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Capital Delivery Programme

Environmental Impact Assessment Screening Report  
St Martin's Water Supply Distribution Pipeline

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# 1 Introduction

## 1.1 Background

1.1.1 Pell Frischmann was commissioned by Trant Engineering Limited (Trant, 'the Principal Contractor'), on behalf of South West Water (SWW, 'the applicant'), to produce an Environmental Impact Assessment (EIA) Screening Report for the St Martin's water supply distribution pipeline ('the proposed scheme'), on the island of St Martin's, within the Isles of Scilly archipelago. Refer to Appendix A for further details.

1.1.2 Potable water is currently abstracted via boreholes at Lower Town, Middle Town and Higher Town. A review of existing infrastructure was undertaken by AECOM Limited (refer to: *Isles of Scilly St Martin's – Potable Water Survey Outcomes, Evaluation and Recommendations Technical Report* – issued 2019). The report concluded that (i) water abstracted from Middle Town was of a higher quality than water abstracted at Higher Town; and (ii) the lower quality water at Higher Town was unlikely to meet the criteria for drinking water, particularly during the tourist season.

1.1.3 SWW subsequently engaged Pell Frischmann to undertake the design of new potable water infrastructure for the works.

### The Need for the Scheme

1.1.4 SWW has statutory responsibilities for the provision of water and wastewater services to people and businesses in the Isles of Scilly. SWW are investing to improve resilience and compliance, as well as investing in improving water quality to create a stable resource to improve water quality and increase supply during peak season (April to September).

1.1.5 As part of these works, SWW proposes that treated water from Middle Town be mechanically pumped to Higher Town to provide interim improvements in drinking water quality at Higher Town, prior to new water treatment facilities being constructed as part of a separate future scheme.

### Purpose of the Report

1.1.6 The purpose of this report is to provide the Isles of Scilly Council with sufficient information to formulate a Screening Opinion in accordance with Regulation 5(1) and (2) of *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017*<sup>1</sup> (the 'EIA Regulations').

1.1.7 This report accompanies a written request for an EIA Screening Opinion and aims to inform the relevant authorities about the potential for significant environmental effects from construction and operation of the proposed scheme, in accordance with the EIA Regulations.

1.1.8 Pell Frischmann have considered the proposed scheme in line with screening selection criteria listed under Schedule 3 of the EIA Regulations (summarised in Section 1.2 overleaf). The conclusion of this report is that the scheme is **unlikely** to constitute an **EIA Development**. As such, the applicant is pursuing the works to be undertaken as permitted development as the laying of below ground water pipelines falls within the permitted development rights afforded to SWW as a Statutory Undertaker under *The Town and Country Planning (General Permitted Development) (England) Order 2015* Schedule 2, Part 13, Class A.

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<sup>1</sup> The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 [The Town and Country Planning \(Environmental Impact Assessment\) Regulations 2017 \(legislation.gov.uk\)](https://www.legislation.gov.uk/uksi/2017/1003/contents/made)

## 1.2 Environmental Impact Assessment Regulations

1.2.1 This EIA Screening Report has been prepared in line with the ‘*Selection Criteria for Screening Schedule 2 Development*’ of Schedule 3 Regulation 5(4) of the EIA Regulations. Said criteria are listed within Table 1 below, along with each section in which the criteria have been addressed.

1.2.2 Selection criteria within Schedule 3 of the EIA Regulations considers the sensitivity of the receiving environment. The characteristics and location of the development and the characteristics of the potential impacts must be considered to determine whether the proposed scheme is likely to have significant effects on the environment. If there are no significant environmental effects, then the proposed scheme will not constitute an EIA development.

**Table 1: Schedule 3 Selection Criteria for Screening Schedule 2 Development (as per EIA Regulations)**

Schedule 3 Criteria	Report Section
<b>Characteristics of the development</b>	
The following characteristics of development must be considered:	
(a) The size and design of the development;	Section 2.2
(b) Cumulation with other existing development and/or approved development;	Section 12
(c) The use of natural resources, in particular land, soil, water and biodiversity;	Sections 3, 6, 0 and 8
(d) The production of waste;	Section 0
(e) Pollution and nuisances;	Section 9
(f) The risk of major accidents and/or disasters relevant to the development concerned, including those caused by climate change, in accordance with scientific knowledge;	Section 11
(g) The risks to human health (for example, due to water contamination or air pollution).	Section 11
<b>Location of development</b>	
The environmental sensitivity of geographical areas likely to be affected by development must be considered regarding:	
(a) The existing and approved land use; (b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground; (c) The absorption capacity of the natural environment, paying particular attention to the following areas – i. Wetlands, riparian areas, river mouths; ii. Coastal zones and the marine environment; iii. Mountain and forest areas; iv. Nature reserves and parks; v. European sites and other areas classified or protected under national legislation; vi. Areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure; vii. Densely populated areas; viii. Landscape and sites of historical, cultural or archaeological significance.	Section 2
<b>Types and characteristics of the potential impact</b>	
The likely significant effects of the development on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, about the impact of the development on the factors specified in regulation 4(2), considering:	
(a) The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); (b) The nature of the impact; (c) The transboundary nature of the impact; (d) The intensity and complexity of the impact; (e) The probability of the impact; (f) The expected onset, duration, frequency and reversibility of the impact; (g) The cumulation of the impact with the impact of other existing and/or approved development; (h) The possibility of effectively reducing the impact.	Section 2

## Completed Surveys and Assessments

1.2.3 This EIA Screening was informed by ecological and heritage desktop assessments and walkovers. A Habitat Regulations Stage 1 Screening was also undertaken (refer to Appendix I for further details). The findings of these assessments are discussed throughout this EIA Screening.

## Consultation

1.2.4 The Isles of Scilly Wildlife Trust were consulted during the design of the proposed scheme. Consultation provided additional knowledge of local terrestrial and marine species and informed the scope of further surveys. Consultation with the Wildlife Trust will be ongoing throughout the proposed scheme.

# 2 The Proposed Scheme

## 2.1 Location and Setting

2.1.1 The proposed scheme is situated on the island of St Martin's, with the approximate midway point of the pipeline being located at National Grid Reference SV 92439 15988. The pipeline is approximately 1,360m in length and crosses through a variety of habitats including agricultural farmland and green space, woodland, and farm tracks / access roads. The full extent of the proposed scheme is located between the settlements of Middle Town and Higher Town and can be viewed in Appendix C: Environmental Constraints Figure.

2.1.2 The central section of the proposed scheme lies adjacent to the Community Observatory St Martin's on Scilly (COSMOS) Community Observatory and nearby to the St Martin's Island Hall and Reading Room (which is located to the south of the Observatory, National Grid Reference Number SV 92419 15981). The eastern extent is located near to North Farm Gallery, Higher Town.

2.1.3 Selection of the proposed pipeline route has been informed by discussions with various landowners, particularly in locations where the pipeline runs past community areas or sensitive designations (such as the area north / north-east of Middle Town) and near the COSMOS Community Observatory. SWW also ran a public consultation session to get feedback from the local Isles of Scilly public regarding the routing.

### Sensitive Areas

2.1.4 The EIA Regulations describe a 'sensitive area' as the following:

- A Site of Special Scientific Interest (SSSI);
- A National Park;
- The Broads;
- A property on the World Heritage List;
- A Scheduled Monument;
- An Areas of Outstanding Natural Beauty; and / or
- A European site.

2.1.5 A map containing an overview of sensitive areas in relation to the proposed scheme location is provided within Appendix C. The proposed distribution pipeline route is within a National Landscape (formally Area of Outstanding National Beauty). The proposed pipeline does not pass through any other sensitive areas as listed above. Sensitive areas located within 500m proposed scheme include:

- Plains & Great Bay (St Martin's) SSSI – approximately 5m from the east boundary of the pipeline extents east of Middle Town;
- Isles of Scilly Special Protection Area (SPA) – 200m east of the proposed pipeline (at its closest point);
- St Martin's Sedimentary Shore SSSI – located approximately 230m south of pipeline extents (at its closest point);

- Isles of Scilly National Landscape (archipelago-wide);
- Isles of Scilly Complex Special Area of Conservation (SAC) – 270m east of the proposed pipeline (at its closest point);
- Porth Seal (St Martin's) Geological SSSI (gSSSI) – 315m to the north-west of proposed pipeline extents north of Middle Town;
- 11 Scheduled Monuments, the closest of which are:
  - Prehistoric cairn and prehistoric to post-medieval field systems between The Plains and Wine Cove, St Martin's – located approximately 5m from scheme extents north of St Martin's Island Hall & Reading Room; and
  - Prehistoric cairn cemetery, field system and settlements on Top Rock Hill, St Martin's, located approximately 65m to the north of the scheme extents north of Middle Town.

## 2.2 Proposed Scheme Description

2.2.1 The proposed scheme comprises the construction of two new pressurised potable water distribution pipelines between Middle Town and Higher Town, both of which are approximately 1,360m in length. These are shown on the proposed scheme layout plan, presented in Appendix A. It is expected that the pipework will be laid approximately 900mm below ground level, with the possibility of reducing this to 500mm in areas of poor ground quality.

2.2.2 It is proposed that the two pipes will be placed alongside each other, running run in parallel from Middle Town to Higher Town. The two pipelines with comprise the following:

- A smaller polyethylene pipe, with a diameter of 50mm (the interim pipeline), will be used for the initial distribution of water between the existing treatment infrastructure at Middle Town and Higher Town for approximately 1 year. The pipe will then be used to transfer flows from the Higher Town boreholes to a new treatment works (as part of a separate works scope). This interim pipe allows flows to be transferred from Middle Town to Higher Town to provide an improvement in water quality at Higher Town prior to the main project being completed.
- A larger polyethylene pipe, with a diameter of 110mm (the permanent distribution pipeline), will then be commissioned after March 2025 to continue providing potable water. This pipeline will act as the distribution main as part of the permanent works, will be installed at the same time in order to minimise construction on the island.

2.2.3 The pipe trench width will be approximately 600mm to accommodate the two pipes, along with 150mm of bedding on either side. An approximate easement of 3m from the outside edges of the pipelines will be used, meaning that the construction working area is approximately 6m (~6.3m) wide. The easement has been aligned based on existing land boundaries to ensure a useable 6m area is provided along the full length of the pipelines. Considering the length of the pipeline and width of the working area, the total footprint associated with the works is approximately 8,160m<sup>2</sup>.

2.2.4 The proposed scheme will include an above ground asset in the form of a small kiosk to house the pumps, which will be located within SWW leased land in Middle Town.

## 2.3 Proposed Construction Methodology

2.3.1 Construction is expected to start in March / April 2024, with testing and commissioning completed in June 2024.

2.3.2 Materials will be transported directly from the mainland to the quay at Higher Town. Landing craft will be used on the beach adjacent to Higher Town quay in place of using the quay at Lower Town or Higher Town. The landing craft allows for better access to land from sea. Access will be over the dunes on the cut out by the

Seal Snorkelling Adventures. Consideration will also be given to the use of the quays at Higher Town and Lower Town, subject to weight restrictions and the tides.

2.3.3 Two temporary storage areas have been identified on the island to support the works:

- One adjacent to The Parsonage, approximately 150m south-west of the pipeline near the Community Observatory (National Grid Reference: SV 92288 15901) and;
- One located off Cruther's Neck, approximately 265m to the south of the eastern extent of the pipeline near Higher Town (National Grid Reference: SV 92878 15296).

2.3.4 Refer to Appendix B: Proposed Scheme Access Plan for details of the routes that can be taken to access different parts of the works, including the storage areas.

2.3.5 The storage areas will store materials such as bagged aggregate to reinstate the trench and stones and soil materials that have been removed from the pipeline trench. On a day to day basis, plant and welfare for the works will follow along the pipeline routes as the works progress, however they will need to be stored temporarily within the storage areas at the beginning and end of the construction works. The storage area near Higher Town will help facilitate the removal of material and equipment from the quay / beach area on Higher Town Bay.

2.3.6 Vegetation within the storage area adjacent to The Parsonage will be cleared prior to use. Clearing will be undertaken using mechanical landscaping tools such as strimmers and hand tools. Consideration will only be given to using excavators and plant if bracken cannot be easily cleared using hand tools. Cut bracken will be disposed of on St Mary's. Clearing will be supervised by an ecologist who will provide a watching brief.

2.3.7 The construction methodology will vary depending on the location and the depth of the underlying granite which will be confirmed following ground investigation works to be undertaken in January 2024. For the majority of the route, the pipelines will be installed using open cut trenching. In sensitive areas (such as root protection zones and where known buried services are present), the excavation will be completed using vacuum excavation equipment and hand digging techniques to reduce impacts to the root protection zones. Vacuum excavation collects the soil without any penetrating tool, so this reduces the risk of striking any uncharted buried services and minimises impacts to root protection zones.

2.3.8 Subject to ground conditions, and where practicable, opportunities for directional drilling or trenchless pipe muling will also be explored to avoid potential impacts upon hedgerows (notably 'protected hedgerows' under *The Hedgerow Regulations 1997*) and local stone walls. It is not anticipated that any removal of hedgerows will be required - this is discussed in more detail at paragraph 4.1.11.

2.3.9 Numerous reviews of the design and construction methods were undertaken to minimise disturbance during the construction phase. The following principles have been employed during design and construction of the proposed scheme:

- Achieve the shortest and most direct viable route for pipelines;
- Avoid construction within existing road networks where possible;
- Avoid environmentally sensitive habitats and areas (such as by routing the pipeline outside of the boundary of sensitive habitats / areas – as far as reasonable considering landowner requirements and providing appropriate fencing during works);
- Ensure the alignment minimises interaction with property owners and landowners;
- Ensure excavations are as shallow as possible to minimise disturbance;
- Limit the number of high and low points on the rising main and position to allow access to air valve and washout points; and
- Minimise the number of crossing points with roads, watercourses and services.

2.3.10 Whilst most of the excavated topsoil will be retained for backfilling and reinstatement, some suitable topsoil may need to be imported due to the underlying granite level being close to the surface. Based on



dynamic cone penetration testing, some underlying bedrock will be removed as part of the excavation activity. This will be removed as it is not suitable material to be laid on top of the pipeline as uneven pressure could lead to leaks or bursts. Based on the UK Water Industry Standard<sup>2</sup> for bedding, if as-dug material cannot be used, processed granular material will be required for backfilling.

### Construction Traffic

2.3.11 It is anticipated that there would be approximately 6-8 movements per day between the storage and working areas, which will include a small dumper transporting aggregates and materials.

2.3.12 There will be partial road closures on sections where the works are near roads (and when the works are occurring in that section of the pipeline). A traffic management system will be in place, which will consist of two staff with Stop/Go signs on each side.

## 2.4 Potential Impacts of the Proposed Scheme

2.4.1 Once constructed, the proposed scheme will comprise a below ground water distribution pipeline. Consequently, no adverse environmental impacts are anticipated during the operation and routine maintenance of the pipeline.

2.4.2 The potential for adverse environmental impacts is likely to be restricted to the construction phase only (March – June 2024) and could include the following:

- Disturbance of nearby sensitivity receptors as a result of increased noise and vibration associated with:
  - The movement / operation of construction plant and vehicles.
  - The delivery and movement construction materials.
  - Construction activities including the excavation works, stockpiling of arisings and backfilling of trenches.
- Localised air quality impacts from the generation of construction dust associated with material cutting, planned excavation works, stockpiling of arisings and backfilling of trenches.
- Disturbance of nearby sensitivity receptors from task lighting.
- Visual Impact of the construction works.
- The removal of existing vegetation along the pipeline route.
- Disturbance of unidentified below ground archaeological artifacts as a result of excavation works.
- Pollution of soil and the underlying aquifer groundwater from:
  - accidental spillage of chemical products (including fuels, oils and lubricants).
  - the mobilisation of existing unidentified below ground contamination.

## 2.5 Construction Environmental Management Plan

2.5.1 A Construction Environmental Management Plan (CEMP) is being developed for scheme and will be in place in advance of the start of works. The CEMP will provide specific control measures to reduce the potential impacts upon sensitive environmental receptors, in-line with current legislation and good practice guidance.

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<sup>2</sup> UK Water Industry (2008), *Water Industry Specification 4-08-32 Specification for Bedding and Sideliff Materials for Buried Pipelines* pp 1-4

2.5.2 The following topics will be outlined within the CEMP:

- General construction information;
- Roles and responsibilities;
- Environmental management requirements including measures for managing the following environmental aspects;
  - Dust and emissions to reduce impacts to air quality;
  - Noise, vibration and light to reduce disturbance to human and environmental receptors;
  - Hazardous materials to avoid pollution events to coastal waters and groundwaters;
  - Preventative measures to reduce the potential for impacts to previously unrecorded heritage assets;
  - Ecological disturbance through retention of habitat where possible;
  - Maintaining high standards of biosecurity to include measures to prevent the spread of Dutch Elm disease;
  - Timing of works to avoid breeding bird season; and
  - Protection of trees by installing root protection areas, fencing and signage.
- Environmental constraints maps;
- Health and Safety toolbox talks;
- Incident management and investigation procedures; and
- Site environmental toolbox talks.

## 2.6 Sustainable Design Principles

2.6.1 The following sustainable design principles and initiatives will be implemented for the proposed scheme:

- The scheme is designed to ensure the most optimal use of space to reduce the footprint of the proposed scheme to reduce land-take and associated impacts to the environment;
- New infrastructure will be designed to reduce embedded and emitted carbon, as well as being designed to reduce waste generation where possible;
- Waste soils will be reused and retained on site where possible to reduce the amount of material sent to landfill;
- Opportunities to use alternative fuels, electric, and hybrid plant and vehicles during construction will be explored to reduce requirements for fossil fuel sources;
- Use of construction materials that are in-keeping with the surrounding landscape and infrastructure to ensure that the scheme is visually sensitive to the area, particularly considering the presence of the Area of Outstanding Natural Beauty (AONB – now referred to as National Landscapes) and Conservation Area covering the whole archipelago; and
- Utilise existing infrastructure where possible to reduce the need to construct new elements for the scheme, as well as manufacturing design elements off-site as much as is practicable to minimise on-site works.

2.6.2 The scheme will be developed in-line with the Isles of Scilly Sustainability Strategy (refer to: 780-PEF-XX-ZZ-T.RP-EN-0001) identified for the Isles of Scilly Capital Delivery Programme and will follow sustainable design and construction methods.

## 3 Nature Conservation Designations

3.1.1 This section is supported by Appendix C: Environmental Constraints Figure and Appendix D: Ecological Designations Impact and Requirements Table for a complete overview of potential impacts on statutory ecological designations. Also refer to Appendix I: Habitat Regulations Stage 1 Screening and Appendix J: Preliminary Ecological Appraisal Summary.

## Statutory Designations

3.1.2 The proposed scheme is not situated within any statutory designations but it is within Impact Risk Zones (IRZ) of several SSSIs that are located within the surrounding area. These are listed in Table 2.

