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Our Ref: RT-MME-160594-01

Ecological Walkover Survey – Thames Young Mariners, Riverside Dr, London

Introduction

In June 2023, Pick Everard commissioned Middlemarch Environmental Ltd to undertake an updated Ecological Walkover Survey at Thames Young Mariners, Richmond, southwest London, in order to inform the proposed redevelopment of the site to create new guest accommodation, staff residences and associated facilities. Previously, a Preliminary Ecological Appraisal was undertaken in 2020 by Surrey Wildlife Trust Ecology Services (Report 3974-1), while a subsequent ecological walkover survey of the site was undertaken by Middlemarch in March 2022, which was undertaken to inform a Biodiversity Net Gain Assessment for the site.

A full list of ecological survey work undertaken at the site by Middlemarch is included below:

- Preliminary Arboricultural Appraisal (RT-MME-157100-01);
- Arboricultural Impact Assessment (RT-MME-157100-02);
- Ecological Walkover Survey (RT-MME-157100-03);
- Preliminary Bat Roost Assessment (RT-MME-157100-04);
- Badger Survey (RT-MME-157100-05);
- Biodiversity Net Gain Assessment (RT-MME-157100-06); and,
- Dusk Emergence Bat Survey (RT-MME-158089).

In addition, Middlemarch has been commissioned to undertake the following ecological survey work at the site:

- Preliminary Bat Roost Assessment (RT-MME-160594-02);
- Badger Survey (RT-MME-160594-03); and,
- Dusk Emergence Bat Survey (RT-MME-160594-04).

Current site boundary

For the purposes of this assessment, the site boundary is considered to comprise the application red-line boundary as per the Landscape Strategy (PR-200-PEV-XX-XX-DR-L-00200) provided by Pick Everard, while the wider Thames Young Mariners site is considered to fall outside of the current survey boundary. Drawing C160594-01-01 displays the extent of the current survey effort.

Ecological Walkover Methodology

A field survey was conducted following the Phase 1 Habitat Survey methodology of the Joint Nature Conservation Committee and the Institute of Environmental Assessment. Phase 1 Habitat Survey is a standard technique for classifying and mapping British habitats. The aim is to provide a record of habitats that are present on site. During the survey, a Habitat Condition Assessment was carried out to determine the ecological status of each habitat recorded. The condition assessment was assessed using published criteria in Panks et al. (2021), the details of which are presented in Appendix A.

During the survey, the presence or potential presence of protected species was noted where observed. This included a review of suitable habitat opportunities or field signs of notable species groups (amphibians, bats, birds, terrestrial and aquatic invertebrates, terrestrial and aquatic mammals, plants and reptiles).

Calculating the On-Site Baseline

The site is separated into habitat parcels based on the Phase 1 Habitat Survey map. The metric differentiates between non-linear habitats (i.e., grassland, woodland) and linear habitats (i.e., hedgerows), for which a separate calculation is completed. The respective areas (in hectares) of each habitat parcel and respective lengths (in kilometres) of linear features are calculated in Geographical Information System (GIS) mapping software and entered into the calculator tool.

Consistent with the previous assessment undertaken at the site in 2022 (RT-MME-157100-06), the Biodiversity Metric 3.1 calculator tool was used. This tool utilises the UK Habitat Classification System (UKHab) as the standard data input for habitats. The Phase 1 Habitat Survey data for the site was subsequently converted for the purposes of the metric calculation using the Phase 1 habitats to UKHab translation feature included in the Biodiversity Metric 3.1 calculator tool or professional opinion.

Each habitat or linear feature recorded within the site is assigned a score for 'Distinctiveness', 'Condition' and 'Strategic Significance':

Each habitat or linear feature recorded within the site is assigned a score for 'Distinctiveness', 'Condition' and 'Strategic Significance':

- **Distinctiveness** – An automated score based on the type of habitat present and its value to wildlife. Highly diverse habitats such as those listed as Habitats of Principal Importance under the NERC Act (2006) or Annex 1 habitats in the Habitats Directive (1992) score highly in this category whilst highly modified and low diversity habitats such as arable crops will have low distinctiveness scores.
- **Condition** – A score based on the quality of the habitat parcel against published condition criteria (see Appendix A).
- **Strategic significance** – A score based on information set out in local plans or policies. In this instance, a strategic location was defined as areas identified as Biodiversity Opportunity Areas, Wildlife Corridors or Biological Notification Sites in the Richmond Borough Biodiversity Action Plan¹. For purposes of this assessment, the Thames Young Mariners site is directly referenced within the Biodiversity Action Plan with respect to enhancement opportunities. As no explicit habitat is referenced, all habitats considered within the assessment have been assigned High Strategic Significance within the Metric in accordance with Paragraph 4.29 within the Metric 3.1 User Guide.

The value of each habitat parcel (or linear feature) is presented in terms of habitat (or hedgerow/river) 'units'.

For purposes of the assessment, the application red-line is considered as "on-site" while habitats within the wider Thames Young Mariners site are considered as "off-site" habitats. Drawing C160594-01-01 displays the extent of the current survey effort.

¹ Richmond Biodiversity Action. Available at: <https://habitatsandheritage.org.uk/our-work/parks-nature/richmond-biodiversity-partnership/>

Results

The ecological walkover survey was undertaken on the 28th June 2023 by Nick Davey (Ecological Consultant) and Annabel Field (Ecological Project Officer). The weather conditions at the time of the survey are detailed in Table 1.

Parameter	Conditions
Temperature (°C)	22
Cloud (%)	100
Wind (Beaufort)	F2
Precipitation	Dry

Table 1: Weather Conditions

Constraints

No constraints were identified during the survey, which was undertaken during the optimal time of year for Phase 1 habitat surveys.

Designated Sites

Ham Lands Local Nature Reserve (LNR), an extensive reserve comprising scrub and grassland, immediately surrounds much of the site.

Habitats

The following habitats were recorded on site during the field survey visit:

- Amenity Grassland;
- Buildings;
- Dense Scrub;
- Plantation Woodland Broadleaved;
- Poor Semi-improved Grassland;
- Hardstanding;
- Introduced Shrub;
- Scattered Trees;
- Species-poor Hedgerow;
- Standing Water; and
- Tall Ruderal.

