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Capital Delivery Programme

Ecological Impact Assessment

Bishop and Wolf Pumping Station and Screening Plant

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Contents

| Execu | tive summary | |
|--------|--|----|
| 1 In | ntroduction | 1 |
| 1.1 | Aims and Objectives | 1 |
| 1.2 | Site Location and Description | 1 |
| 1.3 | Project Description | 2 |
| 2 L | egislation and Planning Policy Context | 3 |
| 2.1 | Introduction | 3 |
| 2.2 | Legislation | 3 |
| 2.3 | Planning Policy | 3 |
| 3 N | lethodology | 5 |
| 3.1 | Ecological Study Area | 5 |
| 3.2 | Desktop Study | 5 |
| 3.3 | Field Surveys | 5 |
| 3.4 | Assessment Methodology | 6 |
| 4 B | aseline Conditions | 8 |
| 4.1 | Baseline Conditions – Ecological Designated Sites | 8 |
| 4.2 | Baseline Conditions – Habitats | 9 |
| 4.3 | Baseline Conditions – Species (Fauna) | 11 |
| 5 P | otential Impacts, Mitigation and Residual Impacts | 13 |
| 5.1 | Ecological Receptors Scoped out of Further Assessment | 13 |
| 5.1 | Summary of Impacts and Mitigation to Ecological Receptor Scoped into the EcIA | 14 |
| 5.2 | Residual Impacts to Ecological Receptor Scoped into the EcIA | 16 |
| 5.3 | Post Development Monitoring | 16 |
| 5.4 | Cumulative Impacts | 16 |
| 6 E | cological Enhancement and Biodiversity Net Gain | 17 |
| 7 E | cological Report Limitations | 18 |
| 8 R | eferences | 19 |
| | | |
| Figure | es | |
| Figure | 1 Site Location Plan | 2 |
| | | |
| Tables | | - |
| | 1 Value or Scale of Nature Conservation Receptor | |
| | 2 Typical Descriptors of Impacts | |
| | 3 Designated Sites of Importance to Nature Conservation within 2km of the Site | |
| | 4 Weather Conditions | |
| | 5 Habitats Recorded during the UKHab Habitat Survey | |
| | o Summary of Fauria baseline | |
| | 8 Impacts and Mitigation to Ecological Receptors | |
| | 9 Ecological Opportunities and Enhancement | |
| . able | o Essignar Opportunitios and Emignomicity | 17 |
| Apper | ndices | |

Appendix A UKHab Habitat Map

Appendix B Legislation

| | Executive Summary |
|---|---|
| Site Name | Bishop and Wolf Pumping Station and Screening Plant |
| Site Location | 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 at Grid Reference: SV 90241 10502 (Easting 090241; Northing 010502). |
| Project Description | 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. |
| Designated Sites Baseline | Seven statutory and one non-statutory designated sites of importance to nature conservation have been identified within 2km of the site. St Mary's Island is directly surrounded by the Isles of Scilly Complex Special Area of Conservation (SAC), as well as the Isles of Scilly SPA. There are no SACs designated for bats within 30km of the site. Sites of Special Scientific Interest (SSSI) are present throughout St Mary's Island. With regards to |
| | the development activities listed for the location, the proposed site can be considered to require consultation with Natural England. |
| Habitat Baseline | The site consists of concrete hardstanding with small amounts of ruderal plant species and bramble 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>Pittosporum crassifolium</i>) hedgerow present which separate the grassland from the adjacent road. |
| | No priority habitats were identified within the site boundary. The nearest sections of priority habitat, lowland heathland, are located 60m southwest, and 195m southeast of the site. |
| Species Baseline | Features were observed on the east and southeast sides of the SPS building which could offer some roosting opportunities for bats, in particular crevice dwelling species. Emergence surveys identified no bats emerging from the SPS and therefore roosting bats are considered absent. No nesting birds were identified within the site. Potential nesting habitat was identified within the eaves of the SPS building, within a small area of overhanging bramble in the northeast corner of the SPS yard, and within the pittosporum hedgerow. Habitats suitable for the Scilly shrew and hedgehog to use as resting places were absent from the Site, however due to the nearby residential gardens they may be present for foraging or commuting. No invasive species were recorded within the site. |
| Ecological | Receptors scoped into the EcIA include: |
| receptors scoped into the EcIA | Designated sites; andNesting birds. |
| Designated Sites Impacts and Mitigation | The overall conclusion of the HRA Stage 1 Screening is that the proposed scheme will not lead to likely significant effects upon any qualifying features (habitats or species) of the Isles of Scilly Complex SAC or Isles of Scilly SPA. Best practice construction methods should be outlined within the scheme Construction Environmental Management Plan (CEMP). |
| Habitat Impacts and Mitigation | The habitats within the site are of negligible value. No priority habitats are present within the site or in proximity to the construction or operational impacts of the proposed scheme. Therefore, the potential for likely significant effects on the habitats are neutral and no additional mitigation would be required. |
| Species Impacts and Mitigation | Habitats present on site were suitable for nesting birds, and therefore construction works during the summer months could lead to the destruction of active nests. Specific legislation protecting nesting birds will be followed. The potential for likely significant effects on other species were scoped out of the EcIA. |
| Cumulative Impacts | Permitted development works on St Mary's will be completed in the future with the works subject to the planning application. It is difficult to assess their cumulative impact at this stage as these proposals are at early design stages. A number of householder and small development applications were identified, none have been identified which are considered significant enough to result in cumulative impacts to the site or to the ecology of the wider area. |
| Ecological Enhancement and Biodiversity Net Gain | A separate Biodiversity Net Gain (BNG) Assessment has been completed and provides recommendations to achieve 10% Statutory BNG. Recommendations have been made to further enhance the ecological value of the Site and the wider EZI in line with the current National Planning Policy Framework (2023). As there is limited space within the site boundary, general biodiversity enhancement works could also be completed within the wider SWWL ownership and will aim to deliver an improvement to biodiversity within the overall SWWL ownership. |

1 Introduction

Pell Frischmann (PF) have been commissioned by Trant Engineering Limited (Trant, the 'Principal Contractor'), on behalf of South West Water Limited (SWWL, 'the undertaker'), to produce an Ecological Impact Assessment (EcIA) for the Bishop and Wolf Pumping Station and Screening Plant ('the proposed scheme'). The proposed scheme is located on the island of St Mary's, within the Isles of Scilly archipelago.

