

AtkinsRéalis



Biodiversity Net Gain Design Stage Assessment Report

Trant Engineering Ltd

May 2026

RACTON BOOSTER STATION

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Summary

Proposed Scheme	The Proposed Scheme consists primarily of a water booster station building that will connect to Portsmouth Water's (PW's) existing water pipeline system in order to safeguard their pressurised water supply network. The water booster station building will be 81.65 m² in area. The booster station comprises a plant room housing a floor mounted pump, and a control room housing a motor control centre (MCC), together with a separate kiosk housing a bespoke, new electricity substation. The building housing the water booster station will be approximately 10 m long and 10 m wide. The maximum height of the building will be 5.31 m (north elevation) to 4.66 m (south elevation) to the top of the pitched roof. The proposed building will have a tiled pitched roof and will be constructed of brick to match the existing surrounding buildings. The Proposed Scheme includes a "Grasscrete" hardstanding parking bay at 90 degrees to Brookfield Close, to allow for safe access for vehicles into the site. A double barrier / gate 1 m back from the current kerb line is also proposed. The Proposed Scheme also includes a number of ancillary items on the site, including; two surface water drainage chambers, two washout chambers, five surface boxes for buried valves, one actuated bypass chamber and one flow meter chamber. The Proposed Scheme includes landscaping proposals as part of the design, comprising species-rich grass and species-rich native hedgerow which will partially screen the water booster station. Five trees are also proposed to be planted. Perimeter hedging is also proposed.
Desk studies and field surveys	A desk study was undertaken in March 2026 which comprised a search of available online biodiversity information for designated sites and ancient trees. In March 2024 Hampshire Biodiversity Information Centre was contacted for records of locally designated sites for nature conservation and protected and priority species and habitats. An ecological walkover survey including habitat survey and condition assessment was undertaken on 29/01/2026.
Irreplaceable habitats	No irreplaceable habitats are present within the desk study search area.
Habitat losses/gains	An 8 m length of hedgerow priority habitat is to be permanently lost to facilitate the construction of the booster station. Temporary and permanent habitat loss of neutral grassland will also occur as a result of the Proposed Scheme. To ensure habitat loss is minimised, the size of the working area, access routes and storage areas etc have been reduced as far as possible. A native species rich hedgerow will be planted to act as screening to the booster station, and new grassland habitats will be created in areas where habitat loss is to be temporary. Habitat creation works are to be undertaken after the completion of construction works.
Biodiversity calculations	The Proposed Scheme will result in a net gain of 0.08 habitat units for 'Individual – urban trees', however, there will also be net loss of 0.10 habitat units for 'Other neutral grassland'. This loss of grassland cannot be addressed through the provision of additional trees as the BNG trading rules are not met. Under the trading rules, Other neutral grassland (a medium distinctiveness habitat) must be replaced by the same broad habitat type or a habitat of higher distinctiveness. Overall the Proposed Scheme will result in the net loss of 0.03 habitat units, and a -1.91% net change.



The Scheme will currently result in the net gain of 0.30 hedgerow units through the planting of 'Species-rich native hedgerow'. This is on top of an existing hedgerow which will be retained, and the required biodiversity net gain is delivered.

The Proposed Scheme does not deliver on-site biodiversity gains in habitat units but it does deliver on-site biodiversity gains in hedgerow units, which exceed the statutory 10% increase in biodiversity value for hedgerow features.

Linear watercourse features are not present in the Application Site and therefore are not considered for the BNG Metric.

**Actions required
to deliver BNG**

The assessment shows that the Proposed Scheme is predicted to result in:

- A net loss of 0.03 habitat units, with a predicted net change of -1.91%; and
- A net gain of 0.30 hedgerow units, with a predicted net change of +167.89%.

To achieve the statutory 10% increase in biodiversity value for area habitat features, the Proposed Scheme needs to deliver 1.46 habitat units; there is currently a deficit of 0.16 habitat units. However, this assessment accounts for on-site changes only (i.e. changes to biodiversity within the Application Site only). The Proposed Scheme will need to achieve the 10% increase in biodiversity value for area habitat features through either registered off-site biodiversity gains or statutory biodiversity credits (both of which will need to comply with the habitat trading rules which are not currently met).



1. Introduction

1.1 Terms of Reference

AtkinsRéalis has been instructed by Trant Engineering Ltd on behalf of Portsmouth Water (PW) to provide a Biodiversity Net Gain (BNG) Design Stage assessment in relation to the application for the construction of Racton Booster Station (hereafter referred to as 'the Proposed Scheme'). The Proposed Scheme is located next to Trosnant Road in Havant, Hampshire at PO9 3BB; the footprint of the Proposed Scheme (hereafter referred to as 'the Application Site') is shown on the Site Location Plan in **Appendix A**.

The British Standard BS 8683:2021¹ defines BNG as “a specific, quantifiable outcome from project activities that deliver demonstrable benefits for biodiversity compared to the baseline situation.” It is an approach that aims to leave the natural environment in a measurably better state than beforehand.

BNG is an approach which aims to leave the natural environment in a measurably better state than beforehand. Biodiversity metrics provide a way of measuring and accounting for biodiversity losses and gains resulting from development and/or land management change. To measure and account for biodiversity losses and gains resulting from the Scheme, a BNG assessment has been undertaken using the Statutory Biodiversity Metric published by Defra².

This report is intended to inform outline project design options, including site location/layout and construction methods, that will maximise the Scheme's ability to deliver BNG.

This report forms part of the Proposed Scheme's planning application submission to Havant District Council (for full planning consent under the Town and Country Planning Act 1990) in relation to meeting the biodiversity gain objective (the 'biodiversity gain condition') under the statutory framework for BNG. The objective is for development, within the scope of mandatory BNG, to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of a development site. The increase in biodiversity value can be achieved through on-site biodiversity gains, registered off-site biodiversity gains or statutory biodiversity credits.

The report provides an assessment of changes in biodiversity, as a result the Proposed Scheme, from a pre-development baseline to a post-development scenario. It follows the framework set out by the Chartered Institute of Ecology and Environmental Management (CIEEM)³ for reporting in relation to BNG assessments. The assessment has been undertaken by a competent person with reference to the British Standard BS 8683:2021¹.

1.2 The Application Site

The Site is located at Ordnance Survey National Grid reference (OSNGR) SU 7115 0683 in Havant, Hampshire. It is formed of neutral grassland, with a group of alder trees and a native hedgerow to the east. The Site is bound by Trosnant Road to the north, Brookfield Close to the east, New Road to the south and Stockheath Lane to the west.

¹ The British Standards Institution 2021. BS 8683:2021 Process for designing and implementing Biodiversity Net Gain – Specification. BSI Standards Limited 2021.

² Defra (2023). Statutory Biodiversity Metric tools and guides. [Available at: [Statutory biodiversity metric tools and guides - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guides/statutory-biodiversity-metric-tools-and-guides)] [Accessed 08/07/2024]

³ CIEEM (2021). Biodiversity Net Gain Report and Audit Templates. Chartered Institute of Ecology and Environmental Management, Winchester, UK.



The Application Site is located in an urban setting. To the west of Stockheath Lane is an area of green space associated with the Hermitage Stream and Hawthorn Walk, with the stream being located 50 m west of the Application Site. The Application Site is approximately 0.09 ha and is shown in Appendix A.

Within this report, any use of the term 'on-site' refers to the Application Site as described above, i.e. all land within the red line boundary of the Proposed Scheme. Any reference to 'off-site' is to any land outside of the Application Site (regardless of ownership) which may be considered in the assessment if delivering the required BNG is not feasible within the Application Site.

1.3 The Proposed Scheme

The Proposed Scheme consists primarily of a water booster station building that will connect to PW's existing water pipeline system in order to safeguard their pressurised water supply network. The proposed water booster station building will be 81.65 m² in area. The proposed booster station comprises a plant room housing a floor mounted pump, and a control room housing a motor control centre (MCC), together with a separate kiosk housing a bespoke, new electricity substation.

The single building housing the proposed water booster station will be approximately 10 m long and 10 m wide. The maximum height of the building will be 5.31 m (north elevation) to 4.66 m (south elevation) to the top of the pitched roof. The proposed building will have a tiled pitched roof and will be constructed of brick to match the existing surrounding buildings.

A summary of the proposed equipment to be housed at the proposed water booster station building includes:

- Floor-mounted pumps and associated pipework;
- Electrical equipment cabinets;
- Electricity substation kiosk;
- High level extraction fans; and
- Air vents and non-powered louvre panels.

The Proposed Scheme includes a proposed "Grasscrete" hardstanding parking bay at 90 degrees to Brookfield Close, to allow for safe access for vehicles into the site. A double barrier / gate 1 m back from the current kerb line is also proposed.

The Proposed Scheme also includes a number of proposed ancillary items on the Application Site, which are outside of the building, including:

- Two surface water drainage chambers;
- Two Washout chambers;
- Five surface boxes for buried valves;
- One actuated bypass chamber; and
- One flow meter chamber.

The Proposed Scheme includes landscaping proposals as part of the design, comprising providing species-rich grass and a species-rich native hedgerow (which will partially screen the water booster station). Five trees will also be planted.

Perimeter hedging is also proposed.



The landscape planting details relating to the Proposed Scheme, as they are currently understood, are shown on **Figure A-2** provided in **Appendix A**.

1.4 Relevant Legislation and Policy

1.4.1 Legislation

The Environment Act was given royal assent in November 2021. This is an act to make provision about targets, plans and policies in relation to the environment, including Part 6 of the Environment Act 2021 'nature and biodiversity', which allows for biodiversity gain in planning.

In England, Schedule 14 of the Environment Act 2021 makes provision for a 10% biodiversity gain to be a condition of planning permission through amendment of the Town and Country Planning Act 1990. It also makes provision for habitat creation and enhancements to deliver biodiversity gain to be maintained for a period of at least 30 years after the development is completed. Schedule 14 of the Environment Act 2021 was brought into force in 2024; BNG is now mandatory under Schedule 7A of the Town and Country Planning Act 1990 for most types of development. A summary of relevant BNG legislation is provided in **Appendix B**.

The Proposed Scheme is within the scope of mandatory BNG.

Portsmouth Water is not a public body; however, Havant Borough Council is a public body, which has a duty to conserve biodiversity under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 (as amended).

The introduction of the Environment Act 2021 strengthens this biodiversity duty by amending Section 40 of the Act 2006 so that public bodies also have a duty to enhance biodiversity. Public bodies must now:

- Consider what they can do to conserve and enhance biodiversity.
- Agree policies and specific objectives based on their consideration.
- Act to deliver their policies and achieve their objectives.

1.4.2 Policy

National Policy

The National Planning Policy Framework (NPPF)⁴ “provides a framework within which locally-prepared plans can provide for housing and other development in a sustainable manner”. It emphasises the importance of protecting and enhancing the natural environment. In relation to BNG, the NPPF states the following:

- Paragraph 187 (d) *Planning policies and decisions should contribute to and enhance the natural and local environment by:*
 - Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures *and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs.*

⁴ Ministry of Housing, Communities & Local Government. *National Planning Policy Framework*. MHCLG, December 2024.



- Paragraph 192 (b) *To protect and enhance biodiversity and geodiversity, plans should:*
 - *Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*
- Paragraph 193 (d) *When determining planning applications, local planning authorities should apply the following principles:*
 - *Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

Local Policy

The Havant Borough Core Strategy⁵ is the current planning policy for Havant along with the 'Local Plan (Allocations)' which is discussed below. The Core Strategy was adopted in 2011 and sets out the planning framework until 2026. The Emerging Local Plan (will replace the core strategy and is hoped to be adopted following consultation which took place in 2025. Policies within the Core Strategy that are relevant to the biodiversity assessment are provided below:

- Policy CS11: Protecting and Enhancing the Special Environment and Heritage of Havant Borough.
- Policy CS13: Green Infrastructure.
- DM8 Conservation, Protection and Enhancement of Existing Natural Features.

The following documents have also been reviewed:

- The Havant Borough Council Biodiversity Strategy (January 2025)⁶;
- Hampshire Local Nature Recovery Strategy⁷.

At present, there are no net gain targets above 10% set within Havant Borough Council and there is no policy wording which creates substantive changes from the statutory framework for BNG.

1.5 Scope of the Assessment

Biodiversity metrics provide a way of measuring and accounting for biodiversity losses and gains resulting from development and/or land management change.

This BNG Design Stage assessment quantifies the baseline biodiversity value of land within the Application Site (using habitat as a proxy and measured in biodiversity units), quantifies the habitats to be lost, retained and/or enhanced, and predicts the post-development biodiversity units to be delivered as part of the Proposed Scheme. The assessment is based on the Post-Development Habitat Plan (see **Figure D-1** in **Appendix D**) available at the time of assessment (08/04/2026).

⁵ <https://www.havant.gov.uk/sites/default/files/documents/ADOPTED%20CORE%20STRATEGY%20.pdf>

⁶ Havant Borough Council Biodiversity Strategy (2025). Available at: [Havant Borough Council Biodiversity Strategy January 2025](#). [Accessed 11/03/2026]

⁷ Hampshire County Council (2025). Local Nature Recover Strategy for Hampshire 2025. Available at: [Local Nature Recovery Strategy for Hampshire | Environment | Hampshire County Council](#) [Accessed 11/03/2026].



The Statutory Biodiversity Metric⁸, hereafter referred to as ‘the Metric’, has been used to calculate biodiversity units and measure the change in biodiversity at the Application Site, as a result of the Proposed Scheme.

The Metric sets out four rules that must be followed in applying the Metric; BNG cannot be claimed if the rules are not followed. Where appropriate to the assessment, these rules are discussed in the relevant sections of this report.

The scope of this assessment is to inform PW how the Proposed Scheme will meet the biodiversity gain objective under the statutory framework for BNG, whether this will be through on-site biodiversity gains or whether registered off-site biodiversity gains or statutory biodiversity credits will need to be considered. PW have committed to achieving biodiversity net gain on site by creating a new species-rich hedgerow and retaining all of the individual trees and some of the species-rich native hedgerow on the Site.

It will be used to inform the Biodiversity Gain Plan, which will need to be submitted and approved by Havant Borough Council before commencement of the Proposed Scheme.

This document must be read with Racton Booster Station_BNG Metric_V2.1⁹.

⁸ www.gov.uk. 2024. Statutory biodiversity metric tools and guides. [online] Available at: [Statutory biodiversity metric tools and guides - GOV.UK](#) [Accessed 11/03/2026].

⁹ [Racton Pumping Station_BNG Metric_V2.1](#).



2. Methods

2.1 Desk Study

2.1.1 Irreplaceable Habitats, Protected Sites and Priority Habitats

A desk study was undertaken in March 2024 and March 2026 to inform the Ecological Impact Assessment (EclA)¹⁰ of the Scheme. In relation to this BNG assessment, the desk study has been used to identify any important ecological features (e.g. irreplaceable habitats, statutory designated nature conservation sites, priority habitats), which may influence the feasibility of delivering BNG, within and adjacent to the Application Site.

To identify any of these features, the following online data sources were accessed:

- Multi-Agency Geographic Information for the Countryside (MAGIC)¹¹;
- Ancient Tree Inventory¹².

Irreplaceable Habitats

Impacts to irreplaceable habitats are not adequately measured by the Metric and they require separate consideration outside of the statutory framework for BNG, which complies with relevant policy, legislation and regulations. The statutory biodiversity gain objective is not applied to losses or deterioration of irreplaceable habitat. The list of irreplaceable habitats considered within the statutory framework for BNG, as set out in the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024, is provided in **Table B-1**.

Protected Sites

Development on statutory designated sites for nature conservation (e.g. Sites of Special Scientific Interest) is not exempt from the statutory biodiversity gain objective. However, development needs to be compliant with relevant policy and guidance to prevent BNG being used as a justification for otherwise unacceptable development on such sites, i.e. there needs to be strict adherence to the mitigation hierarchy and development will not be consented on the justification that habitat losses can be easily offset using the BNG approach.

Priority Habitats

The NPPF⁴ promotes the conservation, restoration and enhancement of priority habitats. These are habitats that have been deemed to be of principal importance for the purpose of conserving biodiversity and have been identified as such by being listed on Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006; Havant Borough Council will take their presence into account in their planning decision making. Priority habitats are afforded high or very high distinctiveness in the Metric.

¹⁰ Ecological Impact Assessment: Racton Pumping Station. August 2024. AtkinsRéalis.

¹¹ magic.defra.gov.uk. 2024. Magic Map Application. [online] Available at: <https://magic.defra.gov.uk/MagicMap.html> [Accessed March 2024].

¹² ati.woodlandtrust.org.uk. 2025. Ancient Tree Inventory – Woodland Trust. [online] Available at: <https://ati.woodlandtrust.org.uk/> [Accessed March 2024].



2.1.2 Strategic Significance

The Metric applies a strategic significance score based on whether the location of a site and/or the baseline habitats present within a site or proposed habitat interventions have been identified as being locally important for biodiversity. The relevant LNRS should be used to assign strategic significance.

The Metric guidance¹³ recommends use of the LNRS¹⁴ to determine strategic significance. In this case, the responsibility of the LNRS falls to Hampshire County Council. Hampshire LNRS has been reviewed to assign strategic significance⁷.

2.2 Baseline Conditions

A field survey to record the baseline habitat types at the Application Site was undertaken in September 2024 and updated in January 2026. The survey comprised identifying the habitats present using the UK Habitat Classification (UKHab)¹⁵, which is the classification system that the Metric predominantly uses in the area habitat module and the hedgerow module, and undertaking condition assessments of the habitats. Condition assessment scores were assigned using professional judgement and the criteria for habitat in 'good', 'moderate', or 'poor' condition as set out in the relevant condition assessment sheets in Technical Annex 1 of the Metric⁸.

The survey was led by a suitably experienced AtkinsRéalis ecologist with a Level 4 Field Identification Skills Certificate (FISC) and who has appropriately evidenced their competency as being capable in the identification of habitats and plant species in accordance with the CIEEM Competency Standard for Preliminary Habitat Survey¹⁶. Surveyors ensured that any habitats considered to be irreplaceable, including ancient and veteran trees, (see **Table B-1**) were identified and recorded.

The survey data was collected using ESRI ArcGIS FieldMaps and then exported and analysed using QGIS. GIS specialists processed the habitat mapping data to remove small overlaps and gaps between polygons that result from digitising at low resolution. The habitat survey data was then clipped to exclude habitat data outside of the Application Site boundary. Using QGIS, areas (measured in hectares) were calculated for each area habitat feature and, where present, lengths (measured in kilometres) were calculated for hedgerow and watercourse features. Habitat parcels were then created, linking areas/lengths of habitat of the same distinctiveness, condition and strategic significance.

To calculate the area of any individual trees within the Application Site, the 'tree helper' tool embedded within the Metric was utilised. This tool calculates the projected area of individual trees according to their size (small, medium, or large) measured as 'diameter at breast height' (i.e. diameter measured at 1.5 m above ground).

The method for assigning baseline strategic significance is set out in **Section 2.1.2**.

¹³ Department for Environment, Food and Rural Affairs (February 2024). The Statutory Biodiversity Metric User Guide.

¹⁴ Information available online at: [Local nature recovery strategies - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/local-nature-recovery-strategies) [Accessed: September 2024].

¹⁵ UKHab Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

¹⁶ CIEEM (2023). Competency Standard for Preliminary Habitat Survey Version 2. [online] Available at: <https://cieem.net/wp-content/uploads/2023/03/Preliminary-Habitat-Survey-Competency-Standard-V2-February-2023.pdf>



2.3 Proposed Design

The proposed landscape design plans (**Figure A-2 in Appendix A**) (see **Appendix D**) have been used to assess the post-development scenario. These plans were converted from CAD software to a QGIS environment where it was overlaid on the baseline habitat data. Areas and lengths of proposed design features, including built development and habitat creation and/or habitat retention/enhancement, were calculated using QGIS. The GIS shapefiles were inspected for any overlaps, gaps, or duplications, and all polygons and lines were snapped correctly, in order to correctly represent the area or length of each habitat type.

The proposed design features were translated to appropriate Metric habitat types and target condition scores were assigned based on the realistic likelihood of achieving the target condition.

2.4 Calculating BNG Units using the Metric

The Metric uses several measures to quantify baseline biodiversity value for each habitat type within a site boundary. These measures include the habitat's distinctiveness (a measure based on the type of habitat and its distinguishing features), its condition (a measure of the habitat against its ecological optimum state) and its size (ha for area habitat/km for linear habitat). In addition, the local strategic significance of a site and/or the habitats within it is taken into account by applying a strategic significance multiplier.

Area habitat units, hedgerow units and watercourse units are calculated in separate modules of the Metric. Rule 2 of the Metric states *"Biodiversity unit outputs, for each type of unit, must not be summed, traded, or converted between types. The requirement to deliver at least a 10% net gain applies to each type of unit."*

A habitat's distinctiveness score is derived from its intrinsic biodiversity value, reflecting species richness and rarity, the extent to which it is protected by designations and the degree to which it supports species rarely found elsewhere. This score is pre-assigned in the Metric.

The calculation of watercourse units includes additional multipliers that take into account whether a watercourse has been modified by built development through the presence of encroachment into the watercourse channel or riparian zone, i.e. the multipliers reduce the number of watercourse units to reflect the negative impact that such encroachment has on a naturally functioning river system.

Post-development biodiversity units are calculated the same way but with the addition of temporal and risk multipliers that take into account the average time it takes between starting habitat creation or enhancement and that habitat reaching its target distinctiveness or condition (time to target condition) and the difficulty¹⁷ in creating or enhancing habitat. These temporal and risk related multipliers are set within the Metric and cannot be changed. Where habitat creation or enhancement is off-site, biodiversity units are calculated the same way but a spatial risk multiplier is applied based on the distance of the off-site habitat creation or enhancement to the on-site habitat loss.

The Metric also takes into account whether habitat creation or enhancement is delivered in advance of any impact it is compensating for or whether there will be any significant delay in an intervention relative to the impact. If taken into account, the standard temporal multiplier is adjusted accordingly.

To calculate the overall net change in biodiversity units, the baseline biodiversity units are subtracted from the post-development biodiversity units, as shown in **Figure 2-1**.

¹⁷ A measure which represents the uncertainty in the effectiveness of management techniques used to enhance or create habitat.



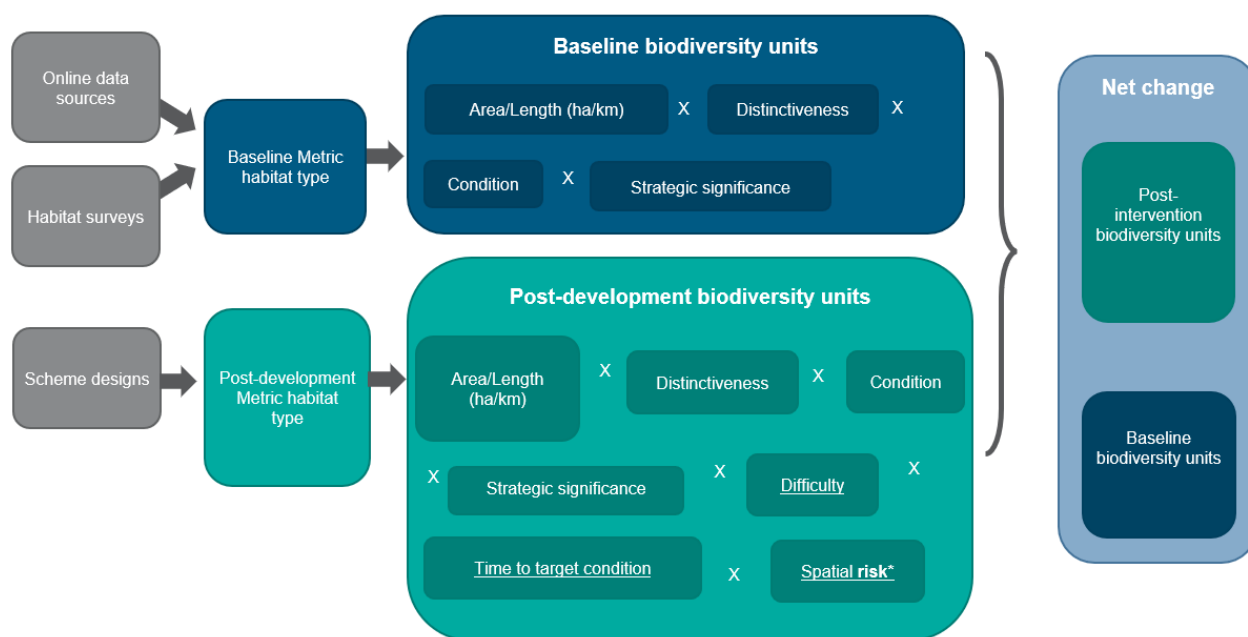


Figure 2-1 – Calculation of Biodiversity Units using the Metric

NB. Illustration does not fully depict calculation of watercourse units; additional multipliers taking into account watercourse and riparian encroachment are applied.

Text underlined indicates a risk factor applied when creating or enhancing habitats.

*Applies to off-site habitat interventions only.

2.5 Trading Rules

Rule 1 of the Metric states “*The trading rules of this biodiversity metric must be followed*”. The trading rules set minimum habitat creation and enhancement requirements to compensate for specific habitat losses, up to the point of no net loss. They are based on the habitat type and distinctiveness of the lost habitat. The trading rules are set out in **Table 2-1**.

Table 2-1 – Habitat Trading Rules

Baseline habitat distinctiveness	Area habitat	Hedgerow	Watercourse
Very high	Priority should be given to replacing losses with area habitat units of the same habitat type (bespoke compensation likely to be required)	Losses must be replaced with hedgerow units of the same habitat type	Priority should be given to replacing losses with watercourse units of the same habitat type (bespoke compensation likely to be required)
High	Losses must be replaced with area habitat units of the same habitat type	Losses must be replaced with hedgerow units of the same habitat type or of a higher band	Losses must be replaced with watercourse units of the same habitat type



Baseline habitat distinctiveness	Area habitat	Hedgerow	Watercourse
Medium	Losses must be replaced by area habitat units of either medium band habitats within the same broad habitat type or, any habitat from a higher band from any broad habitat type	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of the same habitat type
Low	Losses must be replaced with area habitat units of the same or higher band	Losses must be replaced with hedgerow units of the same or of a higher band	Losses must be replaced with watercourse units of a higher band
Very low	Not applicable	Losses must be replaced with hedgerow units of the same or of a higher band	Not applicable

2.6 BNG Principles, Mitigation Hierarchy and Biodiversity Gain Hierarchy

CIEEM, the Construction Industry Research and Information Association (CIRIA) and the Institute for Environmental Management and Assessment (IEMA) have produced ten principles¹⁸ to underpin the practice of applying BNG (see **Appendix C**). Adhering to all principles together underpins the good practice required for achieving and sustaining BNG. Principle 1 of the good practice principles is to apply the mitigation hierarchy (see **Appendix C**), and the avoidance of impacts to irreplaceable habitats must be applied when committing to achieving BNG. This is reinforced through the publication of the British Standard BS 8683:2021¹. Application of the mitigation hierarchy is encouraged by the Metric because BNG can be more easily achieved by avoiding the loss of habitat through either retention or enhancement.

In addition to the good practice principles, the Metric User Guide sets out nine 'Biodiversity Metric Principles'. Amongst these, Principle 3 which states "*This biodiversity metric should be used in accordance with established good practice guidance and professional codes*" reinforces the above. In addition, Principle 2 adds "*The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.*"

In determining whether to approve the Biodiversity Gain Plan, a planning authority must take into account how the Biodiversity Gain Hierarchy (see **Appendix C**) will be followed, and any reasons where it cannot be followed. It is distinct from the mitigation hierarchy and has been designed to reflect the habitat types within the Metric and the ways that the statutory biodiversity gain objective can be achieved. The planning authority will take into account how it has been applied in their planning decision making and whether to approve the Biodiversity Gain Plan.

¹⁸ CIEEM, CIRIA, IEMA. 2016. Biodiversity Net Gain: Good practice principles for development.



2.7 Assumptions and Limitations

It is currently assumed that some of the neutral grassland and native hedgerow will be lost by the Proposed Scheme, but the group of alder trees and some neutral grassland will be retained.

It is assumed that appropriate management will be implemented for the habitat creation proposals to reach their target condition which will give surety that the Scheme will deliver the predicted net gain in biodiversity units.

The desk study search for irreplaceable habitats (including ancient and veteran trees) and priority habitats used online sources as set out in **Section 2.1.1**. These datasets are not entirely accurate and some irreplaceable or priority habitats that are present on Application Site may not be present in the datasets. The field survey aimed to search for these features; as such, this is not considered to be a significant constraint.

It is assumed that construction will take less than a year and a half, therefore, the delay in habitat creation within the post-development tab has been set to zero.



3. Baseline Conditions

3.1 Desk Study

3.1.1 Irreplaceable Habitats, Protected Sites and Priority Habitats

There are no irreplaceable habitats or veteran and ancient trees recorded within the Application Site. No potential ancient or other veteran trees were recorded during the survey. As a result, irreplaceable habitats and veteran and ancient trees are not discussed further in this report.

There are no statutory designated sites within the Application Site. As a result, statutory designated sites are not discussed further in this report.

There are no priority habitats recorded on MAGIC within the Application Site. However, the field survey identified a hedgerow that is a priority habitat within the Application Site boundary.

3.1.2 Strategic Significance

As Hampshire LNRS⁷ has been published, this has been used to assign baseline strategic significance. As such, baseline strategic significance has been set at low in line with the BNG User Guide¹³.

3.2 Pre-Development Biodiversity Value

The following sections summarise, for each module (area, hedgerow, and watercourse), the pre-development biodiversity value of the Application Site. Field survey data to inform the Metric calculations was collected in September 2024 and updated in January 2026. There is no indication that unauthorised activities have been undertaken at the Application Site between 30 January 2020 and the survey date, which may have resulted in degradation of on-site habitat. The pre-development biodiversity value is considered to be accurate for the date of the survey (January 2026) and is relevant to the date of the application.

3.2.1 Area Habitat Baseline

The area habitat baseline of the Application Site is summarised in **Table 3-1**. The area habitat features present within the Application Site are shown on the Habitat Baseline Plan (**Figure A-3**) provided in **Appendix A**. Condition assessment sheets, where required, are provided in **Appendix E**. These provide summary descriptions of the area habitat features present and the results of their condition assessment.

3.2.2 Hedgerow Baseline

The hedgerow baseline of the Application Site is summarised in **Table 3-2**. The linear hedgerow features present within the Application Site are shown on the Habitat Baseline Plan (**Figure A-3**) provided in **Appendix A**. Completed condition assessment sheets, where required, are included in **Appendix E**. These provide summary descriptions of the hedgerow features present and the results of their condition assessment.



3.2.3 Watercourse Baseline

Linear watercourse features are not present in the Application Site.



Table 3-1 – Area Habitat Baseline

Baseline Ref ¹⁹	Broad Habitat	Habitat Type	Area (ha)	Distinctiveness		Condition		Strategic Significance		Ecological Baseline
				Band	Score	Band	Score	Band	Multiplier	Habitat Units
1	Grassland	Other neutral grassland	0.092	Medium	4	Moderate	2	Low	1	0.74
2	Individual trees	Urban tree	0.0489 ²⁰	Medium	4	Good	3	Low	1	0.59
Total Habitat Area (ha)			0.14							
Total Site Area (ha) excluding area of individual trees			0.09							
Total Habitat Units										1.32

Table 3-2 – Hedgerow Baseline

Baseline Ref ²¹	Hedgerow Type	Length (km)	Distinctiveness		Condition		Strategic Significance		Ecological Baseline
			Band	Score	Band	Score	Band	Multiplier	Hedgerow Units
1	Native hedgerow	0.03	Low	2	Good	3	Low	1	0.18
Total Length (km)		0.03							
Total Hedgerow Units									0.18

¹⁹ Refer to Habitat Baseline Plan

²⁰ The baseline includes 3 individual medium trees. The Metric allows the value of individual trees to be measured and has a 'tree helper' function to automate an area calculation that can be used in the Metric. This area is not included in the total Site area.

²¹ Refer to Habitat Baseline Plan



4. Proposed Design

The proposed design used in this assessment is based on the landscape design plans (see **Figure A-2** in **Appendix A**).

The following sections summarise the habitat intervention proposals, which have taken into account the BNG good practice principles, the mitigation hierarchy and the biodiversity gain hierarchy²² and highlights how each have been met and considered for the Proposed Scheme.

The post-development design, illustrated using the Metric habitat types, is shown on the Post-Development Habitat Plan (**Figure D-1**) provided in **Appendix D**.

4.1 Strategic Significance

The following post-development strategic significance has been applied:

- All post-development habitats have been assigned as having low strategic significance as the Site does not fall within an area mapped for potential measures under the LNRS, nor are the proposed interventions consistent with the mapped potential measure in the LNRS.

4.2 Habitat Retention and Enhancement

4.2.1 Area Habitat Retention

A summary of area habitat retention²³ and enhancement²⁴ is provided in Table 4-1.

A summary of the habitat baseline of the Application Site which is proposed to be retained²⁵ is provided on **Figure A-4** in **Appendix A** below. Based on the current proposals, there will be a total loss of 0.08 ha of Other neutral grassland. While the Proposed Scheme will retain existing trees, it is important to note that 'Urban trees' are point features; the Metric has calculated an 'artificial' area to generate biodiversity units. This area does not count towards the total area. Therefore, any habitat creation proposals (including built development) need to address the loss of 0.08 ha of Other neutral grassland within the Site.

In applying the mitigation hierarchy, the Proposed Scheme has sought to avoid the loss of individual trees by retaining all baseline individual trees and has sought to retain as much Other neutral grassland as is practicably

²² Habitat enhancement is where habitat is retained and there is an improvement in condition compared to the baseline state, a change to a higher distinctiveness habitat within the same broad habitat group compared to the baseline state or restoration of relict high or very high distinctiveness habitats, or restoration of intertidal habitats.

²³ Habitat retention is when there is no loss of habitat, when habitat is retained in its baseline condition, and when there is no action to enhance the habitat.

²⁴ Habitat enhancement is where habitat is retained and there is an improvement in condition compared to the baseline state, a change to a higher distinctiveness habitat within the same broad habitat group compared to the baseline state or restoration of relict high or very high distinctiveness habitats, or restoration of intertidal habitats.

²⁵ Habitat retention is the retention of baseline habitat in its baseline condition with no proposals to enhance or create the habitat.



possible, however, this will be enhanced and is therefore discussed further in **Section 4.2.3**. Where loss cannot be avoided this is because the area is required for the development of the new booster station.

4.2.2 Hedgerow Retention

A summary of hedgerow habitat retention and enhancement is provided in **Table 4-2**. Based on the current Scheme proposals, there will be a total loss of 0.01 km of hedgerow features.

4.2.3 Area Habitat Enhancement Proposals

A summary of area habitat retention²³ and enhancement²⁴ is provided in **Table 4-1**.

A summary of the habitat baseline of the Application Site which is proposed to be enhanced is provided on **Figure A-4** in **Appendix A** below. Based on the current proposals, 0.015 ha of Other neutral grassland in moderate condition will be enhanced to Other neutral grassland in good condition.

In order to achieve good condition, the grassland will be managed to meet the following criteria;

- On average the cover of herb species will be >20%, with no grasses sown throughout and rye grass and white clover coverage will be less than 20%;
- There will be an average of >8 species per square metre (to address Criteria A of the condition assessment criteria);
- Sward height will be varied with at least 20% of the sward being >7 cm and 20% <7cm (Criteria B);
- There will be no bracken and scrub cover will be less than 5% (Criteria D);
- Coverage of species indicative of suboptimal conditions (creeping buttercup for example) and physical damage is less than 5%, no invasive species will be present (Criteria E);
- There will be 10 or more vascular plant species present per meter squared (Criteria F).

Other neutral grassland will meet the above five criteria and therefore be classified as good condition.

4.2.4 Hedgerow Enhancement Proposals

There are no current opportunities to enhance retained hedgerow features.



Table 4-1 – Area Habitat Retention/ Enhancement

Baseline Ref ²⁶	Broad Habitat	Habitat Type	Baseline Area (ha)	Ecological Baseline	Area Retained (ha)	Area Enhanced (ha)	Baseline Units Retained	Baseline Units Enhanced	Area Habitat Lost (ha)	Baseline Units Lost
				Habitat Units						
1	Grassland	Other neutral grassland	0.092	0.374	0.00	0.015	0.00	0.12	0.08	0.62
2	Individual trees	Urban tree	0.0489	0.59	0.0489	0.00	0.59	0.00	0.00	0.00
Total Area Retained (ha)					0.05					
Total Area Enhanced (ha)						0.02				
Total Baseline Units Retained							0.59			
Total Baseline Units Enhanced								0.12		
Total Area Habitat Lost (ha)									0.08	
Total Area Lost (excluding area of Individual trees and Green walls) (ha)									0.08	
Total Baseline Units Lost										0.62

²⁶ Refer to Habitat Baseline Plan



Table 4-2 – Hedgerow Retention/ Enhancement

Baseline Ref ²⁷	Hedgerow Type	Baseline Length (km)	Ecological Baseline	Length Retained (km)	Length Enhanced (km)	Baseline Units Retained	Baseline Units Enhanced	Length Lost (km)	Baseline Units Lost
			Hedgerow Units						
1	Native hedgerow	0.03	0.18	0.019	0.00	0.11	0.00	0.01	0.07
Total Length Retained (km)				0.02					
Total Length Enhanced (km)					0.00				
Total Baseline Units Retained						0.11			
Total Baseline Units Enhanced							0.00		
Total Length Lost (km)								0.01	
Total Baseline Units Lost									0.07

²⁷ Refer to Habitat Baseline Plan



4.3 Habitat Creation

Based on the proposed design, there will be a total loss of 0.08 ha of area habitat features and a total loss of 0.01 km of hedgerow features. To compensate for this, habitat creation will include new grassland, individual trees and hedgerow.

Descriptions of the habitat creation proposals (including the translation from landscape design codes to Metric habitat types), assumptions for realistic target condition scores and rationale for assignment of medium or high strategic significance are provided in **Table 4-3**.

Table 4-3 – Habitat Creation Proposals

Landscape Feature	Metric Habitat Type	Target Condition and Assumptions
Proposed Booster station	Urban – Developed land; sealed surface	N/A - Other
Grassland	Other neutral grassland	Good – on average the cover of herb species will be >20%, with no grasses sown throughout and rye grass and white clover coverage will be less than 20%. There will be an average of >8 species per square metre (Criteria A). Sward height will be varied with at least 20% of the sward being >7 cm and 20% <7cm (B). There will be no bracken and scrub cover will be less than 5% (D). Coverage of species indicative of suboptimal conditions (creeping buttercup for example) and physical damage is less than 5%, no invasive species will be present (E). There will be 10 or more vascular plant species present per meter squared (F). Other neutral grassland will meet five criteria and therefore be classified as good condition.
Proposed trees	Individual trees – urban trees	Good – all newly planted trees to be native (silver birch) with 100-120mm girth therefore will be small trees. The trees are considered to pass four criteria including A (tree is native), B (individual trees automatically pass this), C (tree is mature), D (there is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity, and there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height) and F (more than 20% of the tree canopy area is oversailing vegetation beneath), therefore classified as good condition.
Proposed native hedgerow	Species-rich native hedgerow	Moderate – species-rich native planting of transplants to give >5 species per 30 m section. It has an assumed height of less than 1.5 m in length (A1) and width (A2) based on the landscape design. It is assumed that management would allow a gap to be present at the base of the hedgerow (B1) and the canopy to be continuous (B2). As it is located within the enhanced other neutral grassland, it is assumed to have undisturbed ground on both sides of the hedgerow (C1 and C2). It is assumed to be managed regularly therefore free of invasive species (D1) but assumed to be subject to management or damage from the booster station (D2).

Landscape Feature	Metric Habitat Type	Target Condition and Assumptions
		Therefore, it is assumed to not fail both attributes from any two functional groups, and as such is categorised as 'moderate' condition. If the hedgerow is either greater than 1.5 m in length or width (A1 or A2), it can achieve a 'good' condition. Species mix is to include field maple, hornbeam, hazel, hawthorn, beech, holly, wild privet, crab apple, blackthorn, dog rose and wych elm.

4.3.1 Area Habitat Creation Proposals

A summary of the area habitat units delivered by the habitat creation proposals is provided in **Table 4-4**. The standard temporal multiplier has been adjusted to reflect the anticipated construction duration of less than 1 year.

4.3.2 Hedgerow Creation Proposals

A summary of the hedgerow units delivered by the hedgerow creation proposals is provided in **Table 4-5**. The standard temporal multiplier has been adjusted to reflect the anticipated one-year construction duration, i.e. it is assumed that there will be a one-year delay between site clearance and hedgerow creation.

Table 4-4 – Area Habitat Creation Proposals

Broad Habitat	Proposed Habitat Type	Area (ha)	Distinctiveness	Condition	Strategic Significance	Habitat Units Delivered
Urban	Developed land; sealed surface	0.02	V. Low	N/A - Other	Low	0.00
Individual trees	Urban tree	0.0204	Medium	Good	Low	0.08
Grassland	Other neutral grassland	0.056	Medium	Good	Low	0.47
Total Habitat Area (ha)		0.10				
Total Site Area (ha) excluding area of individual trees		0.08				
Total Units						0.55

Table 4-5 – Hedgerow Creation Proposals

Hedgerow reference	Hedgerow type	Length (km)	Distinctiveness	Condition	Strategic significance	Hedgerow units delivered
1	Species-rich native hedgerow	0.027	Medium	Moderate	Low	0.18
2	Species-rich native hedgerow	0.016	Medium	Moderate	Low	0.11
3	Species-rich native hedgerow	0.012	Medium	Moderate	Low	0.08
Total length (km)		0.06				
Total hedgerow units delivered						0.37

5. BNG Metric

5.1 Habitat Trading

The following section identifies whether habitat trading rules have been met.

5.1.1 Area Habitat

Very High Distinctiveness Habitat

The Proposed Scheme does not result in the loss of very high distinctiveness habitat.

High Distinctiveness Habitat

The Proposed Scheme does not result in the loss of high distinctiveness habitat.

Medium Distinctiveness Habitat

The Proposed Scheme will result in a net gain of 0.08 habitat units for Individual – urban trees, however, there will also be a unit change -0.10 of Other neutral grassland. To satisfy the BNG trading rules, the loss of Other neutral grassland should be addressed through the creation of the same broad habitat (i.e. grassland) or a higher distinctiveness habitat required. As such, this loss cannot be addressed through the provision of Individual – urban trees and therefore the trading rules for medium distinctiveness habitats have not been met.

Low Distinctiveness Habitat

The Proposed Scheme does not result in the loss of low distinctiveness habitat.

5.1.2 Hedgerow Module

Very High Distinctiveness Habitat

The Proposed Scheme does not result in the loss of very high distinctiveness hedgerow.

High Distinctiveness Habitat

The Proposed Scheme does not result in the loss of high distinctiveness hedgerow.

Medium Distinctiveness

The Scheme will currently result in the net gain of 0.37 hedgerow units for Species-rich native hedgerow. As such, trading rules for medium distinctiveness hedgerow are met and the required biodiversity net gain is delivered.



Low Distinctiveness

The Proposed Scheme results in the loss of 0.07 hedgerow units for Native hedgerow, a low distinctiveness habitat. However, this loss is addressed through the gain of 0.37 units from medium distinctiveness hedgerow habitats and therefore the trading rules are satisfied for hedgerows.

5.2 Headline Results

Using the Metric, the Application Site has the following pre-development biodiversity unit values:

- Habitat units: 1.32
- Hedgerow units: 0.18

The proposed design (habitat retention, habitat enhancement, habitat creation) is predicted to deliver:

- Habitat units: 1.30
- Hedgerow units: 0.48

The assessment shows that the Proposed Scheme is predicted to result in:

- A net loss of 0.03 habitat units, with a predicted total net change of -1.91%.
- A net gain of 0.30 hedgerow units, with a predicted total net change of +167.89%.

The Proposed Scheme does not deliver on-site biodiversity gains in habitat units but it does deliver on-site biodiversity gains in hedgerow units, which exceed the statutory 10% increase in biodiversity value for hedgerow features.

To achieve the statutory 10% increase in biodiversity value for area habitat features, the Proposed Scheme needs to deliver 1.46 habitat units; there is currently a deficit of 0.16 habitat units. However, this assessment accounts for on-site changes only (i.e. changes to biodiversity within the Application Site only). The Proposed Scheme will need to achieve the 10% increase in biodiversity value for area habitat features through either registered off-site biodiversity gains or statutory biodiversity credits (both of which will need to comply with the habitat trading rules which are not currently met).

If off-site biodiversity units cannot be bought, then statutory biodiversity credits will need to be purchased. As it is a last resort, the requirement to purchase statutory biodiversity credits will need to be proved by:

- Evidencing why on-site BNG was not possible.
- Evidencing that three local or national off-site unit suppliers, habitat banks or trading platforms have been approached and that insufficient off-site options are available²⁸.

A Biodiversity Gain Plan will be submitted and approved by Havant Borough Council before commencement of construction of the Proposed Scheme.

The Biodiversity Gain Plan will:

²⁸ If the Proposed Scheme needs less than 0.25 biodiversity units (area or linear), the applicant can buy statutory credits without following this step.



- Demonstrate how the Proposed Scheme will meet the statutory BNG requirements.
- Provide evidence of the decisions made in this BNG assessment.

A Habitat Management and Monitoring Plan (HMMP) will also be produced if the Proposed Scheme relies on off-site biodiversity gains. The HMMP will detail the measures required to ensure the habitat creation and enhancement proposals reach their target condition and give confidence that every effort will be made to enable the Proposed Scheme to deliver the predicted biodiversity units. If off-site units are to be delivered by a habitat bank, then the HMMP would be provided by the provider.

An HMMP will also be required if Havant Borough Council deem that any on-site biodiversity gains are 'significant enhancements'; this can include the creation or enhancement of habitats of medium or higher distinctiveness. Hedgerow habitats being created are of medium distinctiveness and therefore a HMMP is likely required.



APPENDICES

Appendix A. Proposed Scheme Plans

A.1 Site Location Plan

Figure A-1 - Site location plan





Legend

 Application Site Boundary



Base Mapping:© Google 2024

Original scale: 1:200.00	Figure No. A-1
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AtkinsRéalis ©, Woodcote Grove, Ashley Road,
Epsom, England, KT18 5BW

Project: Racton Pumping Station

Client: Trant Engineering Ltd

Title: Site Location Plan

Drawn by: BB Date: 31/03/2026	Checked by: SB Date: 02/04/2026	Reviewed by: MG Date: 07/04/2026
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A.2 Landscape Proposal Plans

Figure A-2 - Landscape Proposal Plan



A vertical scale bar labeled "Millimetres" with markings at 0, 10, and 100.

PLANTING NOTES

All planting to be in accordance with series 3000 Specification for Highways Works

Preparation and cultivation:

All groundwork shall comply with BS 3882 and BS 8601 for topsoil. Site won topsoil and subsoil material is to be screened, free from contamination, building materials, stones and roots over 50mm. Clean imported topsoil is to be in compliance with BS 3882.

Low nutrient topsoil to be used for species rich grass areas.

Subsoil to be loosed to min 500mm depth by ripping at 600mm centres using appropriate tillage equipment. After spreading topsoil, rip at 300mm centres to depth of 300mm for grass areas and 600mm for planting areas.

Further cultivation: any large, compacted lumps of soil shall be broken down by further appropriate cultivation (in accordance with BS 4428) to produce a fine tilth suitable for planting (<30mm), turfing and seeding (<10mm).

New trees and shrubs shall be planted into established grass areas (either existing or newly seeded as part of the works).

All site preparation, planting and maintenance works shall be carried out in accordance with British Standard BS 4428:1989 code of practice for general landscape operations (excluding hard surfaces).

All trees and plants supplied shall comply with the requirements of all parts of British Standard BS 3936 specification for nursery stock, BS 8545:2014 trees: from nursery to independence in the landscape. Recommendations & The National Plant Specification.

All new tree planting shall be positioned in accordance with the requirements of table A.1 of British standard BS 5837:2012 Trees in Relation to Design, Demolition and Construction –Recommendations.

Tree planting pits are to be suitable for each root ball, excavated to a minimum depth/width 1000mm with slow release fertiliser granules fully incorporated within backfill material. For extra heavy standards and heavy standards the staking shall be undertaken after the tree has been positioned. Two stakes, each of 3 m length shall be driven down the side of the rootball and into the pit to a depth of 500 mm below the bottom of the pit. The stakes shall be angled outwards to between 5° and 10° at the top and pulled in moderately by tensioning all the supporting bands equally. The stakes shall be equally spaced and shall not pass through the rootball.

Timing and condition of stock:

The condition of all proposed planting stock is to be in accordance with BS 3936:1992 and BS 5236. All stock shall be sourced from a HTA (Horticultural Trade Association) approved nursery. Rootballed trees are to be planted between mid-October and early April; outside of this period, all rootballed trees are to be replaced with containerised stock. All other planting to be undertaken between September and March, except when the ground is frozen and/or snow bound, waterlogged, and during prolonged dry and windy conditions. Upon completion of planting all plants are to be fully watered in to field capacity. All dead or dying foliage and branches to be pruned.

Grass seeding:

Seed is best sown in the autumn or spring but can be sown at other times of the year if there is sufficient warmth and moisture in the soil. Moisture may be supplied artificially by watering but must be thorough enough to penetrate at least 100mm, and continued after sowing if dry weather follows. Seed should be surface sown onto freshly prepared seed bed and can be applied by machine or broadcast by hand. To get an even distribution, divide the seed into two or more parts and sow in overlapping sections.

Landscape Maintenance:

Damage or disturbance to soil structure, planting, grass, fencing, hard landscaping, structures or buildings: reinstate to original condition.

Watering: as necessary for the continued thriving of all planting, wet to field capacity

Species rich grassland: cut once a year in august or September once flowers have gone to seed. cut to height of 100mm and remove all arisings.

Failures to any planting and seeding to be made good and replaced in the next suitable planting /seeding season
All planting and trees to be reformed after strong winds or frost heave. Check all tree stakes and adjusted as needed.

Planting areas and around base of trees to be kept weed free.

Location Plan 1:2000

This map shows the site highlighted in red, situated in a residential area. The site is bounded by a road to the north and a road to the east. The surrounding area includes various residential plots, roads, and a railway line. The map is labeled with 'Location Plan 1:2000' in the top left corner.

 **APPLICATION BOUNDARY**

 EXISTING TREES TO BE RETAINED

PROPOSED TREES
To be planted as standards, 10-12cm girth
Bpn = Betula pendula (Silver Birch)

MATURE CANOPY SPREAD
Approximate average size

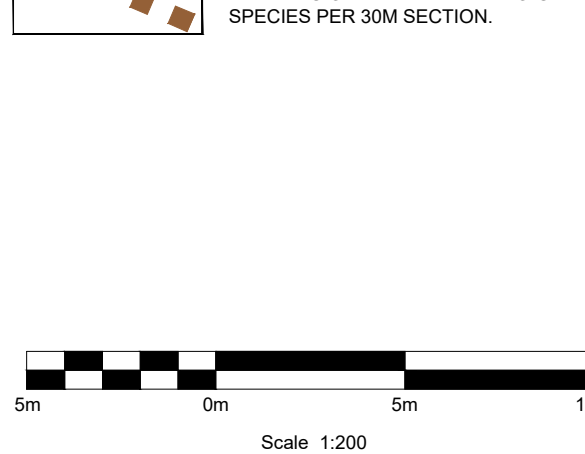
 TREE ROOT BARRIER
gtRootbarrier 325, 1m depth or similar, to be installed in
locations shown on plan to protect services and
pavements

 EXISTING GRASS TO BE RETAINED

PROPOSED SPECIES-RICH GRASS
G3C OTHER NEUTRAL GRASSLAND, TO BE SEED
WITH A SPECIES-RICH MEADOW MIXTURE

 EXISTING HEDGEROWS TO BE REMOVED

NATIVE HEDGE
H2A5 SPECIES-RICH NATIVE HEDGEROW
PLANTING OF TRANSPLANTS TO GIVE >5
SPECIES PER 30M SECTION.



P08	22/05/26	PROPOSED HEDGE AMENDED	SN	DB	JL	
P07	01/05/26	PLAN UPDATED	SN	DB	JL	
P06	17/03/26	UPDATED TO LATEST TRANT PROPOSALS	SN	DB	JL	
P05	18/10/24	PROPOSED TREE LOCATIONS AMENDED	DN	DB	JL	
P04	14/10/24	MINOR UPDATES	DB	DB	JL	
P03	09/10/24	TREES AMENDED, ROOT BARRIER AND CANOPY SPREAD ADDED	DB	DB	JL	
P02	26/09/24	MEADOW MIXTURE CHANGES, FOR REVIEW AND COMMENTS	DS	DB	JL	
P01	20/09/24	FOR REVIEW AND COMMENTS	DS	DB	JL	
Rev.	Date	Description	By	Chk'd	App'd	

Drawing Status	Suitability
FOR INFORMATION	S2



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Client	
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Project Title

RACTON PUMPING STATION

Drawing Title

LANDSCAPE
PROPOSALS PLAN

Scale 1:200	Designed DB	Drawn DS	Checked DB	Authorised JL
Original Size A1	Date 13/09/24	Date 13/09/24	Date 18/09/24	Date 20/09/24
Drawing Number 5227179-ATK-XX-XX-DR-L-1000				Revision P08

A.3 Baseline Habitat Plan

Figure A-3 - Baseline Habitat Plan





Legend

-  Application Site Boundary
-  Individual - urban trees
-  Native hedgerow
-  g3c - other neutral grassland



Base Mapping:© Google 2024

Original scale: 1:200.00	Figure No. A-2
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AtkinsRéalis ©, Woodcote Grove, Ashley Road,
Epsom, England, KT18 5BW

Project: Racton Pumping Station

Client: Trant Engineering Ltd

Title: Baseline Habitat Plan

Drawn by: BB Date: 31/03/2026	Checked by: SB Date: 02/04/2026	Reviewed by: MG Date: 07/04/2026
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A.4 Retained and Enhanced Habitat Plan

Figure A-4 – Retained and Enhanced Habitat Plan







Legend

-  Application Site Boundary
-  Individual - urban trees (retained)
-  Native hedgerow (retained)
-  g3c - other neutral grassland (enhanced)

0510 m

Base Mapping:© Google 2024

Original scale:
1:200.00

Figure No. A-4

AtkinsRéalis ©, Woodcote Grove, Ashley Road,
Epsom, England, KT18 5BW

Project: Racton Pumping Station

Client: Trant Engineering Ltd Title:

Retained and Enhanced Habitat Plan

Drawn by: BB
Date: 31/03/2026

Checked by: SB
Date: 02/04/2026

Reviewed by: MG
Date: 07/04/2026

INSERT FIGURE A-4



Appendix B. Summary of Relevant BNG Legislation

The relevant primary legislation for the statutory framework for BNG is principally set out under Schedule 7A (Biodiversity Gain in England) of the Town and Country Planning Act 1990²⁹, which was inserted into the 1990 Act by Schedule 14 of the Environment Act 2021³⁰. The biodiversity gain objective (the 'biodiversity gain condition') under the statutory framework for BNG is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of a development site. The increase in biodiversity value can be achieved through on-site biodiversity gains, registered off-site biodiversity gains or statutory biodiversity credits.

The Levelling-up and Regeneration Act 2023³¹ has amended Schedule 7A of the Town and Country Planning Act 1990:

- Section 135 Biodiversity net gain: pre-development biodiversity value and habitat enhancement.
 - This provides a clause to ensure that habitats assessed for BNG during pre-development calculations are taken at their highest value on site prior to any proposed clearance that could have been undertaken during a previous activity (e.g., a previous planning application). This is to reduce incentives to clear habitats on potential BNG sites or off-site contributions to BNG.

The relevant secondary legislation (BNG regulations) to support the delivery of the statutory framework for BNG is summarised in **Table B-1**.

Table B-1 – Summary of BNG Regulations

Regulation	Summary
The Biodiversity Gain (Town and Country Planning) (Consequential Amendments) Regulations 2024 ³²	These regulations make further consequential amendments to existing primary legislation on planning, to integrate the BNG framework. These amendments include the definition of a planning authority under Schedule 7A which sets out the BNG framework.
The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024 ³³	These regulations commence BNG for most types of new planning applications and provides transitional arrangements for section 73 permissions. This includes: ▪ Provision for biodiversity gain as condition of planning permission. ▪ Provision for a register of biodiversity gain sites (the 'biodiversity gain site register'). ▪ Arrangement for the purchase of statutory credits.
The Biodiversity Gain Requirements (Exemptions) Regulations 2024 ³⁴	These regulations prescribe exemptions for categories of development to which BNG does not apply. This includes the following: ▪ Householder development. Development which is subject of a householder application as defined within Article 2(1) of the Town and

²⁹ <https://www.legislation.gov.uk/ukpga/1990/8/contents>

³⁰ <https://www.legislation.gov.uk/ukpga/2021/30/schedule/14/enacted>

³¹ <https://www.legislation.gov.uk/ukpga/2023/55/contents>

³² <https://www.legislation.gov.uk/ukdsi/2024/9780348254419>

³³ <https://www.legislation.gov.uk/ukdsi/2024/44/made>

³⁴ <https://www.legislation.gov.uk/ukdsi/2024/47/contents/made>



Regulation	Summary
	Country Planning (Development Management Procedure) (England) Order 2015. - Development granted planning permission by a development order under section 59. This includes permitted development rights. - Development subject to the de minimis exemption. Development that does not impact a priority habitat and impacts less than 25 square metres (e.g. 5 m by 5 m) of habitat, or 5 metres of linear habitats such as hedgerows. - Self-build and custom build development. Development which: - consists of no more than 9 dwellings, and - is carried out on a site which has an area no larger than 0.5 hectares, and - consists exclusively of dwellings which are self-build or custom housebuilding as defined in section 1(A1) of the Self-build and Custom Housebuilding Act 2015. - Urgent Crown development granted permission under section 293A Town and Country Planning Act 1990. - Development of a biodiversity gain site. Development which is undertaken solely or mainly for the purpose of fulfilling, in whole or in part, the biodiversity gain condition which applies in relation to another development. - Development related to the high speed railway transport network. Development forming part of, or ancillary to, the high speed railway transport network comprising connections between all or any of the places or parts of the transport network specified in section 1(2) of the High Speed Rail (Preparation) Act 2013.
The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations 2024 ³⁵	These regulations amend the Town and Country Planning (Development Management Procedure) (England) Order 2015 and the Town and Country Planning (Section 62A Applications) (Procedure and Consequential Amendments) Order 2013 to include provisions in respect of applications for planning permission and the submission and determination of Biodiversity Gain Plans, as well as modifications of Schedule 7A of the Town and Country Planning Act 1990 for phased development.
The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024 ³⁶	These regulations set out the modifications for irreplaceable habitat. The following habitats are considered to be irreplaceable for BNG metric calculation purposes: - Blanket bog - Lowland fens - Limestone pavements - Coastal sand dunes - Ancient woodland

³⁵ <https://www.legislation.gov.uk/uksi/2024/50/contents/made>

³⁶ <https://www.legislation.gov.uk/uksi/2024/48/contents/made>



Regulation	Summary
	▪ Ancient trees and veteran trees ▪ <i>Spartina</i> saltmarsh swards ▪ Mediterranean saltmarsh scrub
The Biodiversity Gain Site Register Regulations 2024 ³⁷	These regulations allow for fees to be charged for applications to register land in the biodiversity gain site register and allows the register operator (Natural England) to issue financial penalties where false or misleading information is provided.

³⁷ <https://www.legislation.gov.uk/uksi/2024/45/contents/made>



Appendix C. BNG Principles, Mitigation Hierarchy and Biodiversity Gain Hierarchy

C.1 BNG Good Practice Principles

Table C-1 - BNG good practice principles

Principle	In practice
1. Apply the mitigation hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
2. Avoid losing biodiversity that cannot be offset by gains elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.
3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.
4. Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between losses occurring and the gains being fully realised.
5. Make a measurable net gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices when: ▪ Delivering compensation that is ecologically equivalent in type, amount and condition and that accounts for the location and timing of biodiversity losses ▪ Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation ▪ Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels ▪ Enhancing existing or creating new habitat ▪ Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
8. Create a net gain legacy	Ensure net gain generates long-term benefits by:



Principle	In practice
	▪ Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity³⁸ ▪ Planning for adaptive management and securing dedicating funding for long-term management ▪ Designing Net Gain for biodiversity to be resilient to external factors, especially climate change ▪ Mitigating risks from other land uses ▪ Avoiding displacing harmful activities from one location to another ▪ Supporting local-level management of Net Gain activities
9. Optimise sustainability	Prioritise BNG and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
10. Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

C.2 Mitigation Hierarchy

Expanding on Principle 1 of the good practice principles for achieving BNG, the mitigation hierarchy and the avoidance of impacts to irreplaceable habitats must be applied when committing to achieving BNG. This is reinforced through the publication of the British Standard BS 8683:2021¹.

The sequential approach to applying the mitigation hierarchy is to:

- Avoid – Where possible habitat damage should be avoided.
- Minimise – Where possible habitat damage and loss should be minimised.
- Remediate – Where possible any damaged or lost habitat should be restored.
- Compensate – As a last resort, damaged or lost habitat should be compensated for³⁹.

Application of the mitigation hierarchy is encouraged by the Metric because BNG can be more easily achieved by avoiding the loss of habitat through either retention or enhancement. Principle 2 of the Metric adds “*The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands.*”

C.3 Biodiversity Gain Hierarchy

The Biodiversity Gain Hierarchy and its effect for the purpose of the statutory framework for BNG is set out in Articles 37A and 37D of the Town and Country Planning (Development Management Procedure) (England) Order 2015. This hierarchy (which does not apply to irreplaceable habitats) sets out a list of priority actions:

³⁸ For projects being consented through the Town and Country Planning Act 1990, the Environment Act 2021 now makes provision for habitat enhancements undertaken to deliver biodiversity gain to be maintained for a period of at least 30 years after the development is completed.

³⁹ Compensation should be undertaken on-site. If this is not possible then off-site habitat compensation may be an option; however, this should be undertaken as close to the on-site area as possible.



- First, in relation to on-site habitats which have a medium, high and very high distinctiveness, the avoidance of adverse effects from the development and, if they cannot be avoided, the mitigation of those effects.
- Then, in relation to all on-site habitats which are adversely affected by the development, the adverse effect should be compensated by prioritising in order, where possible, the enhancement of existing on-site habitats, creation of new on-site habitats, allocation of registered off-site gains and finally the purchase of biodiversity credits.



Appendix D. Post-Development Habitat Plan

Figure D-1 – Post-development Habitat Plan







Legend

-  Application Site Boundary
-  Individual - urban trees
-  Native hedgerow
-  g3c - other neutral grassland
-  u1b - developed land, sealed surface

0 5 10 m



Base Mapping:© Google 2024

Original scale: 1:200.00	Figure No. D-1
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AtkinsRéalis ©, Woodcote Grove, Ashley Road, Epsom, England, KT18 5BW

Project: Racton Pumping Station

Client: Trant Engineering Ltd

Title: Post-development Habitat Plan

Drawn by: EH Date: 29/05/2026	Checked by: SB Date: 29/05/2026	Reviewed by: SB Date: 29/05/2026
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Appendix E. Condition Assessment Sheets

E.1 Other Neutral Grassland

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Types			
Grassland - Other neutral grassland			
On-site or off-site, site name and location	On site, Racton Booster Station, Havant	Survey date	29/01/2026
Limitations (if applicable)	N/A	Survey reference (if relating to a wider survey)	N/A
Grid reference	SU 71151 06837	Habitat parcel reference	N/A
Habitat Description			
Other Neutral Grassland surrounding by residential property to the north, east and south. Other Neutral Grassland extends to the west, with Hermitage Stream 50 m west of the Survey Area. Frequent occurrences of creeping buttercup, common bent, common daisy, red fescue and other species indicative of Other Neutral Grassland.			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Yes	On average >20% cover of herb species. >8 species per m/s. No grasses sown throughout and cover of rye grass and white clover is ~20%.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for	No	Sward height not varied.



	insects, birds and small mammals to live and breed.		
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	No	<1% cover of bare ground.
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Yes	No bracken. Scrub cover <5%.
E	Combined cover of species indicative of suboptimal condition³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	Yes	Coverage of creeping buttercup, white clover, cow parsley is less than 5%. Some patches of creeping buttercup.
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	Yes	Average of ~13 spp. in quadrants surveyed. Oxeye daisy, Yorkshire fog, rough meadow grass, cocks foot, yarrow, rib wort plantain.
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		Yes	
Number of criteria passed		4	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/√	
Non-acid grassland types (Result out of 6 criteria)			



Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	×	
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	✓	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	×	
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 - Professional judgement should be used alongside the UKHab description. Footnote 2 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3 - Species indicative of suboptimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>. There may be additional relevant species local to the region and or site. Footnote 4 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. Footnote 5 – Wildlife and Countryside Act 1981 (as amended).			



E.2 Native Hedgerow

Condition sheet: HEDGEROW Habitat Types				
Habitat Type				
Native hedgerow				
Habitat Description				
Native hedgerow on the east side of the Site, dominated by hawthorn with occasional elder.				
ukhab – UK Habitat Classification				
On-site or off-site, site name and location	On site, Racton Booster Station, Havant	Survey date	29/01/2026	
Limitations (if applicable)	N/A	Survey reference (if relating to a wider survey)	N/A	
Grid reference	SU 71157 06838	Habitat parcel reference	N/A	
Condition Assessment Details				
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria. This assessment is based on the Hedgerow Survey Handbook¹ and Favourable Conservation Status document². For further clarification please refer to the Hedgerow Survey Handbook. Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.				
Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)	Notes (such as justification)
Core groups - applicable to all hedgerow types				
A1	Height	>1.5 m average along length The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to	Yes	



			good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).		
A 2 .	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).	Yes	
B 1 .	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).	Yes	
B 2 .	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).	Yes	
C 1 .	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary	Yes	



			habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.		
C 2	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	No	cow parsley and some nettle.
D 1	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA ³) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website ⁴ , as well as the BSBI website ⁵ where the 'Online Atlas of the British and Irish Flora' ⁶ contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website ⁷ .	Yes	no INNS identified
D 2	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).	No	signs of human impact (dumping/litter)
Additional group - applicable to hedgerows with trees only					
E 1	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.	N/A	
E 2	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.	N/A	



		wild animals, pests or diseases, or human activity.			
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.					
Condition categories for hedgerows without trees					
Category	Category Requirements	Metric Score			
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3			
Moderate	No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2			
Poor	Fails a total of more than 4 attributes; OR <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1			
Score achieved:			Good		
Suggested enhancement interventions to improve condition score					
Footnotes					
Footnote 1 – DEFRA (2007) <i>Hedgerow Survey Handbook. A standard procedure for local surveys in the UK.</i> [online] Available on: layout (hedgelink.org.uk)					
Footnote 2 – STALEY, J.T. ET AL. (2020) <i>Definition of Favourable Conservation Status for Hedgerows.</i> [online] Available on: Definition of Favourable Conservation Status for Hedgerows - RP2943 (naturalengland.org.uk)					
Footnote 3 – Wildlife and Countryside Act 1981 (as amended).					
Footnote 4 – CHEFFINGS, C. M. et al. (2005) <i>The Vascular Plant Red Data List for Great Britain.</i> Species Status 7: 1-116. [online] Available on: The Vascular Plant Red Data List for Great Britain (Species Status No. 7) JNCC Resource Hub					
Footnote 5 – BOTANICAL SOCIETY OF BRITAIN AND IRELAND (BSBI). <i>Definitions: wild, native or alien?</i> [online] Available on: Definitions: wild, native or alien? – Botanical Society of Britain & Ireland (bsbi.org)					
Footnote 6 – BSBI and Biological Records Centre (BRC) (2022) <i>Online Atlas of the British and Irish Flora.</i> [online] Available on: Acknowledgements Online Atlas of the British and Irish Flora (brc.ac.uk)					
Footnote 7 – GB NON-NATIVE SPECIES SECRETARIAT (GBNNSS) (2022) Available on: Home » NNSS (nonnativespecies.org)					



Footnote 8 – See gov.uk standing advice on ancient and veteran trees. Available from: [Keepers of time: ancient and native woodland and trees policy in England \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/61212/Keepers_of_time_-_ancient_and_native_woodland_and_trees_policy_in_England.pdf) and [Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61212/Ancient_woodland,_ancient_trees_and_veteran_trees_advice_for_making_planning_decisions_-_GOV.UK.pdf)



E.3 Individual Trees

Condition Sheet: INDIVIDUAL TREES Habitat Type			
Habitat Types			
Individual trees – Urban trees			
Habitat Description			
Individual trees (description applied to the urban or rural environment): Young trees over 7.5 cm in diameter at breast height whose canopies are not touching. Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only): Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.			
On-site or off-site, site name and location	On site, Racton Booster Station, Havant	Survey date	29/01/2026
Limitations (if applicable)	N/A	Survey reference (if relating to a wider survey)	N/A
Grid reference	SU 71144 06831	Habitat parcel reference	N/A
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Yes	Group of alder trees
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	Urban group of trees. Auto pass. All canopy connected
C	The tree is mature (or more than 50% within the block are mature) ¹ .	Yes	Mature alders present



D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes	No active management. Compost heap at base (grass cuttings)
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Yes	Large amount ivy present
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Yes	60% canopy over sailing.
Number of criteria passed			
Condition Assessment Result (out of 6 criteria)	Condition Assessment Score	Score Achieved ×/✓	
Passes 5 or 6 criteria	Good (3)	✓	
Passes 3 or 4 criteria	Moderate (2)	×	
Passes 2 or fewer criteria	Poor (1)	×	
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.			
Suggested enhancement interventions to improve condition score ²			
Footnotes			
Footnote 1 - See gov.uk standing advice on ancient and veteran trees. Available from:			
Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk)			
and:			
Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)			
Footnote 2 - Enhancement of this habitat type is only possible by improving the habitat so that it meets all Criteria B, D and F. It is not possible or appropriate to enhance individual tree/s through meeting just one or two of those Criteria, nor by meeting Criteria A, C or E.			



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