**Table 2: On-site Impact Risk Zone**

Impact Risk Zone	Proximity to the Proposed Scheme	Reasons for Designation
<b>Plains &amp; Great Bay (St Martin's) SSSI IRZ</b>	The northern portion of the proposed distribution pipeline is directly adjacent to this SSSI. At its closest point, the proposed pipeline alignment has been set 1.5m away from hedgerow boundary that appears to mark the boundary of the Plains & Great Bay SSSI.  Due to its proximity, the proposed scheme is located within the inner zone of the SSSI IRZ. Due to its proximity, the proposed scheme is located within the inner zone of the SSSI IRZ;	Designated for its dune system on windblown granite sand. The dune, dune grassland and heathland habitats support several nationally rare and uncommon plant species. The site is also of importance for illustrating the classic succession of coastal communities from embryo dunes to dune scrub.  Protected scrub and habitat for Ringed Plover <i>Charadrius hiaticula</i> <sup>3</sup> .
<b>St Martin's Sedimentary Shore SSSI IRZ</b>	Designation located approximately 230m south of the proposed scheme (at its closest point).  The proposed scheme is located within the inner zone of the SSSI IRZ	Sediment habitats and their marine wildlife that are considered to be nationally and perhaps internationally important.
<b>Chapel Down SSSI IRZ</b>	Designation located approximately 745m to the east of the proposed scheme.  The proposed scheme is located within the outer zone of the SSSI IRZ;	Exposed headland on the eastern side of the island of St Martin's that support distinctive 'waved' maritime heathland with small areas of Small areas of maritime grassland. Exposed cliffs also support the largest Scillonian colony of breeding Kittiwake <i>Rissa tridactyla</i> together with breeding Fulmar <i>Fulmarus glacialis</i> , Herring Gull <i>Larus argentatus</i> and Lesser Black-backed Gull <i>L. fuscus</i>

3.1.3 Other statutory designations located within 500m of the proposed scheme are presented in Table 3.

**Table 3: Other off-site statutory designations within 500m of the proposed scheme**

Designation	Proximity to the Proposed Scheme	Reasons for Designation
<b>Isles of Scilly Complex SAC</b>	An archipelago wide designation covering the coastal and marine areas. Located approximately 270m east of the proposed pipeline (at its closest point).	<ul style="list-style-type: none"> <li>➤ Sandbanks which are slightly covered by sea water all the time (subtidal sandbanks);</li> <li>➤ Mudflats and sandflats not covered by sea water at low tide (intertidal mudflats and sandflats);</li> <li>➤ Reefs;</li> <li>➤ <i>Halichoerus grypus</i> (grey seal); and</li> <li>➤ <i>Rumex rupestris</i> (shore dock).</li> </ul>
<b>Isles of Scilly SPA</b>	An archipelago wide designation covering the coastal and marine areas. Located at the coast 200m east of the proposed scheme (at its closest point).	<ul style="list-style-type: none"> <li>➤ <i>Hydrobates pelagicus</i> (European storm-petrel);</li> <li>➤ <i>Larus fuscus graellsii</i> (lesser black-backed gull);</li> <li>➤ <i>Phalacrocorax aristotelis</i> (European shag); and</li> <li>➤ <i>Larus marinus</i> (great black-backed gull).</li> </ul>
<b>Men a Vaur to White Island Marine</b>	Covering the marine and coastal area to the north of St. Martin's.	<ul style="list-style-type: none"> <li>➤ Intertidal coarse sediment;</li> <li>➤ Intertidal sand and muddy sand;</li> <li>➤ Moderate energy intertidal rock;</li> </ul>

<sup>3</sup> Natural England (1986) Plains and Great Bay (St Martin's) Citation. [last accessed: November 2023]. Available at: [1001923 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk/1001923)

Designation	Proximity to the Proposed Scheme	Reasons for Designation
<b>Conservation Zone (MCZ)</b>	Located approximately 200m to the east of the proposed scheme (at its closest point).	<ul style="list-style-type: none"> <li>➤ High energy intertidal rock;</li> <li>➤ Intertidal underboulder communities;</li> <li>➤ Spiny lobster (<i>Palinurus elephas</i>); and</li> <li>➤ Stalked jellyfish (<i>Lucernariopsis campanulata</i>).</li> </ul>
<b>Higher Town MCZ</b>	Covering the marine and coastal area to the south of St. Martin's.  Located approximately 380m to the south of end point of the proposed distribution pipeline near Higher Town.	<ul style="list-style-type: none"> <li>➤ Intertidal coarse sediment;</li> <li>➤ Intertidal sand and muddy sand;</li> <li>➤ Low energy intertidal rock;</li> <li>➤ Moderate energy intertidal rock;</li> <li>➤ Intertidal underboulder communities; and</li> <li>➤ Stalked jellyfish (<i>Haliclystus auricula</i>).</li> </ul>
<b>Tean MCZ</b>	Covering the marine and coastal area to the west of St. Martin's.  Located approximately 515m west of the end point of the proposed pipeline north of Middle Town.	<ul style="list-style-type: none"> <li>➤ Intertidal coarse sediment;</li> <li>➤ Intertidal sand and muddy sand;</li> <li>➤ Moderate energy intertidal rock; and</li> <li>➤ Intertidal underboulder communities.</li> </ul>
<b>Porth Seal (St Martin's) Geological SSSI (gSSSI)</b>	Located 315m to the north-west of proposed pipeline extends north of Middle Town.	Porth Seal is important for Quaternary studies, with a sequence of (i) raised beach, (ii) series of interbedded organic and inorganic silts and sands, and (iii) head deposits. Porth Seal provided important information on Late Pleistocene environmental conditions in the south-west of England.

## Non-statutory Designations

3.1.4 A section of the proposed scheme east of Middle Town falls within the Isles of Scilly Wildlife Trust Reserves. This also includes part of the route which is located to the east of the COSMOS Community Observatory

## Likelihood of Significant Adverse Effects

3.1.5 A Habitats Regulations Assessment (HRA) Stage 1 Screening has been completed and appended to this report (in Appendix I). The purpose of the Screening was to assess whether there are direct environmental impacts on European sites arising from the proposed scheme, including Isles of Scilly Complex SAC and SPA. Due to the proximity of the Plains & Great Bay SSSI, potential impacts upon the SSSI have also been covered within the HRA report.

3.1.6 The HRA concluded that significant adverse effects upon either the Isles of Scilly Complex SAC, the Isles of Scilly SPA or Plains & Great Bay (St. Martin's) SSSI or their qualifying features are **unlikely**. This is due to:

- The limited scale of and duration of construction activities that could generate high noise or dust emissions;
- Potential impacts to functionally linked land would likely be temporary and limited in nature and given the planned construction programme, only affect non-breeding qualifying bird species;
- Potential impacts associated with construction works will be temporary and short term;
- Once operational, the works will be buried beneath the ground and no significant effects are envisaged (with minimal maintenance anticipated).

3.1.7 Considering the above, no direct impacts are anticipated to this MCZ as no infrastructure is proposed within the MCZ waters. Equally, it is considered unlikely that the installation works would have a significant effect upon of the habitats or marine species within the MCZ, even with production of noise and disturbance.

3.1.8 It is considered that the potential impacts associated with the proposed scheme can be sufficiently addressed through standalone ecological assessments and management plans.

### Measures to be included within the CEMP

3.1.9 The works area will be delineated prior to excavation commencing to ensure waste and materials are controlled and monitored. Measures to control dust, noise, light, vibration and other sources of nuisance will be documented in the CEMP (with some examples included below). The Principal Contractor will be responsible for implementing the CEMP and ensure activities are completed in line with good practice guidance and relevant legislation. As a result, it is considered unlikely that construction of the proposed scheme would result in adverse effects to the ecological designations. Subject to the findings of the GI works, CEMP measures are likely to include the following:

#### Dust

- Spraying water to suppress dust, for example damping down excavation sites during construction;
- If feasible, excavations and earthworks activities should be avoided during very dry or windy weather;
- Applying sheeting / a covering over soil stockpiles (such as excavated soils to be stored for backfilling); and
- Cleaning the road / track near to the works location, as required.

#### Noise and Vibration

- Construction contractors should adhere to the codes of practice for construction work given in *BS 5228-1:2009-Code of practice for noise and vibration control on construction and open sites – Noise* and the guidance given therein regarding minimising noise from the site;
- Construction plant and equipment should comply with UK noise emissions limits;
- Implementation of a no-idling policy for vehicles; and
- Site fencing / hoarding to be erected prior to the commencement of construction.

#### Light

- It is not considered likely that construction activities, such as excavation or installation, would occur during night-time and therefore require lighting. However, if construction lighting was required measures may include:
  - Turning off lights when not in use to minimise light spill away from the site;
  - Switching off lighting when not required;
  - Undertaking daily assessments for need and appropriateness of task lighting; and
  - Ensuring that light scatter is minimised through height and direction adjustment.

3.1.10 If the construction programme is unable to avoid breeding bird season, a pre-commencement nesting bird survey will be completed to ensure that affected areas are clear of nests (as per the recommendations in the Preliminary Ecological Appraisal).

3.1.11 A review of ecological receptors identified in the ecology walkover that impacts to designated sites are considered highly unlikely, based on the nature of the works. The HRA has verified the findings of this assessment, and as such, an EIA would not be considered necessary.

3.1.12 Designations >500m from the proposed scheme are considered highly unlikely to be affected by the proposed works. The qualifying features are not anticipated to be compromised by construction or operational activities.

3.1.13 Consultation with the Isles of Scilly Wildlife Trust is ongoing, particularly regarding the Isles of Scilly Wildlife Trust Reserves (which part of the scheme falls within).

## 4 Habitats

### Priority Habitat:

4.1.1 The following Priority Habitats are located either adjacent to the proposed scheme boundary, or a very small proportion of habitat is passed through by the pipeline:

- “Lowland heathland;” and
- “No main habitat but additional habitats present” - in this instance, the additional habitats which help make up this mosaic of habitat is lowland heathland and coastal sand dune.

4.1.2 In addition, the following habitats have also been identified within the 500m of the proposed scheme:

- Maritime cliff and slope – approximately 160m south of scheme extents north-west of Higher Town (at its closest point).
- Coastal vegetated shingle – approximately 415m north of scheme extents north of Middle Town.

4.1.3 A very small area of priority habitat will be temporarily lost due to construction. This includes an area of approximately 0.021ha (210m<sup>2</sup> including 6m working area) of “no main habitat but additional habitats” present to the north of Middle Town. However it is noted that where the pipeline passes through this section of habitat, the route has been chosen to go around an existing building. From satellite imagery, this area does not appear to be composed of sand dune or heathland habitat.

### Other Sensitive Habitats

4.1.4 An ecology desktop review and site walkover were undertaken in July 2023. This identified the types of habitats and species present on-site and in the surrounding areas. These details can be found within Appendix J: Preliminary Ecological Appraisal Summary.

4.1.5 The boundaries of the fields affected by the proposed scheme are edged by the non-native karo (*Pittosporum*) dominant hedgerows which also contain non-native species such as tamarisk (*Tamarix*), spindle (*Euonymus*) as well as native species such as bracken (*Pteridium aquilinum*) and bramble (*Rubus fruticosus*).

4.1.6 As such the ecological value of the hedgerows is limited to providing habitat for nesting birds, rather than for intrinsic biodiversity value. However due to the evergreen nature of karo, the hedgerows are valuable for visual screening, providing shelter from prevailing winds as well as contributing to the landscape character.

4.1.7 Vegetation clearance at the Parsonage will be supervised by an ecologist. The area is dominated by bracken species and is considered low ecological value. If fauna are identified within the work area, works in the area will cease. The ecologist will then provide a separate risk assessment.

### Likelihood of Significant Adverse Effects

4.1.8 The temporary loss of heathland is also a very small amount with approximately 0.0027ha (27m<sup>2</sup>, including 6m working area).

4.1.9 Overall, no permanent loss of priority habitats is anticipated as part of the construction of the proposed scheme as the pipeline route is either outside of existing priority habitat, or the small areas of priority habitat and other grassland areas along the pipeline route that will be disturbed will be reinstated following placement of the pipe.

4.1.10 Topsoil will be stripped and stockpiled separately to ensure that soil structures are maintained to enable replacement habitats to regrow effectively once the topsoil has been reinstated. Other non-hazardous excavated material will also be retained, stored appropriately and reinstated directly which will help reduce impacts. This excludes the excavated bedrock material, as noted in paragraph 2.3.10.

4.1.11 As mentioned within paragraph 2.3.7, subject to the ground investigation findings, opportunities for directional drilling will be explored in areas of sensitive habitats such as under hedgerows. However, if the opportunities are not feasible, then some disturbance may occur to the hedgerows along the route. Such locations include by the COSMOS Community Observatory (to the north of St Martin's Island Hall & Reading Room), two areas to the north of the St Martin's School, and various locations closer to Higher Town (such as to the north of the Fire Station and HM Coastguard Station and dividing fields to the north of North Farm and to the east of Churchtown Farm).

4.1.12 Impacted hedgerow habitats will be reinstated like-for-like and will be returned to their original state in time. Hedgerow removal notices may be required.

4.1.13 The habitat at The Parsonage is considered low value and clearing will be supervised by an ecologist.

4.1.14 As such, impacts from construction of the proposed scheme are considered temporary and are unlikely to adversely impact priority habitats.

## 5 Archaeology and Cultural Heritage

### On-Site Heritage Designations

5.1.1 The site is located within an area classified as both Heritage Coast and a Conservation Area, which cover the entire Isles of Scilly archipelago. These are both non-statutory designations.

5.1.2 A heritage assessment was undertaken by AC Archaeology in October 2023 (including a desktop study and site walkover). The proposed scheme does not directly intersect within the footprint of a Scheduled Monument or Listed Building, however the assessment identified moderate potential for prehistoric barrows throughout the proposed scheme.

5.1.3 A review of the Isles of Scilly Council Local Plan Policies Map<sup>4</sup> identified that the proposed scheme is located within the following archaeological constraint areas (which are a type of non-statutory designation assigned by Isles of Scilly Council):

- Top Rock Hill – A eastern extent of the scheme falls within the designation to the north of Middle Town;
- Great Bay – Parts of the pipeline (to the north-east of Middle Town and north-west of Higher Town) border this archaeological constraint area;
- Higher Town – A small section of scheme extents are within the designation along a track to the north of Higher Town; and
- North Farm – A small section of scheme extents are within the designation towards the end point of the pipeline north of Higher Town.

5.1.4 There are no statutory heritage designations located on-site, however, the following Scheduled Monuments are located within 100m of the proposed scheme:

- Prehistoric cairn and prehistoric to post-medieval field systems between The Plains and Wine Cove, St Martin's, located adjacent to scheme extents north of St Martin's Island Hall & Reading Room; and
- Prehistoric cairn cemetery, field system and settlements on Top Rock Hill, St Martin's, located approximately 65m to the north of the scheme extents north of Middle Town.

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<sup>4</sup> Isles of Scilly Council (2023) Isles of Scilly Local Plan Policies Map. [last accessed: November 2023]. Available at: [Local Plan \(2015 - 2030\) | Council of the ISLES OF SCILLY](#)

## Off-Site Heritage Designations

5.1.5 There are a further 11 Scheduled Monuments within 500m of the proposed scheme.

5.1.6 The following Listed Buildings (Grade II) are within 100m of the proposed scheme:

- Bleak House – 15m south of scheme extents north of Higher Town;
- Outbuilding approximately 25m west of North Farmhouse – 15m south-east of scheme extents north of Higher Town;
- Outbuilding approximately 25m west south west of North Farmhouse – 25m south of scheme extents north of Higher Town;
- Pigsty approximately 25m north west of North Farmhouse – 30m east of scheme extents north of Higher Town;
- Outbuilding approximately 2m south west of North Farmhouse – 45m east of scheme extents north of Higher Town;
- North Farmhouse – 55m east of scheme extents north of Higher Town;
- Church of St Martin's approximately 75m west of scheme extents north of Higher Town;
- Corner Cottage Evergreen Melinda – 80m south-east of scheme extents north of Higher Town;
- K6 Telephone Kiosk – 80m south-east of scheme extents north of Higher Town; and
- Rock Cottage Rock House – 90m south of scheme extents north of Higher Town.

5.1.7 A further three Grade II Listed Buildings are located within 500m of the proposed scheme.

5.1.8 There are no World Heritage Sites, Registered Parks and Gardens, Registered Battlefields or Protected Wreck Sites within 500m of the proposed scheme.

5.1.9 A summary of all heritage designations located within 500m of the proposed scheme is provided within Appendix E: Heritage Designations. Appendix C: Environmental Constraints Figure should also be referred to for the location of certain nearby heritage assets.

## Likelihood of Significant Adverse Effects

5.1.10 There is potential for disturbance to on-site non-statutory heritage designations, as well as nearby statutory heritage designations.

5.1.11 Where there is close proximity between the working area and a Scheduled Monument boundary (such as the two designations mentioned within paragraph 5.1.4 above), the area will be fenced with warning signs to prevent physical incursion into the designated site.

5.1.12 The heritage survey also suggested the presence of dry-stone wall breaches throughout survey area. Potential impacts include:

- Excavation of and damage to unearthened heritage assets; and
- Vibration-intensive activities causing damage to structures.

5.1.13 As mentioned within Section 2.3 (Proposed Construction Methodology), the technique of installing the pipelines using opportunities for directional drilling or trenchless pipe muling via a piercing tool under hedgerows will also be explored for stone walls. This technique creates a passage for a sleeve to be installed underneath walls (including local stone walls) to feed the pipe into. This will help reduce physical impacts upon the local stone walls. It is not anticipated that any removal of stone walls will be required.

5.1.14 The assessment recommends a watching brief and accompanying method statement be undertaken in areas with high potential for unearthened heritage assets. In addition, a Written Scheme of Investigation will be produced prior to the construction. These documents will be discussed and agreed with the County Archaeologist before start of works. The initial watching brief will inform the need for further watching briefs on



the remaining excavations throughout the proposed scheme. Controls to manage impacts to heritage will also be stated in the CEMP which will detail further required archaeological investigation / methodologies.

5.1.15 Once operational, the proposed scheme is unlikely to have an impact upon the setting of heritage assets throughout the proposed scheme.

5.1.16 Based upon the above findings, it is considered that the potential impacts upon archaeology and heritage assets as a result of the proposed scheme can be addressed by a watching brief and an accompanying method statement and are not considered to be of such significance to require an EIA.

## 6 Landscape

### On-Site Landscape Designations

6.1.1 The site is located within the Isles of Scilly National Landscape which is classified as a sensitive area by the EIA Regulations. It is designated for the diverse scenery that makes up the Isles of Scilly archipelago, including rugged cliffs and headlands, sandy bays, hidden coves, shifting dunes and saline lagoons<sup>5</sup>.

6.1.2 The site is also located within National Character Area 158 Isles of Scilly which is designated for the complex seascapes, unique field and settlement patterns, and isolated nature of the Isles of Scilly archipelago.

6.1.3 Further details of these landscape designations can be found in Appendix F: Landscape Designations.

### Likelihood of Significant Adverse Effects

6.1.4 The proposed scheme comprises open-cut excavation and installation of a sub-surface distribution pipeline.

6.1.5 Although it is anticipated there would be no need for hedgerow removal or loss of trees, there is potential for impacts to landscape receptors during construction including loss of on-site features such ground vegetation as well as to the setting of landscape designations because of construction activities disturbing the natural beauty and tranquillity of the area. In addition, there is potential for temporary impacts to visual receptors from the works including residential receptors, users of footpaths, publicly accessible areas and on views within the designations.

6.1.6 Impacts to the landscape designations are likely to be temporary only during construction. Mitigation will be stated in the CEMP to reduce noise, dust and light, thereby reducing the severity of the short-term impacts.

6.1.7 Based on the relatively short construction programme and confined area of construction, significant effects to landscape and visual amenity are considered unlikely.

6.1.8 The proposed scheme will not be visible following construction, and as such, long-term impacts to the landscape and visual amenity are considered highly unlikely. A dedicated Landscape and Visual Impact Assessment has not been undertaken for the proposed scheme based on impacts to landscape being negligible.

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<sup>5</sup> Isles of Scilly Area of Outstanding Natural Beauty (2023) About our Area of Outstanding Natural Beauty [last accessed: November 2023]. [About our Area of Outstanding Natural Beauty | Isles of Scilly \(scillyaonb.org.uk\)](https://scillyaonb.org.uk)

## 7 Water Environment

7.1.1 A baseline review of available information indicates that:

- Based on the Environment Agency (EA) Flood Mapping<sup>6</sup>, the proposed scheme is located within Flood Zone 1 (low probability of flooding from river and sea). EA Mapping also suggests that the proposed scheme is not located within an area of flood risk from surface water<sup>7</sup>;
- Both the northern extents of the proposed scheme (north of Middle Town) and southern extents (north of Higher Town) are located within the Inner Zone (Zone 1) and Outer Zone (Zone 2) of a Groundwater Source Protection Zone<sup>8</sup> (SPZ). Scheme extents within the middle of these two areas, spanning approximately 590m, are not within a SPZ; and
- The Isles of Scilly are underlain by the Isles of Scilly Groundwater Body, which had a poor overall status in 2019.

7.1.2 A review of MAGIC<sup>9</sup> identified that the only Water Framework Directive (WFD) higher sensitivity habitat within 500m of the proposed scheme is subtidal seagrass beds. The proposed works do not directly overlap with this marine habitat.

7.1.3 Regarding WFD lower sensitivity habitats, the proposed scheme is located within 500m of gravel & cobbles, intertidal soft sediment, subtidal soft sediment, rocky shore and subtidal rocky reef. However, there are no direct overlaps between the habitats and the proposed scheme boundary.

7.1.4 Further details of water environment designations within 500m of the proposed scheme can be found in Appendix G: Water Environment Designations.

### Likelihood of Significant Adverse Effects

7.1.5 There is potential for impacts upon the Groundwater SPZs to arise from accidental pollution from hazardous materials, fuels, or other dangerous liquids during construction of the proposed scheme. Controls to manage pollution will be a requirement of the CEMP, including:

- Storing fuels in sealed and bunded containers
- Refuelling plant in designated areas with sealed hardstand
- Plant and welfare facilities (particularly whilst mobile as the works progress along the pipeline route) should have plant nappies to reduce likelihood of spillage; and
- Having sufficient spill kits throughout the work area.

7.1.6 It is considered unlikely that resulting effects would be significant with suitable mitigation measures and approaches in place.

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<sup>6</sup> Environment Agency (2023) Flood map for planning. [last accessed: November 2023]. Available from: [Flood map for planning - GOV.UK \(flood-map-for-planning.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/114444/flood-map-for-planning.service.gov.uk)

As defined by the Environment Agency, land located within Flood Zone 1 is classified as having a less than 0.1% annual probability of flooding from fluvial sources.

<sup>7</sup> Environment Agency (2023) Learn more about this area's flood risk – surface water extent of flooding. [last accessed: November 2023]. Available from: [Learn more about this area's flood risk - Check your long term flood risk - GOV.UK \(check-long-term-flood-risk.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/114444/learn-more-about-this-area-s-flood-risk-check-your-long-term-flood-risk-GOV.UK-check-long-term-flood-risk.service.gov.uk)

<sup>8</sup> An inner zone (SPZ1) is defined as having a 50-day travel time of pollutant to source whereas the outer zone (SPZ2) has a 400-day travel time of pollutant to source.

