Burhill Golf and Leisure Ltd.
Burhill
Burwood Road
Hersham
Walton-On Thames
Surrey
KT12 4BX

DATE: 5th January 2024
SITE: Burhill Golf Club, Hersham
REFERENCE: UES02258/07

Biodiversity Net Gain Assessment

Introduction and objectives

United Environmental Services Ltd (UES) were commissioned to undertake a Biodiversity Net Gain (BNG) assessment of a proposed development at Burhill Golf Club, Hersham, Walton-on-Thames, Surrey.

This report has been written and compiled by Tom Kenwright BSc MSc ACIEEM, UES Senior Ecologist. Tom holds a level 5 Botanical Society for Britain and Ireland (BSBI) field identification skills certificate (FISC), which certifies him as competent to undertake habitat and botanical surveys, including phase 1 habitat and national vegetation classification (NVC) surveys.

The proposed development involves the construction of a reservoir, with associated pipeline and landscaping.

The purpose of this report is to provide an assessment of the impacts on biodiversity resulting from the proposed development. The objectives and aims of the assessment are as follows:

- Establish the total number of baseline habitat, hedgerow and watercourse units at the site of the proposed development.
- Establish the total number of habitat, hedgerow and watercourse units, which will be created, retained and/or enhanced under landscape and ecological mitigation proposals at the site of the proposed development.

- Determine whether the proposed development will result in a net loss, no net loss or a net gain for biodiversity.

- Recommend additional enhancement / compensation measures to ensure BNG is achieved.

Planning policy

Paragraphs 170(d), 174(b) and 175(d) of the National Planning Policy Framework (NPPF) set out requirements for the delivery of biodiversity net gain and this is supported within Natural Environment Planning Policy Guidance (PPG). Currently the NPPF does not specify the level of net gain required and any gain over no net loss is compliant with policies.

Following adoption of the Environment Bill, it will become mandatory for all planning applications in England that are submitted and validated after a currently undetermined date in January 2024 to deliver a minimum 10% BNG. The Act sets out the following key components to mandatory BNG:

- Minimum 10% gain required calculated using Biodiversity Metric & approval of net gain plan
- Habitat secured for at least 30 years via obligations / conservation covenant
- Habitat can be delivered on-site, off-site or via statutory biodiversity credits
- There will be a national register for net gain delivery sites
- The mitigation hierarchy still applies of avoidance, mitigation and compensation for biodiversity loss
- Will also apply to Nationally Significant Infrastructure Projects (NSIPs)
- Does not apply to marine development
- Does not change existing legal environmental and wildlife protections

Policy CS15 – 'Biodiversity' of the Elmbridge Core Strategy (adopted July 2011) details the requirement for all developments to deliver a net gain for biodiversity. Policy CS15 read as follows:

"The Council will seek to avoid loss and contribute to a net gain in biodiversity across the region and the objectives of the Surrey Biodiversity Action Plan (BAP) by:

1. *Protecting and seeking to improve all sites designated for their biodiversity importance, as identified on the proposals map, in accordance with PPS9: Biodiversity and Geological Conservation and CS13-Thames Basin Heaths Special Protection Area (SPA), including those sites considered as being relevant to the integrity of the South-West London Waterbodies SPA and Ramsar site. Criteria based policies against which proposals will be judged for any development on, or affecting, sites of regional or local significance will be brought forward through future DPDs that address Development Management and Site Allocations;*

2. *Support the implementation of the Regional Forestry and Woodland Framework by:*

    - *Protecting all woodland, including ancient woodland, as shown on the proposals map, from damaging development and land uses;*

- *Promoting the effective management, and where appropriate, extension and creation of new woodland areas including, in association with areas of major development, where this helps to restore and enhance degraded landscapes, screen noise and pollution, provide recreational opportunities, helps mitigate climate change, and contributes to floodplain management;*
- *Replacing woodland unavoidably lost through development with new woodland on at least the same scale;*
- *Promoting and encouraging the economic use of woodlands and wood resources, including wood fuel as a renewable energy source;*
- *Promoting the growth and procurement of sustainable timber products*

