

Morven Offshore Wind Farm

Morven Hawthorn Pit Grid Connection Project
Non-Technical Summary

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1 Introduction

1.1 What is a Non-Technical Summary?

This Non-Technical Summary (NTS) provides a clear and easy-to-read overview of the Morven Hawthorn Pit Grid Connection Project (the ‘MHPGC Project’), which will transport the electricity from either North Offshore Wind Array Project (hereafter, ‘Morven North’) or the Morven South Offshore Wind Array project (hereafter, “Morven South”) to the National Grid at Hawthorn Pit.

It explains why the MHPGC Project is needed, where it would be located and its main components. It also summarises the existing environment, the potential environmental and social effects, proposed mitigation and the benefits the MHPGC Project could bring.

The NTS summarises the preliminary findings of the Environmental Impact Assessment (EIA), presented in the Preliminary Environmental Information Report (PEIR), to help people understand the proposals and provide feedback as part of the pre-application consultation.

1.2 Why is the Project Needed?

The MHPGC Project would provide the infrastructure needed to connect either Morven North or Morven South to the existing National Grid at Hawthorn Pit in County Durham, enabling renewable electricity generated in the North Sea to be supplied across the UK. The Project would support increased renewable energy generation, energy security and reduced reliance on fossil fuels.

Figure 1 illustrates the components of the Morven Offshore Wind Farm. The Morven Offshore Wind Farm comprises two offshore array sites, Morven North and Morven South, which would be located off the coast of Aberdeenshire in the North Sea. These are subject to separate applications and do not form part of the MHPGC Project or this NTS..

1.3 The Environmental Impact Assessment

Before a project like this can be built, it is important to understand how it could affect people, places and the environment. This process is called an Environmental Impact Assessment (EIA).

The EIA identifies potential environmental effects, considers whether these are likely to be significant or not significant, and identifies measures to avoid, reduce or manage them. The sections that follow summarise the assessment and identify any preliminary significant effects.

At this stage, the Project is at outline design stage and some elements of the final design are not yet fixed. The PEIR therefore uses a maximum design envelope approach, which considers the maximum extent or parameters of the Project that could reasonably be required and provides a precautionary basis for the assessment.

The findings summarised in this NTS are preliminary and reflect the current stage of the EIA process. The detailed findings of this stage are presented in the Preliminary Environmental Information Report (PEIR). The PEIR allows consultees, stakeholders and members of the public to review the information and provide feedback.

As the Project continues to develop and feedback is received through consultation, the project design and assessment will be reviewed and updated. The final findings of the EIA will be reported in an Environmental Statement (ES), which will support the applications for the consents needed to build and operate the Project. These include a Development Consent Order (DCO) application for the MHPGC Project components in England and English waters and Marine Licence application(s) to the Marine Directorate Licensing Operations Team (MD-LOT) for Project assets located within Scottish Waters.

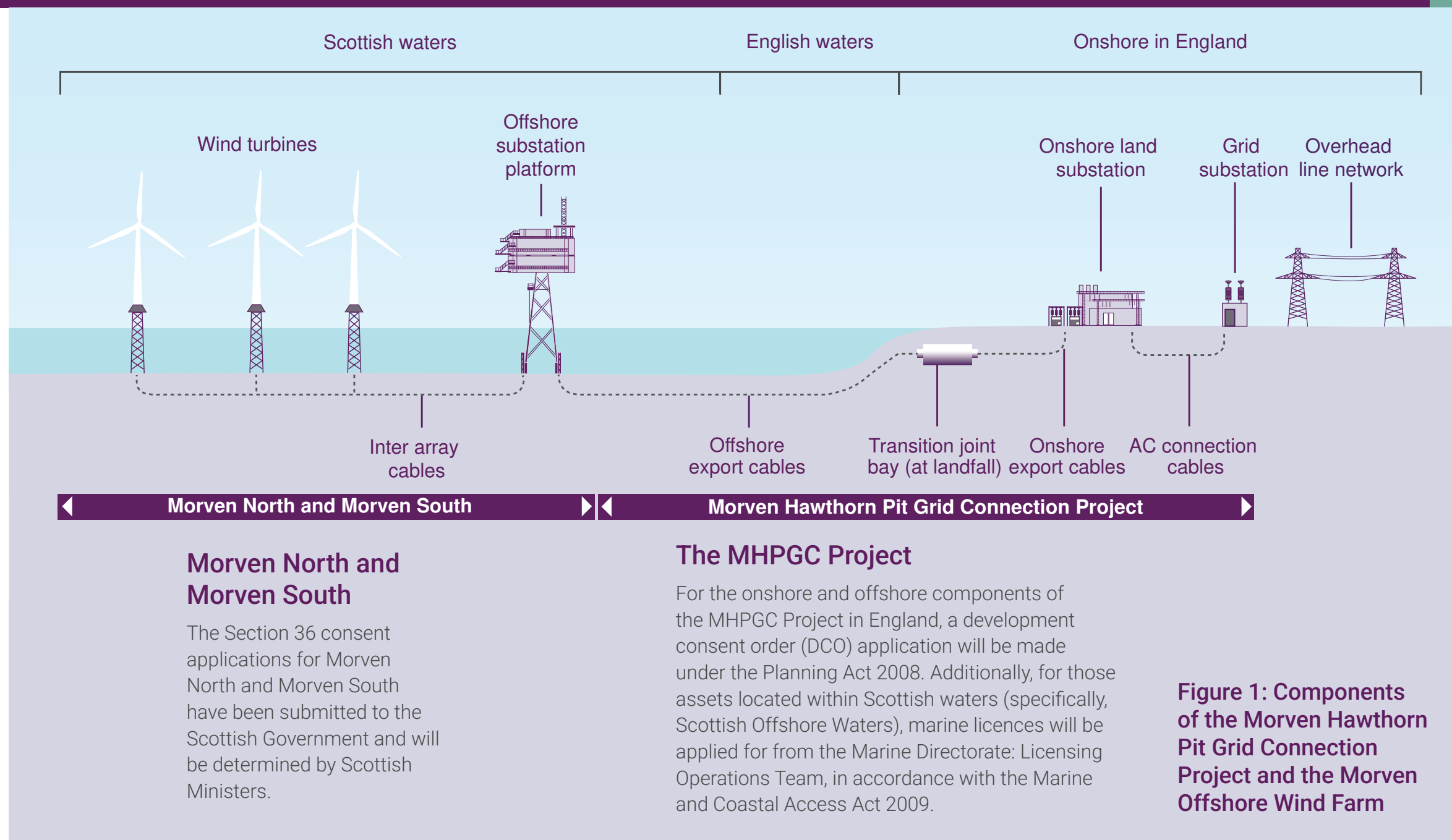
1.4 The offshore elements of the MHPGC Project