Amenity Grassland

Both the 2022 and 2023 survey visits recorded the amenity grassland to comprise a closely mown sward with a low species diversity, while extensive bare ground was present near the building complex, with this area evidently subject to high levels of trampling. Nonetheless, where the grassland bordered dense scrub and tall ruderal vegetation south of the lake, a patchy, narrow layer of long grassland (dominated by false oat-grass *Arrhenatherum elatius*) was recorded. The general grassland sward was comprised dominant fescue *Festuca sp.* species with abundant perennial ryegrass *Lolium perenne*, frequent cock's foot *Dactylus glomerata* and occasional annual meadow grass *Poa annua*, bent *Agrostis sp.* and meadow foxtail *Alopecurus pratensis*. Forb growth was species poor and included frequent common daisy *Bellis perennis*, ribwort plantain *Plantago lanceolata*, yarrow *Achillea millefolium*, occasional bristly oxtongue *Helminthotheca echioides*, dandelion *Taraxacum officinale*, hedge mustard *Sisymbrium officinale*, white clover *Trifolium repens*, common ragwort *Jacobaea vulgaris*, herb Robert *Geranium robertianum*, slender speedwell *Veronica filiformis* and geranium species *Geranium sp.*

Buildings

A series of single storey buildings with associated hardstanding access roads within the south-western portion of the site.

Dense Scrub

DS1

Bramble *Rubus* agg. scrub with scattered holly *Ilex aquifolium*, elder *Sambucus nigra* and holm oak *Quercus ilex*. In addition, ivy *Hedera helix*, old man's beard *Clematis vitalba*, cleavers *Galium aparine*, green alkanet *Pentaglottis sempervirens* and cow parsley *Anthriscus sylvestris* were frequently present within the scrub. Both the 2022 and 2023 surveys recorded sections of the scrub to have been recently cleared and cut back, but the scrub generally formed dense thickets along the site boundaries.

DS2

Mixed scrub, predominantly along the southern bank of the lake. The habitat comprised dominant bramble and goat willow *Salix caprea* with butterfly bush *Buddleja davidii* and elder frequent. Other species included sycamore *Acer platanoides*, holm oak and robinia *Robinia pseudoacacia*. Old man's beard and cow parsley dominated the ground flora, with false oat-grass and green alkanet present within more open areas of the habitat. Scattered semi mature and mature trees were present within the habitat.

Hardstanding

Hardstanding access roads and footpaths were recorded within the site. Other artificial surfaces included areas of gravel and wood chip play areas.

Introduced Shrub

Introduced shrub beds within residential gardens. Cherry laurel *Prunus laurocerasus* was frequent, along with a small variety of ornamental shrub and herb species. The level of management within the introduced shrub beds varied from well-managed to overgrown, with more overgrown areas comprising a mixture of long grass and weeds such as common nettle *Urtica dioica*.

Plantation Woodland Broadleaved

BW1

Woodland of relatively recent origin in the south-west corner of the site. Reference to historic maps indicates the woodland was planted within the last century.

Frequent deadwood and large areas of brash and urban debris were noted within the habitat, while the woodland parcel was also evidently subject to high levels of recreational pressure. The canopy cover was continuous and comprised dominant mature to semi-mature hawthorn *Crataegus monogyna*. A linear band of robinia trees was present within the north-eastern corner of the woodland. The shrub layer comprised sparse snowberry *Symphoricarpos alba*, young hawthorn, elder and bramble. Ground flora comprised dominant lesser periwinkle *Vinca minor* with abundant cleavers, cow parsley and green alkanet. Burdock *Arctium lappa*, variegated yellow archangel *Lamium galeobdolon subsp. argentatum* and Spanish bluebell *Hyacinthoides hispanica* were also noted frequently with Lords and Ladies *Arum maculatum* occasional.

BW2

A small copse along the southern boundary of relatively recent origin. Reference to historic maps indicates the woodland was planted within the last century.

The canopy cover was continuous and comprised dominant wild cherry *Prunus avium* with scattered ash *Fraxinus excelsior* and crab apple *Malus sylvestris*. The shrub layer was previously recorded in 2022 to comprise goat willow, elder, holm oak and bramble scrub, albeit this had since been predominantly cleared, with only a sparse shrub layer remaining, including sycamore saplings, holm oak, elder and hawthorn. The ground flora was less continuous compared to the 2022 survey following recent management, with extensive bare ground and woody arisings present. Nonetheless the species present were consistent with those recorded in 2022 and included frequent ivy and cow parsley and occasional common nettle and common hogweed *Heracleum sphondylium*, with these species still widespread and evidently re-colonising cleared areas. As previously, occasional deadwood was present on the woodland floor.

BW3

A parcel of woodland within the south-east corner of the site of relatively recent origin. Reference to historic maps indicates the majority of the woodland was planted within the last century, with the exception of two significantly older mature oak *Quercus robur* trees.

The woodland was used as a natural play area, which was evidently subject to high levels of footfall. The canopy was characterised by a mixture of semi-mature ash, oak, sycamore, hawthorn and wild cherry, while frequent mature plum *Prunus domestica* and occasional silver birch *Betula pendula* were also present on the eastern side. Given the high footfall, the shrub and ground flora layers were largely absent, albeit honeysuckle *Lonicera periclymenum*, snowberry and cotoneaster *Cotoneaster franchetti* were present within the woodland, while the western section of the parcel had a sparse shrub layer comprising bramble and elder. The ground layer was dominated by bare ground, albeit un-trampled areas included dominant ivy, with occasional cow parsley and common hogweed.

A series of deadwood piles, bug hotels and brash piles were noted across the parcel. Woodland planters with ornamental species were also present.

BW4

Woodland BW4 comprised a woodland parcel within the far eastern extent of the site, which extended offsite (within the wider Thames Young Mariners grounds) along the eastern extent of the lake. The woodland is of recent origin, while reference to historic maps indicates the woodland was planted within the last century.

As previously, the canopy comprised semi-mature plum and non-native cherry plum *Prunus cerasifera*, with occasional blackthorn *Prunus spinosa*, silver birch, ash, sycamore and scattered mature willows *Salix* sp. nearer the lake. The shrub layer was generally sparse, but with snowberry, elder and honeysuckle recorded. Similarly to BW3, the parcel was used as a natural play area. Nonetheless, trampling within the on-site section of woodland was evidently mainly restricted to paths, and as such the ground flora layer was relatively continuous. Species included locally dominant common nettle and ivy, along with cow parsley, cleavers and occasional Lords and Ladies and common hogweed. An earth pile with deadwood was noted at the woodland entrance, with colonising vegetation including Cyclamen *Cyclamen* sp. and stinking hellebore *Helleborus foetidus*. Bat boxes were present on woodland trees and invertebrate features were scattered throughout the woodland.

A series of deadwood piles and brash piles were noted across the woodland.

Poor Semi-improved Grassland

S11

A fenced-off area of infrequently managed grassland to the south of the lock. Given that the latest survey was undertaken in June, a slightly longer sward (20-40cm) was recorded compared to the 2022 findings (10-30cm). The species composition was broadly similar to the amenity grassland, however, false oat-grass, common hogweed, common ragwort, common nettle, cow parsley and green alkanet were also abundant within the habitat, while brash piles were also present.