<sup>9</sup> Defra (2023) Multi-Agency Geographic Information for the Countryside (MAGIC) Online Mapping [last accessed: November 2023]. [MAGIC \(defra.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/114444/magic.defra.gov.uk)

7.1.7 The proposed scheme involves transport of potable water. As such, it is not considered likely that the operational phase of the proposed scheme will impact the water environment.

7.1.8 Based on the above findings, potential impacts to the water environment from the proposed scheme are not considered to be of such significance that an EIA is required.

## 8 Geology and Soils

8.1.1 A review of the British Geological Society (BGS) Geology Viewer<sup>10</sup> identified that the site is underlain by the following geology:

- Superficial deposits: Head (Clay, Silt, Sand and Gravel) for areas underlying parts of the of the end point of the proposed distribution pipeline north of Middle Town; Blown Sand – Sand underlying most of the proposed scheme, including extents north of Middle Town and east of Middle Town; and
- Bedrock: Isles of Scilly intrusion – Granite – the entire proposed scheme is underlain by the Isles of Scilly intrusion.

8.1.2 The proposed scheme is underlain by a Secondary A bedrock aquifer and a superficial drift aquifer that varies between Secondary A and Secondary (undifferentiated) beneath those areas where superficial deposits are present. The groundwater vulnerability beneath the site varies between high and medium to high. There may be potential for impacts to aquifers during construction activities such as excavation, due to the potential creation of pathways from sediments and pollutants to enter groundwater and underlying aquifers. However, with implementation of control measures within the CEMP, the potential for impacts to geology and soils is considered highly unlikely.

8.1.3 The Natural England Agricultural Land Classification<sup>11</sup> (ALC) mapping has identified that most of the works are within ALC Grade 4 (Poor), except for scheme extents east of Middle Town which are within ALC Grade 5 (Very Poor) land, and scheme extents north of Higher Town which are within ALC land classified as Urban. As the proposed pipeline is entirely below ground, there will be no permanent loss of land. ALC grades 4, 5 and Urban are not considered to be best or most versatile (BMV) land by Natural England, and as such, the magnitude of potential temporary effects during construction are reduced.

8.1.4 The proposed scheme is bordered by agricultural fields. There is no evidence of heavy industry within or adjacent to the proposed scheme. Minor pesticides may exist within the soil surface from use as agricultural land. However, concentrations are not considered likely to warrant specific controls associated with contact with contaminated soil. As such, adverse impacts from contaminated soil are considered highly unlikely.

8.1.5 Whilst there are no landfill or historic landfill sites within the proposed scheme location, St Martin's safeguarded waste site is located approximately 35m north-east of the proposed distribution pipeline, north-west of Higher Town. However, it is considered unlikely that the proposed scheme will impact the waste site, given the alignment of the proposed scheme. Operation of the proposed scheme is not likely to prejudice the waste site for future use.

8.1.6 Overall, given the outlined control measures and design principles within Section 2.3, the above factors are not considered to be of such significance to require an EIA.

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<sup>10</sup> British Geological Survey (BGS) (2023) Geology of Britain Viewer [last accessed: November 2023]. [BGS Geology Viewer - British Geological Survey](#)

<sup>11</sup> Natural England (2019) Provisional Agricultural Land Classification (ALC) (England). [last accessed: November 2023]. Available at: [Provisional Agricultural Land Classification \(ALC\) \(England\) | Provisional Agricultural Land Classification \(ALC\) \(England\) | Natural England Open Data Geoportal \(arcgis.com\)](#)

## 9 Nuisance Receptors

9.1.1 There are several sensitive receptors that may be impacted by the proposed scheme, including residential properties, farms, businesses and community facilities.

9.1.2 The sensitive receptors located within proximity to the proposed scheme include the following:

- Community Observatory St Martin's on Scilly (COSMOS) Community Observatory – adjacent to the alignment located between Middle Town and Higher Town;
- Residential property opposite St Martin's Island Hall and Reading Room – adjacent to the alignment located between Middle Town and Higher Town. St Martin's Island Hall and Reading Room itself is within 15m of the proposed scheme;
- The Stables (self-catering accommodation) – adjacent to scheme extents north of Higher Town;
- Scilly Flowers (florist) – adjacent to scheme extents north of Higher Town;
- Farm buildings and residential properties north of Higher Town, including North Farm Gallery – adjacent to the southern section of the proposed scheme;
- Helen's Shepherd's Hut (holiday rental) – 40m south of scheme extents north of Middle Town; and
- Healthy People Nutrition (nutritionist) – 45m south of scheme extents north of Middle Town.

9.1.3 There are no public rights of way on the Isles of Scilly as all land is leased by the Duchy of Cornwall. However, there are numerous public walking tracks and access roads throughout St Martin's.

9.1.4 The proposed scheme is not located within an Air Quality Management Area (AQMA) nor within Noise Action Planning Important Area.

9.1.5 A summary of the sensitive receptors outlined above, as well as other sensitive receptors within 500m of the proposed scheme are provided within Appendix H.

### Likelihood of Significant Adverse Effects

9.1.6 Construction of the proposed scheme has the potential to result in impacts to air quality from the production of dust, as well as resulting in changes in noise and vibration levels from construction activities. An increase in construction vehicles and temporary changes in access may also result in temporary adverse effects to people on the island. Sensitive receptors include residential areas, users of public walking tracks and businesses along the alignment.

9.1.7 Impacts from construction will be temporary based on the short programme of works. Impacts will be sufficiently mitigated against with the implementation of the CEMP and delineated work area. Example control measures within the CEMP include restriction of working hours, prioritising work during the off-season for tourists, ensuring plant and equipment comply with noise and vibration requirements and ensuring dust suppression is applied during dry or windy weather. The programmed time to complete the works is approximately 60 days. As such, there are unlikely to be long-term impacts associated with construction to nearby receptors.

9.1.8 With these measures in place, it is considered unlikely that effects upon sensitive receptors would be significant and warrant an EIA.

## 10 Waste

10.1.1 The proposed scheme has the potential to generate waste during construction activities such as unusable excavated materials (including granite bedrock), and remnants of additional materials (such as sections of concrete road surface). The Principal Contractor will be responsible for separating waste streams and ensuring waste is managed appropriately. Dedicated waste streams will be available throughout the work area to ensure waste is captured and will not leave the work area.

10.1.2 Soil removed during construction of the proposed scheme will be retained for backfilling along the alignment, although it is noted that the soil to be excavated is fairly minimal in certain locations where underlying bedrock level is close to the surface. No soil will be disposed to landfill unless unexpected contamination is identified. A separate risk assessment will be conducted to determine the reuse potential for soil with visual or olfactory signs of contamination.

10.1.3 In-line with the design principles stated within paragraph 2.6.1, materials with limited waste potential from packaging and residual elements will be selected where practicable for construction of the proposed scheme.

### Likelihood of Significant Adverse Effects

10.1.4 Measures to reduce and manage waste, such as relating to the excavated granite, will be considered within the CEMP and a Site Waste Management Plan will be prepared for the proposed scheme.

10.1.5 Production of excess waste is not anticipated to be significant during construction of the proposed scheme. Reuse of soil will reduce the volume of material imported and reduce waste sent to landfill.

## 11 Major Accidents and Human Health

### Risk of Major Accidents and / or Disaster

11.1.1 A major accident is defined as “*an event which threatens immediate or delayed serious environmental effect to human health, welfare and / or the environment, and requires the use of resources beyond those of the client or its appointed representatives to manage.*”<sup>12</sup>

11.1.2 A disaster is defined as “*a manmade / external hazard with the potential to cause an event or situation that meets the definition of a major accident.*”

11.1.3 A review of Zetica Unexploded Ordnance (UXO) Online Unexploded Bomb Risk Map<sup>13</sup> did not contain a risk rating for UXO on the island of St Martin’s. A Pre-Desk Study Assessment was requested from Zetica. The Assessment suggested that whilst there were some World War I and World War II strategic targets within 5km of the site (including the Royal Naval Air Station Tresco, Royal Air Force St Mary’s, transport infrastructure, public utilities and anti-invasion defences), there was no military activity or bombing identified within the study area. The Assessment also stated that “*A detailed desk study...is not considered essential in this instance*”. Based on the location of the proposed scheme, and the information provided, the bombing density and consequent risk of UXO is very low. Appendix K should be referred to for the Pre-Desk Study Assessment.

11.1.4 There is a low risk of flooding given the proposed scheme is within Flood Zone 1 as discussed in Section 7.

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<sup>12</sup> IEMA (2020) Major Accidents and Disasters in EIA [last accessed: November 2023] [IEMA - IEMA Major Accidents and Disasters in EIA Guide](#)

<sup>13</sup> Zetica UXO (2023) Unexploded Bomb Risk Map [last accessed: November 2023]. [Risk Maps | Zetica UXO](#)

11.1.5 The Principal Contractor will have an emergency plan in place during construction in accordance with the *Management of Health and Safety at Work Regulations 1999*. The emergency plan must detail planned procedures that should be followed, should an emergency arise such as flooding, explosions and serious injuries. It is unlikely that there will be a significant effect from major accidents or disasters.

### Human Health and Safety

11.1.6 Construction of the proposed scheme is likely to cause short-term disruption to public receptors on the island. The Principal Contractor will adhere to the policies and procedures cited within their prescribed Risk Assessment Method Statement (RAMS) which will be appended to the CEMP. Topics covered will include:

- Control of Substances Hazardous to Health (COSHH);
- Safe driving;
- Digging around services; and
- Personal Protective Equipment (PPE) requirements.

11.1.7 There are various risks to workers and other people during construction of the proposed scheme. Common risks are likely to be working with machinery and large / heavy quantities of materials.

11.1.8 The Principal Contractor will be responsible for managing risks to health and safety. Procedures will be available on-site and regularly updated as necessary in accordance with changing project conditions. Unacceptable risks to health and safety are considered highly unlikely based on the Principal Contractor having considerable experience in civil infrastructure construction projects.

11.1.9 Temporary diversions will be deployed to affected roads, footpaths and other access points to ensure the safety of the public. A 6m construction easement will be implemented for the proposed pipeline route, which will be secured appropriately to prevent unsafe access from the public. The works will avoid peak tourist season and are not likely to cause adverse impacts to the public.

11.1.10 As stated within Section 9, effects up human health due to air pollution associated with the proposed scheme are unlikely to be significant with implementation of control measures within the CEMP.

11.1.11 Operators of the site are expected to be suitably competent and trained. Operation of the proposed scheme is highly unlikely to cause adverse impacts to health and safety.

11.1.12 Overall, no unacceptable risks to human health and safety are likely during construction and operation of the proposed scheme.

## 12 Cumulative Impact with Other Proposed Developments

12.1.1 A review of the Isles of Scilly Council's online planning portal was completed in October 2023 to access information relating to proposed or permitted developments on the island of St Martin's that could act cumulatively with construction of the proposed scheme.

12.1.2 A review of planning applications submitted within the last three years identified no significant developments involving major civil works that would result in cumulative effects with the proposed scheme. Additionally, a review of the Isles of Scilly Council Local Plan (2015 to 2030)<sup>14</sup> did not identify any significant site allocations on the island of St Martin's.

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<sup>14</sup> Isles of Scilly Council (2021) Isles of Scilly Local Plan 2015 to 2030 [Last accessed: November 2023]. [Isles of Scilly Local Plan](#)

12.1.3 Construction of other developments by SWW, as part of the SWW Capital Delivery Programme, may be ongoing over the construction period of the proposed scheme. However, the proposed scheme works would be the first in a series of phased works to be carried out on St Martin's, and as such, would be complete before other planned works were to commence; thus, reducing the potential for significant cumulative effects to arise between the projects.

12.1.4 In addition, Nationally Significant Infrastructure Projects (NSIPs)<sup>15</sup> were also searched for using the National Infrastructure Planning website. No NSIPs were identified on the whole Isles of Scilly archipelago and consequently, no cumulative effects with any NSIPs are anticipated.

12.1.5 As such, no significant cumulative effects are anticipated following the completion of the proposed scheme.

## 13 Conclusion

13.1.1 The proposed scheme involves the construction of two distribution pipelines between Higher Town and Middle Town on St Martin's to provide increased reliability and abundance of potable water in the Isles of Scilly. Construction of the proposed scheme is expected to start in April 2024 and conclude in June/July 2024.

13.1.2 The proposed pipeline does not pass through any other sensitive areas in Section 2.1.5. Sensitive areas located within 500m proposed scheme include:

- Plains & Great Bay (St Martin's) SSSI – approximately 5m from the east boundary of the pipeline extents east of Middle Town;
- Isles of Scilly Special Protection Area (SPA) – 200m east of the proposed pipeline (at its closest point);
- St Martin's Sedimentary Shore SSSI – located approximately 230m south of pipeline extents (at its closest point);
- Isles of Scilly National Landscape (archipelago-wide);
- Isles of Scilly Complex Special Area of Conservation (SAC) – 270m east of the proposed pipeline (at its closest point);
- Porth Seal (St Martin's) Geological SSSI (gSSSI) – 315m to the north-west of proposed pipeline extents north of Middle Town;
- 11 Scheduled Monuments, the closest of which are:
  - Prehistoric cairn and prehistoric to post-medieval field systems between The Plains and Wine Cove, St Martin's – located approximately 5m from scheme extents north of St Martin's Island Hall & Reading Room; and
  - Prehistoric cairn cemetery, field system and settlements on Top Rock Hill, St Martin's, located approximately 65m to the north of the scheme extents north of Middle Town.

13.1.3 Construction and operation of the proposed scheme is unlikely to lead to significant permanent effects on the environment as the distribution pipeline will be sub-surface with most impacts likely to be of a temporary nature during construction.

13.1.4 Mitigation will be applied as discussed within Sections 3 (Nature Conservation Designations), 4 (Habitats), 5 (Archaeology and Cultural Heritage) and 6 (Landscape).

13.1.5 The proposed scheme is also within two SSSI IRZs. Works are highly unlikely to directly impact the SSSIs and other ecological designations based on the distance of the works from the SSSI boundaries. Works within the IRZ are also unlikely to impact the qualifying features of the SSSI, based on the short-term impacts of the works and the distance from the SSSIs. Controls for managing impacts to the surrounding environment will be captured in a CEMP, as discussed within Section 2.5.

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<sup>15</sup> Infrastructure Planning Inspectorate (2023) National Infrastructure Planning [last accessed: November 2023] [National Infrastructure Planning \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/)

13.1.6 Impacts relating specifically to the Plains & Great Bay SSSI have also been assessed within the HRA Stage 1 Screening report appended to this document.

13.1.7 A CEMP will be produced prior to commencing works. The CEMP will be a commitment from the Principal Contractor to ensure good practice techniques are implemented during construction, in line with recommendations made throughout this EIA Screening. Implementation of a CEMP will reduce the potential for adverse impacts to the AONB (National Landscape) and human receptors. Control measures for nuisances such as noise and vibration, dust and emissions, pollution and contamination events, and disturbances to ecology and the water environment will be managed by requirements in the CEMP.

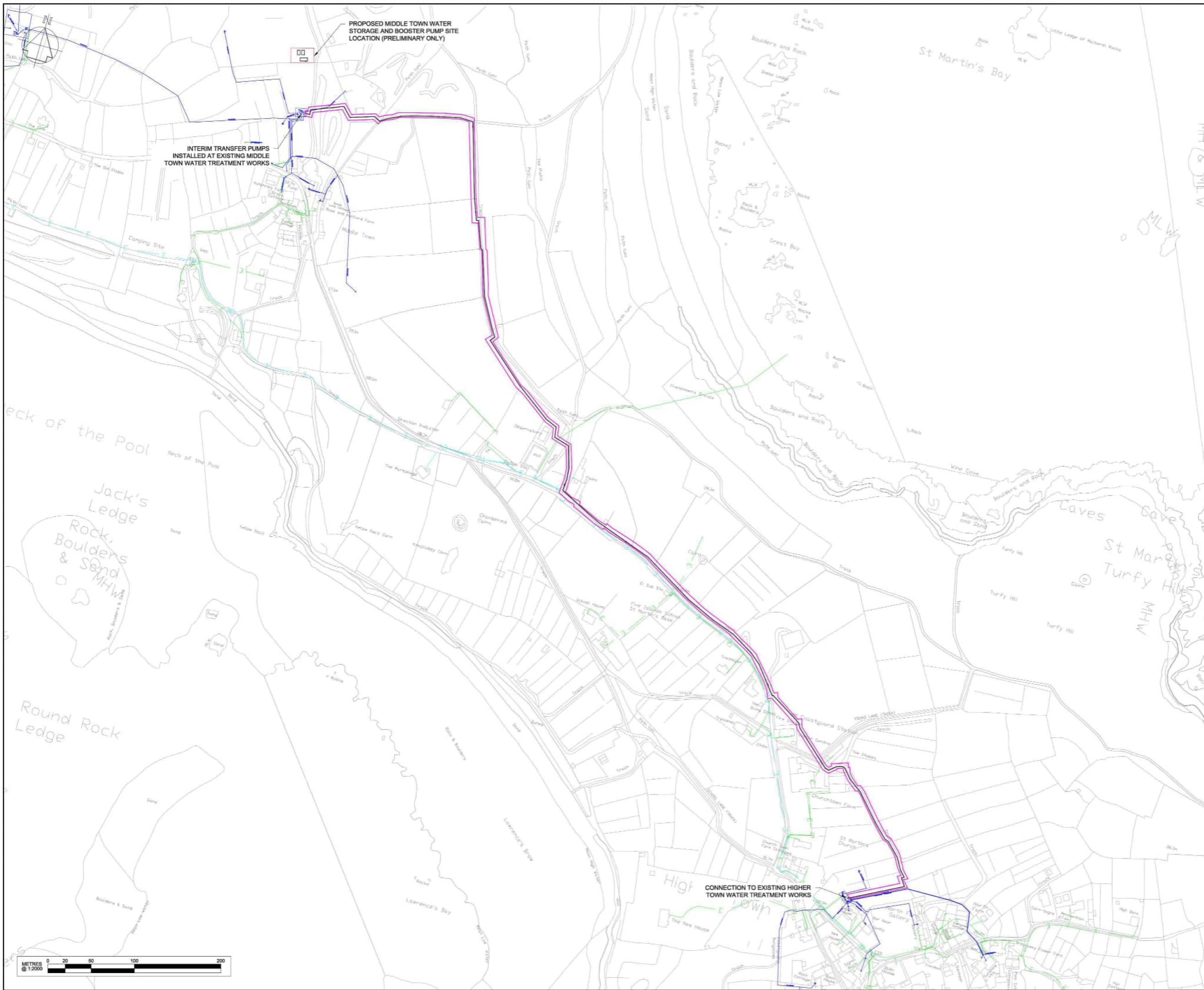
13.1.8 Delivering on the design principles discussed in paragraph 2.6.1 will also reduce waste and promote a sustainable construction method throughout delivery of the proposed scheme. Implementation of a Site Waste Management Plan will also be a requirement.

13.1.9 Completion and implementation of the above outlined documents and assessments will inform the need for further assessments and identify appropriate mitigation measures. It is therefore anticipated that utilisation of these findings, as well as outcomes of relevant consultation, will identify additional measures to reduce and manage potential impacts of the proposed scheme such that there will not be likely significant effects on the environment. As such, the proposed scheme is not considered to require an EIA.

13.1.10 Therefore, the applicant is seeking written confirmation that an EIA **is not required** from the Isles of Scilly Council.