- **Offshore export cable(s):** High voltage direct current (HVDC) cables which export electricity from either the Morven North Offshore Substation Platform (OSP) or the Morven South OSP to the transition joint bay (TJB) at landfall.
- **Cable protection:** Where the offshore cable cannot be buried in the seabed.

Landfall

Landfall is the point where the offshore export cables transition from the offshore marine environment to the onshore terrestrial environment.

- **Transition Joint Bay (TJB):** An underground bay housing a joint which connects the offshore export cables to the onshore export cables, this will be located onshore at landfall.



Morven North and Morven South

The Section 36 consent applications for Morven North and Morven South have been submitted to the Scottish Government and will be determined by Scottish Ministers.

The MHPGC Project

For the onshore and offshore components of the MHPGC Project in England, a development consent order (DCO) application will be made under the Planning Act 2008. Additionally, for those assets located within Scottish waters (specifically, Scottish Offshore Waters), marine licences will be applied for from the Marine Directorate: Licensing Operations Team, in accordance with the Marine and Coastal Access Act 2009.

Figure 1: Components of the Morven Hawthorn Pit Grid Connection Project and the Morven Offshore Wind Farm

The onshore elements of the MHPGC Project

- **Onshore export cables:** The high voltage direct current (HVDC) cables which bring electricity from the TJB to the onshore land substation (LSS).

- **Onshore land substation (LSS):** A purpose-built site comprising a compound containing the electrical components for converting the HVDC to high voltage alternating current (HVAC) power. The LSS site associated with the MHPGC Project will also adjust the power quality and power factor to meet the requirements of power supply being fed to the National Grid Hawthorn Pit Substation.

- **Alternating Current (AC) connection cables:** The high voltage alternating current (HVAC) cables which will connect the proposed LSS to the National Grid Hawthorn Pit Substation.
- **Environmental mitigation and biodiversity net gain area:** Temporary and/or permanent areas identified to provide environmental mitigation or biodiversity net gain.

2 The MHPGC Project

2.1 MHPGC Project Overview

The MHPGC Project will transport the electricity generated from either Morven North or Morven South to the National Grid at Hawthorn Pit. A separate grid connection from either Morven North or Morven South would connect at Branxton, this is a separate project. **Figure 2** shows an overview of the MHPGC Project Boundary, which identifies the area within which the MHPGC Project would be located. This has informed the assessment and findings described in the PEIR and this NTS.

The MHPGC Project consists of components located offshore in Scottish and English waters, and landfall and onshore areas in England as shown on (**Figure 2**).