3. *Protecting and enhancing BAP priority habitats and species and seeking to expand their coverage by supporting the development of the Biodiversity Opportunity Areas; as shown on the proposals map;*

4. *Managing and maintaining a mosaic of habitats and rich variety of wildlife across the Council's landholdings in accordance with the Elmbridge Countryside Strategy;*

5. *Working in partnership to re-store and enhance: the Thames Basin Heath SPA, in accordance with CS13-Thames Basin Heaths SPA, which is an area of strategic opportunity for biodiversity improvement. Brooklands Community Park and Esher Commons Site of Special Scientific Interest (SSSI) in accordance with the Council's most up-to-date mitigation strategy for the Thames Basin Heath SPA and the Esher Commons SSSI Restoration and Management Plan.*

6. *Maximising the contribution of other green spaces and features, where appropriate, to the area's biodiversity resources including identifying and developing wildlife corridors to provide ecological 'stepping stones' and form a coherent local and regional biodiversity network in accordance with CS12-The River Thames and its tributaries and CS14-Green Infrastructure;*

7. *Directing development to previously developed land in accordance with CS1-Spatial Strategy, taking account of its existing biodiversity value.*

8. *Ensuring new development does not result in a net loss of biodiversity and where feasible contributes to a net gain through the incorporation of biodiversity features."*

Policy DM21 – 'Nature Conservation and Biodiversity' of the Elmbridge Local Plan Development Management Plan also highlights the requirement for developments to provide a net gain on biodiversity. The relevant section of Policy DM21 reads as follows:

a) *"In accordance with Core Strategy policy CS15 – Biodiversity, all new development will be expected to preserve, manage and where possible enhance existing habitats, protected species and biodiversity features. The Council will work in partnership to explore new opportunities for habitat creation and restoration.*

b) *Support will be given to proposals that enhance existing and incorporate new biodiversity features, habitats and links to habitat networks into the design of buildings themselves as well as in appropriate design and landscape schemes of new developments with the aim of attracting wildlife and promoting biodiversity. Conditions will be used to secure the provision of mitigation measures, as appropriate."*

No local planning policy currently details a requirement for developments to provide a specific percentage net gain As such, it is considered that any net gain over no net loss would be compliant with local policy.

Methodology

The BNG assessment has been undertaken using the Natural England Biodiversity Metric 4.0. The metric was used to calculate and compare baseline and post-development habitat, hedgerow and watercourse units. A walkover survey to map the habitats and undertake detailed condition assessments within he proposed development site (Area A) was survey was undertaken by Tom Kenwright on the 13th July 2022. A walkover survey of the proposed offsite compensation areas (Areas B and C) was undertaken by Tom Kenwright on the 24th October 2023. The results of these surveys have been used to inform this assessment.

Habitats recorded within the proposed development area were mapped on a Phase 1 Habitat plan, provided at Appendix 1. Photos the habitats present within Areas A, B and C are provided at Appendix 2.

The Natural England Biodiversity Metric 4.0 utilises habitats classified under the UK Habitats Classification methodology (UKHAB). As such tab G9 'Translation Phase 1' of the metric, in addition to surveyor knowledge and experience, was used to translate Phase 1 habitats into UKHAB codes provided within the metric.

Results - Area A

A1.1.2 – Broadleaved plantation woodland (other woodland; broadleaved)

0.2085ha of woodland lies within the proposed development boundary, of which 0.0544ha will be retained as part of the proposals. This woodland is a relatively small and isolated stand of early mature woodland composed of crack willow *Salix fragilis*, alder *Alnus glutinosa*, silver birch *Betula pendula* and ash *Fraxinus excelsior*. Trees are all of the same age and no mature or veteran trees are present. The woodland lacks an understory and the ground flora is sporadic and species-poor. Species present include bramble *Rubus fruticosus agg*., stinging nettle *Urtica dioica*, Yorkshire fog *Holcus lanatus*, holly *Ilex aquifolium* saplings, creeping buttercup *Ranunculus repens*, common bent *Agrostis capillaris*, creeping bent *Agrostis stolonifera*, cleavers *Galium aparine*, ivy *Hedera helix*, cock's-foot *Dactylis glomerata*, red fescue *Festuca rubra*, creeping thistle *Cirsium arvense*, hawthorn *Crataegus monogyna* saplings and broadleaved willowherb *Epilobium montanum*. No invasive species were observed within the woodland however a pond is present at the woodland margin and contains New Zealand pigmyweed *Crassula helmsii*.

A2.1 – Dense scrub (mixed scrub / bramble scrub)

0.1732ha of mixed scrub lies within the proposed development boundary. These areas predominantly comprise a mix of blackthorn *Prunus spinosa* and grey willow *Salix cinerea*, with some young crab apples *Malus sylvestris* trees and bramble, particularly at the margins. Some small, scattered stands of willow scrub had recently been removed prior to the walkover survey in 2022, however these areas have been included within the metric, based on aerial imagery, to ensure their value is captured and compensated for.

0.44ha of scrub dominated by bramble and lacking other woody species (other than individual and very young saplings) is also present within the proposed development boundary and will be removed to facilitate the proposals.

A3.1 – Broadleaved scattered trees (individual rural trees / line of trees)

Two young crab apple trees, a young pedunculate oak *Quercus robur* tree and a young turkey oak *Quercus cerris* tree are present on site and will be removed to facilitate the proposals.

A line of mature and semi-mature pedunculate oak and turkey oak trees is present at the southern boundary of the site. This line of trees will be retained as part of the proposals.

B5 – Marshy grassland (other neutral grassland)

A small area of marshy grassland (0.027ha) is present on site and appears to have formed as a result of adjacent bunding of spoil directing run-off into a low-lying area. This area shares many species with the adjacent and surrounding areas of grassland, however botanical species diversity is increased and there is a greater abundance of soft rush *Juncus effusus* in some areas. Additional species present within the marshy grassland include greater bird's-foot trefoil *Lotus pedunculatus*, meadow vetchling *Lathyrus pratensis*, tufted vetch *Vicia cracca*, smooth tare *Vicia tetrasperma* and common fleabane *Pulicaria dysenterica*.

B6 – Species-poor semi-improved grassland (other neutral grassland)

The majority of the site is dominated by large areas of species-poor semi-improved grassland that appears to be subject to very infrequent management, if any in recent years. The grassland is mostly dominated by coarse species indicative of rank and unmanaged grasslands, particularly false oat-grass *Arrhenatherum elatius*, in addition to abundant or frequent cock's-foot, Yorkshire fog and common couch *Elymus repens*. Some small areas of the grassland show a slightly different vegetative community, with a stand in the eastern section being dominated by Yorkshire fog and a stand in the western section containing frequent common bent and occasional red fescue *Festuca rubra*, albeit still being dominated by Yorkshire fog and false oat-grass.

All areas of grassland are species-poor and share the same low abundance and diversity of forbs. Forbs present are mostly species indicative of unmanaged grasslands such as mugwort *Artemisia vulgaris*, creeping thistle, stinging nettle and common ragwort *Jacobaea vulgaris.* Some of these species, particularly stinging nettle, are abundant in some areas. Other species present in very low quantities, and mostly at the ecotone with other habitats, include common mouse-ear *Cerastium fontanum*, cleavers, meadow buttercup *Ranunculus acris*, creeping buttercup, self-heal *Prunella vulgaris*, soft rush, common fleabane, broadleaved dock *Rumex obtusifolius*, curled dock *Rumex crispus*, common hogweed *Heracleum sphondylium*, spear thistle *Cirsium arvense*, meadow foxtail *Alopecurus pratensis* and rough meadow-grass *Poa trivialis*. Some bramble and scrub encroachment, particularly from grey willow, blackthorn and hawthorn saplings is occurring throughout the grassland.

C1.1 – Continuous bracken

Large stands of continuous bracken are present, but all lie outside of the proposed development boundary and will not be impacted by the proposals.

G1 – Standing water (Pond)

A pond lies outside but immediately adjacent to the proposed working area, located within and at the edge of the stand of woodland. The pond is mostly shaded by the woodland and marginal and emergent vegetation is generally limited to the western edge. Species present include greater reedmace *Typha latifolia*, yellow iris *Iris pseudacorus*, gypsywort *Lycopus europaeus*, marsh foxtail *Alopecurus geniculatus*, soft rush and marsh bedstraw *Galium palustre.* The invasive species New Zealand pigmyweed is present and covers large sections of the pond, particularly at the western margin.

J1.2 – Amenity grassland

A small section (0.1458ha) of the adjacent amenity grassland golf fairway falls within the proposed development boundary and will be lost to facilitate the proposals. This area is intensively managed with a very short sward, making species identification difficult. Regardless of this limitation, this is a habitat of very low value and it dominated by a very low number of grasses, with very few forbs present.

J1.3 – Ephemeral / short perennial vegetation

A spoil mound lies offsite but immediately adjacent to the proposed development boundary. This area has been colonised by a number of ephemeral / short perennial species including common centaury *Centaurium erythraea*, creeping thistle, spear thistle, Yorkshire fog, common bird's-foot trefoil *Lotus corniculatus*, common mouse-ear, common ragwort Guernsey fleabane *Erigeron sumatrensis*, silver birch saplings, creeping buttercup, white clover *Trifolium repens*, ribwort plantain *Plantago lanceolata*, smooth tare, butterfly bush *Buddleia davidii*, common bent, autumn hawkbit *Scorzoneroides autumnalis*, common cat's-ear *Hypochaeris radicata*, red fescue, black medick *Medicago lupulina*, tufted vetch, curled dock, Canadian fleabane *Erigeron canadensis*, broadleaved dock and perforate St John's-wort *Hypericum perforatum*.

J2.6 – Dry ditch

A dry ditch runs along the base of the line of trees at the southern site boundary. The ditch contains no additional species other than those found within the surrounding scrub. This ditch will be retained and unaffected by the proposals.

Results - Area B

A3.1 – Broadleaved scattered trees (individual rural trees)

A single mature goat *Salix caprea* willow tree is present within the improved grassland paddock.

B4 - Improved grassland (modified grassland)

The proposed offsetting area comprises a paddock of improved grassland that is subject to intensive management though horse grazing. The sward is very short, is species poor and is dominated by perennial ryegrass *Lolium perenne*. Other grass species and forbs are present throughout but are only frequent or abundant at the margins of the paddock and within areas of disturbance, which are numerous. A large number of species were recorded but these are

not spread throughout the sward and are limited to sporadic areas. Additional species present are all indicative of nutrient enrichment or are species tolerant of intensive management, including Yorkshire fog, dandelion *Taraxacum officinale agg*., white clover, common bent, broadleaved dock, creeping thistle, greater plantain *Plantago major*, annual meadow-grass *Poa annua*, common daisy *Bellis perennis*, common mouse-ear, common ragwort, yarrow *Achillea millefolium,* self-heal and thyme-leaved speedwell *Veronica serpyllifolia*.

Results - Area C

B6 – Species-poor semi-improved grassland (other neutral grassland)

This proposed offsetting site comprises an area of rank, unmanaged and species-poor grassland dominated by a small number of grass species. Due to a lack of management, forbs are limited in number and diversity and are being outcompeted by grasses such as cock's-foot, false-oat grass and undesirable species such as stinging nettle, creeping thistle and broadleaved dock. The grassland does not appear to have previously been subject to significant levels of nutrient enrichment and has been unused by the golf course as if forms part of the floodplain to the River Mole. Species diversity within the grassland is low and forbs are sporadic and present in low abundance throughout. Additional species present include cleavers, teasel *Dipsacus fullonum*, common couch, spear thistle, common ragwort, Yorkshire fog, clustered dock *Rumex conglomeratus*, rough chervil *Chaerophyllum temulum* and meadow foxtail.

Post development habitats

Based on the latest development proposals and landscaping and planting plans provided to UES (see report reference) the proposed development will result in:

- A 3.53 gain in habitat units, an increase of 18.82%
- No change in hedgerow or watercourse units

The Natural England Biodiversity Metric 4 used as part of this assessment is to be submitted with this report to provide full details of the calculations.

Evaluation and recommendations

Provided the habitat creation and enhancement works are implemented, the proposed development will result in no change to hedgerow or watercourse units and will result in a net gain of 3.53 habitat units, a net increase of 18.82%. In addition to the proposed net gains, all trading rules within the metric have been met and the net gain provided exceeds the requirement of both local and national planning policy. As such it is considered that no further habitat retention, creation or enhancement is required, and the development is compliant with both local and national planning policy with regards to biodiversity net gain.

A long-term management plan detailing how all onsite and offsite habitats proposed for retention, creation and enhancement will be managed to ensure they meet and maintain their target condition, will need to be submitted to the local planning authority and can be secured through a suitably worded planning condition. The management plan must also detail proposals for ongoing ecological monitoring and reporting of habitat condition, to allow for intervention and changes to the management plan if necessary.

If you require any further information or wish to discuss this matter further, please do not hesitate to contact myself or another member of staff at UES.

Yours sincerely,

Tom Kenwright BSc MSc ACIEEM
Senior Ecologist
United Environmental Services Ltd

Appendix 1 – Phase 1 habitat plan

Phase 1 Habitat Plan - Area A

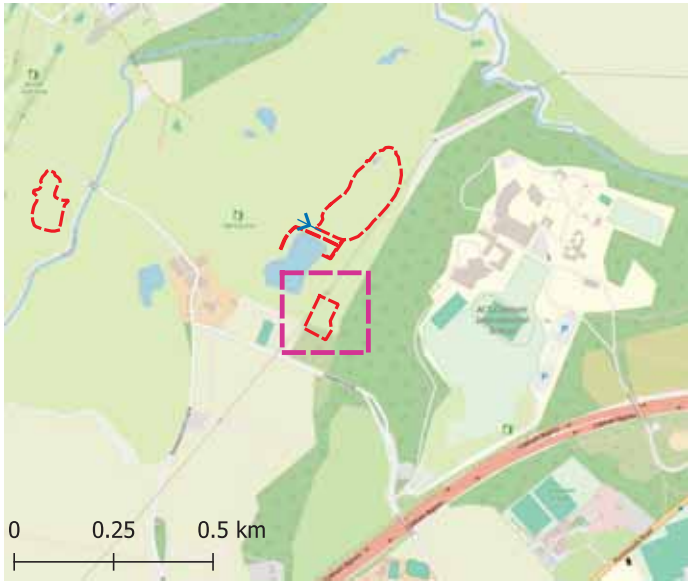
Site: Burhill Golf Club, Hersham
NGR: TQ 10988 62310
Author: Tom Kenwright
Date: 05/01/2024

KEY:

- A1.1.2 - Broadleaved woodland - plantation
- A2.1 - Scrub - dense/continuous
- A3.1 - Broadleaved scattered trees
- B5 - Marsh/marshy grassland
- SI B6 - Poor semi-improved grassland
- C1.1 - Continuous braken
- G1 - Standing water
- A J1.2 - Amenity grassland
- J1.3 - Ephemeral/short perennial
- J2.6 - Dry ditch
- Development boundary

Phase 1 Habitat Plan - Area B

Site: Burhill Golf Club, Hersham
NGR: TQ 10986 23008
Author: Tom Kenwright
Date: 05/04/3034

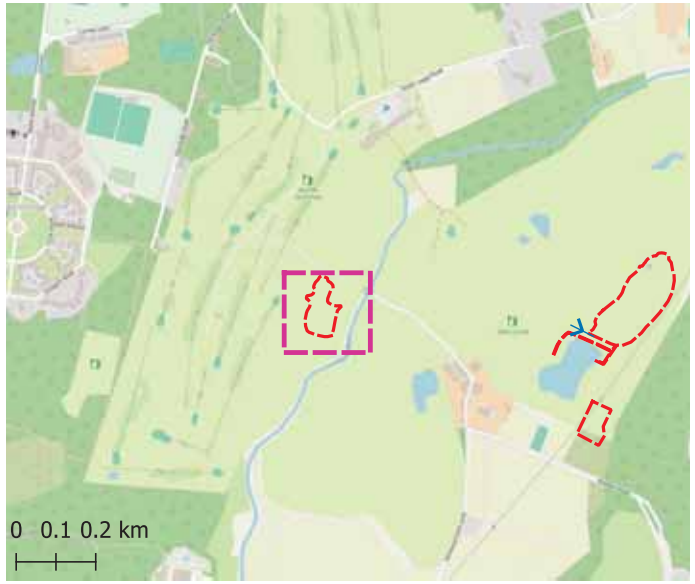


KEY:

- A3.1 - Broadleaved scattered trees
- I B4 - Improved grassland
- Survey boundary

Phase 1 Habitat Plan - Area C

Site: Burhill Golf Club, Hersham
NGR: TQ 10197 62277
Author: Tom Kenwright
Date: 05/04/2024



KEY:

SI B6 - Poor semi-improved grassland

Development boundary

Appendix 2 – Photographs

Photograph 1. Looking north across the species-poor semi-improved grassland and towards the woodland within Area A. Some scattered scrub is visible.

Photograph 2. Looking north-east across the species-poor semi-improved grassland within Area A.

Photograph 3. Looking north-east across the species-poor semi-improved grassland within Area A.

Photograph 4. Looking south-east across the species-poor semi-improved grassland in Area A.

Photograph 5. Looking towards an example of small, scattered stands of mixed scrub within Area A.

Photograph 6. Areas of the species-poor semi-improved grassland in Area A that contain an abundance of stinging nettle.

Photograph 7. Example of young, scattered trees located within Area A.

Photograph 8. Example of dense bramble scrub within Area A.

Photograph 9. Looking south towards bramble scrub, mixed scrub and the line of trees at the southern boundary of Area A.

Photograph 10. Example of small, scattered areas of willow scrub removed prior to the walkover survey of Area A.

Photograph 11. View of the marshy grassland sward with increased botanical diversity, located within Area A.

Photograph 12. Example of amenity grassland within Area A.

Photograph 13. Ephemeral / short perennial vegetation located offsite but immediately adjacent to Area A.

Photograph 14. View of dense bracken located offsite but immediately east of Area A.

Photograph 15. Woodland within Area A.

Photograph 16. Pond at edge of woodland, located immediately adjacent to Area A.

Photograph 17. New Zealand pigmyweed within the pond immediately adjacent to Area A.

Photograph 18. Looking west across southern section of offsetting Area B.

Photograph 19. Looking east across northern section of offsetting Area B, towards the single goat willow tree.

Photograph 20. Example of grassland sward within offsetting Area B.

Photograph 21. Looking north-east across offsetting Area C.

Photograph 22. Looking north across offsetting Area C.

Photograph 23. Example of encroaching tall ruderal within the grassland in offsetting Area C.

Photograph 24. Example of encroaching tall ruderal and scattered scrub within the grassland in offsetting Area C.