## Appendix A Proposed Scheme Layout



1. This drawing should only be relied upon by the copyright holder. Pell Frischmann will not accept liability if this drawing is used for any purpose other than that for which it has been produced.  
 2. Where this is an as-built drawing, it shall be based on Pell Frischmann's construction drawings with site changes as supplied and checked by the contractor. Pell Frischmann in no way accepts any liability for the accuracy of the information supplied by the contractor nor for any issues related to changes made on site.  
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- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES - (mm) ALL LEVELS ARE IN METRES - (m) AND ARE ABOVE ORDNANCE DATUM UNLESS NOTED OTHERWISE.
  - WHERE DIMENSIONS ARE TAKEN FROM BOUNDARIES THESE ARE BASED ON THE NEAREST FACE OF ANY BOUNDARY, WALL OR HEDGE.
  - FUTURE DISTRIBUTION MAIN TO BE LAID ALONGSIDE INTERIM DISTRIBUTION MAIN. FUTURE DISTRIBUTION MAIN TO BE CONNECTED TO ONCE NEW WORKS ARE OPERATIONAL. SIZING AND PIPE SPECIFICATION FOR BOTH ARE TO BE CONFIRMED.
  - THIS DRAWING IS TO BE VIEWED IN CONJUNCTION WITH:  
 107780-PEF-DP-100-D.DR.C-0005 ST MARTINS DISTRIBUTION PIPELINE LONG SECTION SHEET 1 OF 3  
 107780-PEF-DP-100-D.DR.C-0006 ST MARTINS DISTRIBUTION PIPELINE LONG SECTION SHEET 2 OF 3  
 107780-PEF-DP-100-D.DR.C-0007 ST MARTINS DISTRIBUTION PIPELINE LONG SECTION SHEET 3 OF 3

**LEGEND**

	EXISTING SURFACE PIPELINE
	UNDERGROUND ELECTRIC 11kV
	OVERHEAD ELECTRIC 11kV
	UNDERGROUND LV
	SERVICE PIPE
	EXISTING WATER SUPPLY
	UNTREATED WATER MAIN EASEMENT

FOR REVIEW AND COMMENT	NG	SF			18.12.23	
FOR INFORMATION					31.10.23	
REV	DESCRIPTION	DRN	DES	CHK	APP	DATE

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 www.pellfrischmann.com



Project Status: **DETAILED DESIGN**

Project: **ISLES OF SCILLY CAPITAL DELIVERY PROGRAMME**

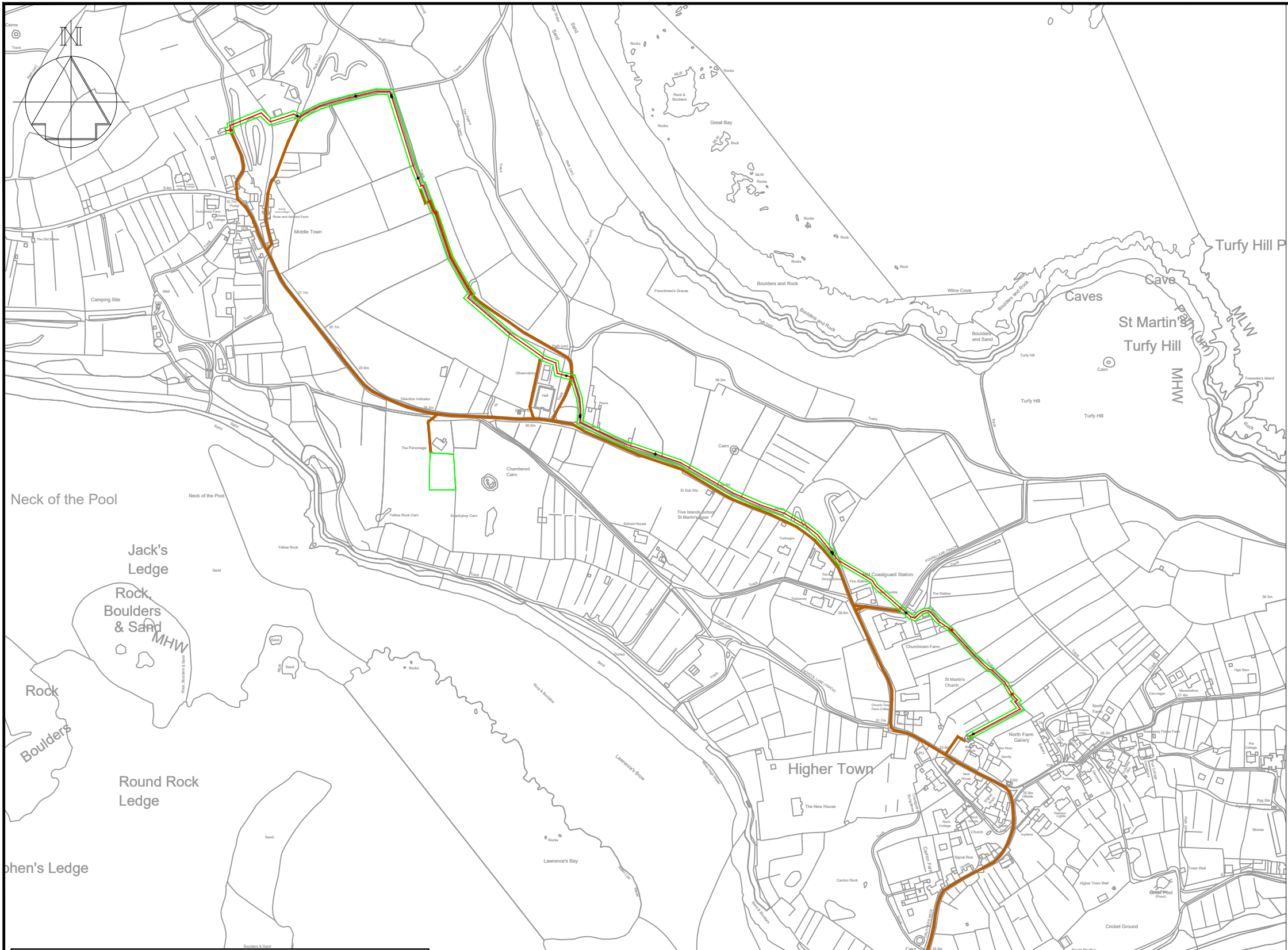
Drawing Title: **ST MARTIN'S DISTRIBUTION PIPELINE OVERALL PLAN**

Drawing Status: **FOR REVIEW AND COMMENT**

Name	Date	Status Code
NG	18.12.23	S1
SF	18.12.23	Scale
		1:2000
Eng Chk		Revision
		P02
Approved		
Drawing No.		

107780-PEF-DP-100-D.DR-C-0001

## Appendix B Proposed Scheme Access Plan



THIS MAP IS REPRODUCED FROM ORDNANCE SURVEY MATERIAL WITH THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HIS MAJESTY'S STATIONERY OFFICE © CROWN COPYRIGHT. UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS. SOUTH WEST WATER LICENCE NUMBER 0000861633

P04	LEGAL	NG	SF	RN	RN	08.01.24
P03	LEGAL	NG	RN	KT	RN	19.12.23
P02	LEGAL	NG	SF	RN	RN	14.12.23
P01	LEGAL	NG	SF	RN	RN	27.11.23
REV	DESCRIPTION	DRN	DES	CHK	APP	DATE

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 www.trant.co.uk

**ISLES OF SCILLY  
 CAPITAL DELIVERY  
 PROGRAMME**

**ST MARTIN'S  
 DISTRIBUTION PIPELINE CONSTRUCTION  
 ACCESS PLAN**

Drawing Status				<b>LEGAL</b>		
	Name	Date	Status Code			
Drawn	N.GIRACH	08.01.24	<b>S4</b>			
Designed	S.FRAYLING	08.01.24	Scale			
Eng Chk	R.NEWELL	08.01.24	<b>1:5000</b>			
Approved	R.NEWELL	08.01.24	Revision			
			<b>P04</b>			
Drawing No.						
<b>107780 - PEF - DP - 100 -D.DR - T - 0018</b>						

## Appendix C Environmental Constraints Figure

Methods to minimise potential adverse impacts upon sensitive sites which cross the site (such as hedgerows and walls\*):

- Where practicable, opportunities for directional drilling or trenchless pipe moling will be explored where hedgerows and walls are present. Piercing tools can be used to help create a passage for a sleeve to be installed underneath an object (such as a wall) to feed the pipe into. Such options would reduce physical disturbance. Opportunities for this will be confirmed following ground investigation.
- Where root protection zones or known buried services are present, vacuum excavation equipment and hand digging techniques can be used to reduce excavation impacts. Vacuum excavation collects soil without any penetrating tool, meaning no risk of striking uncharted buried services and minimising impacts to root protection zones.
- If disturbance does occur to hedgerows, it is expected that the habitat will be reinstated like-for-like and returned to their original state in time
- Where there is proximity between the working area and a designated site, the area will be fenced with warning signs to prevent physical incursion.

\*Whilst the walls have not been mapped on the below figure, there is evidence from archaeological surveys that there are some local stone / historic dry-stone walls present within the study area.

### Legend

- St Martin's Proposed Distribution Pipeline
- 6m Construction Easement
- Storage Areas

#### Ecological Designations

- Isles of Scilly Complex Special Area of Conservation
- Isles of Scilly Special Protection Area
- Site of Special Scientific Interest (SSSI) (Biological)
- SSSI (Geological)
- SSSI Impact Risk Zone

#### Priority Habitat

- Lowland heathland
- Maritime cliff and slope
- No main habitat but additional habitats present

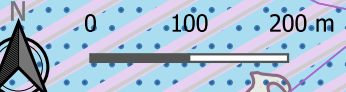
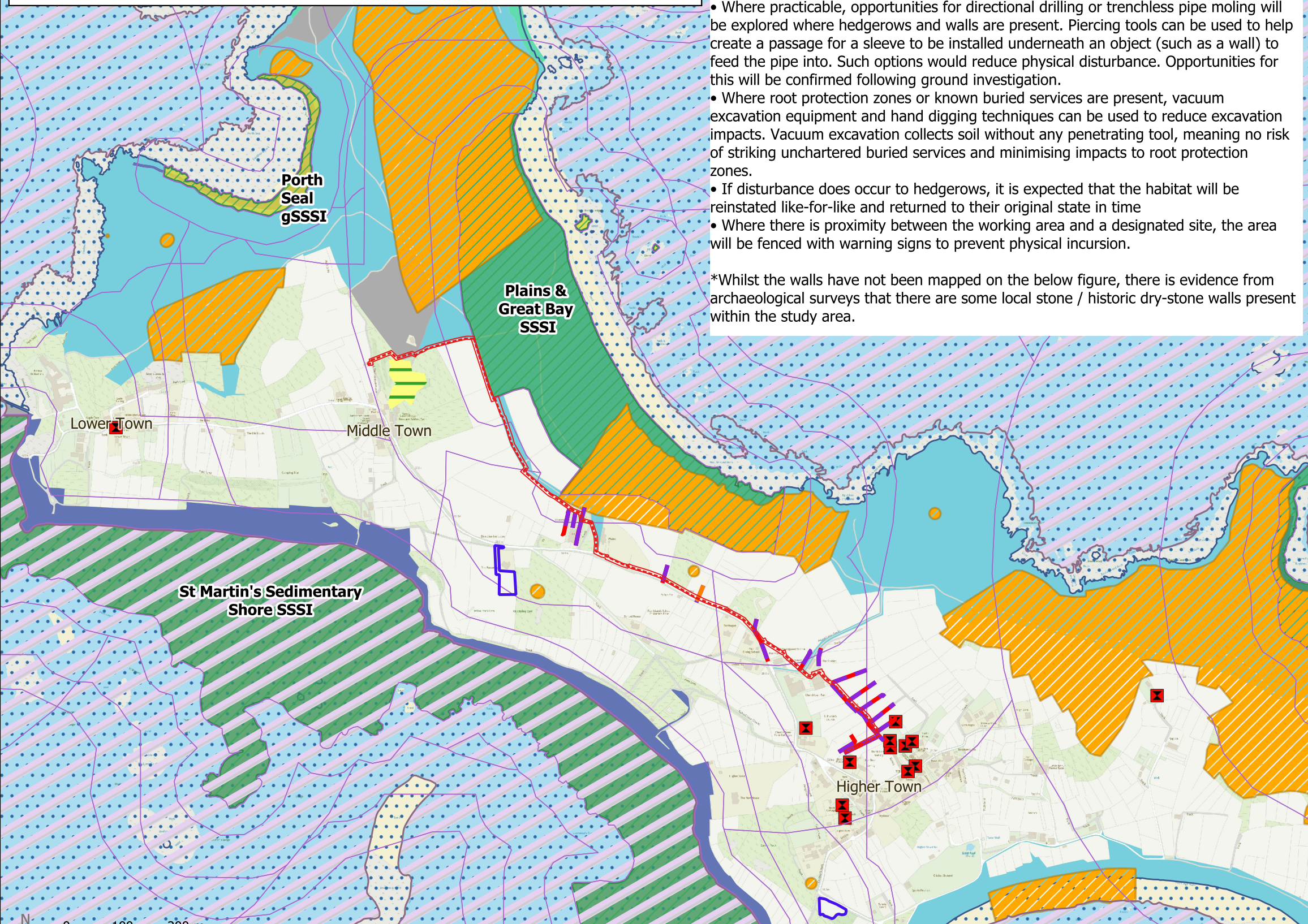
#### Historic Environment

- Scheduled Monuments

#### Hedgerow and Tree / Woodland Habitats

- Other coniferous woodland
- Non-native and ornamental hedgerow
- Native hedgerow

NB: The Isles of Scilly archipelago is designated as a Conservation Area and Heritage Coast, and is within the Isles of Scilly National Character Area and Isles of Scilly AONB / National Landscape



## Appendix D Ecological Designations Impact and Requirements Table

Designation	Qualifying Features	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
<b>On-Site Statutory Designations</b>				
St Martin's Sedimentary Shore IRZ	See St Martin's Sedimentary Shore SSSI row for further information for reasons for designation	The proposed scheme is within the designation	The works also fall within multiple rings of the IRZ for the SSSI. Consultation with Natural England is needed for pipeline schemes.	<ul style="list-style-type: none"> <li>➤ Consultation with relevant authorities including Natural England and Isles of Scilly Council, among others. An SSSI Assent Form may potentially be required;</li> <li>➤ Ecological Impact Assessment (EclA) / additional surveys (scope to be agreed with the Isles of Scilly Wildlife Trust); and</li> <li>➤ The IRZ / SSSI will be discussed, where relevant, within the HRA.</li> </ul>
Plains & Great Bay SSSI IRZ	See Plains & Great Bay SSSI row for further information for reasons for designation	The proposed scheme is within the designation	The works also fall within multiple rings of the IRZ for the SSSI. Consultation with Natural England is needed for pipeline schemes.	
Chapel Down SSSI IRZ	The Chapel Down SSSI is approximately 745m to the east and therefore, the SSSI itself is not covered in this table.	The proposed scheme is within the designation	The eastern extent of the works falls within the outer ring of the IRZ. Consultation with Natural England is required for pipeline schemes that fall within this ring of the IRZ.	
Lowland heathland (Priority Habitat)	UK BAP Priority Habitat	The proposed scheme is within the designation, but only for a very small area (approximately <math><30\text{m}^2</math> including easement)	There is the potential for direct impacts to the designation to arise during construction of the proposed scheme in relation to air quality, noise and vibration and general disturbance. Also potential for impacts to species, such as birds, utilising the habitat during installation.	<ul style="list-style-type: none"> <li>➤ Consultation with relevant authorities including Natural England; and</li> <li>➤ EclA / additional surveys (scope to be agreed with the Isles of Scilly Wildlife Trust).</li> </ul>
No main habitat but additional habitats present (Priority Habitat)	N/A – the additional habitats present include lowland heathland and coastal sand dunes.	The proposed scheme is within the designation, but only for a small area (approximately <math>210\text{m}^2</math> including easement)	It is anticipated that excavated material within the designation would be backfilled and securely stored to ensure successful reinstatement of the habitat is achieved once the scheme is operational.  Operation of the proposed scheme is not anticipated to impact the designation as it will be entirely below ground.	
<b>On-site Non-statutory Designations</b>				
Isles of Scilly Wildlife Trust Reserves	The Isles of Scilly Wildlife Trust cares for approximately 60% of the landmass of Scilly which includes all the uninhabited islands. The Wildlife Trust is the dedicated conservation charity.	The proposed scheme is within the designation	There is potential for direct impacts to the designation to arise during construction of the proposed scheme in relation to air quality, noise and vibration and general disturbance.	<ul style="list-style-type: none"> <li>➤ Consultation with Isles of Scilly Wildlife Trust; and</li> <li>➤ EclA / additional surveys (scope to be</li> </ul>



Designation	Qualifying Features	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
			Operation of the proposed scheme is unlikely to impact the designation as it will be entirely below ground.	agreed with the Isles of Scilly Wildlife Trust)
<b>Off-Site Statutory Designations (Within 500m)</b>				
Plains & Great Bay SSSI	<ul style="list-style-type: none"> <li>➤ The site is sheltered from westerly gales by St Martin's and White Island, which enables an accreting dune system to develop. The dune, dune grassland and heathland habitats present support several nationally rare and uncommon plant species, and illustrates well sand dune succession;</li> <li>➤ Some of the rarer species are found in the species-rich dune grassland further inland such as nationally rare Orange Bird's-foot (<i>Ornithopus pinnatus</i>) and Ramping Furmitory (<i>Fumaria capreolata</i>); and</li> <li>➤ The site also supports a breeding colony of Ringed Plover (<i>Charadrius hiaticula</i>).</li> </ul>	Immediately to the east of the proposed scheme, east of Middle Town	<p>There is potential for impacts to the designation to arise during construction of the proposed scheme in relation to air quality, noise, and vibration. Direct losses of habitat from the designation are not anticipated as the proposed scheme is not located within the designation.</p> <p>Operation of the proposed scheme is not considered likely to impact the designation.</p>	<ul style="list-style-type: none"> <li>➤ Consultation with relevant bodies including Natural England;</li> <li>➤ An SSSI Assent Form may be required due to proximity; and</li> <li>➤ EclA / additional surveys (scope to be agreed with the Isles of Scilly Wildlife Trust).</li> </ul>
Lowland Heathland (Priority Habitat)	UK BAP Priority Habitat	The entire proposed scheme is within at least 165m of lowland heathland	<p>This habitat is located within proximity to the entire proposed scheme, and as such, it is likely to experience impacts related to air quality and noise and vibration because of construction activities. These impacts would be limited and temporary in nature.</p> <p>Operation of the proposed scheme is not anticipated to impact this habitat</p>	EclA / additional surveys (scope to be agreed with the Isles of Scilly Wildlife Trust).
Maritime cliff and slope (Priority Habitat)	UK BAP Priority Habitat	160m south of scheme extends north-west of Higher Town	<p>There is potential for construction stage impacts related to air quality and noise and vibration to impact the habitat, however, these would be limited and temporary in nature due to the distance between the habitat and the proposed scheme.</p> <p>Operation of the proposed scheme is not anticipated to impact this habitat.</p>	EclA / additional surveys (scope to be agreed with the Isles of Scilly Wildlife Trust).
Isles of Scilly SPA	<ul style="list-style-type: none"> <li>➤ European storm-petrel (<i>Hydrobates pelagicus</i>);</li> <li>➤ Lesser black-backed gull (<i>Larus fuscus graellsii</i>);</li> </ul>	200m east of proposed scheme (at its closest point)	Due to the distance between the designation and the proposed scheme, and the fact that the SPA is designated for bird species, it is considered unlikely that direct impacts arising during the construction	<ul style="list-style-type: none"> <li>➤ Consultation with relevant bodies including Natural England; and</li> </ul>

Designation	Qualifying Features	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
	<ul style="list-style-type: none"> <li>➤ European shag (<i>Phalacrocorax aristotelis</i>); and</li> <li>➤ Greater black-backed gull (<i>Larus marinus</i>).</li> </ul>		<p>stage of the proposed scheme would affect the designation.</p> <p>As the proposed scheme will be buried beneath the ground, operation of the works is also not considered likely to impact the designation.</p>	<ul style="list-style-type: none"> <li>➤ Impacts discussed within the HRA Stage 1 Screening.</li> </ul>
Men a Vaur to White Island MCZ	<ul style="list-style-type: none"> <li>➤ Giant goby (<i>Gobius colitis</i>);</li> <li>➤ High energy intertidal rock;</li> <li>➤ Intertidal coarse sediment;</li> <li>➤ Intertidal sand and muddy sand;</li> <li>➤ Intertidal underboulder communities;</li> <li>➤ Moderate energy intertidal rock;</li> <li>➤ Stalked jellyfish (<i>Calvadosia campanulata</i>); and</li> <li>➤ Spiny lobster (<i>Palinurus elephas</i>).</li> </ul>	200m east of the proposed scheme	<p>No direct impacts are anticipated to this MCZ as no infrastructure is proposed within the MCZ waters.</p> <p>Operation of the proposed scheme is considered unlikely to impact the designation.</p>	No specific assessment required
Porth Seal gSSSI	<p>The gSSSI is important for Quaternary studies as it shows a sequence of deposits for a raised beach, a series of interbedded organic and inorganic silts and sands, and head.</p> <p>The organic deposits were radiocarbon dated to the Late Devensian period. The organic deposits include pollen which indicated arctic tundra environmental conditions.</p> <p>The gSSSI therefore provides vital information about the Late Pleistocene environmental conditions in South-West England.</p>	210m north-west of scheme extends north of Middle Town	<p>This SSSI is designated for geological interest (as opposed to biological / ecological interest) and is not located within immediate proximity of the works. The IRZ for the SSSI is also limited to just around the site and is therefore not within proximity to the works either. As a result, no significant adverse effects are predicted for this SSSI.</p>	No specific assessment required
No main habitat but additional habitats present (Priority Habitat)	The additional habitat present is categorised as mudflats.	230m south of scheme extends (different section to on-site habitat)	<p>There is potential for construction stage impacts related to air quality and noise and vibration to impact the habitat, however, these would be limited and temporary in nature due to the distance between the habitat and the proposed scheme.</p> <p>Operation of the proposed scheme is not anticipated to impact this habitat.</p>	No specific assessment required
St Martin's Sedimentary Shore SSSI	The sedimentary shore has almost no contact with freshwater and associated water-borne pollution and suspended fine sediment. Consequently, there is a range of marine wildlife that is exceptionally undisturbed.	230m south of the proposed scheme (at its closest point)	<p>Due to the distance between the designation and the proposed scheme, it is considered unlikely that direct impacts upon qualifying features would occur during construction or operation.</p>	No specific assessment required

