



FOA ECOLOGY'S BADGER, BAT & NESTING BIRD RESPONSES – FOLLOWING October 2018 SITE MEETING

1. SMALL ARTIFICIAL SETT

A new small artificial sett will be provided and it is proposed that a suitable location for the small artificial sett will be in the south-eastern section of the park (known as Woodland Walk), within or adjacent to cover, and upon / adjacent to an existing badger movement corridor.

Its precise location will need to account for tree protection areas and drainage/ flood risk; the artificial sett is proposed to be built up from ground level if flooding / wet ground conditions is expected to be a problem.

In line with the request from Tasha Hunter, it is proposed to install a camera into the artificial sett as an educational resource.

Approximate location is shown at the end of this document – NB this is an indicative plan is based on the “landscaping phasing plan” and is not to scale.

2. WOODLAND BADGER SETTS

Based upon on-site discussions, the following outcome is proposed for each sett in turn:

- Sett A – SE quarter – retention and non-licensed method statement – Phase 3 works (see attached phasing plan)
- Sett B – NE quarter – permanent closure – Phase 1 & 2 works
- Sett C – SW quarter – potential retention (increased islands), possible temporary closure - Phase 3 & 4 works
- Sett D - SW quarter – potential retention (increased islands), possible temporary closure - Phase 3 & 4 works
- Sett E - SW quarter – retention, possible temporary closure – Phase 3 works
- Sett F - SW quarter – retention, possible temporary closure – Phase 3 works
- Sett G - SW quarter – retention, possible temporary closure – Phase 3 works
- Sett H - SW quarter – permanent closure - Phase 1 & 2 works
- possible other / new setts – SW quarter – unknown outcome, depends upon their location(s)



3. BAT TREE, BADGER & NESTING BIRD MEASURES BY QUARTER:

3.1 NW QUARTER – no badger holes identified

Phase 1 works

3.1.1 Badgers

Although no badger setts have been identified in the NW quarter to date, in advance of the Phase 1 works, a repeat badger sett survey will need to be undertaken.

It is proposed that this is undertaken to check for newly excavated setts and to assess whether any such sett(s) are in current use; camera trapping is likely to be required to determine current use. This repeat survey will be undertaken in winter 2018/2019 suitably in advance of the proposed works.

3.1.2 Bat Roost Potential Trees:

Mature lime tree G9.17 (1416) - both low maternity and hibernation potential and moderate day / transitional roost potential and overall Moderate potential

This tree could **NOT** be climbed - due to safety concerns.

A suite of mitigation measures will nonetheless need to be adopted for the proposed felling works for this tree, on account of both the limitations accounted for its climbing inspection and the nomadic nature of the use of trees by bats, including:

- a) repeat pre-felling bat survey work, should significant time lapse between the survey work and the proposed felling date for each tree in question (potentially using a mobile elevated work platform for those trees which are unsafe to climb, including G9.17)
- b) a sensitive / soft approach to felling, and, where necessary, a sensitive timing of the felling works (including accounting for nesting birds)
- c) formalisation of contractor awareness of roosting bats in relation to the felling works and protocol in unlikely event that bats are encountered
- d) provision of bat boxes for loss of potential roost sites
- e) *specific method statement – it is proposed that a mobile elevated work platform (mini cherry picker) be used to allow a bat-licensed arboriculturalist or a licensed bat worker to conduct an endoscope check of the suitable bat features immediately prior to the felling works. Further, even if no evidence of roosting bats is found, the tree should be felled sectionally, i.e. any hollow and dead branches or branches with split bark, should be cut in sections from the top down, with the sections being gently lowered to the ground (without damaging the bat features) and the lowered timber will be left uncut at the base of the tree for at least 24 hours prior to their removal, so to allow any bats (should any be present) to disperse*

G9.10 (1521) – another BRP tree –proposed for retention

No measures required.



3.1.3 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to February 2019; by March 2019 there is a risk that bird nesting will have commenced.

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.

Phase 2 works

3.1.4 Bat Roost Potential Trees:

Tree G9.7 (1511) - proposed for retention

No measures required.

3.1.5 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to September 2019 to Feb 2020; by March 2020 there is a risk that bird nesting will have commenced.

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.

3.2 NE QUARTER – 2no. badger setts present

Phase 1 works

3.2.1 Badgers:

The Phase 1 works will occur at an approximate minimum distance of 10 m north of the entrances of sett B and Sett H.