Electricity generated by Morven North or Morven South would be transported by offshore export cables to the landfall at Blast Beach, Seaham

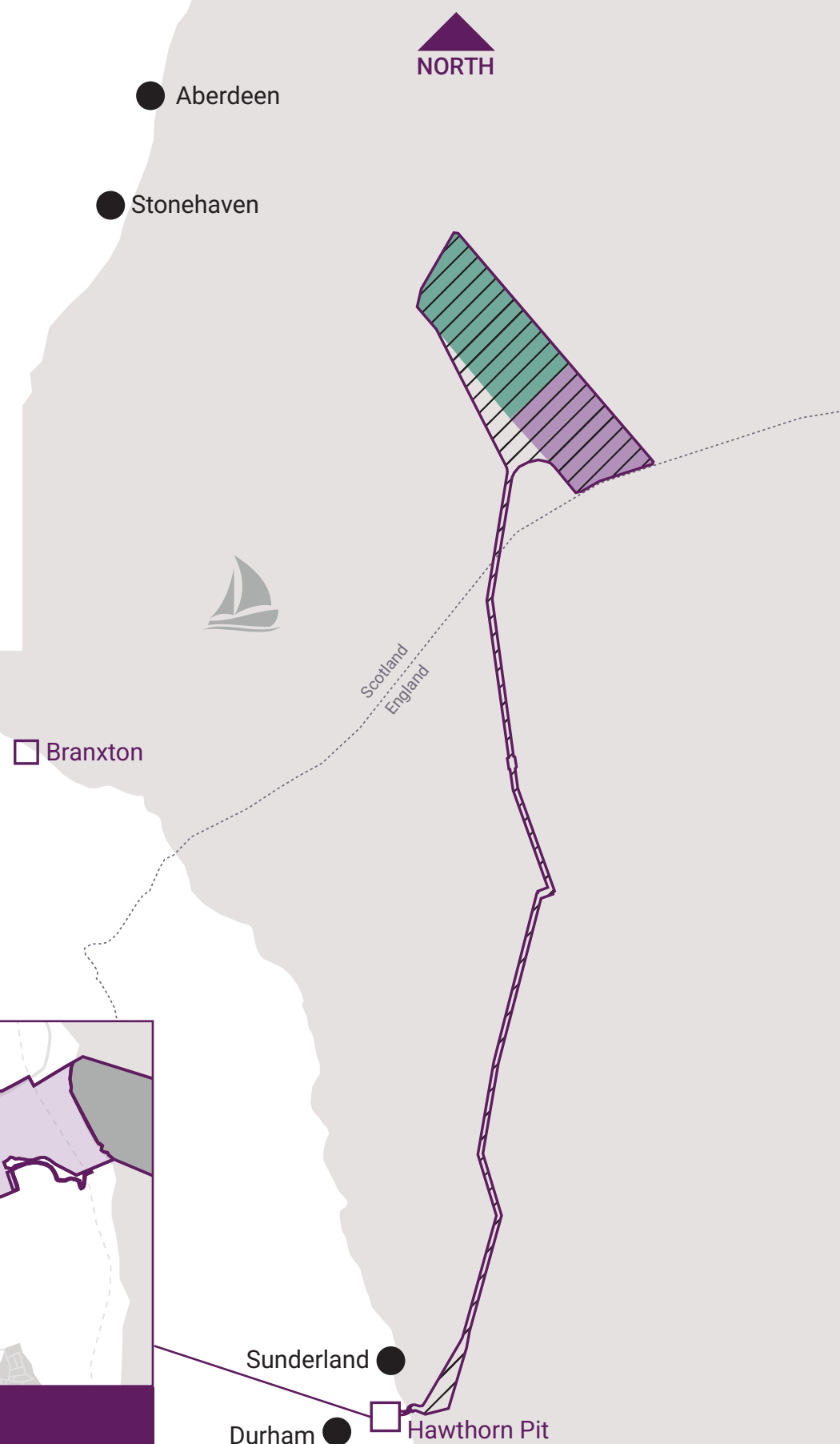
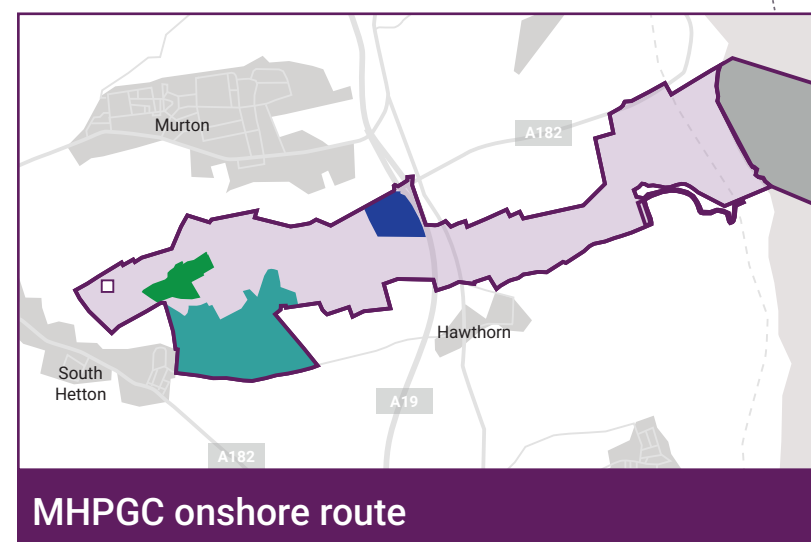


Figure 2: Overview of the Morven Hawthorn Pit Grid Connection Project Boundary and wider programme

The Morven North Offshore Wind Array Project (Morven North)

The Morven South Offshore Wind Array Project (Morven South)

Morven Branxton Area Grid Connection (MBAGC) Project

Morven Hawthorn Pit Grid Connection (MHPGC) Project – the subject of this consultation

Transmission assets to transport electricity generated by either Morven North or Morven South to the National Grid at Hawthorn Pit, County Durham.