Designation	Qualifying Features	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
	The mild climate results in an abundance of Mediterranean-Atlantic species. The sediment habitats and the associated marine wildlife are of national, and potentially international, importance.			
Isles of Scilly Complex SAC	<ul style="list-style-type: none"> <li>➤ Sandbanks (subtidal);</li> <li>➤ Mudflats and sandflats (intertidal);</li> <li>➤ Reefs;</li> <li>➤ Grey seal (<i>Halichoerus grypus</i>); and</li> <li>➤ Shore dock (<i>Rumex rupestris</i>)</li> </ul>	270m east of the proposed scheme.		<ul style="list-style-type: none"> <li>➤ Consultation with relevant bodies including Natural England; and</li> <li>➤ Impacts discussed within the HRA Stage 1 Screening.</li> </ul>
Higher Town MCZ	<ul style="list-style-type: none"> <li>➤ Intertidal coarse sediment;</li> <li>➤ Intertidal sand and muddy sand;</li> <li>➤ Intertidal underboulder communities;</li> <li>➤ Low energy intertidal rock;</li> <li>➤ Moderate energy intertidal rock;</li> <li>➤ Stalked jellyfish (<i>Calvadosia cruxmelitensis</i>); and</li> <li>➤ Stalked jellyfish (<i>Halicylistus species</i>).</li> </ul>	380m south of the end point of the proposed scheme north of Higher Town	No direct impacts are anticipated to this MCZ as no infrastructure is proposed within the MCZ waters. Equally, it is not considered likely that the installation works would have a significant effect upon the habitats or marine species within the MCZ, even with production of noise and disturbance.	No specific assessment required
Coastal vegetated shingle (Priority Habitat)	UK BAP Priority Habitat	400m north of scheme extends north of Middle Town	This habitat is not located within proximity to the works and therefore no significant adverse effects are considered or to the species which may live on or utilise the habitat.	No specific assessment required
Tean MCZ	<ul style="list-style-type: none"> <li>➤ Intertidal coarse sediment;</li> <li>➤ Intertidal underboulder communities;</li> <li>➤ Moderate energy intertidal rock; and</li> <li>➤ Intertidal sand and muddy sand.</li> </ul>	460m west of the end point of the proposed scheme north of Middle Town	No direct impacts are anticipated to this MCZ as no infrastructure is proposed within the MCZ waters. Equally, it is not considered likely that the installation works would have a significant effect upon the habitats or marine species within the MCZ, even with production of noise and disturbance.	No specific assessment required

## Appendix E Heritage Designations Impact and Requirements Table

Heritage Asset Name	Designation Features	Distance from the Proposed Scheme	Potential Impacts	Actions and Requirements
<b>Direct Overlap with the Proposed Scheme</b>				
Heritage Coast	The Isles of Scilly Heritage Coast is unique in terms of environmental quality and beauty of its coastal landscape, ranging from sandy beaches to dunes and sheer rugged cliffs. The islands are important for rare migrating birds and the warm lagoons support seals and porpoises, along with extensive marine habitat areas.	The proposed scheme is within designation	Whilst the whole of the Isles of Scilly is classed as a heritage coast, the proposed works are not located directly at the coast and the affected habitats are not coastal environments. Therefore, no significant effects are considered likely.	<ul style="list-style-type: none"> <li>➤ Consultation with relevant organisations including Historic England and Isles of Scilly Council may be required;</li> <li>➤ An archaeological or heritage specialist may also need to be liaised with, particularly regarding the potential to disturb unburied and unknown archaeological remains underlying the proposed development site; and</li> <li>➤ Heritage Impact Assessment / Heritage Statement.</li> </ul>
Conservation Area	The special architectural and historic interest of the islands was recognised when all inhabited islands were designated as a Conservation Area. It is therefore necessary for the character and appearance of each island to be preserved or enhanced by any development.	The proposed scheme is within designation	<p>Construction works have the potential to adversely impact a conservation area through impacting the setting. Noise and vibration, production of dust, and loss of land can impact an area.</p> <p>During operation, the pipeline will be out of sight (as it will be underground) and therefore no adverse impacts are anticipated.</p>	<ul style="list-style-type: none"> <li>➤ Heritage Impact Assessment / Heritage Statement.</li> </ul>
<b>Scheduled Monuments</b>				
Prehistoric cairn cemetery, field system and settlement on Top Rock Hill, St Martin's	<p>Prehistoric cairn cemetery and field system on the ridge and flanks of Top Rock Hill. The scheduling also includes prehistoric settlements behind the headland's east coast and a hut on its southern plateau.</p> <p>A 2m boundary is recommended around the designation to support and preserve the monument's integrity.</p>	Located adjacent to scheme extents north of Middle Town	Due to the proximity of the proposed works and the designations, there is potential for disturbance to occur during construction due to noise and vibration, and production of dust. There is also the potential for temporary impacts upon the designations' heritage settings due to an increase in construction vehicles and plant in the vicinity of the designation areas.	<ul style="list-style-type: none"> <li>➤ Consultation with relevant organisations including Historic England and Isles of Scilly Council;</li> <li>➤ Scheduled monument consent;</li> <li>➤ An archaeological or heritage specialist may also need to be liaised with, particularly regarding the potential to disturb unburied and unknown archaeological remains underlying the proposed development site; and</li> </ul>
Prehistoric cairn and prehistoric to post-medieval field systems between The Plains and Wine Cove, St Martin's	<p>Prehistoric platform cairn and a prehistoric to early post-medieval field system between The Plains and Wine Cove, on the ridge top and northern slope of the western side of St Martin's. An area referred to as Frenchmen's Graves is also included within the scheduling.</p> <p>The platform cairn survives on flattish ground that is visible as a low rounded mound.</p> <p>The northern coastal slope and crest of the island contains extensive remains of early field systems</p>	Located adjacent to scheme extents north of St Martin's Island Hall & Reading Room	As the proposed distribution pipeline will be buried below ground, the potential for impacts to arise to designations during the operational phase are unlikely.	<ul style="list-style-type: none"> <li>➤ An archaeological or heritage specialist may also need to be liaised with, particularly regarding the potential to disturb unburied and unknown archaeological remains underlying the proposed development site; and</li> </ul>

Heritage Asset Name	Designation Features	Distance from the Proposed Scheme	Potential Impacts	Actions and Requirements
	<p>whose known extent ranges from the slope below The Plains on the slope behind Wine Cove. The field system is visible both as low vegetation-covered banks and low rubble ridges crossing the footpaths of the area.</p> <p>The remains in this scheduling are defined visibly from those areas by deep medieval and later deposits of blown sand and by dense surface vegetation, both of which obscure surface traces of the field system on the intervening land. The discovery beyond this scheduling of some early medieval artefacts at the base of the blown sand layer south of Top Rock Hill indicate continued activity into that period.</p> <p>Ground beneath the land is also included within the scheduling.</p> <p>A 2m boundary is recommended around the designation to support and preserve the monument's integrity.</p>			<ul style="list-style-type: none"> <li>➤ Heritage Impact Assessment / Heritage Statement.</li> </ul>
Prehistoric chambered cairn 60m north of Knackyboy Carn, St Martin's	<p>Large prehistoric chambered cairn built on around a large bedrock outcrop which rises towards the centre of the platform.</p> <p>A 2m boundary is recommended around the designation to support and preserve the monument's integrity.</p>	110m south-west of scheme extents near St Martin's Island Hall & Reading Room	The potential for impact varies depending on the proximity of a designation to the works. Whilst no direct physical impacts are anticipated, there are likely to be impacts upon heritage setting including potential for temporary noise and vibration, production of dust, and potential changes in views (particularly if a works area needs to be established).	<ul style="list-style-type: none"> <li>➤ Consultation with relevant organisations including Historic England and Isles of Scilly Council; and</li> </ul>
Prehistoric cairn cemetery and field system on Tinkler's Hill, St Martin's	<p>Prehistoric cairn cemetery and field system on the plateau and upper southern slope of Tinkler's Hill. The scheduling is divided into two separate areas. The prehistoric field system extends across the south and south east of the Tinkler's Hill plateau and adjacent upper southern slope.</p> <p>A 2m boundary is recommended around the designation to support and preserve the monument's integrity.</p>	130m west of scheme extents north of Middle Town		<ul style="list-style-type: none"> <li>➤ Heritage Impact Assessment / Heritage Statement.</li> </ul>
Prehistoric cairns, field system and settlements, medieval chapel and post-medieval daymark,	<p>Extensive prehistoric funerary, field system and settlement remain on north eastern St Martins, with an early medieval chapel, post-medieval daymark and a signal station on the north of the eastern</p>	190m east of scheme extents north of Higher Town		<ul style="list-style-type: none"> <li>➤ Consultation with relevant organisations including Historic</li> </ul>

Heritage Asset Name	Designation Features	Distance from the Proposed Scheme	Potential Impacts	Actions and Requirements
lookout and signal station on north-east St Martin's	plateau, Chapel Down, and a post-medieval lookout near Turfy Hill. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.		The potential for impact varies depending on the proximity of a designation to the works. Whilst no direct physical impacts are anticipated, there are likely to be impacts upon heritage setting including potential for temporary noise and vibration, production of dust, and potential changes in views (particularly if a works area needs to be established).	<p>England and Isles of Scilly Council; and</p> <p>➤ Heritage Impact Assessment / Heritage Statement.</p>
Platform Cairn on Cruther's Neck, St Martin's	Platform cairn situated on the saddle called Cruther's Neck, surviving as a circular mound of heaped earth and rubble. Part of a northward continuation of a linear group of four broadly contemporary funerary monuments dispersed along 130m of the summit ridge of Cruther's Hill, a highly prominent cairn group visible for considerable distances to the east and west. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	230m south of scheme extents north of Higher Town		
Platform cairn on Turfy Hill, St Martin's	Large prehistoric funerary cairn situated on the summit of Turfy Hill, visible as a circular mound. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	330m north of scheme extents north of Higher Town		
Prehistoric to Romano-British ritual, funerary and settlement remains on Par Beach, St Martin's	Prehistoric stone row and a grouping of prehistoric to Romano-British funerary and settlement remains, including field system walls, towards the centre of Par Beach.	350m to the south-east of scheme extents north of Higher Town		
Prehistoric entrance grave, the northern one of three on Cruther's Hill, St Martin's	Prehistoric entrance grave situated on the northern end of the summit ridge of Cruther's Hill, surviving as a circular mound of heaped earth and rubble. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	350m south of scheme extents north of Higher Town		

Heritage Asset Name	Designation Features	Distance from the Proposed Scheme	Potential Impacts	Actions and Requirements
Prehistoric entrance grave, the middle one of three on Cruther's Hill, St Martin's	Prehistoric entrance grave situated near the centre of the summit ridge of Cruther's Hill, surviving as a circular mound of heaped earth and rubble. The entrance grave is one of a linear group of four broadly contemporary funerary monuments dispersed along 130m of the summit ridge of Cruther's Hill. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	390m south of scheme extends north of Higher Town	The potential for impact varies depending on the proximity of a designation to the works. Whilst no direct physical impacts are anticipated, there are likely to be impacts upon heritage setting including potential for temporary noise and vibration, production of dust, and potential changes in views (particularly if a works area needs to be established).	<ul style="list-style-type: none"> <li>➤ Consultation with relevant organisations including Historic England and Isles of Scilly Council; and</li> <li>➤ Heritage Impact Assessment / Heritage Statement.</li> </ul>
Prehistoric platform cairn, settlement and field system at Pernagie, St Martin's	Prehistoric platform cairn and nearby settlement and field system on a small knoll at the south of Pernagie. The cairn is visible on the summit of the knoll as a circular mound. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	400m north of scheme extends north of Middle Town		
Prehistoric entrance grave, the southern one of three, and kerbed round cairn with cist on Cruther's Hill, St Martin's	Prehistoric entrance grave and an adjacent round cairn with a kerb and funerary cist situated at the south east end of the summit ridge of Cruther's Hill. Forms part of a linear group visible over considerable distances along 130m to the east and west. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	440m south of scheme extends north of Higher Town		
Post-medieval kelp pit on the western coast of Tinkler's Hill, St Martin's	Post-medieval kelp burning pit situated on the coastal margin at the foot of the western slope on Tinkler's Hill, visible as a rounded hollow, shaped as an inverted bowl. A 2m boundary is recommended around the designation to support and preserve the monument's integrity.	460m west of scheme extends north of Middle Town		
<b>Grade II Listed Buildings</b>				
Bleak House	Early/mid-19 <sup>th</sup> century house	15m south		



Heritage Asset Name	Designation Features	Distance from the Proposed Scheme	Potential Impacts	Actions and Requirements
Outbuilding Approximately 25m west of North Farmhouse	19 <sup>th</sup> Century cowhouse with loft and barn	15m east	The potential for impact varies depending on the proximity of a Listed Building to the works. Many of the Listed Buildings within Higher Town are near the proposed distribution pipe. Whilst no direct physical impacts are anticipated, there are likely to be impacts upon heritage setting including potential for temporary noise and vibration, production of dust, and potential changes in views (particularly if a works area needs to be established).	<ul style="list-style-type: none"> <li>➤ Consultation with relevant organisations including Historic England and Isles of Scilly Council; and</li> <li>➤ Heritage Impact Assessment / Heritage Statement.</li> </ul>
Outbuilding Approximately 25m south-west of North Farmhouse	19 <sup>th</sup> Century outbuilding, former calf-house	25m east		
Pigsty Approximately 25m north-west of North Farmhouse	19 <sup>th</sup> Century pigsty	30m east		
Outbuilding Approximately 2m south-west of North Farmhouse	19 <sup>th</sup> Century outbuilding, a former dairy and brewhouse	45m east		
North Farmhouse	17 <sup>th</sup> / 18 <sup>th</sup> Century farmhouse, remodelled and extended in 19 <sup>th</sup> Century	55m east		
Church of St Martin's	Originally built in 1866, different period features including 20 <sup>th</sup> Century windows and 19 <sup>th</sup> Century pine benches.	75m west		
K6 Telephone Kiosk	Designed in 1935 by Sir Giles Gilbert Scott	80m east		
Corner Cottage Evergreen Melinda	Late 18 <sup>th</sup> to mid-19 <sup>th</sup> Century terrace of 3 cottages	80m east		
Rock Cottage, Rock House	Inscription from 1822; remodelled and extended in later 19 <sup>th</sup> century. Included as a dated example of a Scillonian house and for group value with the Methodist Chapel.	90m south		
Methodist Church	c.1845 methodist church	115m south		
Ashvale Farmhouse	Mid-19 <sup>th</sup> Century, incorporating older former dwelling	460m south-west		
Barn at Little Arthur Farm	Mid-19 <sup>th</sup> Century barn	490m east		

## Appendix F Landscape Designations Impact and Requirements Table

Designation Name	Designation Features	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
Isles of Scilly AONB (National Landscape)	Despite the small scale, the Isles display a large diversity of scenery such as a combination of rugged granite cliffs and headlands, sandy bays, hidden coves, shifting dunes and saline lagoons. The Isles of Scilly AONB website states that “over 6,000 years of human occupation has led to the development of lowland heath, enclosed pasture, hedged bulb-strips, small harbours and quays, and scattered rural settlement punctuated by tiny townships”.	The proposed scheme is located within designation	<p>Potential impact upon the natural beauty and characteristics of the AONB, particularly during installation / construction due to activities which generate noise (reducing tranquillity) and dust, such as excavation of trenches to place pipework.</p> <p>Once built, the pipework will be buried below ground and thus out of sight, which would prevent visible impacts. The exception to this is surface plant, such as for the desalination activity, which will remain permanently and could have an impact upon views.</p>	<ul style="list-style-type: none"> <li>➤ Consultation with Natural England and Isles of Scilly Council;</li> <li>➤ Gain consent from the Secretary of State for permission to build within AONB;</li> <li>➤ Biodiversity Net Gain to restore vegetation or enhance existing features; and</li> <li>➤ Landscape and Visual Impact Assessment.</li> </ul>
158: Isles of Scilly NCA	<p>Some of the key characteristics of the area include:</p> <ul style="list-style-type: none"> <li>➤ Low-lying granite islands with a strong maritime influence;</li> <li>➤ Complex seascapes;</li> <li>➤ The area is isolated from the UK mainland, with a strong sense of remoteness and tranquillity;</li> <li>➤ The unique pattern of small fields enclosed by evergreen hedges, called fences locally, protects the bulb and vegetable fields from salt spray and strong winds;</li> <li>➤ Settlement patterns of the off islands (Tresco, Bryher, St Martin’s, St Agnes and Gugh) vary, with small clusters of buildings around quays or in sheltered spots and solitary farmhouses located in the centre of smallholdings;</li> <li>➤ White sandy beaches, embryonic sand dunes and unenclosed areas of maritime heath and grassland fringe the islands; some heathland is dominated by gorse and bracken;</li> <li>➤ There are outstanding examples of long-term human occupation, including chambered barrows and standing stones with forts and castles prominent on areas of higher ground; and</li> <li>➤ A network of roads and tracks and about 200km of permissive paths provide access to all parts of the islands.</li> </ul>	The proposed scheme is located within designation	<p>Like impacts upon the AONB, the potential works could impact the natural beauty and characteristics through activities such as excavation which can disturb the local environment and tranquillity. Works could potentially impact upon the ability of the NCA to reach its Statement of Environmental Opportunity goals.</p>	<p>Consultation with Natural England and Isles of Scilly Council.</p>

## Appendix G Water Environment Designations Impact and Requirements Table

Designation Name	Designation Features	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
Flood Zone 1	N/A	Parts of the proposed scheme are within these designations	As the works are within Flood Zone 1, there is a low risk of flooding. The works are also outside of areas shown to be at risk of flooding from surface water. Therefore, no impacts are anticipated.	No specific assessment required.
Groundwater Source Protection Zones	Inner Zone (SPZ1) and Outer Zone (SPZ2)	Western and eastern parts of the distribution pipeline fall within the Inner Zone and Outer Zone	As the proposed works is partially within a SPZ, certain restrictions may be in place to avoid impacts to the SPZ. There may be potential for contamination during construction activities	The CEMP should include measures to reduce risk of pollution to the ground.
Isles of Scilly Water Body (groundwater body)	Poor overall status in 2019	The proposed scheme is within designation	Potential for contamination during construction activities	
WFD higher sensitivity habitat	Subtidal seagrass beds	Within 500m of the proposed scheme	None of the works directly overlap with the habitat so it is unlikely that impacts to the designation will arise	No specific assessment required.
WFD lower sensitivity habitats	<ul style="list-style-type: none"> <li>➤ Gravel &amp; cobbles;</li> <li>➤ Intertidal soft sediment;</li> <li>➤ Subtidal soft sediment;</li> <li>➤ Rocky shore; and</li> <li>➤ Subtidal rocky reef.</li> </ul>	Within 500m of the proposed scheme	None of the works directly overlap with the habitat so it is unlikely that impacts to the designation will arise	

## Appendix H Sensitive Receptors Impact and Requirements Table

Sensitive Receptor	Distance from the Proposed Scheme	Potential Impact	Actions and Requirements
Community Observatory St Martin's on Scilly (COSMOS) Community Observatory	Adjacent to the proposed scheme	<p>During construction, there is the potential for some disturbance / nuisance to occur such as noise and vibration, production of dust, some construction traffic and potentially some localised and temporary changes in access particularly because some of the proposals involve works within more urbanised parts of the island (i.e. in Higher Town, Middle Town and Lower Town).</p> <p>No adverse impacts are predicted for the built structure.</p>	<ul style="list-style-type: none"> <li>➤ Consultation with Isles of Scilly Council; and</li> <li>➤ Construction Environmental Management Plan to include mitigation measures to reduce impacts, such as restrictions on hours of working.</li> </ul>
Residential property opposite St Martin's Island Hall and Reading Room	Adjacent to the proposed scheme		
Farm buildings and residential properties north of Higher Town, including North Farm Gallery	Adjacent to proposed scheme extents north of Higher Town		
The Stables	Adjacent to proposed scheme extents north of Higher Town		
Scilly Flowers	Adjacent to proposed scheme extents north of Higher Town		
St Martin's Island Hall & Reading Room	15m south of the proposed scheme		
Nearby sensitive receptors (e.g., residential properties and farms, leisure facilities and businesses) within Higher Town	Varying distances ranging from 20m, up to 500m from the proposed scheme		
Helen's Shepherd's Hut	40m south of scheme extents north of Middle Town		
Healthy People Nutrition	45m south of scheme extents north of Middle Town		
Fuchsia Cottage Holidays and residential properties within Middle Town	Varying distances ranging from 50m, up to 250m south of scheme extents north of Middle Town		
St Martin's Campsite	160m south-west of proposed scheme extents north of Middle Town		
Great Bay Beach	180m east of the proposed scheme		
Higher Town Bay	250m south of scheme extents north of Higher Town		
The Flats	250m south of scheme extents north of Middle Town		
Little Bay	250m north-east of scheme extents north of Middle Town		
Nearby sensitive receptors (e.g., residential properties and farms, leisure facilities and businesses) within Lower Town	Varying distances from 300m up to 500m west of the proposed scheme		

## Appendix I Habitats Regulations Assessment Stage 1 Screening Report



Isles  
of  
Scilly



## Capital Delivery Programme

### Habitats Regulations Assessment (HRA) Stage 1 Screening Report

St Martin's Water Supply (Distribution Pipeline)

This report is to be regarded as confidential to our Client and is intended for their use only and may not be assigned except in accordance with the contract. Consequently, and in accordance with current practice, any liability to any third party in respect of the whole or any part of its contents is hereby expressly excluded, except to the extent that the report has been assigned in accordance with the contract. Before the report or any part of it is reproduced or referred to in any document, circular or statement and before its contents or the contents of any part of it are disclosed orally to any third party, our written approval as to the form and context of such a publication or disclosure must be obtained.