In advance of the Phase 1 works, a repeat badger sett survey will need to be undertaken.

It is proposed that this is undertaken to check for newly excavated setts and to determine whether Setts B and Sett H are in current use; camera trapping is likely to be required to determine current use. The repeat badger sett survey should be undertaken in suitably earlier in winter 2018/2019, to allow for 21 days camera trapping of setts B and H, should such be necessary.

Even if setts B and H are confirmed to be in use (as outliers, i.e. not in use as breeding sett), given that these sett entrances are located at least 10 m from the Phase 1 works area, assuming the



adoption of a formal badger working method statement (to be approved by the LPA) for the Phase 1 tree removals and coppicing etc, it is considered likely to be feasible to carry out these Phase 1 works without a badger licence in February 2019.

The formal non-licensed badger working method statement will include a number of stipulations to minimise disturbance to any badgers occupying the closest setts and to avoid risk of breaching any badger tunnels, in the unlikely event that such tunnels extend below the Phase 1 working area.

Such stipulations will include, (but not be limited to; such stipulations will be influenced by repeat pre-Phase 1 works badger sett check):

- erection of protective (Heras or similar) fencing (with badger gaps) at a minimum of a 10 m buffer distance around identified badger setts
- ecological supervision of works (watching brief)
- restriction of use heavy tracked / wheeled machinery and noisy machinery (powered chippers, stump grinders etc) to minimum of 10 m from sett entrances
- tree cutting down to above ground level only, i.e. tree stump and root retention, or else stump grinding if necessary
- tree felling away from badger setts

Alternatively, if the above method statement is not agreeable to the LPA, then the Phase 1 works of the NE quarter should be undertaken concurrently with the Phase 2 NE quarter works, and as part of the (licensed) closure of Setts B and Sett H.

3.2.2 Bat Roost Potential Trees:

No BRP trees present – no measures required

3.2.3 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to February 2019; by March 2019 there is a risk that bird nesting will have commenced

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.

Phase 2 works

3.2.4 Badgers:

The Phase 2 works will require the permanent closure of Setts B and Sett H.

In advance of the Phase 2 works, a repeat badger sett survey will need to be undertaken.



It is proposed that this is undertaken to check for newly excavated setts and to determine whether Setts B and Sett H are in current use; camera trapping is likely to be required to determine current use. The repeat badger sett survey should be undertaken in summer 2019, to allow for 21 days camera trapping of setts B and H, should such be necessary.

If setts B and H are confirmed to be in use, a licence will be applied for to close both of these setts, with closure between September and November 2019 (i.e. the window when badger licences are granted by NE).

The methodology for the permanent closure of Setts B and Sett H, which will be conducted under licence, will follow published guidance, will likely include licence specific measures and will be supervised by the licensed ecologist or accredited agent (as appropriate).

The licensed sett closure will comprise:

- a) Any active sett(s) that will be affected by the proposed works, in lead up to development would need to be subject to licensed closure via a badger development / class licence
- b) The active sett(s) would, if necessary, be protected by Heras fencing, should site set-up activities proceed whilst the sett(s) remains in-situ.
- c) A tool box talk would be undertaken prior to any works commencing on-site. The licence holder / accredited agent would specifically give the site manager a 'toolbox talk' regarding the presence of the badger sett(s) on-site and the mitigation measures which will be implemented to minimise any impacts upon the sett(s) and its / their resident group of badgers. In particular, the site manager will be instructed that any encroachment within the Heras fenced area(s) without the express permission of the licence holder/accredited agent would be prohibited. The site manager would be responsible for disseminating this information to his workforce and any third party contractors. The site manager would also ensure that informative signs are mounted on the Heras fenced area(s), in order to ensure that all contractors are aware of the restrictions, even in the site manager's absence.
- d) Sett closure would be timed to between 1st July and 30th November (i.e. outside the winter and also outside the period when there are pregnant badgers or badgers with dependent young)
- e) Active sett(s) to be closed would be fitted with a 1-way gate, under licence.
- f) Any entrance(s) fitted with a 1-way gate would be as per Natural England guidance (technical information note TIN025, dated 5 November 2007).
- g) Each 1-way gate would be maintained for a 21 day period and monitored at least once every three days. To monitor badger activity two small sticks would be lightly placed just inside each gate, such that they will be knocked over if a badger passes through.
- h) On completion of the monitoring period, the sett(s) would be closed under the direction supervision of the development / class licence holder and / or accredited agent (depending upon the type of licence).
- i) Closure would comprise sensitive excavation under direct supervision of the development / class licence holder and / or accredited agent (depending upon the type of licence) of the sett(s) from the sett entrance, progressing along the line of the sett tunnel.