S12

Longer-sward grassland along the sloped banks which provide access to the lake. Again, given that the latest survey was undertaken in June, a longer sward (20-40cm) was recorded compared to the 2022 findings (20cm). As previously, the species composition was similar to the amenity grassland habitat with a greater abundance of forbs including frequent green alkanet, yarrow, creeping thistle *Cirsium arvense*, sorrel *Rumex acetosa*, broad leaved Dock *Rumex obtusifolius*, dead nettle *Lamium album* and *Geranium* sp.. The 2023 survey also recorded the presence of bramble encroaching into this habitat.

Scattered Trees

Scattered trees over amenity grassland and along the southern boundary of the lake. Trees were generally semi-mature to mature and in good condition. Species included willow, Indian horse chestnut *Aesculus indica*, sycamore, Lombardy poplar *Populus nigra*, hybrid black polar *Populus*

canadensis, hawthorn, field maple *Acer campestre*, apple *Malus* sp., oak, ash, pear *Pyrus* sp., wild cherry and robinia.

ST1

A small group of trees including crab apple and hawthorn over amenity grassland located towards the east of the site. The trees were in good condition and the area was used for recreation.

Species-poor Hedgerow

H1

A tree line comprising young sycamore trees growing along the southern boundary of the lake.

H2

A species-poor hedgerow along the eastern site boundary. The hedgerow was heavily pruned, 4 m tall and 1 m wide at the base. Non-native cherry plum was dominant within the hedgerow, with plum also present. Other woody species included scattered holm oak, elder and blackthorn. The hedgerow was heavily shaded by the adjacent woodland and the hedgerow ground flora comprised cow parsley, nettle, ivy and cleavers, along with occasional Lords and Ladies. Woodland habitat falls to the west of the hedgerow, while a grass verge is present to the east.

Standing Water

A large lake within a former gravel pit, of which the south-western reaches fall within the site boundary. Most of the lake falls offsite within the wider ownership boundary, while the southern boundary of the lake largely forms the northern boundary of the current site.

As described previously, the lake as a whole has moderate physical naturalness, with relatively steep, vegetated banks across 2/3 of the shore. The south-west corner of the lake includes extensive modified, re-enforced banks with a sheer drop to the waterline, albeit these modified areas comprise less than 1/3 of the overall lake circumference.

The lake is connected to the river Thames via a lock in the south-western corner and the water level fluctuates significantly based on the tide.

At the time of the survey no significant aquatic vegetation was noted with the exception of Japanese knotweed *Reynoutria japonica* which was occasionally emerging from the water's edge. Vegetation bordering the lake within on-site areas was predominantly comprised of a narrow band of scrub and tall ruderal vegetation. Stands of Japanese knotweed were also noted across the banks of the lake which appeared to be under treatment at the time of the survey, with no live growth visible. Where the lake margins fell within/at the boundaries of the current site, no marginal vegetation was recorded, likely due to the presence of overshading vegetation, combined with the steep lake banks, leading to limited opportunities for marginal vegetation growth.

Tall Ruderal

TR1

Ruderal vegetation along the site edges comprising dominant cow parsley, with frequent common nettle, common hogweed, dead nettle and ground-ivy *Glechoma hederacea*.

TR2

Vegetation along the southern banks of the lake such as common nettle, hogweed, scattered bramble and stands of apparently dead Japanese knotweed.

Table 2 summarises the extent and ecological condition of the habitats which were recorded on site during the field survey visit.

Phase 1 Habitat	Polygon / Line Ref.	UKHab Habitat Equivalent	Area (ha) / Length (km)	Description (distinctiveness, condition, connectivity and strategic significance)	Value (Biodiversity Units)
Area Based Habitats					
Amenity Grassland	AG1	Grassland – Modified Grassland	1.790482	Habitat is automatically classed as being of ‘Low’ distinctiveness. Assessed against the low-quality grassland condition criteria the habitat has been assigned a condition of ‘Poor’. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	4.12
Buildings And Hardstanding	N/A	Developed Land; Sealed Surface	0.654916	Habitat is automatically classed as being of ‘Very low’ distinctiveness, and due to its lack of habitat attributes is not assigned a condition score. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.00
Dense Scrub	DS1	Heathland And Shrub – Bramble Scrub	0.085263	Habitat is automatically classed as being of ‘Medium’ distinctiveness and due to its lack of habitat attributes is not assigned a condition score. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.39
	DS2	Heathland And Shrub – Mixed Scrub	0.19321	Habitat is automatically classed as being of ‘Medium’ distinctiveness. Assessed against the scrub condition criteria, the habitat has been assigned a condition of ‘Poor’. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.89
Introduced Shrub	N/A	Urban – Introduced Shrub	0.015304	Habitat is automatically classed as being of ‘Low’ distinctiveness and due to its lack of habitat attributes is not assigned a condition score. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.04
Plantation Woodland Broadleaved	BW1	Other Woodland – Broadleaved	0.140281	Habitat is automatically classed as being of ‘Medium’ distinctiveness. Assessed against the woodland condition criteria, the habitat has been assigned a condition of ‘Poor’. The survey area is designated	0.65

Table 2: Summary of Existing Habitats and Linear Features (Continues)

Phase 1 Habitat	Polygon / Line Ref.	UKHab Habitat Equivalent	Area (ha) / Length (km)	Description (distinctiveness, condition, connectivity and strategic significance)	Value (Biodiversity Units)
				as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	
	BW2	Other Woodland – Broadleaved	0.026747	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the woodland condition criteria, the habitat has been assigned a condition of 'Poor'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.12
	BW3	Other Woodland – Broadleaved	0.199536	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the woodland condition criteria, the habitat has been assigned a condition of 'Moderate'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	1.84
	BW4	Other Woodland – Broadleaved	0.07617	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the woodland condition criteria, the habitat has been assigned a condition of 'Moderate'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.70
Poor Semi-improved Grassland	SI1	Grassland - Other Neutral Grassland	0.052141	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the grassland condition criteria, the habitat has been assigned a condition of 'Poor'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.24

Table 2: Summary of Existing Habitats and Linear Features (Continues)

Phase 1 Habitat	Polygon / Line Ref.	UKHab Habitat Equivalent	Area (ha) / Length (km)	Description (distinctiveness, condition, connectivity and strategic significance)	Value (Biodiversity Units)
	SI2	Grassland - Other Neutral Grassland	0.011131	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the grassland condition criteria, the habitat has been assigned a condition of 'Poor'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.05
Scattered Trees	ST1	Urban – Urban Tree	0.0529	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the urban trees condition criteria the habitat has been assigned a condition of 'Moderate'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.49
	N/A	Urban – Urban Tree	1.2127	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the urban trees condition criteria the habitat has been assigned a condition of 'Moderate'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	11.16
Standing Water	N/A	Lakes - Reservoir within Metric 3.1 due to the lack of a suitable alternative.	0.499219	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the lake habitat condition criteria the habitat has been assigned a condition of 'Moderate'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	4.59
Tall Ruderal	TR1	Grassland - Other Neutral Grassland	0.015936	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed	0.07