- Offshore export cable corridor in Scottish and English waters
- Onshore infrastructure in England, near Seaham, County Durham

Key

- MHPGC Project PEIR Red Line Boundary
- ▨ MHPGC Offshore Export Cable Corridor

2.2 MHPGC Project Components

Landfall is the point where the offshore export cables transition from the marine environment to the onshore environment. The cables would be installed using specialist trenchless techniques, which involve drilling beneath the ground and pulling the cables through. This means the cables can be installed beneath the coastline without the need to excavate an open trench across Blast Beach, helping to minimise disruption to the beach and surrounding coastal area.

The underground Transition Joint Bays (shown on **Figure 1**) would provide the connection between the offshore and onshore export cables.

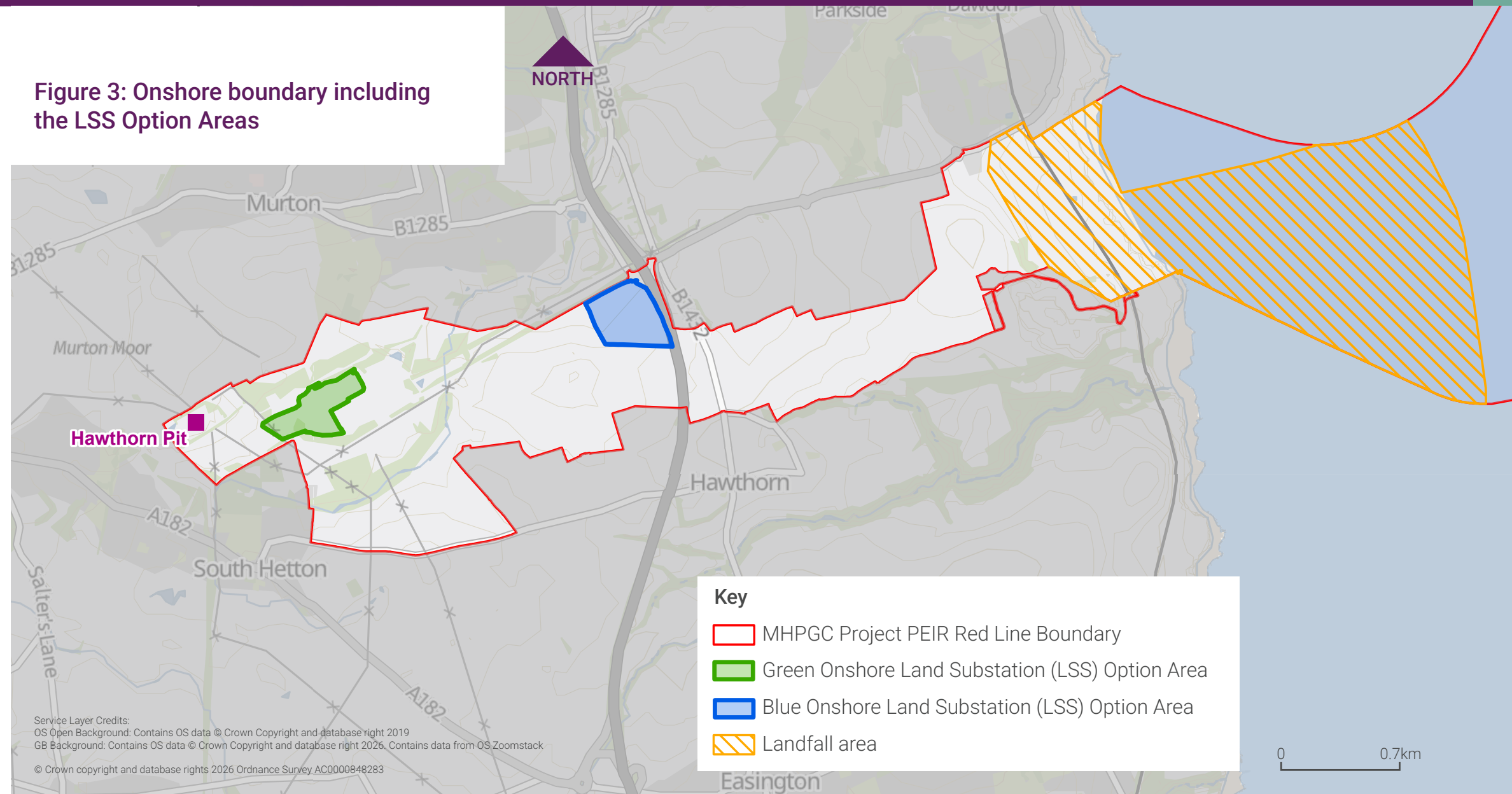
From the Transition Joint Bays, electricity would be transported through underground onshore export cables to the Land Substation (LSS). Two possible areas are currently being considered for the LSS, as shown on **Figure 3**:

- the Green LSS Option Area, on vacant land in the north-west sector of Jade Business Park and east of the National Grid Hawthorn Pit Substation; and
- the Blue LSS Option Area, located in fields west of the A19

Further environmental studies, engineering design work, stakeholder feedback and the output of consultation will help identify the preferred location.