3.2.5 Bat Roost Potential Trees:

Dead cherry G8.31 - no longer present

No measures required.

Dead sycamore G8.53 - low maternity and hibernation potential and moderate day / transitional roost potential and overall Moderate potential.

Proposed to be felled.

A suite of mitigation measures will nonetheless need to be adopted for the proposed felling works for this tree, on account of both the limitations accounted for its climbing inspection and the nomadic nature of the use of trees by bats, including:

- a) repeat pre-felling bat survey work, should significant time lapse between the survey work and the proposed felling date for each tree in question
- b) a sensitive / soft approach to felling, and, where necessary, a sensitive timing of the felling works (including accounting for nesting birds)
- c) formalisation of contractor awareness of roosting bats in relation to the felling works and protocol in unlikely event that bats are encountered
- d) provision of bat boxes for loss of potential roost sites
- e) *specific method statement - it is proposed that a pre-felling check for roosting bats is undertaken by either a bat-licensed arboriculturalist or a licensed bat worker (i.e. an endoscope check of the suitable bat features immediately prior to the felling works). Further, even if no evidence of roosting bats is found, the tree should be felled sectionally, i.e. any hollow and dead branches or branches with split bark, should be cut in sections from the top down, with the sections being gently lowered to the ground (without damaging the bat features) and the lowered timber will be left uncut at the base of the tree for at least 24 hours prior to their removal, so to allow any bats (should any be present) to disperse*

3.2.6 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to September 2019 to Feb 2020; by March 2020 there is a risk that bird nesting will have commenced

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.



3.3 SE QUARTER – 1no. badger sett present (Sett A)

Phase 3 works – April 2020 to Mar 2021

3.3.1 Badgers:

The Phase 3 works will allow for the retention of Sett A.

In advance of the Phase 3 works, a repeat badger sett survey will need to be undertaken.

It is proposed that this is undertaken to check for newly excavated setts or active setts within / adjacent to the Phase 3 works area; camera trapping is likely to be required to determine current use. The repeat badger sett survey should be undertaken in summer 2020, to allow for 21 days camera trapping of any identified setts, should such be necessary, and any necessary sett closure to be undertaken in summer 2020, in advance of September 2020 vegetation works.

3.3.2 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to September 2020 to Feb 2021; as between April and August 2020 and during March 2021 there is a risk that bird nesting will be occurring

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.

3.3.3 Bat Roost Potential Trees:

No BRP trees present

Non intervention area –

3.3.4 Badgers:

Sett A falls within the non-intervention area, which is to be modestly enlarged to provide a sufficient non-intervention buffer around Sett A.

Sett A is to be retained and appropriately buffered from the Phase 3 works.



3.4 SW QUARTER – several badger setts present (Setts C – G)

Phase 3 works – April 2020 to Mar 2021

3.4.1 Badgers:

The Phase 3 works is likely to allow for the retention of some of the already identified setts (i.e. Setts E-G) as these setts fall within the non-intervention zone (and proposed new island areas), though close to proposed hedging.

Temporary licensed sett closure may be required due to the setts' close proximity to the proposed hedging.

In advance of the Phase 3 works, a repeat badger sett survey will need to be undertaken.

It is proposed that this is undertaken to check for newly excavated setts or active setts within / adjacent to the Phase 3 works area and to assess use of already identified setts; camera trapping is likely to be required to determine current use. The repeat badger sett survey should be undertaken in summer 2020, to allow for 21 days camera trapping of any identified setts, should such be necessary, and any necessary (licensed) sett closure to be undertaken in summer 2020, in advance of September 2020 vegetation works.

The same methodology for the temporary licensed closure of setts will be used as for the permanent closure of Setts B and H, with the exception that for the temporarily closed sett(s), the sett(s) will be blocked by pegging down wire meshing across and surrounding the sett(s). This wire mesh will be retained in position for the duration of the works period, but removed thereafter to allow reoccupation by badger.

3.4.2 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to September 2020 to Feb 2021; as between April and August 2020 and during March 2021 there is a risk that bird nesting will be occurring

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.