Table 2: Summary of Existing Habitats and Linear Features (Continues)

Phase 1 Habitat	Polygon / Line Ref.	UKHab Habitat Equivalent	Area (ha) / Length (km)	Description (distinctiveness, condition, connectivity and strategic significance)	Value (Biodiversity Units)
				against the grassland condition criteria, the habitat has been assigned a condition of 'Poor'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	
	TR2	Grassland - Other Neutral Grassland	0.029982	Habitat is automatically classed as being of 'Medium' distinctiveness. Assessed against the grassland condition criteria, the habitat has been assigned a condition of 'Poor'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.14
Total Area (Ha) *			5.06*	Total Site Baseline (Biodiversity Units)	25.48[†]
Hedgerows					
Line of Trees	H1	Hedgerow – Line of Trees associated with Bank or Ditch	0.030189	Habitat is automatically classed as being of 'Low' distinctiveness and is assessed as being in 'Poor' condition against the line of trees condition criteria. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.07
Species-poor Hedgerow	H2	Hedgerow – Hedge Ornamental Non Native	0.058234	Habitat is automatically classed as being of 'Very Low' distinctiveness and is automatically assigned a condition of 'Poor'. The survey area is designated as Metropolitan Open Land. Therefore, the habitat is assigned a high strategic significance.	0.07
Total Length (KM)			0.09[#]	Total Site Baseline (Linear Units)	0.14[†]
Key *The area of Urban Trees does not count towards the Total Area figure in the metric as their canopies extend over other habitats already included in the total. [†] Biodiversity Units are provided by the Biodiversity Metric 3.1 Auditing and Accounting for Biodiversity Calculation Tool. Any apparent calculation errors may be from unseen rounding anomalies.					

Table 2 (Continued): Summary of Existing Habitats and Linear Features

Species

Amphibians: Consistent with the Surrey Wildlife Trust Preliminary Ecological Appraisal undertaken at the site in 2020, the lake is not considered to form suitable habitat for great crested newt *Triturus cristatus* given that it connects with the Thames and likely supports a population of fish, while the lack of marginal and submerged vegetation means that the lake is less likely to be suitable for breeding great crested newt or other amphibians. Aside from the lake, a review of OS mapping data from the

MAGIC online database identified no standing waterbodies within 500m of the site. The site therefore appears to lack connectivity with suitable great crested newt breeding habitats, which are therefore unlikely to be present within terrestrial habitats on site. Nonetheless the potential presence of other amphibians within the terrestrial habitats on site, including overgrown amenity-grassland edges, overgrown areas within residential gardens, poor semi-improved grassland, dense scrub, tall ruderal vegetation and introduced shrub, cannot be ruled out.

Reptiles: The site is dominated by hard surfacing and mown amenity grassland which are unlikely to provide suitable habitat for reptiles. However, as mentioned within the Surrey Wildlife Trust Preliminary Ecological Appraisal report, the site is likely to provide suitable habitat for slow worm. Potential opportunities for this species include overgrown amenity-grassland edges, overgrown areas within residential gardens, poor semi-improved grassland, dense scrub and tall ruderal vegetation.

Birds: Suitable nesting habitat on site for birds includes the woodland, scrub and scattered trees. In addition, bird boxes were noted attached to one of the buildings and to fencing within one of the residential gardens (see Target Note 15 on Drawing 160594-01-01).

Badger *Meles meles*: Previous survey work undertaken at the site, including by the Surrey Wildlife Trust in 2020 (Preliminary Ecological Appraisal) and by Middlemarch in 2022 (Badger Survey Report) indicated the presence of badger within the wider Thames Young Mariners site, but no badger setts were identified within the current site boundary. This is broadly consistent with the 2023 survey work, albeit an updated description of the mammal burrows on site and their potential for use by badger is included within the badger survey report referenced RT-MME-160594-03. Suitable foraging habitats on site for badger includes the woodland, scrub, amenity grassland, poor semi-improved grassland and tall ruderal vegetation, albeit badger may enter any terrestrial habitats on site.

Other mammals: The vegetated areas on site provide suitable foraging habitat for common mammal species such as fox *Vulpes vulpes*, rabbit *Oryctolagus cuniculus* and hedgehog *Erinaceus europaeus*, while denser areas of vegetation provide suitable burrowing habitat for these species. A number of fox burrows are present on site (the locations of which are provided within the Badger Survey Report; RT-MME-160594-03), while rabbits were also observed during the 2023 survey.

Bats: Consistent with previous survey work at the site, including the bat survey work undertaken by Middlemarch in 2022, the site includes trees and buildings with suitable features for roosting bats, while the scattered trees, woodland, scrub and hedgerows are likely to provide suitable features for foraging and commuting bats. This is discussed further within the updated Preliminary Bat Roost Assessment (RT-MME-160594-02) and Bat Emergence Survey reports (RT-MME-160594-04). These reports focus exclusively on the buildings on site given that all trees are proposed for retention. It is noted that two bird boxes attached to garden fencing (Target Note 15) and a dead standing tree (Target Note 8) were recorded within the proposed development area, with the latter including a rot hole approximately 1m above the ground. However, these features were fully inspected using an endoscope during the walkover survey. This confirmed these features not to contain evidence of roosting bats and as such no further consideration is currently required with respect to these features.

Hazel dormouse *Muscardinus avellanarius*: As previously identified by Surrey Wildlife Trust, the woodland and scrub support potentially suitable habitat for hazel dormice, albeit most of the woodland is likely to be suboptimal given the limited scrub layer.

Otter *Lutra lutra* and Water vole *Arvicola amphibius*: The site supports suitable habitat for otter and water vole in the form of a lake with steep, densely vegetated banks.

Fish: The lake supports suitable habitat for European eel *Anguilla Anguilla*.

Invertebrates: The site contains deadwood which is likely to provide suitable habitat for stag beetle *Lucanus cervus*. Further, habitats such as the woodland and scrub, hedgerows and semi-improved grassland are likely to support a variety of invertebrates species.

Invasive Species: Japanese Knotweed and Variegated Yellow Archangel are present on site, both of which are included on Schedule 9 of the Wildlife and Countryside Act 1981, and on the London Invasive Species Initiative (LISI) - Species of Concern list. Other species recorded included holm oak, cherry laurel, robinia species, snowberry and butterfly bush, all of which are LISI species.

Discussions and Conclusions

It is proposed to redevelop the site to create new guest accommodation, staff residences and associated facilities.

Table 3. provides a key summary of the Ecological Constraints and Opportunities associated with the proposed development with regards achieving measurable Biodiversity Net Gain.