The Land Substation (LSS) would contain the electrical equipment needed to convert the electricity from high voltage direct current (HVDC) to high voltage alternating current (HVAC). It would also adjust the electricity to meet the requirements for connection to the National Grid at Hawthorn Pit Substation.

Figure 3: Onshore boundary including the LSS Option Areas



From the LSS, underground AC connection cables would carry the electricity generated to where it would connect to the National Grid at Hawthorn Pit.

Both the onshore export cables and AC connection cables would be completely buried underground along their entire length. No overhead pylons would be installed as part of the MHPGC Project.

In addition to these permanent elements, temporary infrastructure would be needed during construction, including construction compounds and access routes.

The onshore cables would need to cross the A19, B1432 and railway. Trenchless techniques would be used at these crossings, avoiding the need to close these routes to install the cables.

Construction (including site preparation) is currently planned to begin in 2032, with the Project expected to be complete and be fully operational by 2038. Once operational, the Project is expected to remain in service for at least 35 years. At the end of the Project's operational life, it would be decommissioned. At present, it is expected that the underground onshore cables would

be left in place, avoiding the need to excavate them, while the Land Substation (LSS) and associated above-ground infrastructure would be removed. Offshore, the current assumption is that the offshore export cables and associated infrastructure would be removed where possible and appropriate, although the detailed approach to decommissioning would be determined at that time, taking account of the relevant requirements, environmental considerations and best practice. This would include consideration of which infrastructure should be removed and which, where appropriate, could remain in place.

2.3 How was the location of the project chosen?

The National Energy System Operator (NESO) is responsible for strategic electricity network planning in Great Britain and identified Hawthorn Pit, County Durham and the Branxton area, East Lothian as the connection locations for the Morven North and Morven South projects. This was determined through the Holistic Network Design and Holistic Network Design Follow-Up Exercise processes.

Following recommendation of the Point of Interconnection (PoI) at Hawthorn Pit, the MHPGC Project undertook a staged route planning and site selection process for the offshore export cables, landfall and onshore infrastructure, including the onshore export cables, LSS and AC connection cables. The aim of this process was to identify suitable sites and routes that avoid potential impacts where possible, while taking account of environmental, engineering, human and landowner constraints and requirements. Each stage formed part of an iterative design process, with options reviewed and refined as further information became available. Route planning and site selection will continue to evolve, where required, as consultation progresses and new information and data become available.

2.4 How will the project minimise the impact on people and the environment?

Protecting local communities and the environment has been a key consideration in the planning and development of the MHPGC

Project from the outset. The Project team has carried out studies both onshore and offshore and consulted with local communities, landowners and a wide range of stakeholders to help inform the location and design of the Project. This has included seeking to avoid sensitive areas and considering potential effects on local communities and their amenity, businesses and recreational activities, nature and designated sites, farmland, landscapes and historic features.

Where an impact cannot be avoided, the MHPGC Project has sought to, and will continue to seek to, reduce and manage the effects through implementation of mitigation measures in both the design as well as ensuring legislation and good practice are followed. If an impact cannot be avoided, it is reduced and managed in line with the mitigation hierarchy. For example, at landfall the offshore export cables would be installed beneath the coastal cliffs using trenchless techniques, avoiding direct impacts on the designated wildlife and habitats of the Durham Coast Site of Special Scientific Interest and Durham Coast Special Area of Conservation.

The PEIR includes a Draft Commitments Register which identifies these measures. Further outline management plans will be provided with the application and adherence to the measures would be required as a condition of consent.