This report describes the assessment methodology; the baseline conditions within the site and Ecological Zone of Influence (EZI); the likely significant ecological effects; the mitigation measures required to prevent, reduce or offset any significant adverse effects; and the likely residual effects after these measures have been employed.

1.1 Aims and Objectives

The aims of the EcIA are to:

- > Identify and describe all potentially significant ecological effects associated with the project;
- > Set out the mitigation measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects;
- Identify how mitigation measures will/could be secured;
- Provide an assessment of the significance of any residual effects;
- Identify appropriate enhancement measures; and
- Set out the requirements for post-construction monitoring.

In particular the assessment will focus on:

- Internationally and Nationally Designated Sites;
- Regionally and Locally Important Sites;
- ➤ Protected Species species protected by the Wildlife and Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 (as amended);
- > Habitats and Species of Principal Importance; and
- Cumulative and In-Combination Effects.

1.2 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, TR21 0JG at Grid Reference: SV 90241 10502 (Easting 090241; Northing 010502).

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.

The site subject to this EcIA consists of the land within the red line planning application boundary, as shown in Figure 1 below.



Figure 1 Site Location Plan

1.3 Project Description

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 proposed scheme layout is shown in drawing 107780-PEF-WW-602-DDR-T-0003.

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 Planning Policy Context

2.1 Introduction

This section summarises the legislation and planning policy in relation to ecology and biodiversity within the UK and Isles of Scilly Council within which the site is located.

2.2 Legislation

A number of different acts and regulations refer to the protection of wildlife and habitats. Those potentially relevant to this project include:

- ➤ The Environment Act 2021;
- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- Conservation of Habitats and Species 2017 (as amended);
- > The Natural Environment and Rural Communities Act (NERC) 2006;
- The Countryside and Rights of Way Act (CRoW) Act 2000;
- ➤ The Invasive Alien Species (Enforcement and Permitting) Order 2019;
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

These are outlined in more detail in Appendix A. It is recommended that the full legislation texts are referred to when dealing with individual cases and further legal advice is obtained where required. Protected species licences may be required to further comply with this legislation prior to the implementation of the project.

2.3 Planning Policy

2.3.1 National 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 relevance to biodiversity NPPF paragraph 187 states that 'Planning policies and decisions should contribute to and enhance the natural and local environment by:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- d) 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'

The NPPF paragraph 193 advises that 'when determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed

- clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) 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.

2.3.2 Local 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 Methodology

3.1 Ecological Study Area

3.1.1 Main Study Area

The Study Area for habitats covered the site only. This is shown on the UK Habitat Classification (UKHab) Habitat Map as attached in Appendix A

The Study Area for identifying the requirement for species surveys has been taken from Natural England Standing Advice relating to the species in question.

The EZI for direct impacts upon habitats has therefore been set as land within the site (red line boundary). The EZI for species extends to the adjacent land as construction works could potentially impact on protected species with extensive habitat ranges, such as nesting birds and bats.

3.1.2 Broad Study Area

A broad study area of 2km from the site boundary has been applied for a desk study of international and national statutory nature conservation designations, non-statutory nature conservation designations, and records of protected and notable habitats and species.

In addition, a 30km search area was applied for European sites designated for bats

3.2 Desktop Study

To accurately assess the potential ecological impacts of the project, a desktop study was undertaken to identify the presence of sensitive ecological receptors at the site and within the surrounding area. Data was obtained from a range of information sources including:

- > Multi-Agency Geographic Information for the Countryside (MAGIC); and
- The Environment Records Centre for Cornwall and the Isles of Scilly (ERCCIS).

MAGIC maps have been used to obtain information relating to statutory and non-statutory conservation the designation within 2km of the site boundary, with additional information supplied by ERCCIS. Ecological data obtained from ERCCIS provided data relating to protected and notable species recorded on the Isles of Scilly, and within 2km of the Isles of Scilly.

Records of Granted European Protected Species Licences (EPSLs) have been provided by MAGIC.

A focus on species identified within the past 20 years (i.e. since 2003) has been provided where applicable, otherwise focus has been given to the most recent records returned (post 2003).

3.3 Field Surveys

3.3.1 Ecological Walkover Survey

An initial ecology walkover survey was carried out on 8 April 2024, with an updated survey undertaken on 20 August 2024 (more details are provided about this in Section 4.2.3). The ecological walkover surveys were undertaken in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Preliminary Ecological Appraisal guidelines (CIEEM, 2017). The habitats were mapped during the ecological walkover using the UK Habitat Classification (UKHab) Version 2.0 methodology (UKHab Ltd., 2023). The survey also aimed to record evidence of (i) animal species protected under UK legislation and European legislation; (ii) habitat features with potential to support protected animal species; and (iii) invasive species, the introduction or spreading of which is prohibited under UK legislation.

This information allowed the requirement for more detailed species surveys (where required) to be evaluated and have been detailed within this EcIA.

3.3.2 Protected Species Surveys

Following the walkover survey, it was identified that a bat emergence survey was required on the existing SPS building. No other protected species surveys were recommended.

The survey methodologies and results of the bat emergence survey is detailed within the standalone Pell Frischmann report:

Bat Emergence Survey Report 107780-PEF-ZZ-602-TRP-GE-0002

3.4 Assessment Methodology

3.4.1 Competent Expert

The assessment has been undertaken by C Gilby MCIEEM, whilst the review was undertaken F Scherner MCIEEM.