Designated Site	Constraints	Protection and enhancement measures
Ham Lands LNR	Ham Lands Local Nature Reserve (LNR), immediately surrounds much of the site. The proposed development is confined to a relatively small area and is predominated by hard landscaping, while the surrounding habitats (including those adjacent to the LNR) are proposed for retention and enhancement. The proposals are therefore highly unlikely to negatively impact the LNR.	The extent of proposed habitat retention and enhancement is detailed within the Biodiversity Net Gain Assessment report (RT-MME-157100-06). Enhancement measures such as the provision of wildflower meadow areas and scrub enhancement are likely to improve overall habitat connectivity with the surrounding LNR and help extend the benefits of this reserve into on-site areas. Nonetheless, a recommendation is included below to avoid any potential negative impacts on the reserve resulting from the proposed development.

Table 3. Summary of Ecological Constraints and Opportunities (Designated Sites)

Feature	Constraints	Compensation and enhancement measures
Very Low Distinctiveness Habitats		
Buildings Hardstanding	Compensation is not required for loss of developed land; sealed surfaces.	The existing area of buildings and hardstanding presents limited biodiversity value. Opportunities to enhance the newly proposed built development include the incorporation of green roofs, living walls, bat and bird boxes.
Low Distinctiveness Habitat		
Amenity Grassland Introduced Shrub	Habitat trading requirements within Metric 3.1 require provision of "Same distinctiveness or better habitat" to be provided. Areas of amenity grassland and introduced shrub within the west of the site will be lost to facilitate the development.	Loss of amenity grassland and introduced shrub will be compensated for through the provision of 'other neutral grassland'. This will be achieved through the creation of new wildflower meadow areas, the enhancement of existing amenity grassland and the creation of a grassland swale. These areas will be subject to a relaxed hay meadow management regime allowing the formation of a long, diverse sward. This will also improve the quality of the edge habitat adjacent to scrub and woodland. Other compensation measures include the creation of a wildflower lawn on site, the enhancement of bramble scrub to mixed scrub and the provision of new ornamental shrubs and herbaceous planting.

Table 4. Summary of Ecological Constraints and Opportunities (Habitats) (Continues)

Feature	Constraints	Opportunities
Medium Distinctiveness Habitat		
Dense Scrub Plantation Woodland Broadleaved Poor Semi-improved Grassland Scattered Trees Species-poor Hedgerow Standing Water Tall Ruderal	<p>Habitat trading requirements within Metric 3.1 require provision of: "Same broad habitat or a higher distinctiveness habitat". The proposals are designed to retain and protect medium distinctiveness habitats wherever feasible as they contribute to the structural diversity of the site.</p> <p>Small scale clearance of scattered trees and poor semi-improved grassland will be undertaken on site.</p> <p>It is not anticipated that the lake will be significantly impacted by the proposals, however the development should be designed to ensure the condition of the habitat is not reduced.</p>	<p>The small-scale clearance of poor semi-improved grassland will be compensated for through the extensive provision of 'other neutral grassland'.</p> <p>The loss of a small number of scattered trees will be compensated for by the planting of a number of native trees.</p> <p>Additional relevant measures include the proposed enhancement of broadleaved plantation woodland. This will be enhanced through the eradication of invasive species (snowberry and variegated yellow archangel) and enhancement of the ground flora using a suitable seed mix.</p> <p>Further, the sites linear feature biodiversity value will be enhanced through the creation of new native hedgerows.</p>
High Distinctiveness Habitats		

Table 4 (Continued): Summary of Ecological Constraints and Opportunities (Habitats)

Species Group	Constraints	Opportunities
Amphibians	<p>All amphibians receive limited protection under Schedule 5 of Wildlife and Countryside Act 1981 (as amended).</p> <p>The vast majority of the potentially suitable terrestrial habitat for amphibians on site will be retained, save for small areas of poor semi-improved grassland and introduced shrub. The need for appropriate safeguards for amphibians during vegetation clearance is addressed within the recommendation section below.</p>	<p>In the long-term, the proposed creation of 'other neutral grassland', which will be managed to form a long, diverse sward, is likely to provide suitable terrestrial habitat and shelter for common amphibian species and as such the proposals are considered to represent an enhancement for this species group.</p> <p>In addition, the incorporation of new ornamental shrubs and herbaceous planting will compensate for the proposed small-scale removal of introduced shrub habitat.</p>
Reptiles	<p>All reptiles are Species of Principal Importance and receive protection under Schedule 5 of Wildlife and Countryside Act 1981 (as amended).</p> <p>The vast majority of potentially suitable terrestrial habitat on site for reptiles will be retained, save for a very small area of poor semi-improved grassland. An appropriate recommendation to safeguard reptiles is provided below.</p>	<p>Overall, the small-scale loss of suitable reptile habitat on site will be more than compensated for by the creation 'other neutral grassland' habitat, which will create a long, diverse sward suitable for reptiles.</p>

Table 5: Summary of Ecological Constraints and Opportunities (Species) (Continues)

Species Group	Constraints	Opportunities
Birds	<p>A number of bird species (including species potentially present on site) are Species of Principal Importance, while all birds and their nests are protected by the Wildlife and Countryside Act 1981 (as amended).</p> <p>The vast majority of potentially suitable nesting habitat on site for birds will be retained, save for a small amount of introduced shrub, a small number of scattered trees and a small number of bird boxes attached to garden fences and a building. A recommendation for safeguarding nesting birds during the clearance of suitable nesting habitat is provided below.</p>	<p>The small-scale loss of suitable bird nesting habitat on site will be compensated for by extensive tree planting and hedgerow creation. Further, broadleaved woodland will be enhanced through the removal of invasive species and the planting of native trees and shrubs, which will provide further suitable nesting habitat.</p>
Badger	<p>Badgers are protected by the Protection of Badgers Act 1992 and Schedule 6 of Wildlife and Countryside Act 1981 (as amended).</p> <p>The badger survey work undertaken at the site, most recently updated in 2023 (report RT-MME-160594-03), recorded no apparent evidence of active badger setts within 30m of the proposed development footprint, while suitable foraging habitat on site will be predominantly retained, save for small-scale loss of grassland.</p> <p>Recommendations to safeguard badger are included below, and within the Badger Survey Report (RT-MME-160594-03).</p>	<p>Overall, the proposed broadleaved woodland enhancement, tree planting and creation of 'other neutral grassland' are likely to significantly enhance the value of the site as foraging habitat for badger.</p>
Other mammals	<p>Hedgehogs are a Species of Principal Importance and receive limited protection under Schedule 6 of Wildlife and Countryside Act 1981 (as amended).</p> <p>Foxes and rabbits are not protected species and as such are not a material consideration for the proposed development but are protected against acts of cruelty under the Wild Mammals Protection Act (1996).</p> <p>The areas proposed for development are predominantly confined to areas of existing hard landscaping and as such any loss of suitable habitat for these species groups will be minimal.</p> <p>Recommendations to safeguard mammals are included below, and within the badger survey report.</p>	<p>The enhancement of grassland and woodland within the site is likely to provide increased cover food availability for mammal species.</p>