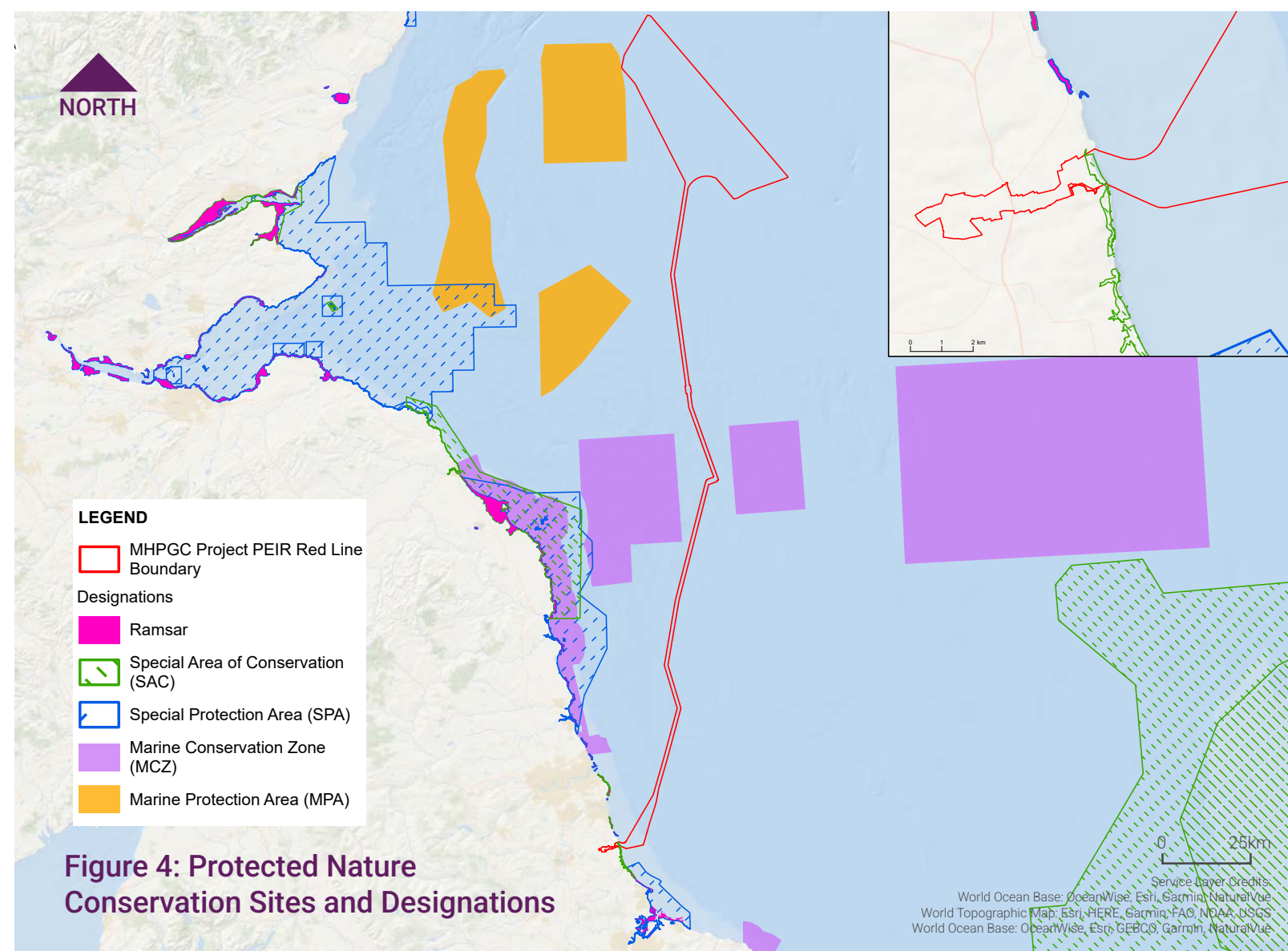
The Project team will keep working with local communities and landowners, business, local authorities and environmental organisations to help further refine the design and proposals to reduce and manage effects.

3 Understanding the Environment

This section describes the existing environment in and around the MHPGC Project, providing the baseline against which potential environmental effects are assessed. The environmental studies undertaken as part of the PEIR consider areas beyond the MHPGC Project boundary where appropriate, to ensure that potential effects on the wider environment are identified and assessed. The extent of these study areas varies depending on the environmental topic being considered.

3.1 Offshore environment overview

The offshore area of the MHPGC Project crosses part of the North Sea from Morven North or Morven South to the County Durham coastline. The seabed within the offshore area of the MHPGC Project is made up mainly of sand, together with areas of gravel and mixed sediments. Tides, waves and currents continually move these materials around, creating a naturally changing environment and helping to shape the seabed and coastline over time.



Along the Durham coast, the shoreline includes beaches, rocky shore platforms, cliffs and small bays. These coastal features are influenced by natural processes such as waves, tides and storms, which move sand and sediment along the coast and contribute to coastal change.

The wider marine environment supports a range of wildlife and habitats and includes several protected marine areas, including the Firth of Forth Banks Complex Marine Protected Area (MPA), Farnes East Marine Conservation Zone (MCZ) and North East of Farnes Deep MCZ and Highly Protected Marine Area (HPMA). The coastal waters also support recreation and tourism, with bathing waters at Seaham, Seaham Hall and Crimdon used by local residents and visitors.

Surveys undertaken for the MHPGC Project show that the seabed, water quality and coastal processes along the route are typical of those found across the wider North Sea. These surveys have helped to understand how the offshore export cables could interact with the marine environment and inform the design and assessment of the MHPGC Project.

3.2 Landfall environment overview

The Durham Coast Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) are designated for the protection of plant and bird species, which are found along the coast at landfall, where the MHPGC Project transitions from the offshore to the onshore environment. To the west of the coast, the railway line runs north to south. All of these features are avoided by crossing beneath them, with the cables installed via trenchless techniques.