Principal Ecologist C Gilby has over nine years of working as an ecologist with experience of writing Environmental Statement (ES) chapters for a number of large and small-scale schemes including road, rail and residential development projects.

Associate Ecologist F Scherner has 19 years' experience working as an ecologist in the United Kingdom and overseas including leading teams on small, medium and large-scale residential, road and rail schemes as well as leading academic research on human impacts in ecological systems.

3.4.2 EclA Methodology

The EcIA of effects follows the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal' (2018 Version 1.3 - updated September 2024).

International convention and national legislation that protects wildlife species and habitats, together with local, regional and national planning policy are referred to where relevant. The assessment will determine impact of the project on protected and notable species in the area. Where potential significant adverse effects are identified, mitigation/enhancement measures are provided to ensure the wildlife populations will be safeguarded, and habitat values improved where feasible. The mitigation hierarchy (prioritising avoidance of impacts, mitigation, compensation and enhancement in that order) has been observed throughout and impacts to notable ecological features have been avoided where possible.

When considering changes and impacts on ecosystem structure and function, the following parameters have been considered, in line with CIEEM, 2018 (V1.3):

- Whether the significant effect is adverse or beneficial;
- Magnitude of the significant effect;
- > Extent of area affected by the significant effect;
- Duration of the significant effect;
- > Reversibility of the significant effect; and
- Timing and frequency of the activity (e.g. in relation to the bird nesting season).

The CIEEM guidelines consider the above range of parameters when determining the overall impact, rather than using a traditional matrix assessment of significant effects. This enables the ecological impacts to be assessed alongside other environmental impacts.

As a result of field surveys and ecological data gathered, the ecological features were evaluated in terms of their nature conservation value (using the criteria set out by CIEEM 2018 EcIA guidelines).

The value of an ecological resource has been determined within a defined geographical context as defined below in

Table 1. Typical descriptors of impact are presented in Table 2.

Table 1 Value or Scale of Nature Conservation Receptor

| Level of Value and Scale | Criteria | Examples |
|--------------------------------------|--|---|
| Very High (International) | High importance and rarity. International scale and limited potential for substitution i.e. site, habitat or populations of species, of international importance. | Ramsar wetlands; Special Protection Areas (SPAs) and Special Areas of Conservation (SACs); Biosphere reserves; and habitats and populations/assemblages of species that represent the qualifying interests of internationally designated sites and/or are European protected species. |
| High (UK National) | High importance and rarity, national scale or regional scale with limited potential for substitution i.e. site, habitat or populations of species, of national importance. | Sits of Special Scientific Interest (SSSIs); National Nature Reserves (NNRs). All populations of WCA Schedule 8 plants; all viable populations of species listed as Critically Endangered, Endangered, Vulnerable or Threatened in relevant Red Data Books; nationally important population /assemblage of an European Protected Species (EPS), Schedule 1 and/or 5 species. |
| Medium (Regional / County) | High or medium importance or rarity, local or regional scale and (limited) potential for substitution i.e. site, habitat or population of species, of regional importance. | Sites and/or species populations that meet SSSI designation criteria but have not been formally designated. Local Nature Reserves (LNR). Regionally important population of a species and habitat of Local Biodiversity Plan (LBAP), priority species and habitats. Regionally important population/assemblage of an EPS, Schedule 1 and/or 5 species. Regionally important assemblages of other species. |
| Low (District / Local) | Low or medium importance and rarity, district or local scale i.e. site, habitat or species, of importance in the context of district or local scale areas. | Locally designated non-statutory sites including Sites of Interest to Nature Conservation (SINCs), Sites of Local Interest to Nature Conservation (SLINCs) and Potential Sites of Interest (PSIs). A breeding population of a species or a viable area of a habitat that is listed in a Local BAP because of its rarity in the locality. All breeding populations of an EPS, Schedule 1 and/or 5 species that have not been captured in higher categories above. Assemblages of other species that are of importance in the context of the local authority area. |
| Negligible (Within Zone of Interest) | A resource that is of little/no intrinsic nature conservation. Very low importance and rarity. | Common, widespread, modified and/or impoverished habitats such as Areas of built development, amenity grassland, rye-grass leys or arable fields. Species of Least Concern which are widespread and/or common locally. |

Table 2 Typical Descriptors of Impacts

| Descriptor | Definition |
|----------------------|--|
| Extent | The spatial or geographic area over which the impact/effect may occur |
| Magnitude | The 'size', 'amount', 'intensity' and 'volume'. Magnitude should be quantified where possible e.g. the amount of habitat loss, percentage change to habitat loss, percentage change to habitat area and percentage decline in species. |
| Duration | Relation to ecological characteristics (such as a species' lifecycle) as well as human timeframes. The duration of an activity may differ from the duration of the resulting effect caused by the activity. |
| Frequency and timing | The number of times an activity occurs will influence the resulting effect. The timings of an activity or change may result in an impact if it coincides with critical life-stages or seasons. |

Bishop and Wolf Pumping Station and Screening Plant Ecological Impact Assessment

| Descriptor | Definition |
|---------------|---|
| Reversibility | Irreversible effect is one from which recovery is not possible within a reasonable timescale or there is no reasonable chance of action being taken to reverse it. A reversible effect is possible, or which may be counteracted by mitigation. |

4 Baseline Conditions

The following section details the site and EZI baseline conditions based upon (i) the ecological desk study, (ii) the UKHab habitat walkover survey, and (iii) further species surveys.

4.1 Baseline Conditions – Ecological Designated Sites

The statutory and non-statutory designated sites identified during the desk study are summarised in Table 3 below. There are no Special Areas of Conservation (SAC) designated for bats within 30km of the Site.

4.1.1 SSSI Impact Risk Zone

The site is situated within the Impact Risk Zone (IRZ) for the Lower Moors (St Mary's) SSSI and the Peninnis Head (St Mary's) mixed classification SSSI. The function of an IRZ is to prompt consultation with Natural England about the potential for off-site impacts upon the qualifying features of nearby SSSIs, associated with certain development activities.

