjoining land.

U62139NS15 - Hard and Soft Landscaping Works

A) No development shall take place until full details of both hard and soft landscaping works have been submitted to and approved in writing by the local planning authority. These details shall include all ecological enhancements recommended in the Ecological Assessment report hereby approved by Aspect Ecology, proposed finished levels or contours; means of enclosure; car parking layouts; other vehicle and pedestrian access and circulation areas; hard surfacing materials; minor artifacts and structures (e.g. furniture, play

equipment, refuse or other storage units, signs, lighting etc.); proposed and existing utility services above and below ground (e.g. drainage, power, communications cables, pipelines etc, indicating lines, manholes, supports etc); retained historic landscape features and proposals for restoration, where relevant a program or timetable of the proposed works.

B) Where within the Root Protection Area of retained trees hard landscape design, small structure installation and service installation should be formulated in accordance with section 7.4, 7.5 and 7.7 of British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations.

C) Soft landscape works shall include planting plans, written specifications (including cultivation and other operations associated with plant and grass establishment) the specification is to include details of the quantity, size, species, position, planting methodology, proposed time of planting and anticipated routine maintenance of all trees to be planted. Any proposed tree planting should be undertaken in accordance with section 5.6 of British Standard 5837:2012 Trees in relation to design, demolition and construction - Recommendations.

D) All tree/plant/shrub planting included within the approved specification shall be carried out in accordance with that specification and in accordance with BS 3936:1986 (parts 1, 1992, Nursery Stock, Specification for trees and shrubs, and 4, 1984, Specification for forest trees); BS 4043: 1989, Transplanting root-balled trees; and BS 4428:1989, Code of practice for general landscape operations (excluding hard surfaces).

E) All hard and soft landscape works shall be carried out in accordance with the approved details and in any event prior to the commencement of use of the land and pathway/cycleway

Reason: To ensure that the proposed development does not prejudice the appearance of the locality and to preserve and enhance nature conservation interests

U62639 Construction Method Statement

No development shall take place, including any demolition, until a Construction Method Statement has been submitted to and approved in writing by the Local Planning Authority. The approved Statement shall be adhered to throughout the construction period. The Statement shall provide for:

1. the parking of vehicles of site operatives & visitors
2. loading/unloading of plant & materials
3. storage of plant and materials used in constructing the development
4. the erection and maintenance of security hoardings including decorative displays and facilities for public viewing, where appropriate.
5. wheel washing facilities
6. measures to control the emission of dust and dirt during construction
7. a scheme for recycling/disposing of waste resulting from demolition & construction works.
8. routing of delivery vehicles to and from the site

Reason: in the interests of highway and pedestrian safety together with the amenity of the area

DETAILED INFORMATIVES

U70641 Relevant policies/proposals FUL~

This decision has taken into account the relevant policies of the London Plan and, in particular, the following have been taken into account in the consideration of this proposal:-

London Plan 2.18, 3.2, 3.6, 5.12, 5.13, 5.21, 6.1, 6.9, 6.10, 7.1, 7.2, 7.3, 7.4, 7.5, 7.8, 7.15, 7.17, 7.18, 7.19, 7.21, 7.24, 7.25, 7.27, 7.28, 7.30, 8.2, Local Development Framework - Core Strategy CP1, CP3, CP4, CP5, CP7, CP8, CP9, CP10, CP12, CP16, CP17 and CP20, Local Development Framework Development Management Plan DM SD 1, DM SD 6, DM SD 7, DM SD 8, DM SD 9, DM OS 2, DM OS 5, DM OS 6, DM OS 7, DM OS 8, DM OS 10, DM OS 12, DM HD 2, DM HD 3, DM HD 4, DM TP 3, DM TP 4, DM TP 6, DM TP 7, DM DC 1, DM DC 2, DM DC 4, DM DC 5

Local Development Framework Twickenham Action Area Plan: Principles 1, 4, 5, Policy TWP3, Proposal Site TW1

Crane Valley Planning Guidelines: SPG Design Quality SPD, Twickenham Station and Surrounding Sites SPD

U70642 Summary Reasons for Granting PP~

The change of use of this site to public amenity land offers an opportunity to secure an important link in the

SCHEDULE OF REASONS FOR APPLICATION 13/1147/FUL

West London Green Chain as specifically identified in the Crane Valley Planning Guidelines, the TW1 Site Allocation in Twickenham Action Area Plan and the Supplementary Planning Document: Twickenham Station and Other Surrounding Sites. As well as the link to the Crane Valley Park and open spaces around the River Crane, the new link will improve connectivity to Heath Road and Twickenham Green, Craneford Playing Fields, Richmond upon Thames College and the Twickenham Stoop Stadium. The footpath, which will act as a shared surface for pedestrians and cyclists, is proposed to be gravel bound and 3m in width with a 1m mown edge to either side. The natural, landscaped setting to the footpath will be retained to ensure the important nature conservation value of the land is not prejudiced while future encroachment towards the river is prevented by the imposition of a condition requiring the retention of an 8m buffer zone between the footpath and the riverbanks. Conditions are imposed that require the soil decontamination and the chemical

treatment or removal of Japanese Knotweed or other pernicious weeds that are found on site. The precise route of the footpath is a reserved matter at this stage. This approach allows the consent to have the necessary flexibility to best respond and protect the arboricultural and nature conservation value of the site. Due to its overgrown state, many parts of the site are simply impenetrable and further survey work will be required before robust decisions can be made on the exact alignment of the path. Nonetheless, in recognition of local residents concerns and on the basis of the site information able to be gathered from the site perimeters, it is clear that certain restrictions on public access to the land are required to prevent neighbour amenity being prejudiced and as such the footpath will be:

- closed on event days at the RFU stadium
- closed before dawn and after dusk on all days
- will be unlit
- will be gated (lockable) and fenced/cctv camera at London Road entrance
- additional tree/vegetation planting will take place on the northern boundary with the river crane

The proposal has been considered in the light of the Development Plan, comments from statutory consultees and third parties (where relevant) and compliance with Supplementary Planning Guidance as appropriate. It has been concluded that there is not a demonstrable harm to interests of acknowledged importance caused by the development that justifies withholding planning permission.