3.3 Onshore environment overview

Inland from Landfall, the area situated within the project boundary (see **Figure 3**) is largely made up of open farmland, fields, hedgerows and rural landscapes, together with existing roads including the A19 and B1432, industrial areas and local communities. The land supports farming activities, including both arable fields and grazing land, and feature soils that are important to support these activities.



Bottlenose dolphin

The route also includes streams, drainage channels and groundwater resources that help support local wildlife and water supplies. The onshore boundary includes areas of potential flooding as defined by the Environment Agency, these are at Blast Beach where no works would be undertaken at the surface and a small area near Hesledon.

Ground conditions vary across the area and reflect its long history of farming, industry and former mining activity. The onshore boundary also overlaps with a number of Minerals Safeguarding Areas which are designated for geological deposits including limestone and sands and gravels. Hawthorn Quarry is adjacent to the boundary and is protected by planning policy.

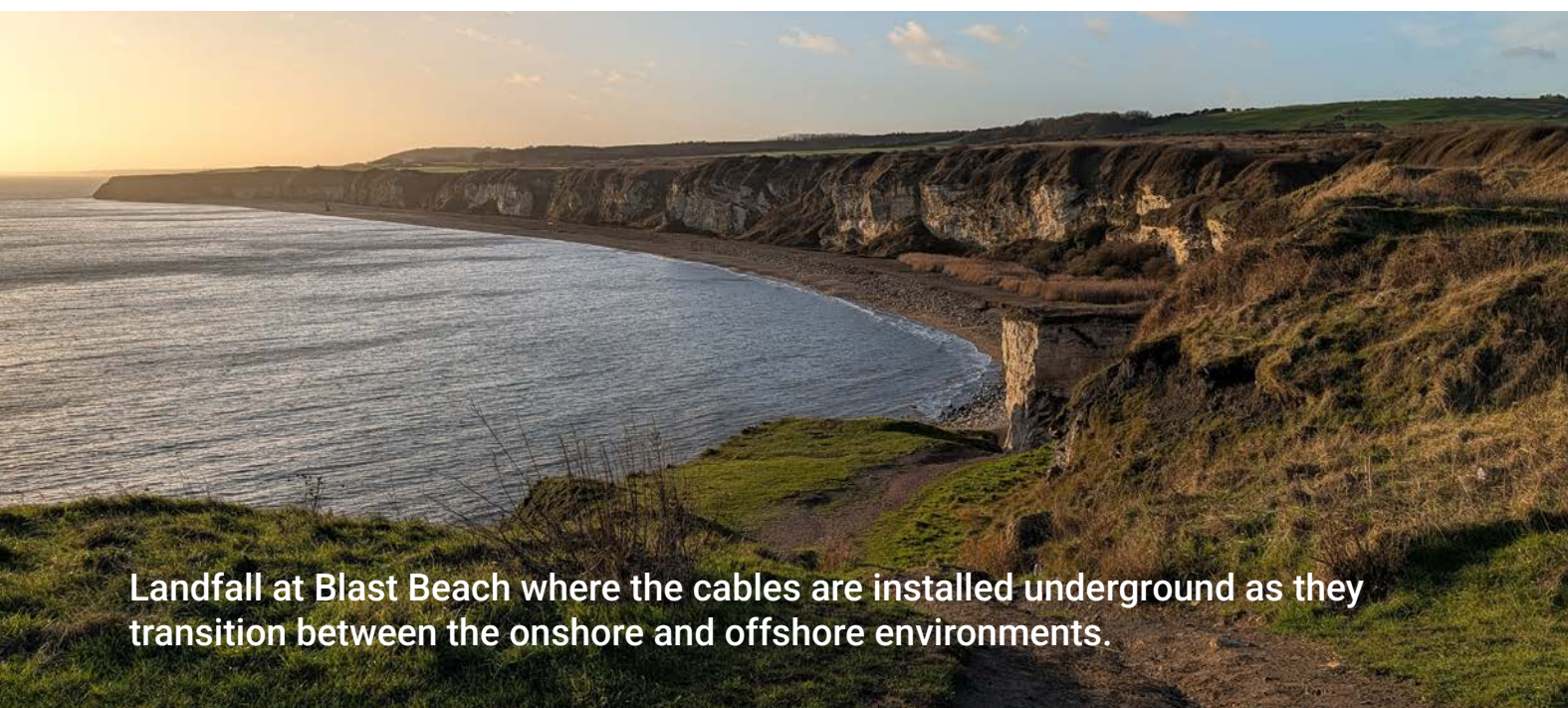
Overall, the land environment is a mix of productive farmland, local watercourses and existing developed areas around Seaham, Murton and Hawthorn Pit, providing an important setting for local communities, farming and nature.