Table 5: Summary of Ecological Constraints and Opportunities (Species) (Continues)

Species Group	Constraints	Opportunities
Bats	<p>Several bat species are Species of Principal Importance, and all afford full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended).</p> <p>The foraging and commuting habitat for bats within the site will be retained, save for the loss of a small number of trees, while the potential impact of the proposals on roosting bats is discussed within the Preliminary Bat Roost Assessment (RT-MME-160594-02) and dusk Emergence Survey (RT-MME-160594-04) reports. These reports also include recommendations to safeguard roosting, foraging and commuting bats.</p>	<p>The proposed planting of hedgerows and scattered trees will provide new habitat for foraging and commuting bats, while the enhancement of grassland and woodland on site will also increase the availability of invertebrate prey.</p> <p>The proposals also represent the opportunity to provide new roosting opportunities for bats through the installation of bat boxes on trees and new buildings.</p>
Hazel dormouse	<p>Dormouse receives full protection under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017 (as amended). Dormouse is also a Species of Principal Importance.</p> <p>The woodland and scrub within the site, which provide potentially suitable habitat for dormice, will be fully retained under the proposals.</p>	<p>Dormice, if present on site, will benefit from the enhancement of broadleaved woodland, comprising the removal of invasive species and planting of native tree and shrub species, likely to provide a source of food and shelter. Measures will be required to protect dormice (if present) during habitat enhancement works, as discussed within the recommendations section below.</p>
Otter and Water vole	<p>Water Vole and otter receive full protection under the Wildlife and Countryside Act 1981 (as amended) and both are also Species of Principal Importance. Otter also receives full protection under the Conservation of Habitats and Species Regulations 2017 (as amended).</p> <p>The banks of the watercourse will be unaffected by the proposals, while the lake itself should also be unaffected given that the lake and surrounding areas are already subject to high levels of recreational use. Otter and water vole are therefore unlikely to be impacted by the proposals. Measures to prevent pollution of the lake (and therefore safeguard any species it supports) are discussed below.</p>	N/A
Fish	<p>European eel, which may be present within the on-site lake, is listed as a Species of Principal Importance.</p> <p>The lake and surrounding banks will be retained under the development proposals, which are therefore unlikely to impact eel or other fish species, while measures to prevent pollution of the lake are discussed below.</p>	N/A

Table 5: Summary of Ecological Constraints and Opportunities (Species) (Continues)

Species Group	Constraints	Opportunities
Invertebrates	<p>Stag beetles are a Species of Principal Importance and are protected by the Wildlife and Countryside Act 1981 (as amended).</p> <p>The woodland and associated deadwood, which are likely to provide suitable habitat for stag beetle, will be retained under the proposals. Nonetheless, a recommendation is included below to safeguard this species group should any suitable refugia be encountered within habitats proposed for clearance.</p> <p>Overall, the vast majority of habitats of enhanced value for invertebrates, (woodland, scrub, trees, hedgerows and semi-improved grassland) will be retained/enhanced.</p>	<p>The proposals represent the opportunity for further provision of suitable habitat for invertebrates such as stag beetle, such as through the creation of hibernacula.</p> <p>Further, the proposed habitat creation and enhancement measures such as grassland enhancement and tree planting should significantly enhance the value of the site for invertebrates.</p>
Invasive Species	<p>The site contains Japanese Knotweed and Variegated Yellow Archangel which are listed on Schedule 9, Part II, of the Wildlife and Countryside Act 1981 (as amended).</p> <p>The site also contains green alkanet, cherry laurel, snowberry, Spanish bluebell, robinia, holm oak and butterfly bush, which are all identified on the London Invasive Species Initiative inventory as species of concern. The requirement for measures to prevent the spread of invasive species during development works or habitat management is discussed below.</p>	<p>The broadleaved plantation woodland within the southwest of the site will be enhanced, partly through eradication of the invasive species (snowberry and variegated yellow archangel) and replacement with native tree and shrub species. In addition, dense scrub on the western site boundary will be enhanced through appropriate long-term management of undesirable species including holm oak.</p>

Table 5 (Continued): Summary of Ecological Constraints and Opportunities (Species)

Recommendations

All recommendations provided in this section are based on Middlemarch's current understanding of the site proposals, correct at the time the report was compiled. Should the proposals alter, the conclusions and recommendations made in the report should be reviewed to ensure that they remain appropriate.

R1 Scheme Design: The proposed development should be designed in accordance with the ecological mitigation hierarchy as set out in the National Planning Policy Framework (NPPF), and the National Planning Practice Guidance (NPPG). The mitigation hierarchy requires all development schemes to apply the following principles:

- *Avoidance* – in the first instance, the proposed development should seek to avoid/minimise losses of habitats of ecological value (such as woodland and scrub), and incorporate these features in the landscaping layout of the scheme accordingly. This will help to further avoid and minimise impacts to protected and notable species.
- *Mitigation* – where significant harm cannot be wholly or partially avoided, adverse effects should be minimised by design or through the use of effective mitigation measures such as minimising light spill.
- *Compensation* – where unavoidable losses occur and mitigation cannot be provided, compensation for significant residual harm will be required as a last resort or planning permission could be refused. Compensation should include the remediation of lost habitats and/or connectivity, the creation of new habitats of ecological value and providing novel compensation solutions to minimise effects on protected or notable species to ensure compliance with UK wildlife legislation.

In accordance with the principles of the Environment Act 2021 the development will secure a net gain in biodiversity, as detailed in full within the Biodiversity Net Gain Assessment report (RT-MME-157100-06) created by Middlemarch in 2022. Biodiversity Net Gain is a planning process that aims to leave biodiversity on site in a better state than it was before, going beyond solely avoiding, mitigating and compensating adverse effect on biodiversity and actively seeking to enhance the site's biodiversity value overall.

R2 Construction Ecological Management Plan (CEcMP): A Construction Ecological Management Plan should be produced for the site setting out the safeguards and appropriate working practices that will be employed to minimise adverse effects on biodiversity and ensure compliance with UK Wildlife Legislation. The details of the CEcMP should include as a minimum:

- Measures to safeguard the adjacent Ham Lands LNR from any potential negative impacts (such as pollution) resulting from the proposed development. It is recommended that the Local Planning Authority (London Borough of Richmond upon Thames) ecologist should be consulted such that the safeguards with respect to the LNR can be agreed upon prior to the commencement of works.
- Development standoffs and safeguards for all retained habitats;
- Construction timetables to avoid sensitive periods such as nesting bird season;
- Checks for nesting birds if works to suitable habitats take place during the nesting bird season;
- Sensitive clearance (at appropriate time of year) of any vegetation removed as part of scrub/woodland enhancement works to ensure no dormice nests, if present, are affected.
- Sensitive clearance of suitable habitats for reptiles and common amphibians (poor semi-improved grassland and introduced shrub);
- Sensitive removal of any potential refugia (such as debris or deadwood) encountered within habitats to be cleared, to safeguard fauna including hedgehog, reptiles and amphibians;
- Vegetation management measures to minimise the risk to protected or notable species;

- Safeguards to protect terrestrial mammals, such as badgers and hedgehogs, including covering open excavations and pipework;
- Sensitive clearance measures in the unlikely event that and fox dens or rabbit warrens require removal;
- Sensitive lighting in order to safeguard habitats for nocturnal fauna including bats;
- Pollution prevention measures to avoid contamination of sensitive ecological receptors such as the lake; and,
- A method statement should be produced in consultation with the Environment Agency to ensure that the proposed development does not result in the spread of any invasive plant species.