3.4.3 Bat Roost Potential Trees:

No BRP trees present – no measures required



Non intervention area –

3.4.4 Badgers:

The Phase 3 works is likely to allow for the retention of some of the already identified setts (i.e. Setts E-G) as these fall within the non-intervention zone (and proposed new islands areas), though close to proposed hedging.

Temporary licensed sett closure may be required due to the setts' close proximity to the proposed hedging.

In advance of the Phase 3 works, a repeat badger sett survey will need to be undertaken.

It is proposed that this is undertaken to check for newly excavated setts or active setts within / adjacent to the Phase 3 works area and to assess use of already identified setts; camera trapping is likely to be required to determine current use. The repeat badger sett survey should be undertaken in summer 2020, to allow for 21 days camera trapping of any identified setts, should such be necessary, and any necessary (licensed) sett closure to be undertaken in summer 2020, in advance of September 2020 vegetation works.

The same methodology for the temporary licensed closure of setts will be used as for the permanent closure of Setts B and H, with the exception that for the temporarily closed sett(s), the sett(s) will be blocked by pegging down wire meshing across and surrounding the sett. This wire mesh will be retained in position for the duration of the works period, but removed thereafter to allow reoccupation by badger.

Phase 4 works – April 2021 to Jan 2022

3.4.5 Badgers:

Sett C may potentially lie within a non-works island within the Phase 4 works area, though hedge planting it proposed in close proximity. Sett D appears to fall within the Phase 4 works area.

The Phase 4 works is likely to allow for the retention of possibly sett C as this appears to fall within the non-intervention zone, though close to proposed hedging.

Temporary licensed sett closure may be required due to sett C's close proximity to the proposed hedging.

Temporary or possible permanent closure of Sett D is likely to be required, depending upon location of new islands.

In advance of the Phase 3 works, a repeat badger sett survey will need to be undertaken.

It is proposed that this is undertaken to check for newly excavated setts or active setts within / adjacent to the Phase 3 works area and to assess use of already identified setts; camera trapping is likely to be required to determine current use. The repeat badger sett survey should be undertaken in summer 2020, to allow for 21 days camera trapping of any identified setts, should such be



necessary, and any necessary (licensed) sett closure to be undertaken in summer 2020, in advance of September 2020 vegetation works.

Additional setts may require licensed closure as there are other animal holes (not specifically labelled in plans in badger report) of suitable size for badger in the Phase 4 works area, and if these are active in the lead up to these works, they will also require closure.

The licensed permanent and temporary closure methodologies given above will be followed.

3.4.6 Nesting birds:

Vegetation works (coppicing, clearing, felling) to be restricted to September 2021 to Jan 2022; as between April and August 2021 there is a risk that bird nesting will be occurring

In the event that some vegetation works are required to be undertaken in the bird nesting season, then this will need to be subject to a pre-works nesting bird check. Please note that the likelihood / risk of encountering nesting birds during the standard nesting season of March to August inclusive is high – in the instance that nesting birds are encountered, the vegetation clearance works will need to be postponed until nesting is complete, which could potentially be in the region of a number of weeks, especially for serial brooder bird species. Accordingly, as far as practicable, vegetation works will need to avoid the nesting bid period of March to August.

3.4.7 Bat Roost Potential Trees:

No BRP trees present



4. BADGER ACTIVITIES – RELEVANT TO MANAGEMENT PLAN:

English Heritage has commissioned a Landscape Ecology Management Plan, the detail of this report once complete will be incorporated into revised versions of the site's Conservation Management Plan and our Maintenance and Management Plan

For badger, the full management plan will encompass a section specifically covering this species. The further surveys which will be undertaken before each phase of works will inform the park's base-line regarding badger sett location and type. The document will therefore need to be iterative and revised subsequent to each set of further badger surveys. The results of each set of pre-works survey will be used to prescribe safeguarding measures for the badgers.

In terms of badger 'nuisance' activities English Heritage acknowledge that badger snuffling, latrines, digging activities may well occur within the re-landscaped areas, however, these badger activities will be accepted and tolerated; there will be no installation of electric fencing or other type of fencing to preclude badger access.

Should badger activities become problematic, E.H's standard established guidance for managing badger snuffling, latrines, digging or damage would be followed, specifically – re-produced from EH Landscape Advice Note: Badgers on Historic Sites:

Damage to lawns and formal gardens

Where damage to lawns and gardens is being caused by badger feeding activity a licence will not normally be appropriate. Feeding damage is usually caused when badgers forage for worms, grubs or nutritious roots and tubers. This is rarely a serious problem, often only occurring seasonally, but it can be unsightly and may create trip hazards.