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# 1 Introduction

## 1.1 Purpose of the Report

Pell Frischmann has been commissioned by Trant Engineering Limited to prepare a Habitat Regulations Assessment (HRA) Stage 1 Screening report for the development of a new potable water pressurised distribution pipeline between Middle Town and Higher Town on the Island of St. Martins (hereafter referred to as the 'proposed scheme'), within the Isles of Scilly archipelago. The proposed scheme will be completed under permitted development rights and as such does not require a planning application.

Isles of Scilly Council, as the competent authority and Local Planning Authority, are required to carry out (or request) an HRA 'to test if a plan or project proposal could significantly harm the designated features of a European site' (in line with the UK government guidance 'Habitats regulations assessments: protecting a European site'<sup>1</sup>).

There are no designated European sites within the scheme boundary, however HRA screening is deemed to be required due to the proximity of the application site to the designated features within the waters surrounding the island and proximity to Plains & Great Bay (St. Martin's) Site of Special Scientific Interest (SSSI) to the east. The Isles of Scilly Special Protection Area (SPA) and the Isles of Scilly Complex Special Area of Conservation (SAC) are archipelago-wide designations and are located approximately (at the closest point) 200m and 270m south, respectively. The location of the designations is shown in .

The HRA process can have up to three stages. This report presents the HRA Stage 1 Screening assessment. The purpose of this stage is to check if the proposed scheme is likely to have a significant adverse effect on a relevant European site's conservation objectives or its qualifying features. If not, the HRA process can stop at Stage 1 Screening and will not need to progress onto Stage 2 Appropriate Assessment or Stage 3 Derogation.

## 1.2 Proposed Scheme Location

The site location is described in Section 1.3 of the Environmental Impact Assessment (EIA) Screening Report (document no. 107780-PEF-DP-100-T.RP-EN-0001 St Martins EIA PD), which is the document this HRA is appended to. The proposed scheme layout can be seen in Appendix A of the EIA Screening Report.

## 1.3 Proposed Scheme Overview

A proposed scheme overview can be seen in Section 1.4 of the EIA Screening Report.

## 1.4 Programme

Construction is expected to start in February 2024, with testing and commissioning completed in March 2024.

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<sup>1</sup> Department for Environment, Food & Rural Affairs, Natural England, Welsh Government and Natural Resources Wales (2021) Guidance – Habitats regulations assessments: protecting a European site. Available at: <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>

## 2 Methodology

### 2.1 Legislation and Guidance

There are two key pieces of legislation associated with HRA:

1. The European Union (Withdrawal) Act 2017, which provides for the retention of existing EU law. The key piece of legislation retained and transposed into UK legislation related to this HRA is the Conservation of Habitats and Species Regulations 2017. This retained EU legislation includes the Birds Directive (79/409/EEC) and Habitats Directive (92/43/EEC). The Birds Directive aims to protect all 500 wild bird species naturally present in the EU. The Habitats Directive aims to protect over 1,000 animal and plant species, as well as over 200 habitat types; and
2. The Conservation of Habitats and Species Regulations 2017 (as amended), also known as the "Habitats Regulations". The Regulations were amended in 2019 followed the UK's exit from the EU. One of the amendments was that SACs and SPAs in the UK are no longer part of the EU's Natura 2000 ecological network, but instead belong to a (UK) national site network.

This Habitat Regulations Assessment has been undertaken in line with the following:

- UK Government Guidance: Habitats regulations assessment: protecting a European site, and Appropriate assessment: guidance on the use of Habitats Regulations Assessment<sup>2</sup>; and
- Highways England standard LA 115 Habitats Regulations Assessment<sup>3</sup>, published as part of the Design Manual for Roads and Bridges (DMRB).

The standard LA 115 provides a clear approach to identify potential significant effects upon a European site using screening matrices. The DMRB screening matrices have been adapted for this HRA.

### 2.2 HRA Stages

The UK Government guidance outlines the three stages of the HRA process:

1. Screening – to check if the proposal is likely to have a significant effect on a site's conservation objectives either alone or in-combination. If not, it is not required to go through the appropriate assessment or derogation stages;
2. Appropriate assessment – to assess if the proposal would have an adverse effect on site integrity either alone or in-combination. In this stage, measures can be identified to avoid or minimise effects; and
3. Derogation – to consider if the proposal that would have an adverse effect on a European site qualifies for an exemption.

This report presents Stage 1 of this process.

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<sup>2</sup> Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities & Local Government (2019) Guidance – Appropriate assessment: Guidance on the use of Habitats Regulations Assessment. Available at: <https://www.gov.uk/guidance/appropriate-assessment>

<sup>3</sup> Highways England (2020) Design Manual for Roads and Bridges Sustainability & Environment Appraisal – LA 115 Habitats Regulations assessment (formerly HD 44/09), Revision 1. Available at: <https://www.standardsforhighways.co.uk/tses/attachments/e2fdab58-d293-4af7-b737-b55e08e045ae?inline=true>

The HRA process is underlined by the precautionary principle when assessing potential impacts. If it is not possible to rule out the risk of harm based on the available evidence, then it is assumed that a risk may exist and it should be dealt with using the appropriate assessment process.

## 2.3 Stage 1 Screening Process

The 'Habitats Regulations Assessment: Protecting a European Site' guidance<sup>1</sup> also outlines the HRA screening process. This information has been summarised into the following steps:

1. Identify which European sites the proposed scheme could affect;
2. Describe how the proposed scheme alone, and in combination with other schemes, may have the potential to cause likely significant effects to the European site(s);
3. Identify the potential effects upon the European site(s);
4. Assess the significance of the potential effects on the European site; and
5. Report the findings, ensuring the evidence is thorough and complete with clear conclusions.

In line with ruling of the Court of Justice of the European Union, competent authorities cannot consider any mitigation measures when making a decision during the Stage 1: Screening process. This report has therefore assessed the potential effects without mitigation measures.

## 2.4 Information Sources

Information sources used during the writing of this report include the following (although specific documents are referenced, where relevant, using footnotes later in this report):

- Natural England – European site conservation objectives;
- Joint Nature Conservation Council (JNCC) – Standard data forms;
- Department for Environment, Food and Rural Affairs (Defra) – MAGIC mapping<sup>4</sup>;
- Royal Society for the Protection of Birds (RSPB) bird species<sup>5</sup> webpages;
- Isles of Scilly Council Planning Applications webpage<sup>6</sup>; and
- Online mapping (for example, Google Maps).

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<sup>4</sup> Defra (2023) Multi-Agency Geographic Information for the Countryside (MAGIC) Mapping. Available at: [Magic Map Application \(defra.gov.uk\)](https://www.defra.gov.uk/magic/)

<sup>5</sup> RSPB (2023) Find a bird. Available at: [RSPB](https://www.rspb.org.uk/)

<sup>6</sup> Isles of Scilly Council (2023) Planning Applications. Available at: <https://www.scilly.gov.uk/planning-development/planning-applications>

## 3 Stage 1 Screening Assessment

### 3.1 European Sites

There are two European sites within 2km of the proposed scheme: the Isles of Scilly SPA and the Isles of Scilly Complex SAC. These European sites are assessed within this HRA and their respective distances from the proposed scheme are provided within Table 1, below.

It is also noted that the DMRB LA 115 standard recommends that a 30km zone of influence is also considered for SACs where bats are a reason for designation. Due to the location of the works on St Martin's which is a small island, the 30km zone of influence is scoped out.

**Table 1: European sites considered within this HRA**

Designation	Location
Isles of Scilly Complex SAC	Approximately 270m to the east of the proposed scheme at its nearest point.
Isles of Scilly SPA	Approximately 200m to the east of the proposed scheme at its nearest point.

#### Isles of Scilly Ramsar

Ramsar sites are wetlands of international importance. Where proposals could result in potential effects upon a Ramsar site, it should be assessed within a HRA. The Isles of Scilly Ramsar is located approximately 730m east of the proposed scheme (at its nearest point). It is therefore not located within close proximity to the proposed scheme. It is also noted that the Isles of Scilly Ramsar is designated specifically for its population of lesser black-backed gull (*Larus fuscus*) during the breeding season<sup>7</sup>.

Based on the following factors, the need to further assess potential impacts of the proposed scheme upon the integrity of the designation and its features has been scoped out:

- The relative distance between the proposed scheme and designation;
- The localised nature of the proposed works and construction activities; and
- The works not being located within a wetland habitat which the lesser black-backed gull favours.

Therefore, no significant impacts upon the Ramsar are considered likely and further assessment has been scoped out of this HRA.

### 3.2 Other Designations

The proposed scheme lies adjacent to Plains & Great Bay (St Martin's) Site of Special Scientific Interest (SSSI) and falls within three SSSI Impact Risk Zones (IRZ) (see Table 2). The locations of the nearby SSSI and IRZs are shown in Appendix B of this report.

Although it is not a statutory requirement for the HRA process, Plains & Great Bay (St Martin's) SSSI is considered within this report due to its proximity to the proposed scheme and potential for significant effects. The SSSI IRZs have been considered in Table 2 below for context, however are not considered further in this report.

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<sup>7</sup> Ramsar Sites Information Service (2001) Isles of Scilly. Available at: [Isles of Scilly | Ramsar Sites Information Service](#)

**Table 2: Non-European Designations within proximity to the proposed scheme**

Designation	Location
Plains & Great Bay (St. Martin's) SSSI (biological)	Whilst the construction easement is located adjacent to the designation, the distribution pipeline itself is located 1.5m east of the proposed scheme (at its nearest point)
Plains & Great Bay (St. Martin's) SSSI (biological) IRZ	Located within. Consultation with Natural England required for all Planning Applications except householder applications.
Chapel Down (St Martin's) SSSI (biological) IRZ	Located within Consultation with Natural England required for Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.
St Martin's Sedimentary Shore SSSI (biological) IRZ	Located within Consultation with Natural England required for Pipelines and underground cables, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

It is noted that the EIA Screening report also mentions the Porth Seal SSSI. Whilst the SSSI is within approximately 315m of the proposed works, it is designated for geological reasons<sup>8</sup> and therefore is not of relevance to this HRA.

### 3.3 Cumulative Effects

A search of the Isles of Scilly Council planning applications list was undertaken in November 2023 to capture any major developments in the previous three years that are located within 2km of the proposed scheme (i.e., within the island of St Martin's). Only full applications were considered when searching for the other schemes, using the distance and date criteria. Table 3 below details the findings of the search.

A search was also carried out using the Planning Inspectorate's National Infrastructure Planning project search<sup>9</sup>, although none were identified within the Isles of Scilly.

**Table 3: Planning applications for notable nearby other schemes**

Distance and direction from:		Description	Planning Reference and Date
Proposed Development	European Sites		
The proposed development's red line boundary is approximately 385m west of the proposed scheme boundary	<ul style="list-style-type: none"> <li>➤ Located within SAC</li> <li>➤ Located within SPA</li> <li>➤ Adjacent to St Martin's Sedimentary Shore SSSI</li> <li>➤ Approximately 575m west of Plains &amp; Great Bay (St Martin's) SSSI</li> </ul>	<p><u>Lower Town Quay, Lower Town, St Martin's</u></p> <p>Construct a removable slipway at the south-west end of St Martins at Lower Town with an associated erosion protection surface and dune stabilisation works (EIA Development).</p>	P/22/078/FUL Decision provided on 20-April 2023 (Permitted)

According to the planning application (P/22/078/FUL) environmental statement addendum, construction at Lower Town Quay is expected to commence in April 2025, which does not coincide with the proposed scheme's construction period. Although Lower Town Quay intersects with both the boundaries for the SAC and SPA (as mentioned above), the development's distance from the proposed scheme minimises the potential for cumulative impacts to arise upon the features of the SAC or SPA. The development at Lower Town Quay is also located approximately 800m west of the Plains & Great Bay (St Martin's) SSSI, which reduces the

<sup>8</sup> Natural England (1989) Porth Seal (St Martin's) SSSI Citation. Available at: [1001971 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

<sup>9</sup> Planning Inspectorate (2023) National Infrastructure Planning – Projects. Available at: [Projects | National Infrastructure Planning \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/projects/)



potential for cumulative impacts to occur to the SSSI when considering the location of the proposed scheme is 1.5m away from the designation. Furthermore, as the proposed scheme is located approximately 230m north of the St Martin's Sedimentary Shore SSSI (at its closest point), and that fact that construction periods of the two developments are not likely to overlap, it is also considered unlikely that cumulative impacts upon the integrity of the SSSI would occur.

## 3.4 Results

### 3.4.1 Isles of Scilly Complex SAC

Table 4 shows the assessment of potential impacts of the proposed scheme upon the SAC and its qualifying features. The table has been adapted from a screening matrix template within DMRB LA 115.

Some of the factual information within the table has been extracted from the JNCC standard data form<sup>10</sup> for the SAC.

**Table 4: Isles of Scilly Complex SAC Stage 1 Screening Assessment Matrix**

Isles of Scilly Complex SAC Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
<b>Characteristics of the European site</b>	
Name of European site (EU Code)	Isles of Scilly Complex Special Area of Conservation (SAC) (UK0013694)
Size of European site	26,848.62 ha
Site details	<p>The Isles of Scilly SAC “encompasses all of the main islands and outlying rocky islets and protects a range of habitats. Rocky reefs in Scilly stretch from the intertidal to deep circalittoral reefs and are recognised for the diversity of the species they support. These include corals, sponges, seaweeds and bryozoans...</p> <p>Extensive intertidal sandflats are present in the shallow water between the islands and again support a wide range of species, including some not often found in the intertidal...</p> <p>In addition to habitats the Isles of Scilly SAC is designated for supporting a sizeable population of grey seals <i>Halichoerus grypus</i>, which are present all year round and shore dock <i>Rumex rupestris</i> on a number of the islands. The Isles Scilly SAC overlaps with 10 of the 11 more recently designated Marine Conservation Zones (MCZs). The MCZs complement the SAC designation by offering protection to species and habitats that are not protected by the SAC”<sup>11</sup>.</p>
Site character, habitat class	<ul style="list-style-type: none"> <li>➤ Habitat class N02, which is defined as: Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) – 20% coverage;</li> <li>➤ Habitat class N01, which is defined as: Marine areas, Sea inlets – 75% coverage; and</li> <li>➤ Habitat class N05, which is defined as: Shingle, Sea cliffs, Islets – 5% coverage.</li> </ul>
Qualifying features	<ul style="list-style-type: none"> <li>➤ Sandbanks which are slightly covered by sea water all the time (subtidal sandbanks);</li> <li>➤ Mudflats and sandflats not covered by sweater at low tide (intertidal mudflats and sandflats);</li> <li>➤ Reefs;</li> <li>➤ <i>Halichoerus grypus</i> (grey seal); and</li> <li>➤ <i>Rumex rupestris</i> (shore dock).</li> </ul>
Natural England Conservation Objectives	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintain or restoring:</p> <ul style="list-style-type: none"> <li>➤ The extent and distribution of qualifying natural habitats and habitats of qualifying species;</li> </ul>

<sup>10</sup> Joint Nature Conservation Council (2015) Standard Data Form for the Isles of Scilly Complex SAC. Available at: <https://jncc.gov.uk/jncc-assets/SAC-N2K/UK0013694.pdf>

<sup>11</sup> Natural England (2023) Designated Sites View – Isles of Scilly Complex SAC. Available at: [Designated Sites View \(naturalengland.org.uk\)](https://designatedsites.naturalengland.org.uk/)

Isles of Scilly Complex SAC Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
	<ul style="list-style-type: none"> <li>➤ The structure and function (including typical species) of qualifying natural habitats;</li> <li>➤ The structure and function of the habitats of qualifying species;</li> <li>➤ The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;</li> <li>➤ The populations of qualifying species; and</li> <li>➤ The distribution of qualifying species within the site.</li> </ul>
Vulnerability of the European site (i.e., threats and pressures)	<ul style="list-style-type: none"> <li>➤ Threat and pressure code H02: pollution to groundwater (point sources and diffuse sources);</li> <li>➤ Threat and pressure code G01: outdoor sports and leisure activities, recreational activities;</li> <li>➤ Threat and pressure code I01: invasive non-native species;</li> <li>➤ Threat and pressure code F02: fishing and harvesting aquatic resources; and</li> <li>➤ Threat and pressure code J03: other ecosystem modifications.</li> </ul>
Project Information	
Land take	The proposed scheme will not involve any land take within the SAC and there is a distance of approximately 270m between the proposed scheme and the nearest part of the SAC.
Functionally linked land	No habitats in or near the proposed scheme are functionally linked to the SAC, a coastal water body, and its qualifying habitats (sandbanks, mudflats, sandflats, and reefs). The SAC's distance from the proposed scheme restricts the potential for functionally linked land due to its coastal nature and qualifying features.
Excavation requirements	No excavation is required within the SAC.
Resource requirements	It is not expected any resources within the SAC, such as seabed sediments or seawater, would be required for the construction or operation of the proposed scheme.
Maintenance requirements	As the proposed scheme is a below ground structure, maintenance requirements are expected to be limited and localised to the pipeline route and will not be undertaken within the SAC. As the pipe flow level will be monitored and maintained as required by SWW, and the fact that the pipe will carry freshwater, potential impacts from leaks would be considered minimal.
Transportation, including access routes	<p>As stated within the EIA Screening, construction materials will be transported from the mainland to St Martin's via boat. The primary entry point for materials is the quay at Higher Town, with consideration for the quay at Lower Town depending on tides. The shipping routes fall within the SAC, with the quay itself bordering the SAC. Since existing routes and locations are being used with a minimal daily movement, no additional impacts on the SAC beyond existing usage are expected during construction.</p> <p>It is proposed that there will be a small site storage area near Higher Town Quay, approximately 110m to the north-east of the SAC at its closest point, and another site storage area located near The Parsonage (located to the south-east of Middle Town), approximately 110m to the north of the SAC. Appendix B (Proposed Scheme Access Plan) of the EIA Screening Report that this HRA is appended to highlights the routes that may be taken to reach the storage areas and different parts of the pipeline route. None fall within close proximity to the SAC.</p> <p>As discussed further within Table 6, the works will be carried out as part of a rolling set up as the works progress along the pipeline route. Whilst there may be movement to / from the storage area on a daily basis when the works take place, it is not considered likely that this would impact upon the SAC or its qualifying features due to distance.</p> <p>The scheme operation will not involve transportation except for maintenance needs, which are likely to be minimal.</p>
Invasive species	No scheduled invasive non-native species (INNS) were identified during the site walkover carried out for the Preliminary Ecological Appraisal (document ref. 107780-PEF-ZZ-100-T-RP-GE-0001), therefore the presence of invasive species is considered unlikely. Regardless, biosecurity best practice measures will be implemented during excavation and construction to reduce the likelihood of spread or introduction of INNS, including rats or Dutch elm disease.
Assessment of potential impacts	
Reduction in habitat area	No reduction of habitat area within the SAC is anticipated as no direct works are proposed within the SAC.
Habitat fragmentation	The proposed scheme won't result in habitat loss within the SAC, especially for its qualifying habitats (sandbanks, mudflats, sandflats, and reefs). Therefore, no habitat fragmentation is anticipated.