The CEcMP should be submitted to the Local Planning Authority for Approval and implemented in full thereafter.

R3 Ecological Surveys: The additional recommendations of the Preliminary Bat Roost Assessment (RT-MME-160594-02), Badger Survey (RT-MME-160594-03) and Bat Emergence Survey (RT-MME-160594-04) reports should be followed.

R4 HEMP: A Habitat Enhancement and Management Plan (HEMP) should be produced for all habitats and hedgerow features proposed within the site. The HEMP should set out the appropriate establishment works, and management prescription required to achieve and maintain the intended type and condition of each habitat/hedgerow feature. In accordance with Biodiversity Net Gain Best Practice Principles, and the principles of the Environment Act 2021, the plan should cover a period of 30 years from the date of commencement with provisions for long-term monitoring and contingency actions if appropriate.

The HEMP should be submitted to the Local Planning Authority for approval (typically to discharge planning conditions) and should be implemented in full thereafter.

I trust that this assessment meets your requirements, however if you have any further queries please do not hesitate to contact me.

Yours sincerely,

For and On Behalf of Middlemarch Environmental Ltd.

Nick Davey
MSc
Ecological Consultant

Checked & Approved By

Paul Roebuck
MSc MCIEEM
Regional Manager: South

Photographs



Plate 1: AG1



Plate 2: Buildings and Hardstanding



Plate 3: DS1



Plate 4: DS2



Plate 5: Introduced Shrub

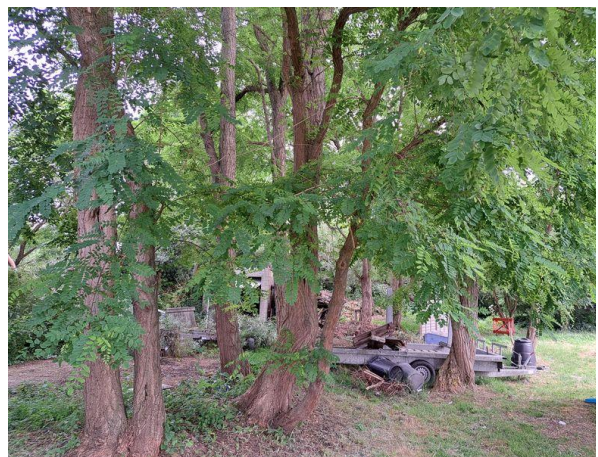


Plate 6: BW1



Plate 7: BW2



Plate 8: BW3 – West



Plate 9: BW3 - East



Plate 5: BW4



Plate 6: SI1



Plate 7: SI2



Plate 8: Scattered Trees



Plate 9: Scattered Trees



Plate 10: Standing Water



Plate 11: TR1



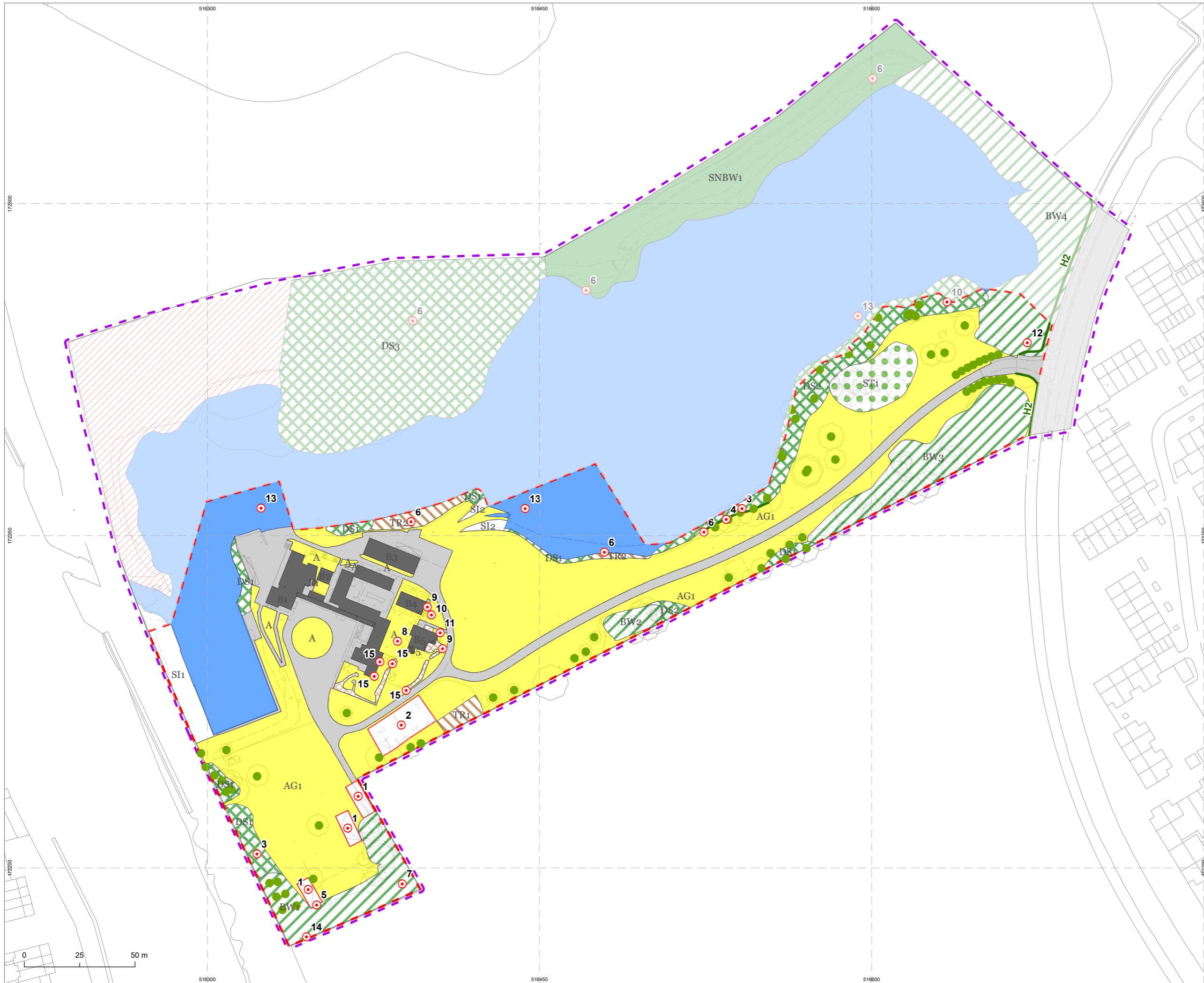
Plate 17: TR2

Drawings

Drawing C160594-01-01 – Phase 1 Habitat Map

Target Notes:

1. Temporary structure
2. Wood chip play surface
3. Holm oak
4. Robinia
5. Bee hive
6. Japanese knotweed
7. Brash and log pile
8. Dead standing tree
9. Cherry laurel
10. Deadwood
11. Invertebrate feature
12. Bat box
13. Pontoon
14. Variegated yellow archangel
15. Bird Box



C160594-01-01

Legend

- - - Phase 1 Survey Area
- - - Previous Phase 1 Survey Area of Wider Ownership Boundary (from 2022 survey)
- Target note
- Scattered tree
- Species-poor intact hedgerow
- A Amenity grassland
- Building
- Dense scrub
- Hardstanding
- Introduced shrub
- Other habitat
- Plantation broad-leaved woodland
- SI Poor semi-improved grassland
- Scattered trees
- Standing water
- Tall ruderal



Project Thames Young Mariners,
Riverside Dr, London

Phase 1 Habitat Map

Client Pick Everard

Drawing Number C160594-01-01	Revision 00
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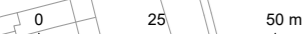
Scale @ A3 1:1,600	Date July 2023
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Approved By WR	Drawn By CD/KB
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Appendix A: Habitat Condition Assessment
Habitat Condition Assessment - Existing

Table A1.1 and A1.2 summarise the results of the habitat condition assessment for the existing area-based habitats and hedgerows respectively. For the detailed condition criteria for each habitat, see Panks *et al.* (2022)².

Phase 1 Habitat	Polygon / Line Ref.	UK Hab Equivalent	Condition Sheet	Condition Criteria Score													Total Score	Condition Assessment
				C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
Amenity Grassland	AG1	Grassland – Modified Grassland	5. Grassland Habitat Type (low distinctiveness)	F	F	P	F	F	P	P	-	-	-	-	-	-	3/7	Poor
Buildings And Hardstanding	N/A	Developed Land; Sealed Surface	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
Dense Scrub	DS1	Heathland And Shrub – Bramble Scrub	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A
	DS2	Heathland And Shrub – Mixed Scrub	19. Scrub Habitat type	P	P	F	F	F	-	-	-	-	-	-	-	-	2/5	Poor
Introduced Shrub	N/A	Urban – Introduced Shrub	N/A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A

Table A1. Summary of Condition Assessment for Habitats (Continues)

² Panks, S., White, N., Newsome, A., Potter, J., Heyton, M., Mayhew, E., Alvarez, M., Russell, T., Scott, S.J., Heaver, M., Scott, S.H., Treweek, J., Butcher, B. and Stone, D. (2022) *The Biodiversity Metric 3.1 – Auditing and accounting for biodiversity: Technical Supplement*. Natural England.

Phase 1 Habitat	Polygon / Line Ref.	UK Hab Equivalent	Condition Sheet	Condition Criteria Score													Total Score	Condition Assessment
				C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
Plantation Woodland Broadleaved	BW1	Other Woodland – Broadleaved	24. Woodland Habitat type	2	3	1	2	2	3	2	2	1	1	1	3	1	24/39	Poor
	BW2	Other Woodland – Broadleaved	24. Woodland Habitat type	1	3	3	2	2	3	2	2	1	1	1	1	2	24/39	Poor
	BW3	Other Woodland – Broadleaved	24. Woodland Habitat type	3	3	1	2	2	3	2	3	1	2	1	3	1	27/39	Moderate
	BW4	Other Woodland – Broadleaved	24. Woodland Habitat type	3	3	1	2	2	3	2	3	1	2	1	3	1	27/39	Moderate
Poor Semi-improved Grassland	SI1	Grassland - Other Neutral Grassland	6. Grassland Habitat Type (medium, high & very high distinctiveness)	F	P	P	P	F	F	-	-	-	-	-	-	-	3/6	Poor
	SI2	Grassland - Other Neutral Grassland	6. Grassland Habitat Type (medium, high & very high distinctiveness)	F	P	P	P	F	F	-	-	-	-	-	-	-	3/6	Poor
Scattered Trees	ST1	Urban – Urban Tree	22. Urban Trees (including street trees) Habitat Type	P	P	F	F	P	P	-	-	-	-	-	-	-	4/6	Moderate
	N/A	Urban – Urban Tree	22. Urban Trees (including street trees) Habitat type	P	F	F	F	P	P	-	-	-	-	-	-	-	3/6	Moderate

Table A1. Summary of Condition Assessment for Habitats (Continues)

Phase 1 Habitat	Polygon / Line Ref.	UK Hab Equivalent	Condition Sheet	Condition Criteria Score													Total Score	Condition Assessment
				C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13		
Standing Water	N/A	Lakes – Other Eutrophic Standing Water Lakes - Reservoir within Metric 3.1 due to the lack of a suitable alternative.	13. Lake Habitat type	4	3	4	3	-	-	-	-	-	-	-	-	-	3.5/5 (1 = Most Natural / 5 = Least Natural)	Moderate
Tall Ruderal	TR1	Grassland - Other Neutral Grassland	6. Grassland Habitat Type (medium, high & very high distinctiveness)	F	P	F	F	F	F	-	-	-	-	-	-	-	1/6	Poor
	TR2	Grassland - Other Neutral Grassland	6. Grassland Habitat Type (medium, high & very high distinctiveness)	F	F	F	F	F	F	-	-	-	-	-	-	-	0/6	Poor
Species poor native hedgerow	H1	Line of Trees - Associated with bank or ditch	15. Line of Trees Habitat type	F	P	F	F	P	-	-	-	-	-	-	-	-	2/5	Poor
Key: P – Criteria passed F – Criteria failed																		

Table A1 (Continued): Summary of Condition Assessment for Habitats

Phase 1 Habitat	Polygon / Line Ref.	UK Hab Equivalent	Criteria Score										Condition Assessment		
			A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*			
Species poor hedgerow	H2	Hedge Ornamental Non Native	-	-	-	-	-	-	-	-	-	-	-	-	Poor
Key: *Applicable to hedgerows with trees only P – Criteria passed F – Criteria failed															

Table A2. Summary of Condition Assessment for Existing Hedgerow