With regards to the development activities listed for the location, the proposed site is not considered to fall under the following categories and therefore consultation with Natural England would not be required:

Pipelines and underground cables, pylons and overhead cables (excluding upgrades and refurbishment of existing network).

Table 3 Designated Sites of Importance to Nature Conservation within 2km of the Site

| Site Reference | Designation Importance | Approximate Distance from the Proposed Site | Reason for Designation | | | |
|--------------------------------------|--|---|--|--|--|--|
| Statutory Desi | Statutory Designated Sites | | | | | |
| Isles of Scilly SPA | Special Protection Area (SPA) | 60m south of the site | The qualifying features of the Isles of Scilly SPA are: > European storm-petrel (<i>Hydrobates pelagicus</i>); > Lesser black-backed gull (<i>Larus fuscus graellsii</i>); > European shag (<i>Phalacrocorax aristotelis</i>); and > Greater black-backed gull (<i>Larus marinus</i>). | | | |
| Isles of Scilly Complex SAC | Special Area of Conservation (SAC) | 100m south of the site | The qualifying features as listed by Natural England are: Sandbanks which are slightly covered by sea water all the time (subtidal sandbanks); Mudflats and sandflats not covered by seawater at low tide (intertidal mudflats and sandflats); Reefs; Grey seal (Halichoerus grypus); and Shore dock (Rumex rupestris). | | | |
| Peninnis Head (St Mary's) SSSI | Mixed Site of Special Scientific Interest (SSSI) | 600m southeast of the site | The site is particularly noteworthy for the prominent granite cliffs and tors but it also supports maritime heathland, maritime grassland and scrub habitats together with populations of a number of rare plant and lichen species; and The extreme oceanic conditions experienced at Peninnis Head have also encouraged the development of a rich lichen flora on cliff, tor and heathland habitats. <i>Ramalina siliquosa</i> occurs extensively and <i>Roccella fucoides</i> and <i>Teloschistes flavicans</i> are two particularly rare species that occur here. | | | |
| Lower Moors (St Mary's) SSSI | Site of Special Scientific Interest (SSSI) | 685m east of the site | The site supports small populations of Royal Fern (Osmunda regalis) and Southern Marsh Orchid (Dactylorhiza praetermissa), a species rare in Scilly. The wet meadows and reed beds are regularly used by some of the less common rails, especially Corncrake (Crex crex) and Spotted Crake (Porzana porzana), on passage. | | | |

| Site Reference | Designation Importance | Approximate Distance from the Proposed Site | Reason for Designation | |
|---|--|---|---|--|
| Isles of Scilly Sites | Marine Conservation Zone (MCZ) | | The MCZ supports an exceptionally high diversity of habitats and species. | |
| Porthloo SSSI | Site of Special Scientific Interest (SSSI) | 1.1km northeast of the site | The site is noted for the extensive and well-developed brecciated head deposits which have made it the recognised type locality for the Porthloo Breccia; and Porthloo is important for the lithostratigraphic evidence which the sediments represent, and the sequence from this site is used widely in comparison with others on the Isles of Scilly. | |
| Higher Moors & Porth Hellick Pool (St Mary's) SSSI | Site of Special Scientific Interest (SSSI) | 1.8km east of the site | The site exhibits a wide diversity of habitats with several rare and notable plant species. The pond and fringing habitats are also of particular importance for breeding and migrant birds. | |
| Non-Statutory | Non-Statutory Designated Sites | | | |
| Isles of Scilly Wildlife Trust Reserves | Wildlife Trust Reserve | 85m southwest of the site | The Isles of Scilly Wildlife Trust cares for approximately 60% of the landmass of Scilly which includes all of the uninhabited islands. The Wildlife Trust is the only locally-run conservation charity. | |

4.2 Baseline Conditions – Habitats

4.2.1 Priority Habitats

No priority habitats were identified within the site boundary.

The nearest sections of priority habitat, lowland heathland, are located 60m southwest, and 195m southeast of the site.

Other priority habitat sites located within the 2km study area for the site include:

- Coastal vegetated shingle;
- Maritime cliff and slope;
- Reedbeds; and
- Good quality semi-improved grassland.

4.2.2 UKHab Habitat Survey

Habitats recorded during the survey have been categorised in line with UKHab Habitat Classification. The distribution of habitats across the site is shown on the UKHab Habitat Plan attached in Appendix A. These habitat types are described within the following sub sections and the frequency of species listed in accordance with the DAFOR scale as follows:

- ➤ D dominant
- ➤ A abundant
- ➤ F frequent
- ➤ O occasional
- ➤ R rare

4.2.3 General Habitat Description

The initial UK Hab survey was undertaken on 08 April 2024 by Associate Ecological F Scherner MCIEEM and updated on 20 August 2024 by Principal Ecologist C Gilby MCIEEM. The site was dominated by hardstanding and a building, with an area of modified grassland and pittosporum hedgerow at Parsons Green as detailed within Table 5 below. The weather conditions during the surveys are shown below in Table 4.