<b>Isles of Scilly Complex SAC Assessment Matrix</b>	
<b>Project</b>	<b>St Martin's Water Supply (Distribution Pipeline)</b>
Disturbance to key species (including species density)	Habitats within the proposed scheme include modified grassland, other coniferous woodland, non-native and ornamental hedgerow, bare ground, other neutral grassland, bracken, developed land (sealed surface), and non-cereal crops. No habitat to support shore dock or grey seal were present within or adjacent to the proposed scheme, and as such, it is considered likely that construction or operation of the proposed scheme would give rise to impacts to these species.
Species fragmentation	No species fragmentation is considered likely as result of the proposed scheme due to the distance to the SAC and habitats present within the proposed scheme. No impact pathways that could affect connectivity for or distribution of shore dock or grey seal within the SAC or functionally linked land have been identified.
Changes in key indicators of conservation value – water quality	There are no watercourses within or near the proposed scheme boundary, and as such, it is not likely that the proposed scheme is hydrologically linked to the coastal water body in which the SAC is located. Consequently, adverse impacts on the SAC's water quality due to the proposed scheme are not anticipated.  Excavation will be limited to the trench for installation of the pipework during construction, with soil stored appropriately to be reused for trench backfilling. This minimises silt run-off and potential for groundwater impacts. Best practices during site establishment will further reduce impacts.
Changes in key indicators of conservation value – air pollution and dust	It is anticipated that the excavation works required during construction may produce dust / soil debris. However, this will be temporary as construction is expected to occur in a 2-3 month period. Dust is not likely to have an adverse effect on the SAC or its qualifying features due to the lack of proximity to the proposed scheme. Regarding air pollution, the construction phase will require use of vehicles / plant however this will be temporary and short term. It is not expected construction phase vehicles will have a significant adverse effect on SAC receptors. Once operational it is not anticipated there will be production of air pollution or dust, with the potential exception of during maintenance activities (which are likely to be minimal). Due to the above information, no significant impacts are considered likely.
Changes in key indicators of conservation value – noise disturbance	Construction will generate noise and vibration, but prolonged, high-noise activities like piling or drilling are not expected. The distance from the SAC and its qualifying features minimises the potential risk of significant adverse effects. Once operational no noise or vibration effects are anticipated, with the exception of noise associated with maintenance (which is likely to be minimal).
Cumulative effects	As detailed in Section 3.3 of this report, it is considered unlikely that there would be significant cumulative effects upon the SAC or its qualifying features. Only one other development has been identified in line with the search criteria.
<b>Assessment of significance of effects</b>	
Is the project directly connected with or necessary to the management of the site?	No, the proposed scheme is not connected within or necessary to the management of the European site.
Has consultation been undertaken?	Consultation with a statutory nature conservation body is not mandatory until Stage 2: Appropriate Assessment. It is noted that some initial conversations have been held with the Isles of Scilly Wildlife Trust regarding the Capital Development Programme, but not specifically for this HRA.
Outcome of the screening stage	It is not considered that the proposed scheme would result in likely significant effects upon the Isles of Scilly Complex SAC or its qualifying species and habitats. Therefore, it is not considered necessary to progress to Stage 2: appropriate assessment of the HRA process.
<b>Assessment information</b>	
Who carried out the assessment?	Prepared by: E. Stone (Graduate Environmental Consultant) and E. Samways (Environmental Consultant) Checked by: Adela Sadler (Environmental Coordinator) Approved by: Jon Davey (Technical Director – Environmental Management & Sustainability)

### 3.4.2 Isles of Scilly SPA

The below table covers the assessment of potential impacts of the proposed scheme upon the SPA and its qualifying features. The table has been adapted from a screening matrix template within DMRB LA 115.

Some of the below factual information within the table has been extracted from the JNCC standard data form for the SPA.

**Table 5: Isles of Scilly SPA Stage 1 Screening Assessment Matrix**

Isles of Scilly SPA Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
<b>Characteristics of the European site</b>	
Name of European site (EU Code)	Isles of Scilly Special Protection Area (SPA) (UK9020288)
Size of European site	13,332.68 ha
Site details	According to Natural England <sup>12</sup> : "The isolated nature of the islands and rocks, together with their low levels of disturbance, make them particularly suitable for nesting seabirds, with the SPA supporting a breeding seabird assemblage of European importance. The waters adjacent to the colonies are used by large numbers of seabirds for a wide range of activities, including bathing, preening, displaying, loafing and local foraging. The site supports the fifth largest UK population of European storm petrels <i>Hydrobates pelagicus</i> (and the largest in England), the sixth largest population of lesser black-backed gulls <i>Larus fuscus graellsii</i> , the third largest population of European shags <i>Phalacrocorax aristotelis</i> (and the largest in England), and the largest population of great black-backed gull <i>Larus marinus</i> in the UK (Natural England, 2018 <sup>13</sup> ).
Site character, habitat class	<ul style="list-style-type: none"> <li>➤ Habitat class N01, which is defined as: Marine areas, Sea inlets – 97.24% coverage;</li> <li>➤ Habitat class N05, which is defined as: Shingle, Sea cliffs, Islets – 1.23% coverage;</li> <li>➤ Habitat class N04, which is defined as: Coastal sand dunes, Sand beaches, Machair – 0.18% coverage;</li> <li>➤ Habitat class N02, which is defined as: Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins) – 0.01% coverage; and</li> <li>➤ Habitat class N08, which is defined as: Heath, Scrub, Maquis and Garrigue, Phygrana – 1.34% coverage.</li> </ul>
Qualifying features	<ul style="list-style-type: none"> <li>➤ <i>Hydrobates pelagicus</i> (European storm-petrel);</li> <li>➤ <i>Larus fuscus graellsii</i> (lesser black-backed gull);</li> <li>➤ <i>Phalacrocorax aristotelis</i> (European shag); and</li> <li>➤ <i>Larus marinus</i> (great black-backed gull).</li> </ul>
Natural England Conservation Objectives <sup>14</sup>	<p>The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintain or restoring:</p> <ul style="list-style-type: none"> <li>➤ The extent and distribution of the habitats of qualifying features;</li> <li>➤ The structure and function of the habitats of the qualifying features;</li> <li>➤ The supporting processes on which the habitats of the qualifying features rely;</li> <li>➤ The populations of each of the qualifying features; and</li> </ul>

<sup>12</sup> Natural England (2023) Designated Sites View – Isles of Scilly SPA. Available at: [Designated Sites View \(naturalengland.org.uk\)](https://designatedsites.naturalengland.org.uk/)

<sup>13</sup> Natural England (2018) Departmental Brief: Isles of Scilly potential Special Protection Area (pSPA).

<sup>14</sup> Natural England (2023) Natural England Conservation Advice for Marine Protected Areas – Isles of Scilly SPA. Available at: <https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9020288&SiteName=Isles%20of%20scilly&SiteNameDisplay=Isles%20of%20Scilly%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=4&HasCA=1#hlico>

Isles of Scilly SPA Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
	<ul style="list-style-type: none"> <li>➤ The distribution of qualifying features within the site.</li> </ul>
Vulnerability of the European site (i.e., threats and pressures)	<ul style="list-style-type: none"> <li>➤ Threat and pressure code I01: invasive non-native species;</li> <li>➤ Threat and pressure code F02: fishing and harvesting aquatic resources;</li> <li>➤ Threat and pressure code D04: airports, flightpaths;</li> <li>➤ Threat and pressure code E03: discharges;</li> <li>➤ Threat and pressure code G01: outdoor sports and leisure activities, recreational activities; and</li> <li>➤ D03 – shipping lanes, ports, marine constructions.</li> </ul>
Project Information	
Land take	The proposed scheme will not involve any land take within the SPA, and there is a distance of approximately 200m between the proposed scheme and the nearest part of the SPA.
Functionally linked land	As the qualifying features of the SPA are bird species, there is potential for these species to use land associated with the proposed scheme footprint, especially considering the SPA is located 200m from the proposed scheme boundary. However, potential impacts arising from disturbance would likely be only temporary in nature due to the short construction period. As the proposed scheme will be completely below ground, operation of the scheme is not considered likely to impact functionally linked land to the SPA.
Excavation requirements	No excavation is required in the SPA itself.
Resource requirements	It is not expected any resources within the SPA, such as seabed sediments or seawater, would be required for the construction or operation of the proposed scheme.
Maintenance requirements	As the proposed scheme is a below ground structure, maintenance requirements are expected to be limited, localised to the pipeline route, and not be undertaken within the SPA. As the pipe flow level will be monitored and maintained as required by SWW, and the fact that the pipe will carry freshwater, potential impacts from any leaks would be considered minimal.
Transportation, including access routes	<p>As stated within the EIA Screening, construction materials will be transported from the mainland to St Martin's via boat. The primary entry point for materials is the quay at Higher Town, with consideration for the quay at Lower Town depending on tides. The shipping routes fall within the SAC, with the quay itself bordering the SAC. Since existing routes and locations are being used with a minimal daily movement, no additional impacts on the SAC beyond existing usage are expected during construction.</p> <p>It is proposed that there will be a small site storage area near Higher Town Quay, approximately 110m to the north-east of the SPA at its closest point, and another site storage area located near The Parsonage (located to the south-east of Middle Town), approximately 110m to the north of the SPA. Appendix B (Proposed Scheme Access Plan) of the EIA Screening Report that this HRA is appended to highlights the routes that may be taken to reach the storage areas and different parts of the pipeline route. None fall within close proximity to the SAC.</p> <p>As discussed further within Table 6, the works will be carried out as part of a rolling set up as the works progress along the pipeline route. Whilst there may be movement to / from the storage area on a daily basis when the works take place, it is not considered likely that this would impact upon the SPA or its qualifying features due to distance.</p> <p>The scheme operation will not involve transportation except for maintenance needs, which are likely to be minimal.</p>
Invasive species	No scheduled INNS were identified during the site walkover carried out for the Preliminary Ecological Appraisal, therefore the presence of invasive species is considered unlikely. Regardless, biosecurity best practice measures will be implemented during excavation and construction to reduce the likelihood of spread or introduction of INNS, including rats or Dutch elm disease.
Assessment of potential impacts	
Reduction in habitat area	No reduction of habitat area within the SPA is anticipated as no direct works will be occurring within the SPA as a result of the proposed scheme. As there is potential for land within the scheme footprint to be functionally linked to the SPA by bird usage, there may be temporary impacts to these qualifying species through temporary habitat loss during the construction stage. However, due to the minimal scheme footprint, these impacts would likely be limited. As the proposed scheme will be below ground, operation of the works would not result in a reduction of habitat for the qualifying bird species.
Habitat fragmentation	As no direct works will be occurring within the SPA as a result of the proposed scheme, the

<b>Isles of Scilly SPA Assessment Matrix</b>	
<b>Project</b>	<b>St Martin's Water Supply (Distribution Pipeline)</b>
	proposed scheme will not result in loss or fragmentation of habitats within the SPA or its surroundings. It is noted that the SPA does not list any habitats as a qualifying feature.
Disturbance to key species (including species density)	As the works are not located close to the SPA or within the water environment (or the coastal edge), it is considered unlikely that there would be disturbance impacts upon the qualifying bird species.
Species fragmentation	No species fragmentation is considered likely as result of the proposed scheme will not cause fragmentation of the habitats that the qualifying species may use or affect the species directly.
Changes in key indicators of conservation value – water quality	There are no watercourses within or near the proposed scheme boundary, and as such, it is not likely that the proposed scheme is hydrologically linked to the coastal water body in which the SPA is located. Consequently, adverse impacts on the SPA's water quality due to the proposed scheme are not anticipated.  Excavation will be limited to the trench for installation of the pipework during construction, with soil stored appropriately to be reused for trench backfilling. This minimises silt run-off and potential for groundwater impacts. Best practices during site establishment will further reduce impacts.
Changes in key indicators of conservation value – air pollution and dust	It is anticipated that the excavation works required during construction may produce dust / soil debris. However, this will be temporary as construction is expected to occur in a 2-3 month period. Dust is not likely to have an adverse effect on the SPA or its qualifying features due to the lack of proximity to the proposed scheme. Regarding air pollution, the construction phase will require use of vehicles / plant however this will be temporary and short term. It is not expected construction phase vehicles will have a significant adverse effect on SPA receptors. Once operational it is not anticipated there will be production of air pollution or dust, with the potential exception of during maintenance activities (which are likely to be minimal). Due to the above information, no significant impacts are considered likely.
Changes in key indicators of conservation value – noise disturbance	Construction will generate noise and vibration, but prolonged, high-noise activities like piling or drilling are not expected. The distance from the SPA itself minimises any significant adverse effects. As qualifying features of the SPA are bird species (which are mobile), there is potential for noise disturbance to affect species located in proximity to the proposed scheme. However, potential impacts would likely be temporary and limited in nature given the construction programme.  Once operational no noise or vibration is anticipated.
Cumulative effects	As detailed in Section 3.3 of this report, it is considered unlikely that there would be significant cumulative effects upon the SPA or its qualifying features. Only one other development has been identified in line with the search criteria.
<b>Assessment of significance of effects</b>	
Is the project directly connected with or necessary to the management of the site?	No, the proposed scheme is not connected with or necessary to the management of the European site.
Has consultation been undertaken?	Consultation with a statutory nature conservation body is not mandatory until Stage 2: Appropriate Assessment. It is noted that some initial conversations have been held with the Isles of Scilly Wildlife Trust regarding the Capital Development Programme, but not specifically for this HRA.
Outcome of the screening stage	It is not considered that the proposed scheme would result in likely significant effects upon the Isles of Scilly Complex SPA or its qualifying bird species. Therefore, it is not considered necessary to progress to Stage 2: appropriate assessment of the HRA process.
<b>Assessment information</b>	
Who carried out the assessment?	Prepared by: E. Stone (Graduate Environmental Consultant) and E. Samways (Environmental Consultant) Checked by: Adela Sadler (Environmental Coordinator) Approved by: Jon Davey (Technical Director – Environmental Management & Sustainability)

### 3.4.3 Plains & Great Bay (St Martin's) SSSI

The below table covers the assessment of potential impacts of the proposed scheme upon the SSSI and its qualifying features. The table has been adapted from a screening matrix template within DMRB LA 115.

Some of the below factual information within the table has been extracted from the Natural England Designated Sites View for the SSSI<sup>15</sup>.

**Table 6: Plains & Great Bay (St. Martin's) SSSI Stage 1 Screening Assessment Matrix**

Plains & Great Bay (St. Martin's) SSSI Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
<b>Characteristics of the designation</b>	
Size of destination	14.4459ha
Site details / reason for designation	<p>According to Natural England<sup>16</sup>: <i>"The dune, dune grassland and heathland habitats support several nationally rare and uncommon plant species. The site is also of importance for illustrating the classic succession of coastal communities from embryo dunes to dune scrub.</i></p> <p><i>Great Bay supports a well-developed strandline vegetation on the embryo dunes where Sea Sandwort (Honkenya peploides), Frosted Orache (Atriplex laciniata) and Sea Rocket (Cakilemaritima) are common. The dunes behind are dominated by Sand Couch (Elymus farctus), Marram (Ammophila arenaria) together with Sea Holly (Eryngium maritimum) and the uncommon Sea Spurge (Euphorbia paralias) and Portland Spurge (E. portlandica). The species rich dune grassland further inland is particularly important for the occurrence of the nationally rare Orange Bird's-foot (Ornithopus pinnatus) in a low, rabbit grazed sward, where Thrift (Armeria maritima), Red Fescue (Festuca rubra), Sand Sedge (Carex arenaria), Sea Stork's-bill (Erodium maritimum) and Eyebright (Euphrasia sp.) are common. Some of the rarer species are found in the species-rich dune grassland further inland such as nationally rare Orange Bird's-foot (Ornithopus pinnatus) and Ramping Furmitory (Fumaria capreolata).</i></p> <p><i>The site also supports a breeding colony of Ringed Plover (Charadrius hiaticula)".</i></p>
<b>Project Information</b>	
Land take	The proposed scheme will not involve any land take within the SSSI. Whilst the construction easement for the proposed scheme is located adjacent to the SSSI, the pipeline route itself is located approximately 1.5m west of the designation (at its nearest point) for around 100m.
Functionally linked land	<p>The qualifying features / reasons for designations for the designated site include various plant species and the ringed plover, which typically breed on coastal beaches but have also been observed breeding inland in sand and gravel pits. While there might be some functionally linked land in terms of bird use, it is unlikely that the habitat will be used by ringed plovers for breeding, and potential impacts would likely only be related to temporary and limited disturbance. The SSSI is classified as Lowland Heathland Priority Habitat. Whilst the proposed scheme crosses a very small area of Lowland Heathland Priority Habitat near to the SSSI, this land is not functionally linked to the Lowland Heathland that falls under the SSSI designation due to the series of tracks that separate the habitats. As such, the land is not functionally linked.</p> <p>It is also noted that a small area of the proposed scheme passes through a priority habitat inventory area noted as 'no main habitat but additional habitats present' (which is not located within the SSSI itself). The additional habitats are noted as lowland heathland and coastal sand dunes. However, from a view of online satellite imagery, there seems to be little visual evidence of sand. Therefore, it is not considered likely that the ringed plover present within the nearby SSSI would use this area of habitat to breed.</p> <p>Once the proposed scheme is operational, works will be buried underground, and as a result, the proposed scheme is not expected to significantly impact the land that ringed plovers or other designated species may use.</p>

<sup>15</sup> Natural England (2023) Designated Sites View – Plains & Great Bay (St Martin's) SSSI. Available at: [SSSI detail \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

<sup>16</sup>Natural England (1986) Plains and Great Bay (St Martin's) Citation. Available at: [1001923 \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

Plains & Great Bay (St. Martin's) SSSI Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
Excavation requirements	No excavation is required within the SSSI.
Resource requirements	It is not expected that any resources within the SSSI would be required for the construction or the operation of the proposed scheme.
Maintenance requirements	As the proposed scheme is a below ground structure, maintenance requirements are expected to be limited, localised to the pipeline route, and not be undertaken within the SSSI. As the pipe flow level will be monitored and maintained as required by SWW, and the fact that the pipe will carry freshwater, potential impacts from any leaks would be considered minimal.
Transportation, including access routes	<p>As stated within the EIA Screening, construction materials will be transported to St Martin's via boat. The primary entry point for materials is the quay at Higher Town, with consideration for the quay at Lower Town depending on tides. These shipping locations do not fall within the SSSI. Of the two proposed site storage areas, neither are located within close proximity to the SSSI (the closest storage area is approximately 145m to the south of the SSSI and the storage area off Cruther's Neck is over 625m to the south-east).</p> <p>It is expected that the works will be carried out as part of a rolling set up as the works progress along the pipeline route. This means that the sufficient areas of pipework, plant / equipment and welfare will be moved from the storage area on a daily basis. This should reduce the need for construction vehicles / plant to move past the SSSI, with the exception of when the works are taking place at the approximate 100m stretch of works which runs parallel with the SSSI. Appendix B (Proposed Scheme Access Plan) of the EIA Screening Report that this HRA is appended to highlights the routes that may be taken to reach the storage areas and different parts of the pipeline route. With the exception of the route needed to reach the 100m stretch of works adjacent to the SSSI, the other routes are not within immediate proximity to the SSSI.</p> <p>The proposed scheme operation does not involve transportation except for maintenance needs, which will likely be minimal.</p>
Invasive species	The Natural England Designated Sites Search includes details relating to SSSI condition <sup>17</sup> . As part of this, it notes that New Zealand flax and hottentot fig have been observed within the supralittoral sediment within the SSSI. However, no INNS were identified during the site walkover carried out for the Preliminary Ecological Appraisal, therefore the presence of invasive species is considered unlikely within the proposed scheme area. Regardless, biosecurity best practice measures will be implemented during excavation and construction to reduce the likelihood of spread or introduction of INNS, including rats or Dutch elm disease.
Assessment of potential impacts	
Reduction in habitat area	No reduction of habitat with the SSSI is anticipated as no direct works will be occurring within the SSSI as a result of the proposed scheme.
Habitat fragmentation	As no direct works will be occurring within the SSSI or its features, the proposed scheme will not result in loss or fragmentation of habitats within the SSSI. Although the proposed scheme is in close proximity to the SSSI, due to the localised nature of the proposed works, no habitat fragmentation is anticipated.
Disturbance to key species (including species density)	<p>As ringer plovers tend to breed on coastal beaches and on inland sand and gravel pits, the potential for the proposed scheme to impact this type of breeding species is considered unlikely as the works are located approximately 200m from the water environment (or coastal edge) and also feature no sand or gravel pits within the proposed scheme footprint. Due to the SSSI being such close proximity to the proposed scheme, there may be potential for impacts to key bird species in terms of noise and vibration and dust disturbance. However, given the short construction timeframe, potential impacts would likely be limited and temporary in nature. As the proposed scheme is not located within the SSSI itself, it is considered unlikely that potential impacts to key plant species would arise.</p> <p>Operation of the proposed scheme is unlikely to lead to disturbance to key species as the works will be entirely below ground.</p>
Species fragmentation	Species fragmentation is considered unlikely as result of the proposed scheme, as the works will be localised to the scheme footprint and not fragment any habitat within the SSSI designation or wider

<sup>17</sup> Natural England (2023) Designated Sites View – Plains. Available at: [Site feature condition \(naturalengland.org.uk\)](https://naturalengland.org.uk)



Plains & Great Bay (St. Martin's) SSSI Assessment Matrix	
Project	St Martin's Water Supply (Distribution Pipeline)
	connectivity for the species under its designation. As proposed scheme works will be entirely below ground, it is considered unlikely that these would lead to any species fragmentation.
Changes in key indicators of conservation value – air pollution and dust	Due to the SSSI being in close proximity to the proposed scheme, there is potential for air quality impacts to arise related to generation of dust caused by the construction phase through excavation. However, this will be temporary / short-term. Dust is not likely to have an adverse effect on the SSSI due to its temporary nature. Regarding air pollution, the construction phase will require use of plant / vehicles however this will be temporary and short term, with vehicle movement in localised areas not anticipated for long periods of time (especially in areas in proximity to the SSSI). It is not expected construction phase vehicles will have a significant adverse effect on SSSI receptors. Once operational it is not anticipated there will be any air pollution or dust as works will be below ground. Therefore, no significant effects are considered likely.
Changes in key indicators of conservation value – noise disturbance	Whilst there will be noise and vibration as a result of the construction of the proposed scheme, this will be temporary and short-term in nature. It is not anticipated that any construction noise will have a significant adverse effect on the SSSI. Once operational no noise impacts are envisaged, except associated with potential mitigation (which is likely to be minimal).
Cumulative effects	As detailed in Section 3.3 of this report, it is considered unlikely that there would be significant cumulative effects upon the SSSI. This is due to the SSSI being located approximately 650m away from the other development, which reduces the likelihood of overlapping impacts between the other development and the proposed scheme upon the SSSI and its features.
Assessment of significance of effects	
Is the project directly connected with or necessary to the management of the site?	No, the proposed scheme is not connected with or necessary to the management of the SSSI.
Has consultation been undertaken?	Consultation with a statutory nature conservation body is not mandatory until Stage 2: appropriate assessment. It is noted that some initial conversations have been held with the Isles of Scilly Wildlife Trust regarding the Capital Development Programme, but not specifically for this HRA.
Outcome of the screening stage	It is not considered that the proposed scheme would result in likely significant effects upon the Plains & Great Bay SSSI or its features. Therefore, it is not considered necessary to progress to Stage 2: appropriate assessment of the HRA process.
Assessment information	
Who carried out the assessment?	Prepared by: E. Stone (Graduate Environmental Consultant) and E. Samways (Environmental Consultant) Checked by: Adela Sadler (Environmental Coordinator) Approved by: Jon Davey (Technical Director – Environmental Management & Sustainability)

### 3.5 Overview of 'No Significant Effects'

Overall, it is not expected that there would be likely significant effects upon either the Isles of Scilly Complex SAC, the Isles of Scilly SPA or Plains & Great Bay (St. Martin's) SSSI or their qualifying features. This is because of:

- Limited construction activities that could generate high noise or dust emissions;
- Potential impacts to functionally linked land would likely be temporary and limited in nature and only affect non-breeding qualifying bird species;
- Potential effects associated with construction works will be temporary and short term;
- Once operational, the works will be buried beneath the ground and no effects are envisaged (with minimal maintenance anticipated).