If persistent damage occurs, it may be possible to identify the food item the badgers are digging for and reduce its abundance. In some cases, badgers may be fenced out of vulnerable areas, provided this does not deprive the clan of a substantial proportion of their foraging territory. Serious damage in gardens involving setts will probably necessitate applying for a licence (see previous sections).

Latrines

*These can be unsightly, and in public access areas may be perceived as a health risk, but again a licence will not normally be appropriate. The risks from badger droppings are comparable with those from dog and cat faeces. Like these animals, badger droppings can carry the parasitic worm *Toxocara* which can cause blindness in children. There is also a theoretical risk of tuberculosis, albeit very slight. If there is concern about a health risk, or latrines are considered intolerable because of their appearance or smell, dung should be shovelled up and removed, or covered over with soil. Appropriate safety equipment should be used if handling dung such as impermeable gloves, splash mask and coveralls. Again, it may be possible to exclude badgers from the site if the area concerned is not too extensive.*

BADGER FENCE / HEDGE GAPS:

For those areas which are to be hedged and fenced to exclude dog access (allowing least disturbance for wildlife), badger access will be maintained via the creation of suitably sized badger gaps (300 mm



wide and 250 mm high) at intervals along the fencing/hedging via excavating soil beneath the base of the fence/hedge.



SMALL ARTIFICIAL SETT – PROPOSED LOCATION (RED BLOCK) – FOR DISCUSSION

SMALL ARTIFICIAL SETT – PROPOSED LOCATION (RED BLOCK) – FOR DISCUSSION

Habitat Network

The proposed planning aims to make connections between and enhance existing wildlife habitats whilst being mindful of retaining habitats that currently work well for important species, such as song thrush. The woodland area to the north-west of the site adjacent to the Sweet Walk will be retained and managed as song thrush habitat. Similarly, two areas of the southern Woodland Quarters surrounding Marble Hill House will be protected with new fences and hedging to preserve the internal area of habitat, as noted in Item 4 on the opposite diagram. These areas will undergo a longer term process of woodland management to ensure habitats are retained and undisturbed so wildlife can adapt whilst other areas of new tree and understorey planting establishes.

The expanded areas of tree planting and understorey tall grassland to the perimeter of the park and between the Pleasure Ground avenues will provide wider and better connected flight paths for commuting bats. The species-rich grassland below will also attract a greater number of insects, providing enhanced foraging potential for bats and birds. This will also benefit mammals such as badgers, hedgehogs and mice, the latter of which will attract larger birds of prey to the park, such as tawny owl, known to nest in Marble Hill Park.

In the northern Woodland Quarter the habitat will be diversified with the re-introduction of shrub understorey and nectar-rich ground flora into the areas of micket and providing new areas of grove trees with meadow understorey. The flower-rich meadows will attract a wider range of pollinating insects such as bees, butterflies and hoverflies, providing a food source for birds which can seek cover in the adjacent dense thicket.

The dense nature of the thickets also offer the opportunity to include dead wood habitats where they are less likely to be disturbed; an important habitat for attracting stag beetles.

- KEY:**
- Existing woodland and near tree corridors
 - Proposed micket planting below existing trees
 - Areas of Woodland Quarter with no works proposed as part of this application
 - New Orchard and Grove trees with meadow understorey
- 01 Expanded tree planting and tall grassland understorey to provide connected bat foraging routes and larger areas of cover for wildlife commuting and foraging
 - 02 New avenue tree planting to connect bat foraging routes
 - 03 Existing area of woodland and known song thrush habitat to remain unchanged
 - 04 Area of Woodland Quarter to remain unchanged to retain existing habitats and undergo a longer-term programme of woodland management
 - 05 Proposed areas of understorey shrub and groundcover planting below existing trees, with new tree re-planting
 - 06 Proposed areas of new grove tree planting with meadow understorey
 - 07 Proposed areas of new orchard tree planting with meadow understorey
 - 08 Proposed flower garden with shrub and herbaceous perennial planting