U70644 Trees - Protective fencing

In order to protect trees during building works the Local Planning Authority would normally expect the erection of Chestnut pale fencing to a height of not less than 1.2m around the trees in question to the extent of their existing crown spread or, where circumstances prevent this, to a minimum radius of 2m from the trunk of the tree.

U70645 Trees - Size of new stock

The Local Planning Authority would normally expect all new trees to be planted to be a minimum size of SELECTED STANDARD which shall have a sturdy reasonably straight stem with a clear height from ground level to the lowest branch of 1.8m, an overall height of between 3m and 3.5m and a stem circumference measured at 1m from ground level of 10-12cm. The tree shall, according to the species and intended use, have either a well-balanced branching head or a well defined, straight and upright central leader with the branches growing out from the stem with reasonable symmetry.

U70646 Nature Conservation

When submitting proposals for landscaping the site applicants are advised that in determining the suitability of such proposals the Local Planning Authority will take into account the scope for enhancing the nature conservation interest of the site.

U70655 Consultation with Amenity Groups

The applicant is advised to consult with local amenity groups (including FORCE (Friends of the River Crane Environment)) when preparing details for submission in relation to the pathway conditions.

U70648 Ground contamination

The possibility of ground contamination should always be considered, regardless of past land uses and the applicant is advised to follow guidance set out in the NPPF

U70649 Archaeology

SCHEDULE OF REASONS FOR APPLICATION 13/1147/FUL

The written scheme of investigation submitted pursuant to condition NS05 will need to be prepared and implemented by a suitably qualified archaeological practice in accordance with English Heritage Greater London Archaeology guidelines. It must be approved by the planning authority before any on-site development related activity occurs.

U70650 London Cycle Design Standards

The applicant is recommended by TfL to consult the London Cycle Design Standards at the detailed design stage and delivery of this link hereby approved.

U70651 Landscaping details

The applicant is advised that landscaping details submitted pursuant to condition NS09 and NS15 should include ecological enhancements to protect and enhance the river corridor and in-channel habitat.

U70653 Noise Control - Building Sites

The attention of the applicant is drawn to the requirements of section 60 of the Control of Pollution Act 1974 in respect of the minimisation of noise and vibration on construction and demolition sites. Application, under section 61 of the Act for prior consent to the works, can be made to the Environmental Health Department.

Under the Act the Council has certain powers to control noise from construction sites. Typically the council will limit the times during which sites are permitted to make noise that their neighbours can hear.

For general construction works the Council usually imposes (when necessary) the following limits on noisy works:-

Monday to Friday 8am to 6pm

Saturdays 8am to 1pm

Sundays and Public Holidays- No noisy activities allowed

Applicants should also be aware of the guidance contained in British Standard 5228:2009- Noise and vibration control on construction and open sites.

Any enquiries for further information should be made to the Commercial Environmental Health Team, 2nd Floor Civic Centre, 44 York Street, Twickenham TW1 3AB.

U70647 Bats

The applicant is advised that bats are European Protected Species under the Wildlife and Countryside Act 1991 (as amended) and the Natural Habitats

Regulations 1994 and therefore any works effecting roosts, habitats and foraging areas will need to first be approved by DEFRA.

END OF SCHEDULE OF CONDITIONS AND INFORMATIVES FOR APPLICATION 13/1147/FUL

APPENDIX 3

Examples of Bat Boxes

Bat Boxes

Schwegler bat boxes are made from 'woodcrete' and have the highest rates of occupation of all types of box.

The 75% wood sawdust, clay and concrete mixture is ideal, being durable whilst allowing natural respiration and temperature stability. These boxes are rot and predator proof and extremely long lasting.

Boxes can be hung from a branch near the tree trunk or fixed using 'tree-friendly' aluminum nails.



1F Bat Box

A larger than standard bat box, with two additional roughened wooden panels inside to be used by the bats as perches.

Woodcrete construction, 16cm diameter, height 36cm.

1FF Bat Box

The rectangular shape makes the 1FF suitable for attaching to the sides of buildings or in sites such as bridges, though it may also be used on trees. It has a narrow crevice-like internal space to attract Pipistrelle and Noctule bats.

Woodcrete construction, 27cm width, 43cm height, 7.3kg weight



Schwegler 2F Bat Box

The 2F from Schwegler is the most popular general purpose bat box. It is particularly attractive to the smaller British bats. A simple design made from strong, natural WoodcretePLUS material, with a narrow entrance slit on the front. Hang from a tree branch near the trunk, or fix to a trunk with the supplied 'tree-friendly' aluminium nail.

Woodcrete construction, 16cm diameter, 33cm height, 4kg weight.

APPENDIX 4

Examples of Bird Boxes

Bird Boxes

Schwegler bird boxes have the highest rates of occupation of all types of box.

They are designed to mimic natural nest sites and provide a stable environment with the right thermal properties for chick rearing and winter roosting.

Boxes are made from 'Woodcrete'. This 75% wood sawdust, clay and concrete mixture is breathable and very durable making these bird boxes extremely long lasting.



1B Bird Box

This is the most popular box for garden birds and appeals to a wide range of species. The box can be hung from a branch or nailed to the trunk of a tree with a 'tree-friendly' aluminium nail.

Available in four colours and three entrance hole sizes: 26mm for small tits, 32mm standard size, and oval for redstarts.

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