Table 4 Weather Conditions

| Date | Temperature (°C) | Cloud Cover (%) | Precipitation (%) | Wind (Beaufort Scale) |
|----------------|------------------|-----------------|-------------------|-----------------------|
| 08 April 2024 | 14 | 0 | 0 | 1 |
| 20 August 2024 | 18 | 25 | 0 | 1 |

Table 5 Habitats Recorded during the UKHab Habitat Survey

| UKHab Code | Habitat type | Description | Level of value or importance in relation to the Site |
|---------------|------------------------------------|--|--|
| u1b | Developed/Sealed Surface | 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. | Negligible |
| u1b5 | Buildings | The existing Bishop and Wolf pumping station building. | Negligible |
| g4 | Modified grassland | An amenity area of grassland adjacent to residential properties and the road. This area will form the Parsons Green compound location. Grasses were all mown to one uniform length and included ribwort plantain (<i>Plantago lanceolata</i>), daisy (<i>Bellis perennis</i>), white clover (<i>Trifolium repens</i>), broadleaf plantain (<i>Plantago major</i>), dandelion (<i>Taraxacum officinale</i>), yellow medick (<i>Medicago lupulina</i>), Yorkshire fog (<i>Holcus lanatus</i>), cocksfoot (<i>Dactylis glomerata</i>) and yarrow (<i>Achillea millefolium</i>). | Negligible |
| h2b | Ornamental/non- native hedgerow | Three small sections of non-native karo (<i>Pittosporum crassifolium</i>) hedgerow were present and separated the Parsons Green grassland from the adjacent road. | Negligible |

4.3 Baseline Conditions – Species (Fauna)

It should be noted that ERCCIS returned no records for the following species, and in addition it is understood from the Isles of Scilly Wildlife Trust website that these species are considered absent from St Mary's and most of the other islands. Therefore, the following species have not been considered further within this report:

- Eurasian badger (Meles meles);
- > Eurasian beaver (Castor fiber);
- Eurasian otter (Lutra lutra);
- > Hazel dormice (Muscardinus avellanarius);
- Water vole (Arvicola amphibius);
- Great crested newt (GCN) (Triturus cristatus); and
- > Terrestrial reptile species including snakes or lizards.

Table 6 Summary of Fauna Baseline

| Species | Overview of Desk Study | Overview of Survey Results and Justification of Value | Intrinsic Value in the context of the Site |
|------------|---|---|--|
| Amphibians | ERCCIS returned no records for amphibian species on St Mary's. | No survey required. | Negligible |
| Bats | ERRCIS returned 3,124 records for bats within St Mary's since 2003. The closest record is for a common pipistrelle (<i>Pipistrellus pipistrellus</i>). The most recent year recorded was 2019. Six records of soprano pipistrelle (<i>Pipistrellus pygmaeus</i>) and 19 records of unidentified bat (species not recorded) (<i>Chiroptera</i> sp.) have also been recorded. Additional data from the 'Bats of the Isles of Scilly 2022' report was also reviewed (https://www.ios-wildlifetrust.org.uk/sites/default/files/2023-08/BigScillyBatSurveyReport2022FINAL.pdf), and it is understood that species recorded on St Mary's through this study included common pipistrelle, soprano pipistrelle (<i>Pipistrellus pygmaeus</i>), and Nathusius' pipistrelle (<i>Pipistrellus nathusii</i>). The report notes that prior knowledge was that potentially Leisler's bat (<i>Nyctalus leisleri</i>) and/or serotine bat (<i>Eptesicus serotinus</i>) had also been recorded. A search of MAGIC returned no Granted EPSL for bats on St Mary's. | Bat Foraging and Commuting Bat activity surveys were not required due to the very small nature of the proposed scheme. Bat Roosting Potential Features were observed on the east and southeast sides of the SPS building which could offer some roosting opportunities for bats, in particular crevice dwelling species such as common pipistrelle. The building has a pump which turns on and off periodically and causes some level of noise and the internal condition of the building appeared in good repair. There was a false ceiling however no access hatch was present to enable further roof inspection. The boundary stone wall included features which could offer potential for opportunistic bats to roost. Overall, the building and the boundary wall were assessed as having 'low' potential for roosting bats. Bat Emergence Survey The emergence survey recorded no bats emerging from the SPS building or the boundary wall. Therefore, it was concluded that roosting bats were likely absent and therefore the site offered negligible value in relation to roosting bats. | Negligible |

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| Species | Overview of Desk Study | Overview of Survey Results and Justification of Value | Intrinsic Value in the context of the Site |
|---|--|---|--|
| | | Overall A value of 'negligible' has therefore been assigned to bats in the context of the site in relation to foraging. A value of 'negligible' would be considered suitable for roosting bats as while there remains roosting potential within the site only, emergence surveys identified roosting bats were likely absent. | |
| Birds | ERCCIS returned 210 records since 2003 for bird species on St Mary's. The most recent record returned were from 2021 for common guillemot (<i>Uria aalge</i>), located approximately 440m southwest of Old Town. Those records within proximity and associated with the habitats for Site include blackbird (<i>Turdus merula</i>), blue tit (<i>Cyanistes caeruleus</i>), goldcrest (<i>Regulus regulus</i>), great tit (<i>Parus major</i>), house sparrow (<i>Passer domesticus</i>), and robin (<i>Erithacus rubecula</i>). Other notable species records returned within St Mary's are available on request and are associated with natural habitats beyond the scope of this EcIA. | No nesting birds were identified within the site. Potential nesting habitat was identified within the eaves of the SPS building, within a small area of overhanging bramble in the northeast corner of the SPS yard, and within the pittosporum hedgerow at Parsons Green. A value of 'low' has been assigned to birds as a group due to the limited habitats within the Site for species of conservation concern to be present. | Negligible |
| Invasive and non-native species (INNS) | ERCCIS returned 253 records of INNS since 2003 on St Mary's. | No invasive species were recorded within the site. Since these species are non-native and invasive (as well as absent), no value of importance has been assigned in relation to the site. | Nonapplicable |
| Invertebrates (terrestrial) | ERCCIS returned 62 records for invertebrates since 2003 within St. Mary's. | No invertebrate surveys were completed due to the lack of suitable habitats present. A value of 'Negligible' has been assigned to invertebrates as a group due to the limited habitats within the site for species of conservation concern to be present. | Negligible |
| Lichens | A detailed desk study was completed to determine the requirement for further lichen surveys following consultation with the IoSWT. This focussed on areas with suitable underlying habitats; however, it should be noted that the site was not included within this desk study. | No further survey was required due to the lack of suitable underlying habitats for lichens within the site. A value of 'Negligible' has been assigned to lichens as a group due to the limited habitats within the site for species of conservation concern to be present. | Negligible |
| Other Protected and Notable Mammals | ERRCIS returned six records for notable mammals within St. Mary's since 2006 including lesser white-toothed (Scilly) shrew (<i>Crocidura suaveolens</i>) in 2015, and West European hedgehog (<i>Erinaceus europaeus</i>). | Habitats suitable for the Scilly shrew and hedgehog to use as resting places were absent from the site, however due to the nearby residential gardens they may be present for foraging or commuting. A value of 'negligible' has been assigned to the Scilly shrew due to the presence of suitable nearby habitat only. | Negligible |