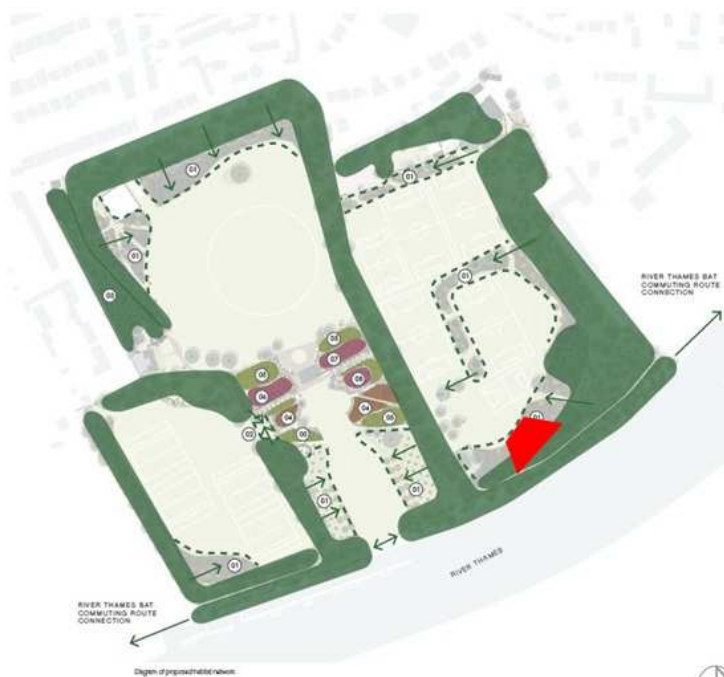


Diagram of proposed habitats





KEY

PHASE 1
FEB - MAR 2019

WORKS:

- Tree works (removals and coppicing) in upper portion of north-east and north-west Woodland Quarters with new tree and understorey planting to thickets

ECOLOGICAL PROGRAMME CONSTRAINTS:

- Works pending outcome of pre-construction Badger Survey
- Tree works to take place outside of Bird Nesting season (March - August)

PHASE 2
SEP 2019 - MAR 2020

WORKS:

- Badger mitigation works carried out within licence period (Jul-Nov)
- Tree works (removals and coppicing) in lower portion of north-east and north-west Woodland Quarters with new avenue and grove tree planting, hedges and fence installation
- Avenue and grove tree planting to lower Pleasure Grounds
- Upgrade works to first football and rugby pitch (pitch out of action from Sept 2019 - Sept 2020)
- Upgrade works to cricket pitch
- Path upgrade to western boundary
- Tree planting and meadow seeding to west meadow

ECOLOGICAL PROGRAMME CONSTRAINTS:

- Tree works to take place outside of Bird Nesting season (March - August) or under ecological supervision
- Works to Woodland Quarters will likely require Badger Licence (covers July - Nov)
- Tree planting season Dec 2019 - Feb 2020

PHASE 3
APR 2020 - MAR 2021

WORKS:

- Tree works (removals and coppicing) in upper portion of south-west Woodland Quarter, excluding reserved area, with new avenue and woodland tree planting, understorey, hedges, fence and path installation
- Tree works (removals and coppicing) in south-east Woodland Quarter, excluding reserved area, with new avenue and woodland tree planting, understorey, hedges, fence and path installation and creation of flower garden
- Planting of palisade around oval lawn
- Construction of ninepin alley
- Upgrade works to second football and rugby pitch (pitch out of action from Sept 2020 - Sept 2021)
- Installation of new play area and planting
- Installation of Ice House seat and Beehive interpretation to northern Woodland Quarters
- Tree planting and meadow seeding to east meadow

ECOLOGICAL PROGRAMME CONSTRAINTS:

- Tree works to take place outside of Bird Nesting season (March - August) or under ecological supervision
- Works to Woodland Quarters will likely require Badger Licence (covers July - Nov)
- Tree planting season Dec 2020 - Feb 2021