When considering the potential impacts of the proposed scheme (during construction and operation) alongside the potential impacts from other developments, no significant cumulative effects have been identified due to

limited potential for overlapping impacts. Based on the search criteria, as described in Section 3.3 of this report, only one other development was identified. Considering the nature of the proposed scheme the other development, the potential for cumulative effects is minimal.

### 3.6 Conclusions

Overall, it is considered unlikely that the proposed scheme – a new potable water pressurised distribution pipeline between Middle Town and Higher Town - will have a significant effect upon the Isles of Scilly Complex SAC, the Isles of Scilly SPA or Plains & Great Bay SSSI or their qualifying features (various habitats and species).

No significant cumulative effects with other nearby schemes have been identified.

It is possible that there could be some localised changes in the surroundings of the proposed scheme, such as production of dust, emissions, noise, and vibration associated with the excavation of the trench and installation of the pipe. However, these changes are not likely to significantly affect the European sites which are located at the coast (and not in immediate proximity to the proposed scheme) or the features of the SSSI (despite the closer proximity). The qualifying features of the European Sites are focused on a more coastal location than where the proposed scheme is located which reduces potential for interactions and disturbance for the majority of the qualifying habitats and species. In addition, the proposed scheme's construction phase will be temporary and short term, once operational the proposed scheme will be below ground, and no effects are anticipated.

This means that the HRA does not need to progress onto Stage 2: Appropriate Assessment.

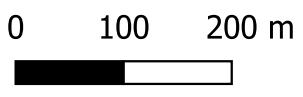
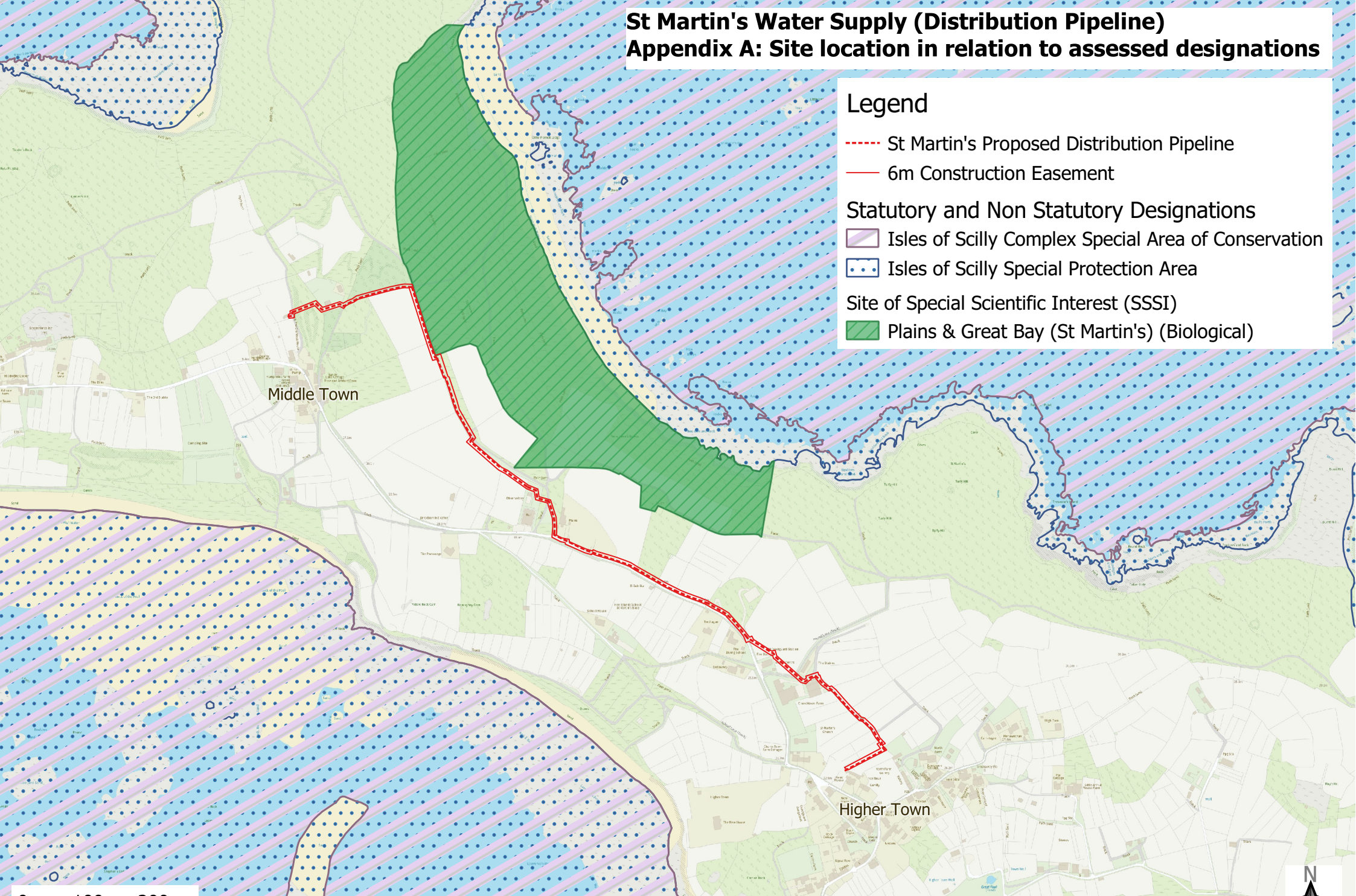
## Appendix A Assessed Designations Figure

# St Martin's Water Supply (Distribution Pipeline)

## Appendix A: Site location in relation to assessed designations

### Legend

- St Martin's Proposed Distribution Pipeline
- 6m Construction Easement
- Statutory and Non Statutory Designations**
  - Isles of Scilly Complex Special Area of Conservation
  - Isles of Scilly Special Protection Area
- Site of Special Scientific Interest (SSSI)**
  - Plains & Great Bay (St Martin's) (Biological)



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## Appendix B Ramsar, SSSI and IRZ Location Figure

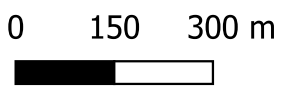
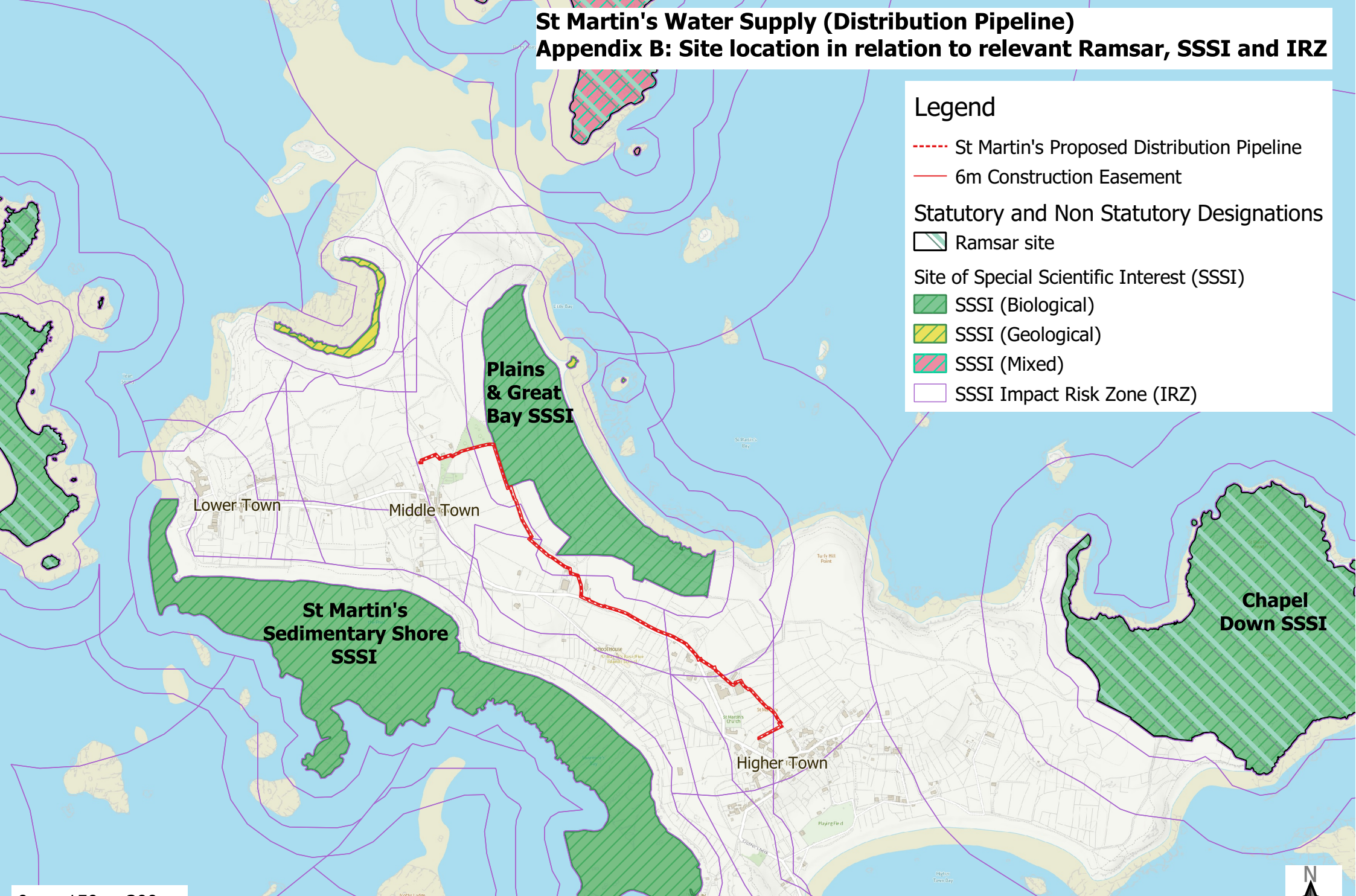
# St Martin's Water Supply (Distribution Pipeline) Appendix B: Site location in relation to relevant Ramsar, SSSI and IRZ

### Legend

- St Martin's Proposed Distribution Pipeline
- 6m Construction Easement

### Statutory and Non Statutory Designations

-  Ramsar site
- Site of Special Scientific Interest (SSSI)
  -  SSSI (Biological)
  -  SSSI (Geological)
  -  SSSI (Mixed)
  -  SSSI Impact Risk Zone (IRZ)



## Appendix J Preliminary Ecological Assessment Summary

## Methodology

A desktop study and site walkover were undertaken to determine the habitats and ecological features of the site.

## Desktop Summary and Site Walkover Findings

The desktop study and walkover identified the following features:

- Priority Habitats (Lowland Heathland and 'No main habitat but additional habitats present');
- Listed species (including bats and birds) as shown on Environmental Record Centre for Cornwall and the Isles of Scilly (ERCCIS); and
- Statutory Designated Sites:
  - o Area of Outstanding Natural Beauty (AONB) (National Landscapes)
  - o Sites of Special Scientific Interest (SSSIs)
  - o Ramsar Sites
  - o Special Areas of Protection (SPAs)
  - o Special Areas of Conservation (SACs)
  - o Marine Conservation Zones (MCZ).

The findings from the desktop study and site walkover are shown in Table 1 below (additional controls are to be detailed in the EIA Screening Report and the Construction Environmental Management Plan [CEMP]):



**Table 1: Summary of Assessment Findings**

Features	Impact of Scheme on Features	Risk Without Suitable Mitigation	Mitigation	Residual Risk	
Bats	<ul style="list-style-type: none"> <li>A Granted European Protected Species Licence (EPSL) is located 90m south of the pipeline. The EPSL is active, from September 2020 till September 2025 for common pipistrelle (<i>Pipistrellus pipistrellus</i>)</li> <li>The Site has a 'moderate' suitability for community and foraging bats due to the following:               <ul style="list-style-type: none"> <li>Hedgerows and woodland along the boundaries which were connected to the wider landscape</li> <li>Open grassland within the Site boundary.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Removal of hedgerows to facilitate construction</li> <li>Disturbance to bats by noise, vibration and lighting.</li> </ul>	High	<ul style="list-style-type: none"> <li>Retention of bat foraging flight lines and trees with bat roosting features</li> <li>Additional controls are discussed in the CEMP.</li> </ul>	Low
Birds	<ul style="list-style-type: none"> <li>Records within proximity and associated with the habitats for the Site include:               <ul style="list-style-type: none"> <li>Ground nesting birds – quail (<i>Coturnix coturnix</i>) and nightjar (<i>Caprimulgus europaeus</i>)</li> <li>Other nesting birds – whitethroat (<i>Sylvia communis</i>), Montagu's harrier (<i>Circus pygargus</i>) (now a farmland breeder with nesting locations kept secret), chiff chaff (<i>Phylloscopus collybita</i>), collared dove (<i>Streptopelia decaocto</i>), and mistle thrush (<i>Turdus viscivorus</i>).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Direct physical disturbance, or loss of life to ground nesting or other nesting birds using the Site.</li> </ul>	High	<ul style="list-style-type: none"> <li>Pre-commencement surveys for nesting birds to ensure the habitats are clear of nests</li> <li>Retaining trees and other bird habitat by optimising the alignment of the pipeline</li> <li>Limiting noisy works around known bird habitat</li> </ul>	Low
Designated sites within 100m	<ul style="list-style-type: none"> <li>The Site is within Isles of Scilly (IoS) Area of Outstanding Natural Beauty (AONB) (National Landscape)</li> <li>The Site is within the IoS Conservation Area</li> <li>SSSI: Plains &amp; Great Bay (St Martin's) 10m east of Site.</li> </ul>	<ul style="list-style-type: none"> <li>Impacts to ground-nesting birds (designated feature of the SSSI) from construction noise, vibration, dust and lighting</li> <li>Inadvertent loss of habitat due to encroachment of work area on SSSI area</li> </ul>	Moderate	<ul style="list-style-type: none"> <li>Best practice construction methods should be outlined within the CEMP to reduce noise, vibration, dust and lighting effects to designated sites during construction.</li> </ul>	Low
Designated sites >100m from site	<ul style="list-style-type: none"> <li>Isles of Scilly Complex SAC</li> <li>Isles of Scilly SPA</li> <li>St Martin's Sedimentary Shore SSSI</li> <li>Porth Seal (St Martin's) SSSI</li> </ul>	<ul style="list-style-type: none"> <li>Impacts to sites &gt;100m are considered highly unlikely based on the</li> </ul>	Low	<ul style="list-style-type: none"> <li>Work area to be appropriately delineated to limit disturbance to surrounding areas.</li> </ul>	Low


Features		Impact of Scheme on Features	Risk Without Suitable Mitigation	Mitigation	Residual Risk
	<ul style="list-style-type: none"> <li>• Tean SSSI</li> <li>• Isles of Scilly Ramsar</li> </ul>	localised nature of the works.			
Hedgerows	<ul style="list-style-type: none"> <li>• The distribution pipeline crosses numerous sections of karo (<i>Pittosporum</i>)-dominated hedgerows.</li> </ul>	<ul style="list-style-type: none"> <li>• Permanent loss of hedgerows causing disturbance to species that use hedgerows for habitat.</li> </ul>	Moderate	<ul style="list-style-type: none"> <li>• Key habitats to be retained including the woodland and boundary hedgerows wherever possible</li> <li>• Hand digging to be used at the base of hedgerows to limit damage to roots.</li> <li>• Hedgerow removal consent from Isles of Scilly Council must be in place prior to removal of hedgerows.</li> </ul>	Low
Priority Habitat	<ul style="list-style-type: none"> <li>• “No Main Habitat but Additional Habitats Present”; and</li> <li>• Lowland Heathland.</li> </ul>	<ul style="list-style-type: none"> <li>• Temporary loss of small areas of priority habitat.</li> </ul>	Moderate	<ul style="list-style-type: none"> <li>• Directional drilling to be explored in area of priority habitat to avoid damage</li> <li>• If drilling is not possible, area of disturbance to minimised and replaced as soon as possible.</li> </ul>	Low
Trees	<ul style="list-style-type: none"> <li>• Woodland located west of Middle Town, adjacent to Plains &amp; Great Bay SSSI.</li> </ul>	<ul style="list-style-type: none"> <li>• Impact to root protection zone (RPZ)</li> <li>• Damage to unique lichen species located on trees throughout the archipelago.</li> </ul>	Moderate	<ul style="list-style-type: none"> <li>• BS 5837:2012 Arboricultural Survey to be undertaken prior to construction. Report to detail good practice for mitigating damage to RPZ. Arborist assessment to be undertaken w/c 11<sup>th</sup> December.</li> <li>• Hand-digging to be undertaken around RPZ, in place of using plant.</li> <li>• Plant and equipment to be stored away from RPZ to prevent damage to roots and compaction of soil.</li> <li>• Desktop study to be undertaken to determine lichen distribution and recommendations for mitigating impacts.</li> </ul>	Low

The following species were not identified in the ERCCIS records:

- Eurasian badger (*Meles meles*)
- Eurasian beaver (*Castor fiber*)
- Eurasian otter (*Lutra lutra*)
- Hazel dormice (*Muscardinus avellanarius*)
- Water vole (*Arvicola amphibius*)
- Great Crested Newts (GCN) (*Triturus cristatus*)
- Terrestrial reptile species
- Amphibian species

These species do not require further consideration for the extent of the proposed works.

## Appendix K Zetica UXO Pre-Desk Study Assessment

	
Pre-Desk Study Assessment	
<b>Site:</b>	St Martins, Isles of Scilly PD
<b>Client:</b>	Pell Frischmann
<b>Contact:</b>	Lizzie Handy
<b>Date:</b>	9 <sup>th</sup> November 2023
Pre-WWI Military Activity on or Affecting the Site	None identified.
WWI Military Activity on or Affecting the Site	None identified.
WWI Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: <ul style="list-style-type: none"> <li>■ Transport infrastructure and public utilities.</li> <li>■ Royal Naval Air Station (RNAS) Tresco.</li> <li>■ Anti-invasion defences.</li> </ul>
WWI Bombing	None identified on the Site.
Interwar Military Activity on or Affecting the Site	None identified.
WWII Military Activity on or Affecting the Site	None identified.
WWII Strategic Targets (within 5km of Site)	The following strategic targets were located in the vicinity of the Site: <ul style="list-style-type: none"> <li>■ Transport infrastructure and public utilities.</li> <li>■ Royal Air Force (RAF) St Mary's.</li> <li>■ Military camps and training areas.</li> <li>■ Anti-invasion defences.</li> </ul>
WWII Bombing Decoys (within 5km of Site)	None.
WWII Bombing	No official statistics for bombing in the Isles of Scilly have been found, the bombing density is believed to be very low. No readily available records have been found to indicate that the Site was bombed.
Post-WWII Military Activity on or Affecting the Site	None identified.

Recommendation	A detailed desk study, whilst always prudent, is not considered essential in this instance.
Further information	<p>For information about Zetica's detailed UXO desk studies and other UXO services, please visit our website: <a href="http://www.zeticauxo.com">www.zeticauxo.com</a>.</p> <p>Details and downloadable resources covering the most common sources of UXO hazard affecting sites in the UK can be found <a href="#">here</a>.</p> <p>If you have any further queries, please don't hesitate to get in contact with us at <a href="mailto:uxo@zetica.com">uxo@zetica.com</a> or 01993 886 682.</p>

This summary is based on a cursory review of readily available records. Caution is advised if you plan to action work based on this summary.

It should be noted that where a potentially significant source of UXO hazard has been identified on the Site, the requirement for a detailed desk study and risk assessment has been confirmed and no further research will be undertaken at this stage. It is possible that further in-depth research as part of a detailed UXO desk study and risk assessment may identify other potential sources of UXO hazard on the Site.