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5 Potential Impacts, Mitigation and Residual Impacts

The ecological impact hierarchy requires that all steps are taken to avoid adverse impacts to habitats and species. Only where impacts cannot be avoided, steps should be taken to mitigate for any losses within the project boundary. In cases where all options for on-site mitigation have been exhausted, offsite compensation measures can be considered.

Residual impacts are those which are still present even after the implementation of mitigation within the project design. These are considered during both the construction and operational phases.

5.1 Ecological Receptors Scoped out of Further Assessment

After review of the final layout and details of the proposed scheme, the following ecological receptors, presented below in Table 7, have been scoped out of further assessment. It is considered unlikely that the project and associated works will give rise to likely significant effects, and they have therefore not been considered further within the EcIA.

Table 7 Ecological Receptors Scoped Out of the EclA following Review of the Final Project

| Ecological Receptor Scoped Out | Justification |
|--|---|
| Habitats | |
| Priority Habitats | No priority habitats are present within the site or proximity to the construction or operational impacts of the proposed scheme. Therefore, the potential for likely significant effects on the species are neutral . |
| Developed/Sealed Surface and buildings | The habitats within the site are of negligible value and therefore, the potential for likely significant effects on the habitats are neutral . |
| Modified grassland | The habitats within the site are of negligible value and will be reinstated following completion of the scheme and therefore, the potential for likely significant effects on the habitats are neutral . |
| Ornamental/non-native hedgerow | The habitats within the site are of negligible value and will be retained in full during construction and therefore, the potential for likely significant effects on the habitats are neutral . |
| Species | |
| Amphibians | Amphibian species are considered unlikely to be present within the site and therefore the proposed scheme would not impact on them during either the construction or operation phases of the proposed scheme. Therefore, the potential for likely significant effects on the species are neutral . |
| Bats – roosting | Roosting bats are considered unlikely to be present within the site based on the results of the emergence survey. Therefore, the proposed scheme would not impact on them during either the construction or operation phases of the proposed scheme. Prior to demolition, an ecologist will complete an updated survey to determine no change to the baseline. Therefore, the potential for likely significant effects on the species are neutral . |
| Bats – foraging and commuting | Given the limited extent of habitat within the site, the requirement for bat activity surveys was considered to be disproportionate to the impacts from the proposed scheme. The proposed scheme involves the demolition and rebuild of the SPS building and therefore connectivity between the Site and wider landscape will not be impacted. In addition, the lighting proposed to be used during the operational scheme will be minimal. LED Task Lighting will be required within the site boundary between 16:00 – 17:30 during winter working only when bats are less active (during occasional warm days only). Therefore, impacts to habitat suitable for foraging and commuting bats will be neutral . |
| Invetebrates (terrestrial) | Protected and notable terrestrial invertebrate species are considered unlikely to be present within the site due to the lack of suitable habitat and therefore the proposed scheme would not impact on them during either the construction or operation phases of the proposed scheme. Therefore, the potential for likely significant effects on the species are neutral . |
| Lichens | Protected and notable lichen species are considered unlikely to be present within the site due to the lack of suitable habitat and therefore the proposed scheme would not impact on them during either the construction or operation phases of the proposed scheme. Therefore, the potential for likely significant effects on the species are neutral . |

| Ecological Receptor Scoped Out | Justification |
|-----------------------------------|---|
| Other notable species | Impacts to the Scilly shrew and West European hedgehog have been identified during the construction phase of the project in the form of disturbance and mortality. Best practice construction methods should be outlined within the scheme Construction Environmental Management Plan (CEMP). Therefore, the potential for likely significant effects on the species are neutral . |

5.1 Summary of Impacts and Mitigation to Ecological Receptor Scoped into the EcIA

5.1.1 Designated Sites – Impacts and Mitigation

Due to the proximity of the proposed scheme to the Isles of Scilly Complex SAC, Isles of Scilly SPA and Isles of Scilly Ramsar there is potential for significant effects to occur which must be assessed in line with Regulation 63 of the Conservation of Habitats and Species Regulations 2017 (as amended). This assessment will take the form of a Report to Inform Habitats Regulations Assessment (HRA) for the proposed scheme and the associated permitted development works. Terrestrial effects to be considered are habitat loss, physical damage / mortality of habitats and species, disturbance (such as noise, vibration, lighting, dust production and air quality issues), visual disturbance, and introduction or spread of INNS.

Best practice construction methods should be outlined within the scheme Construction Environmental Management Plan (CEMP).

Table 8 sets out the impacts to the habitats of the site and the EZI as a result of the project and recommended mitigation measures to be implemented to limit or remove these impacts. These are made on the basis of the current project and should be updated and amended by a suitably qualified ecologist as appropriate should the proposals be revised.

5.1.2 Species - Impacts and Mitigations

Potential adverse effects from the project have been identified for nesting birds during the construction phase of the project in the form of mortality.

Best practice construction methods should be outlined within the scheme CEMP.

Table 8 sets out the impacts from the project which will occur to species utilising the site and EZI, and recommended mitigation measures to be implemented to limit or remove these impacts. These are made on the basis of the current proposals and should be updated and amended by a suitably qualified ecologist as appropriate should the proposals be revised.

Table 8 Impacts and Mitigation to Ecological Receptors

| · | Level of value or importance in relation to the Site | Impact | Significance of impact before mitigation | Recommended Mitigation | Significance of impact following Mitigation |
|--|--|--|--|---|---|
| Designated | Sites | | | | |
| Designated Sites – Habitat and species features | Very high | HRA Conclusions The overall conclusion of the HRA Stage 1 Screening is that the proposed scheme will not lead to likely significant effects upon any qualifying features (habitats or species) of the Isles of Scilly Complex SAC or Isles of Scilly SPA. There will be no loss of the designated site land, no significant effects on the qualifying features within the European sites, proposed scheme site or wider connected area, and nor will the ability of the designated sites to reach conservation objectives be compromised as a result of the proposed scheme. Construction phase - embedded mitigation Best practice construction methods should be outlined within the scheme Construction Environmental Management Plan (CEMP). Operational phase - embedded mitigation | Not significant | No additional mitigation would be required during either the construction or operational phase. | N/A |
| Species | | 14/7 | l | | |
| Birds – general | Negligible | Construction phase - embedded mitigation Habitats present within the site were suitable for nesting birds, and therefore construction works during the summer months could lead to the destruction of active nests. Specific legislation protecting nesting birds will be followed. All clearance of suitable vegetation during site preparation will be undertaken outside of the recognised nesting bird season (late February - August inclusive for most species). If this is not possible, an ecologist will be required to complete a nesting bird check of the working area prior to works commencing. If nests are identified, appropriate mitigation would be required and implemented to ensure the nests are not disturbed or destroyed. This would include erecting an exclusion zone between the works and any nest(s) identified and suspending vegetation clearance works within the exclusion zone until any young had fledged and permanently left the nest. Operational phase - embedded mitigation | Not significant | No additional mitigation would be required during either the construction or operational phase. | N/A |
| | | Operational phase - embedded mitigation N/A | | | |

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5.2 Residual Impacts to Ecological Receptor Scoped into the EclA

5.2.1 Designated Sites – Residual Impacts

Following the embedded mitigation measures set out, there are no residual effects for designated sites.

5.2.2 Species – Residual Impacts

Provided all the embedded mitigation measures set out are implemented, there will be a neutral impact on species. Therefore, no residual impacts in relation to these protected species are anticipated from the project.

5.3 Post Development Monitoring

No further post-development monitoring of other important ecological features is proposed.

5.4 Cumulative Impacts

The proposed scheme forms part of SWWL's Isles of Scilly Capital Delivery Programme. The proposed works are comprised of improvements to the potable and wastewater infrastructure across the archipelago.

Further permitted development works on St Mary's will therefore be completed in addition to the works subject to the planning application and are likely to include:

Repairing the existing Morning Point outfall on the Garrison.

For the longer term, SWWL are proposing further potable & wastewater upgrades on St Mary's and across the archipelago.

The local planning portal for the Isles of Scilly was searched on the 02 December 2024 for the latest details of planning applications on the archipelago. While a number of householder and small developments were identified, none have been identified which are considered significant enough to result in cumulative impacts to the site or to the ecology of the wider area.

It is of our knowledge however, that intake and outfall proposals are currently planned for other islands of the Archipelago. It is difficult to assess their cumulative impact at this stage as these proposals are at early design stages.

It is important that future projects consider the green spaces and wildlife corridors such that key habitats and connective routes are retained. Tools such as Biodiversity Net Gain (BNG) must be implemented such that losses through development are known and that project designs target no net loss or a net gain depending on the requirements of both the Local Planning Authority and the NPPF.

6 Ecological Enhancement and Biodiversity Net Gain

The following recommendations have been made to further enhance the ecological value of the site and the wider EZI in line with the current National Planning Policy Framework (NPPF 2024). Where opportunities within the design allow, these ecological enhancement measures should be considered in addition to those required for mitigation.

A separate BNG Assessment has been completed and provides recommendations to achieve 10% Statutory BNG.

As there is limited space within the site boundary, general biodiversity enhancement works could also be completed within the wider SWWL ownership and will aim to deliver an improvement to biodiversity within the overall SWWL ownership.

Table 9 Ecological Opportunities and Enhancement

| Ecological Feature | Ecological Opportunities |
|-----------------------|---|
| Invertebrates | Insect houses, log piles and compost heaps will increase the insect diversity within the site and could be placed within the existing hedgerow and grassland corners of the Parsons Green site where grassland adjoins these habitats. Wildflower planting, including pot plants and planting in tubs, to enhance the site for pollinating insects such as bumble bees and butterflies and should also be incorporated into the Landscape Scheme. |
| Nesting birds | Where practical, it is recommended that bird boxes are built into the timber clad section buildings which have a north east facing wall. |
| Bats | It is recommended that a bat bricks/boxes should be built into the new building to provide additional roost locations within the site. |

7 Ecological Report Limitations

The information reported herein is based only on the interpretation of data collected during the desk study investigations and the site visit. This work pertains specifically to the identification of designated sites, habitats and protected species on the proposed site. Information provided to Pell Frischmann by Environmental Records Centre for Cornwall and the Isles of Scilly and other statutory information sources 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.

The evaluation and conclusions do not preclude the existence of protected species, which could not reasonably have been revealed by the comprehensive desk studies and site visit. Hence, this report should be used for information purposes only and should not be construed as a comprehensive characterisation of all site habitats.

In addition, this report details only the conditions on site, at the time of reporting. The dynamic nature of the natural environment will result in changes to the surrounding environment as seasons change. No responsibility is taken by Pell Frischmann to the existence of additional species identified on this site at a later date.

This report has been prepared solely for the use of South West Water Limited 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.

8 References

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| cological Impact Assessment | Appendix A UKHab Habitat Ma |
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| Bishop and Wolf Pumping Station and Screening Plant | |
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| Ecological Impact Assessment | |

Appendix B Legislation

The Environment Act 2021

The Environment Act 2021 provides a framework for environmental governance, including provisions to establish a 'post-Brexit' set of statutory principles including the creation of an environmental watchdog The Office for Environmental Protection (OEP). In relation to Biodiversity and Nature Conservation, the Act includes targets to halt biodiversity decline by 2030 and mandates a 10% Biodiversity Net Gain for developers.

The Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) consolidates national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and the Directive on the conservation of wild birds (Birds Directive) 2009/147/EC (which is the codified version of the Council Directive 79/409/EEC).

The WCA is the principal mechanism for the legislative protection of wildlife in the UK and is divided into four parts, the first section of which details the protection of wildlife. This legislation protects wild animals listed on Schedule 5 and wildflowers which are listed on Schedule 8. All wild birds and their eggs and nests are protected, with special protection for birds listed on Schedule 1. Invasive plants listed on Schedule 9 must not be spread or propagated in any way.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) transpose Council Directive 92/43/EEC, on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive), and the Directive on the conservation of wild birds (Birds Directive) 2009/147/EC (which is the codified version of the Council Directive 79/409/EEC) into national law.

The regulations protect animals listed on Schedule 2 and plants listed on Schedule 5, also known as European Protected Species. The Regulations allow the designation and protection of Special Areas of Conservation (SACs), Special Protection Areas (SPA's) and RAMSAR sites. These are collectively known as National Site Network within the UK (formerly known as Natura 2000 sites). A development which would have an adverse effect on the conservation interests for which a National Site Network area has been designated should only be permitted where:

- > There is no alternative solution: and
- > There are imperative reasons of over-riding public interest, including those of a social or economic nature.

Where a priority habitat or species (as defined in Article 1 of the Habitats Directive) would be affected, prior consultation with the European Commission is required unless the development is necessary for public health or safety reasons. These conditions also apply to any European protected species that may be present.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities (NERC) Act 2006 places an obligation on all Local Planning Authorities to conserve and protect biological diversity and the natural environment. Section 40 of the Act concerns biodiversity and states: 'Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercising of those functions, to the purpose of conserving biodiversity.'

The Act states that: 'it is important that public authorities seek not only to protect important habitats and species, but actively seek opportunities to enhance biodiversity through development proposals, where appropriate.'

This legislation also details those species for each county that are of 'principal importance for the purpose of conserving biodiversity' and includes those that are most threatened, declining, or where the UK populations represents a significant proportion of the global population. These species are mainly derived from the original UK Biodiversity Action Plans (UK BAP) which has now been succeed by the UK Post-2010 Biodiversity Framework published in 2012 and highlights those that are of conservation concern, detailing why they are of concern and the actions required to prevent further declines and to encourage habitat/population expansion.

Bishop and Wolf Pumping Station and Screening Plant Ecological Impact Assessment

Local Biodiversity Action Plans (LBAPs) have been developed which set priorities for locally important habitats and wildlife. The statutory basis for species and habitats listed in the LBAP is provided by Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

The Countryside and Rights of Way Act, 2000

The Countryside and Rights of Way Act 2000 (CROW Act, 2000) increases the measures for the management and protection of Sites of Special Scientific Interest (SSSI), reinforces existing wildlife enforcement legislation, and requires that local authorities provides for better management and have due regards for Areas of Outstanding Natural Beauty (AONB).

Species of principal importance for the conservation of biodiversity in England (as identified under the CROW Act) should be protected from adverse impacts of development. To ensure that the habitats of these species are not adversely impacted upon, the planning authority may impose planning conditions or obligations.

The Invasive Alien Species (Enforcement and Permitting) Order 2019

The Invasive Alien Species (Enforcement and Permitting) Order 2019 are regulations which aim to prevent and minimise the impact of the introduction and spread of non-native plants and animals 'not ordinarily resident in' and 'not a regular visitor to Great Britain in a wild state', or otherwise listed in Schedule 2. The order lists 66 species which are of special concern and apply to live plant and animal specimens (including anything they can reproduce from, such as seeds, spores and fragments of plants). The regulations make it an offence to import, keep, breed, transport (except transporting for eradication), sell, exchange, allow to grow, cultivate or permit to reproduce, or release into the environment unless a licence, permit or exemption is in place.

The Protection of Badgers Act 1992

The Protection of Badgers Act 1992 provides protection to badgers and their setts from injury/fatality, damage and any form of disturbance; however, this does not extend to the protection of other habitats badgers may utilise.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 affect hedgerows that are 20m or more in length or are connected at both ends to another hedgerow (of any length) and enable their protection from intentional or reckless removal, or to cause or permit another person to remove a hedgerow. The regulations apply to hedgerows that are on, or adjoining, land that is used for the following – agriculture; forestry; breeding or keeping of horse, ponies or donkeys; common land; village greens; and SSSI's or Local Nature Reserves (LNR's).

the LPA have powers to serve a Hedgerow Retention Notice, requiring that the hedgerow is retained if a hedgerow is deemed to be important under specified criteria (found in chapter 7 The Hedgerow Regulations – A Guide to the Law and Good Practice) and is older than 30 years. The regulations do not apply to hedges that are attached to houses.

Ancient Woodlands and Veteran Trees

Ancient semi natural woodland consists of any wooded area which has been wooded continuously since at least 1600 AD and has protection under the NPPF. Ancient Woodlands are described as irreplaceable habitats as per Natural England's standing advice which states that local planning authorities 'should refuse planning permission if development will result in the loss or deterioration of ancient woodland, ancient trees and veteran trees unless:

- > there are wholly exceptional reasons
- > there's a suitable compensation strategy in place

To protect Ancient Woodland and Veteran Trees during development, The Forestry Commission and Natural England have published guidance (known as 'standing advice'). This standing advice is a material consideration during the planning process and should therefore be considered when making decisions on

Bishop and Wolf Pumping Station and Screening Plant Ecological Impact Assessment

relevant planning applications. This standing advice was last updated in November 2018 and states the following:

- > 'For ancient woodlands, you should have a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, you're likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic'.
- > 'A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter'.