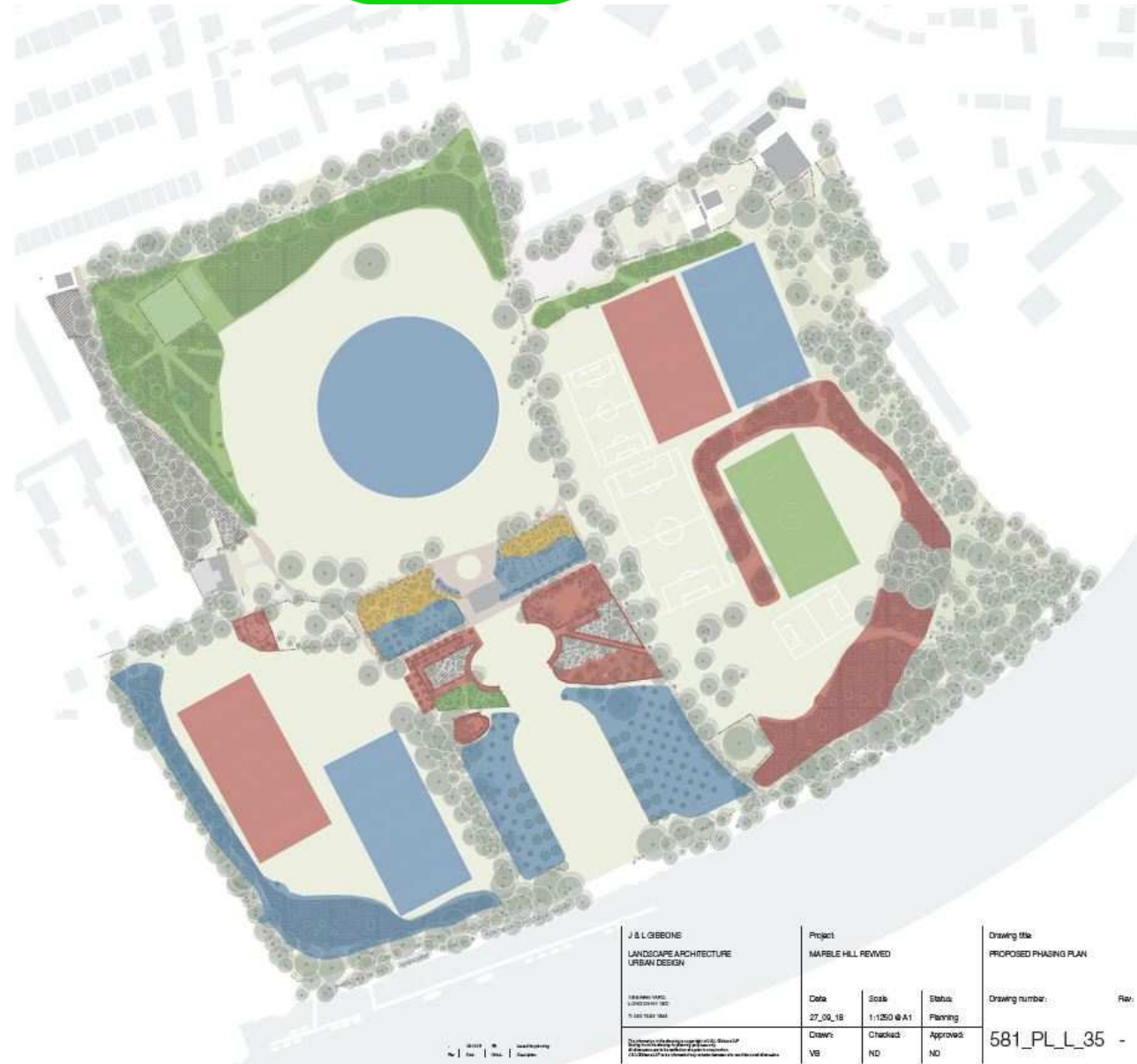
PHASE 4
APR 2021 - JAN 2022

WORKS:

- Tree works in lower portion of south-west Woodland Quarter with new woodland tree planting, understorey, hedges and fence installation
- Upgrade works to third football pitch (pitch out of action from Sept 2021 - Sept 2022)
- Sweetwalk tree and understorey planting
- Tree planting and meadow seeding around tennis court and to northern park boundary

ECOLOGICAL PROGRAMME CONSTRAINTS:

- Tree works to take place outside of Bird Nesting season (March - August) or under ecological supervision
- Tree planting season Dec 2021 - Jan 2022



J & L GIBBONS
LANDSCAPE ARCHITECTURE
URBAN DESIGN

581 PL L 35
27_09_18
1:1250 @ A1
VS ND NO

Project
MARBLE HILL REVISED

Date	Scale	Status
27_09_18	1:1250 @ A1	Planning
Drawn:	Checked:	Approved:
VS	ND	NO

Drawing title
PROPOSED PHASING PLAN

Drawing number: 581_PL_L_35 -
Rev: