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Capital Delivery Programme

Biodiversity Net Gain Assessment

Bishop and Wolf Pumping Station and Screening Plant

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Report Ref.	107780-PEF-ZZ-602-TRP-GE-0003 Biodiversity Net Gain Assessment					
File Path	ACCDocs\Pell_Frischmann\107780 IoS\Project Files\01-WIP\IS0-Initial Status\EN-Environment & Sustainability\GE-Ecology\T - Textual\Reports					
Rev	Suit	Description	Date	Originator	Checker	Approver
P01	S4	For acceptance	04 Dec 2024	N Hawkes-Southern	C Gilby	C Gilby
P02	S4	For acceptance – updated based on Client comments	06 Jan 2025	E Samways	J Davey	J Davey

Ref. reference. Rev revision. Suit suitability.

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Executive Summary

Site Name	Bishop and Wolf Pumping Station and Screening Plant
Location and Proposed Scheme	<p>The site is located at the existing SWWL Bishop and Wolf sewage pumping station (SPS), located off Little Porth Road, Hugh Town, St Mary's, Isles of Scilly, TR21 0JG. Grid ref: SV 90241 10502.</p> <p>The proposed scheme consists of the construction of an enlarged wastewater infrastructure building, which will replace the existing Bishop and Wolf SPS building. The new building will house new variable-speed pumps and a new screening plant. The screening plant will remove objects such as rags, paper, plastics, and metals to prevent damage and clogging of downstream equipment, piping, and appurtenances as well as ensuring they do not enter the marine environment. The plant will operate intermittently as required on a 24/7 basis, operation could occur at any time.</p>
Biodiversity Net Gain	<p>This BNG assessment has been completed to quantify the baseline value and overall effect of the proposed scheme on biodiversity within the site. The BNG assessment has followed industry best practice methodologies and legislation using the Statutory Biodiversity Metric and the UKHab Habitat Map produced as part of the EclA. The Statutory Biodiversity Metric is a tool that can be used to calculate the biodiversity impact of development projects in England. It is used to ensure that development projects achieve a net gain in biodiversity, meaning that they leave the environment in a better state than they found it.</p>
Baseline Habitats	<p>The site consists of concrete hardstanding with small amounts of ruderal plant species and bramble were present within the cracks of concrete and the boundary wall; however, these formed less than 10% of the site, and the existing Bishop and Wolf pumping station building. An amenity area of grassland at Parsons Green was present adjacent to residential properties and the road, with three small sections of non-native karo (<i>Pitosporum crassifolium</i>) hedgerow present and separate the grassland from the adjacent road.</p> <p>No priority habitats were identified within the site boundary. The nearest section of priority habitat, lowland heathland, is located 60m southwest, and 195m southeast of the site.</p>
Results and Recommendations	<p>The proposed scheme can achieve an excess of 10% BNG in area habitat units within the site through the reinstatement of modified grassland at Parsons Green with either modified grassland (good condition) or other neutral grassland (moderate condition).</p> <p>Based on retention of the hedgerow alone, the proposed scheme cannot achieve the 10% BNG in linear hedgerow units.</p> <p>To achieve the required 10% for linear hedgerow units, options for additional planting have been outlined. Plant species mixes are recommended to reflect the unique flora of the Isles of Scilly and provide additional and improved habitats for pollinators.</p> <p>The Statutory Metric identifies that these can be met for the proposed scheme.</p> <p>Construction is expected to commence in early 2025. The site is anticipated to be operational in 2025. Therefore, a zero-year delay multiplier has been applied in the metric.</p> <p>Should there be any changes to the scheme, an update may be needed to the BNG metric, however the project will still likely achieve an excess of 10% BNG.</p>

1 Introduction

Pell Frischmann (PF) has been commissioned by Trant Engineering Limited (Trant, 'The Principal Contractor'), on behalf of South West Water Limited (SWWL, 'the undertaker'), to produce a Biodiversity Net Gain (BNG) Assessment for the Bishop and Wolf Pumping Station and Screening Plant on the island of St Mary's, within the Isles of Scilly archipelago (hereafter referred to as 'the proposed scheme').

This BNG assessment has been completed to quantify the baseline value and overall likely effect of the proposed scheme on BNG changes within the site. This has been achieved by comparing the site's baseline habitat with the proposed scheme value and calculations include the level of habitat retention, loss, enhancement and creation using the Statutory Biodiversity Metric. The Statutory Metric has been used in line with the appropriate User Guidance and the assessment has also been completed in line with the Best Practice Principles.

1.1 Site Location and Description

The site is located at the existing SWWL Bishop and Wolf sewage pumping station (SPS) located off Little Porth Road, Hugh Town, St Mary's, Isles of Scilly. The nearest postcode is TR21 0JG and approximate central grid reference is SV 90241 10502. The site subject to this BNG assessment consists of the land within the red line planning application boundary, as shown in Figure 1 Site Location Plan.

The existing SPS is located behind retail, leisure, and residential properties along Garrison Lane, in the middle of Hugh Town, and is accessed from Little Porth Road via a shared access point.

The site consists of concrete hardstanding and the existing SPS. A wall separates the existing Bishop and Wolf pumping station from the Bishop and Wolf pub beer garden. Due to the increase in footprint of the building, a small section of the Bishop & Wolf Pub's outside space will be included in the proposal.

The redline boundary includes an approximate 162m length of Carriageway extending from 14 Silver Street, along Little Porth up to 10 Parsons Field. The redline boundary has been produced to incorporate all land necessary to carry out the proposed development this including the land required for access to the site from the public highway, visibility splays, car parking associated with construction site workers and those local areas it is expected will require temporary parking suspensions put in place during the construction sites operational hours.

It is proposed that's Parson's Green will be used as a construction storage compound and lay-down area. Parson's Green comprises a 250m² triangular piece of amenity grassland located along Little Porth Road, approximately 50m to the west of the Bishop and Wolf Pumping Station

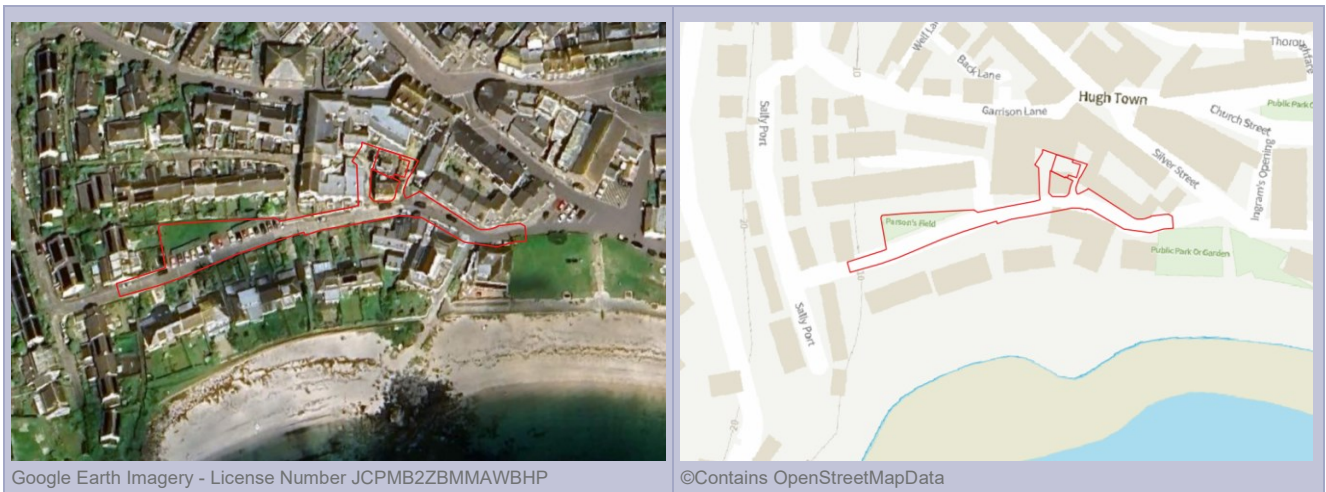


Figure 1 Site Location Plan

1.2 Proposed Scheme

The proposed scheme has been informed by the Bishop and Wolf PS & Screening Plant Proposed Site Plan (107780-PEF-WW-602-DDR-T-0003) to enable the BNG Assessment.

The proposed scheme consists of the construction of an enlarged wastewater infrastructure building, which will replace the existing Bishop and Wolf SPS building. The new building will house new variable-speed pumps and a new screening plant. The screening plant will remove objects such as rags, paper, plastics, and metals to prevent damage and clogging of downstream equipment, piping, and appurtenances as well as ensuring they do not enter the marine environment.

The plant will operate intermittently as required on a 24/7 basis, operation could occur at any time.

The proposed scheme will improve the resilience of the wastewater system, bringing benefit to all residents and visitors to St Mary's. Residents in close proximity will further benefit from the replacement of the existing infrastructure with modern plant, incorporating improved noise attenuation and odour control facilities.

The replacement pumps will be sized to ensure the conditions of the Atlantic CSO permit are met. Screens will be fitted with 3mm mesh to comply with the discharge permit conditions. Screens will have a 30 l/s flow rate.

2 Legislation and Policy

2.1 National Legislation

The Environment Act 2021 provides a framework for environmental governance, and in relation to Biodiversity and Nature Conservation, the Act includes targets to halt biodiversity decline by 2030. From 12th February 2024, the Act requires all relevant developments to achieve a minimum 10% BNG under the statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990, inserted by the Environment Act.

2.2 National Planning Policy

The National Planning Policy Framework (NPPF 2024) paragraphs 187 to 195 set out the Government's policies on conserving and enhancing habitats and biodiversity through the planning system. These policies are expected to be incorporated into development planning documents at regional and local scales and are also of material worth in considering individual planning applications.

Of particular note to BNG is Paragraph 193(d) which states *“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”*.

2.3 Local Planning Policy

Policy OE2 (1) Biodiversity and Geodiversity within Section 2 of the Isles of Scilly Local Plan (2015-2030) states that:

1. *‘Development proposals will be permitted where they conserve and enhance biodiversity and geodiversity, giving particular regard to ecological networks and areas with high potential for priority habitat restoration or creation, and should:’*
 - a) *Protect the hierarchy of international, national and local designated sites in accordance with their status;*
 - a) *Retain, protect and enhance features of biodiversity and geological interest (including supporting habitat and commuting routes through the site and taking due account of any use by migratory species) and ensure appropriate and long-term management of those features;*
 - b) *Contribute to the restoration and enhancement of existing habitats and the creation of wildlife habitats and linkages between sites to create and enhance local ecological networks;*
 - c) *Seek to eradicate or control any invasive non-native species present on site; and*
 - d) *Be required to contribute to the protection, management and enhancement of biodiversity and geodiversity.*
2. *Development proposals must:*
 - a) *Apply the mitigation hierarchy to all proposals;*
 - b) *Demonstrate how they conserve or enhance biodiversity an ecosystem processes;*
 - c) *The local guidance on biosecurity to control the spread of invasive non-native species; and*
 - d) *Ensure proportionate and appropriate biodiversity net-gain is secured.*
3. *Development proposals will not be supported where significant and harmful direct or indirect effects on biodiversity and ecosystem processes are identified, unless: a) the need for the development clearly outweighs the harm caused; b) an appropriate scheme is proposed that will secure compensation and net-increases in biodiversity.*
4. *Development proposals will not be permitted where a detrimental impact is identified to geodiversity sites unless the need for development outweighs the harm caused.*

Avoidance, Mitigation and Compensation for Biodiversity and Geodiversity Impacts

5. *Development should avoid adverse impacts on existing biodiversity and geodiversity interests as a first principle, and enable measurable net gains by designing-in biodiversity features and enhancements and opportunities for geological conservation alongside new development, in accordance with Policies SS1 and SS2. Where adverse impacts are unavoidable, it must be demonstrated that the development cannot be reasonably located on an alternative site that would result in less or no harm to biodiversity or geodiversity interests; and impacts must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort. Clear arrangements for the long-term maintenance or management of the mitigation and compensation need to be provided.'*

3 Assessment Methodology

The BNG assessment has followed industry best practice methodologies and legislation including:

- The Statutory Biodiversity Metric¹ and User Guide (DEFRA, 2024a)²; and
- CIEEM, CIRIA & IEMA (2019). Biodiversity Net Gain: Good practice principles for development. A practical guide³.

The Statutory Biodiversity Metric and Good Practice Principles (CIRIA, CIEEM and IEMA 2019) combined are used to produce an assessment which:

- Establishes the baseline biodiversity units for area, linear hedgerow and Watercourse habitats (where applicable) within the site and in the case of watercourses within 10m of the site boundary;
- Establishes the number of biodiversity units to be retained and or/created;
- Establishes whether the proposed scheme will result in an overall net loss, no net loss or BNG within the site boundary;
- Provides evidence of how the proposed scheme will achieve biodiversity gain within the proposed scheme; and
- Provides recommendations for amendments and updates to the proposed scheme to ensure that BNG can be achieved and implemented.

In addition to the BNG calculations, evidence of the application of the mitigation hierarchy, stakeholder engagement and post-development habitat management has been referenced in Table 5.

3.1 The Statutory Biodiversity Metric

The BNG assessment and calculations have been assessed using the Statutory Biodiversity Metric and the UKHab Habitat Map produced as part of the PEA. The Statutory Biodiversity Metric is a tool that can be used to calculate the biodiversity impact of development projects in England. It is used to ensure that development projects achieve a net gain in biodiversity, meaning that they leave the environment in a better state than they found it.

The Statutory Biodiversity Metric provides a way to measure and account for the losses, changes, and gains, in biodiversity as a result of development, or changes in land management, and includes a calculation tool to demonstrate these figures.

Baseline Biodiversity Units:

The Statutory Biodiversity Metric has been used to calculate the baseline biodiversity units within the site. These calculations have then been used to help the scheme follow both the mitigation hierarchy of avoidance, mitigation, and compensation, the Biodiversity Hierarchy of achieving BNG on-site as the first priority and to inform the post development management. Biodiversity units are a function of the elements described below.

¹ Statutory biodiversity metric tools and guides available at:

<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

² Department for Environment Food and Rural Affairs (DEFRA) (2024) The Statutory Biodiversity Metric User Guide First Published: February 2024. Last Updated: July 2024. Available at:

https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide_23.07.24_.pdf

³ CIEEM, CIRIA & IEMA (2019). Biodiversity Net Gain: Good practice principles for development. A practical guide. <https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf>

Habitat Distinctiveness

Habitat distinctiveness is described as a collective measure of biodiversity and its distinguishing features. The Statutory Biodiversity Metric automatically assigns distinctiveness based on the habitat selected.

Habitat Condition

Habitat condition is a measure of the state of a habitat and is used to measure variation between parcels of the same habitat type and is measured in accordance with the assessment methodology set out by The Statutory Biodiversity Metric Condition Assessment Sheets and Methodology (version V1.0.2, July 2024) (DEFRA, 2024b)⁴. To determine the habitat condition, the habitat is subject to a field survey and assessed against a number of criteria as set out for each habitat type.

Strategic Significance

Strategic significance is the local significance of the habitat based on its location and habitat type. Where published, the relevant published Local Nature Recovery Strategy (LNRS) should be used to assign strategic significance. If an LNRS has not yet been published, the planning authority should specify alternative suitable documents to be used. Descriptions are set out further in the User Guide to inform this assessment.

Post Development Biodiversity Units

The metric is then used to calculate the biodiversity units present in the post development proposal. Where the number of biodiversity units is lower/higher than the baseline calculations, an assessment can be made as to whether the scheme will achieve a net gain or a net loss for biodiversity.

Calculations of biodiversity units remaining following the construction of the proposed scheme take account of:

- Habitat that is lost due to development;
- Habitat retained post development;
- Retained and enhanced habitats; and
- Habitats created due to the development.

Post construction assessment is based upon the target state (size and condition) for the habitats that are being enhanced or created.

3.2 Baseline Surveys and Data Sources

A baseline habitat survey was undertaken by Pell Frischmann in April 2024 and updated in August 2024. The survey was reported in the Ecological Impact Assessment (EIA) (ref 07780-PEF-ZZ-602-TRP-GE-0001) produced by Pell Frischmann in December 2024.

The UKHab Habitat Survey map included in Appendix A was used to measure the baseline biodiversity units within the site. The habitats identified and mapped were also subject to a habitat condition assessment to enable them to be categorised in line with the methodology described above.

⁴ DEFRA (2024) The Statutory Biodiversity Metric -Technical Annex 1: Condition Assessment Sheets and Methodology
July 2024. Version: v1.0.2. Available at:

https://assets.publishing.service.gov.uk/media/669e5db4fc8e12ac3edb0198/Statutory_Biodiversity_Metric_Condition_Assessments23.07.24.xlsx

3.6 Constraints and Limitations

The following constraints and limitations apply to the assessment:

- All habitat areas and lengths have been measured manually using QGIS based on the UKHab Habitat Plan and the Bishop and Wolf PS & Screening Plant Proposed Site Plan, as such habitat areas have been measured as accurately as possible.

4 Baseline Habitats

The baseline (pre-development) habitats recorded within the site during the UKHab Habitat Survey are shown in the UKHab Habitat Map (Appendix A). This site contained Area Units and Linear Hedgerow Units; therefore, Watercourse Units have not been referenced.

In total, the baseline biodiversity value of the area-based habitats present was calculated as 0.10 habitat units. The baseline biodiversity value of the hedgerow habitats present was calculated as 0.03 hedgerow units.

The habitats recorded within the site included modified grassland (distinctiveness: low), sealed surface developed land (distinctiveness: very low), and non-native and ornamental hedgerow (distinctiveness: very low).

Strategic significance was applied to habitats as follows:

- Strategic significance has been set based on the Isles of Scilly Local Plan 2015-2030 (Adopted March 2021) and the Cornwall and Isles of Scilly Nature Recovery Strategy (Published November 2024) March 2022, as no Local Nature Recovery Strategy (LNRS) for Cornwall and the Isles of Scilly has yet been published.
- Modified grassland, sealed surface developed land, and non-native and ornamental hedgerows were all identified as 'low' strategic significance, as none were identified within the above documents.

The habitat condition sheets, and justification are attached in Appendix B.

Table 1 Summary of on-site Baseline Habitat Types – Area Habitats

Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic Significance	Baseline Area Units
Modified grassland	0.0261	Low	Moderate	Low	0.10
Developed land; sealed surface	0.1636	Very low	N/A	Low	0.00
Total⁷					0.10

Table 2 Summary of on-site Baseline Habitat Types – Linear Hedgerows

Habitat Type	Length (km)	Distinctiveness	Condition	Strategic Significance	Baseline Linear Units
Non-native and ornamental hedgerow	0.0257	Very low	Poor	Low	0.03
Total⁸					0.03

⁷ Note numbers taken directly from the Statutory Biodiversity Metric so rounding errors may occur

⁸ Note numbers taken directly from the Statutory Biodiversity Metric so rounding errors may occur

5 Post-Development Habitats

The details of post-development habitats are set out below for Area Habitats and Linear Hedgerow calculated from the Bishop and Wolf PS & Screening Plant Proposed Site Plan.

5.1 Habitats to be Retained

The habitats to be **retained**, in full or in part, in their current state during the development within the site development boundary include:

- Developed land; sealed surface – all parts of the existing road will be retained, while the SPS building will be demolished and replaced; and
- Non-native and ornamental hedgerow (0.0257 km).

This will be achieved through:

- Construction limited to other habitats (SPS building and modified grassland for the construction compound); and
- Heras protection fencing to avoid damage to hedgerows.

5.2 Habitats to be Enhanced

No areas of habitat within the site boundary will be **enhanced** within the site boundary.

5.3 New Habitats to be Created

Habitats to be **created** within the site boundary will consist of:

- The new Bishop and Wolf PS & Screening Plant Building; and
- Replacement of the modified grassland being lost during construction at Parsons Green.

The replacement grassland planting at Parsons Green should include **EITHER**:

- 0.0261 ha modified grassland (good condition)

OR:

- 0.0261 ha other neutral grassland (moderate condition).

Grassland species must consist of a grassland mix representative of native and naturalised grassland species specific to the Isles of Scilly.

The flora of the Isles of Scilly is unique compared with the wider flora of the British Isles; native and naturalised species already present on the islands should be selected to preserve this uniqueness. Suitably Scilly wildflowers may include chamomile (*Chamamelum nobile*) and orange bird's-foot (*Ornithopus pinnatus*).

6 Results and Recommendations

6.1 Discussion of Results

The proposed scheme can achieve an excess of 10% BNG in area habitat units within the site through the reinstatement of modified grassland at Parsons Green with either modified grassland (good condition) or other neutral grassland (moderate condition).

Based on retention of the hedgerow alone, the proposed scheme cannot achieve the 10% BNG in linear hedgerow units.

Table 3 Summary of Biodiversity Units

Unit Type	Baseline Units	Post Development Units	Net Project Biodiversity Units (+/-)	Total Project Biodiversity % Change
Habitat area units (reinstatement of modified grassland good condition)	0.10	0.12	+ 0.02	+ 16.89
Habitat area units (reinstatement of other neutral grassland modified condition)	0.10	0.17	+ 0.07	+ 67.37
Linear hedgerow units	0.03	0.02	-0.01	- 20.43

6.2 Recommendations

6.2.1 Linear Hedgerow Units

To achieve the required 10% for linear hedgerow units, the following could be included within the landscape design:

- 0.009 km non-native and ornamental hedgerow adjoining the baseline non-native and ornamental hedgerows, to consist of non-native naturalised species notable to the Isles of Scilly.

OR:

- 0.005 km native hedgerow adjoining the baseline non-native and ornamental hedgerows, to consist of native species already present on the Isles of Scilly.

6.2.2 Combination of Habitat Creation Options

To aid with the development of soft landscaping proposal, we have outlined four combinations to provide a range of BNG scores.

- Option 1 – Reinstatement with modified grassland (good condition) and planting of additional 9m of non-native and ornamental hedgerows.
 - The BNG calculations summarised in Table 4 indicate that the completed development could result in the net gain of **16.89%** in Area Habitat Units, and a net gain of **13.37%** in Linear Hedgerow Units.
- Option 2 – Reinstatement with modified grassland (good condition) and planting of additional 5m of native hedgerows.
 - The BNG calculations summarised in Table 4 indicate that the completed development could result in the net gain of **16.89%** in Area Habitat Units, and a net gain of **17.12%** in Linear Hedgerow Units.

- Option 3 – Reinstatement with other neutral grassland (moderate condition) and 9m of non-native and ornamental hedgerows.
 - The BNG calculations summarised in Table 4 indicate that the completed development could result in the net gain of **67.37%** in Area Habitat Units, and a net gain of **13.37%** in Linear Hedgerow Units, translating to **no** increase in linear hedgerow biodiversity units.
- Option 4 – Reinstatement with other neutral grassland (moderate condition) and 5m of native hedgerows.
 - The BNG calculations summarised in Table 4 indicate that the completed development will result in the net gain of **67.37%** in Area Habitat Units, translating to an increase of **+0.07** in area biodiversity units, and a net gain of **17.12%** in Linear Hedgerow Units, translating to **no** increase in linear hedgerow biodiversity units.

6.3 Trading Rules

The metric sets the minimum habitat creation and enhancement requirements up to ‘no-net loss’ and are based on habitat type and distinctiveness. Table 3 of the User Guide sets out the trading rules and the Statutory Metric identifies that these can be met for the proposed scheme.

6.4 Temporal Risk Multiplier

Construction is expected to commence in early 2025. The site is anticipated to be operational in 2025. Therefore a zero-year delay multiplier has been applied in the metric.

Should modified grassland be selected, it is anticipated that this habitat will reach its target condition (‘good’) within seven years. Should other neutral grassland be selected, it is anticipated that this habitat will reach its target condition (‘moderate’) within five years. The addition of nine meters of non-native and ornamental hedgerow, or five meters of native hedgerow, to the retained non-native and ornamental hedgerows will achieve an excess of 10% BNG, despite not increasing the linear hedgerow biodiversity units.

Should there be any change to this timeframe, an update may be needed to the BNG metric, however the project will still likely achieve an excess of 10% BNG.

Table 4 Summary of Options to achieve BNG⁹

Unit Type	Baseline Units	Post Development Units	Net project biodiversity units (+/-)	Total project biodiversity % Change
Option 1 - Standard time to target condition 7 years				
Habitat units	0.10	0.12	+0.02	+16.89
Linear hedgerow units	0.03	0.03	0.00	+13.37
Option 2 - Standard time to target condition 7 years				
Habitat units	0.10	0.12	+0.02	+16.89
Linear hedgerow units	0.03	0.03	0.00	+17.12
Option 3 - Standard time to target condition 5 years				
Habitat units	0.10	0.17	+0.07	+67.37
Linear hedgerow units	0.03	0.03	0.00	+13.37
Option 4 - Standard time to target condition 5 years				
Habitat units	0.10	0.17	+0.07	+67.37
Linear hedgerow units	0.03	0.03	0.00	+17.12

⁹ Note numbers taken directly from the Statutory Biodiversity Metric so rounding errors may occur

6.5 Biodiversity Net Gain Principles

The BNG calculations provide only a quantitative assessment and therefore further principles should also be considered including the application of the mitigation hierarchy, engagement with stakeholders, avoidance of irreplaceable habitats, and overall achieving the best possible outcomes for biodiversity.

These 10 principles are discussed further below in Table 5 with evidence and outcomes of each principle from the proposed scheme.

Table 5 Qualitative Discussion of Biodiversity Net Gain Principles

Principle	Description of Principle	Evidence of Principle being Applied within the Proposed Scheme
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.	The proposed scheme has used data collected during the UKHab Survey (detailed within the EcIA (ref 107780-PEF-ZZ-602-TRP-GE-0001)). No key habitats or species of conservation concern were identified, therefore none are subject to loss. The loss of habitats has been noted and their replacement or enhancement will be included within the landscape plan, to be produced following planning permission being granted.
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.	No irreplaceable habitats will be lost due to the proposed scheme.
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.	Consultation between South West Water Limited has been ongoing throughout the planning process.
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 the losses occurring and the gains being fully realised.	The BNG assessment has used recognised guidance and will be updated following any changes to the Bishop and Wolf PS & Screening Plant Proposed Site Plan. Construction is expected to commence in early 2025. The site is anticipated to be operational in 2025. Therefore, a zero-year delay multiplier has been applied in the metric. Should there be any change to this timeframe, an update may be needed to the BNG metric, however the project will still achieve an excess of 10% BNG.
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.	BNG is achievable with a minimum gain of 16.89% increase for Area Habitat Units and options to achieve a minimum of 13.37% increase for Linear Hedgerow Units has been identified. A maximum gain of 67.37% increase for Area Habitat Units and 17.12% increase for Linear Hedgerow Units is possible, subject to client decision.
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: <ul style="list-style-type: none"> ➤ 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; and ➤ Enhancing ecological connectivity by creating more bigger, better and joined areas for biodiversity 	The proposed scheme can achieve overall BNG using the habitat creation recommended in Section 4, in conjunction with the information provided within the EcIA (ref 107780-PEF-ZZ-602-TRP-GE-0001). The BNG assessment has been undertaken using the Statutory Biodiversity Metric. The metric highlights the requirement for trading rules for habitats of low, medium, high and very high distinctiveness. The metric currently identifies that the trading rules for 'low' distinctiveness habitats may be met on-site, through the creation of habitats of equal or higher distinctiveness. Planting within the site will be finalised alongside the landscape plan, to be produced after planning permission has been granted and in collaboration/discussion with the client.

Principle	Description of Principle	Evidence of Principle being Applied within the Proposed Scheme
Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).	<p>The proposals result in a minimum net gain of 16.89% increase for Area Habitat Units and have identified options for a minimum of 13.37% increase for Linear Hedgerow Units.</p> <p>Habitats created should focus on pollinating species, and those found on the Isles of Scilly. Given the current baseline, it was considered that a future baseline without the proposed scheme would include a 'no-change' scenario. Therefore, the proposed scheme can deliver a positive outcome for these species in the long term that would not otherwise occur.</p>
Create a Net Gain legacy	<p>Ensure Net Gain generates long-term benefits by:</p> <ul style="list-style-type: none"> ➤ Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity; ➤ Planning for adaptive management and securing dedicated 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; and ➤ Supporting local-level management of Net Gain activities. 	<p>A Management Plan will be produced to include further details on ongoing maintenance obligations. Though it is considered that created habitats will be maintained in the long term, the management plan should outline in full specific responsibilities and obligations for those to be responsible for implementing the long-term site management and maintenance.</p> <p>As above, it was considered that a future baseline would include a 'no-change' scenario therefore, the proposed scheme delivers a positive outcome for these species to produce a net gain legacy.</p> <p>The planting proposals prioritise the choice of native species across the four options presented, to build in resilience against climate change by increasing species diversity of the grasslands and hedgerows being created and enhanced. In addition, these habitats link to other existing habitats to build in resilience for the proposed scheme and wider landscape.</p>
Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.	This principle has been achieved through production of this BNG Assessment Report to ensure the implementation of the recommended measures.
Be transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.	Liaison with the local planning authorities and community engagement should continue to be undertaken.

7 Ecological Report Limitations

The information reported herein is based only on the interpretation of data collected during the UKHab survey (April 2024; updated August 2024) and reported in the Ecological Impact Assessment (ref 107780-PEF-ZZ-602-TRP-GE-0001); and through the Bishop and Wolf PS & Screening Plant Proposed Site Plan (ref 107780-PEF-WW-602-DDR-T-0003). This work pertains specifically to the determination of Biodiversity Net Gain on the proposed site. Information provided to Pell Frischmann has been accepted as being accurate and valid.

This report has been prepared by Pell Frischmann with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client.

This report should be used for information purposes only and should be reviewed and amended accordingly when a final proposed layout is available.

This report has been prepared solely for the use of Trant Ltd and may not be relied upon by other parties without written consent from Pell Frischmann. In addition, it must be understood that this report does not constitute legal advice.

Pell Frischmann disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Appendix A UKHab Habitat Survey Map



- Legend**
- Site boundary
 - Hedgerows
 - h2b Non-native and ornamental hedgerow
 - Habitats
 - u1b Developed land; sealed surface
 - g4 Modified grassland

Scale 1:500 at A3
Contains OS data © Crown
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Appendix B Condition Assessments

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	On-site, Isles of Scilly, St Mary's	Survey date and Surveyor name	20/08/2024 C Gilby
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	SV901104	Habitat parcel reference	2546 (QGIS fid), B&W compound
Habitat Description			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	<p>There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.</p> <p>Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.</p>	No	Ribwort plantain, daisy, white clover, broadleaf plantain, hawkweed or dandelion, yellow medick, Yorkshire fog, cocksfoot (? Too short to ID), yarrow, small leaves see photo. These are across the site but in 1m ²² generally only 5 to 6 max.
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 vertebrates and invertebrates to live and breed.	No	All mown to one length
C	<p>Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present).</p> <p>Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.</p>	Yes	None present
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Yes	n/a
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Yes	0%
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	0%
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	Absent
Essential criterion achieved (Yes or No)			No
Number of criteria passed			5

Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved x/√	
Passes 6 or 7 criteria including passing essential criterion A	Good (3)		
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	Yes	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnotes			
<p>Footnote 1 – 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>.</p> <p>Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.</p> <p>Footnote 3 – 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, using professional judgement.</p> <p>Footnote 4 – Wildlife and Countryside Act 1981 (as amended).</p>			