3.4 Nature and Wildlife

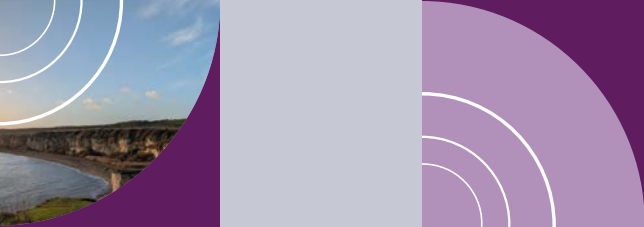
Offshore

The offshore area of the MHPGC Project passes through an area of the North Sea that is home to a wide range of marine species and habitats. The seabed includes sand, gravel, rocky areas and patches of exposed bedrock, that provide habitat for many seabed-dwelling animals. These include worms, shellfish, crabs and other small sea creatures that form an important part of the marine ecosystem.

Several protected nature conservation sites are located within the wider area, including sites designated for important habitats and species (**Figure 4**). The waters along offshore area of the MHPGC Project also provide feeding, nursery and spawning areas for a range of fish and shellfish species, including herring, sandeel and Norway lobsters, which support the wider ecosystem and commercial fisheries. The offshore area is also important for marine mammals and seabirds.



Landfall at Blast Beach where the cables are installed underground as they transition between the onshore and offshore environments.



Marine mammals present in the offshore area include harbour porpoise, bottlenose dolphin, white-beaked dolphin, minke whale, grey seal and harbour seal. These species use the marine environment for feeding, travelling and, in some cases, breeding.

The offshore area is also used by a variety of seabirds. Species recorded in the offshore area include red-throated diver, kittiwake, guillemot, razorbill, puffin, northern gannet, fulmar, herring gull and black-legged gull, as well as a range of wading and coastal birds closer to shore. Important, protected bird sites along the east coast of Scotland and north-east England support many of these species. Together, these habitats and species make the marine environment an important area for nature and wildlife.

Onshore

The onshore area of the MHPGC Project extends from the Durham coast to National Grid at Hawthorn Pit through a landscape of farmland, grassland, hedgerows, woodland, ponds, streams and coastal habitats. The coastline around the Project includes valuable coastal grassland, rocky shore and intertidal habitats that support birds and other wildlife. Further inland, fields, hedgerows and woodland provide habitat and movement routes for a range of species. Surveys undertaken for the Project have recorded habitats including those suitable for bats, badgers and otters a variety of breeding and wintering birds.

The agricultural landscape also supports common farmland birds, while wetlands, streams and coastal areas provide feeding and resting areas for migratory and wintering birds. These habitats and species form an important part of the natural environment.

3.5 Communities, Recreation and the Local Economy

Offshore

The offshore area that the MHPGC Project passes through is used for a range of activities by the local communities and businesses. Commercial fishing takes place, with fishing boats targeting species such as Norway lobster, crab and a variety of fish species. In addition, the wider offshore area contains existing sea structures, including subsea cables, pipelines and other renewable energy developments. Activities such as boating and other leisure activities also take place in coastal waters near the Durham coastline. These activities provide employment, support local businesses and contribute to the economy of coastal communities along the north-east coast of England and south-east Scotland.

Onshore

The onshore area that the MHPGC Project passes through is near the communities of South Hetton, Murton, Cold Hesledon and Dawdon. The wider onshore area includes residential properties, schools, healthcare facilities, community services and local businesses. Much of the land along the route is used for farming that supports local livelihoods and contributes to food production. There are also many paths, tracks and walking routes that people use to enjoy the countryside and coast. Popular leisure attractions in the wider area include the Durham Heritage Coast, coastal walking routes, local parks and open spaces that are used by residents and visitors throughout the year.

The air is generally low in pollutant levels, and the area is usually quiet, reflecting its mainly rural character. However, some locations are affected by existing noise sources such as roads and rail. The wider area has a long history of mining and industry but today supports a mix of employment in manufacturing, logistics, services, retail, education and healthcare.

3.6 Landscape and Views

The stretch of the Durham coast is known for its open sea views, dramatic cliffs, beaches and coastal paths that are widely used by walkers and visitors. The area forms part of the Durham Heritage Coast, a nationally recognised coastline valued for its natural beauty and distinctive character. The seawaters are part of the wider Tyne, Tees and Wear coastal area, where views across the sea often include ships, fishing boats and other sea activity. Important viewpoints include locations around Beacon Hill, Nose's Point and the coastal paths near Seaham, where people can experience wide, uninterrupted views of the sea and coastline.

Further inland, the onshore area is made up mostly of farmland, hedgerows, small woodland areas and open countryside, with nearby communities including Hawthorn, Murton, Easington and areas around Seaham. Some parts of the wider onshore area provide wide views across the surrounding landscape. Local roads, paths and cycle routes allow residents and visitors to enjoy the countryside and access nearby communities.

3.7 Transport and Shipping

Offshore

The offshore area around the MHPGC Project is a busy part of the North Sea used by vessels every day. On average, around 45 vessels pass through the area each day, rising to about 52 per day during the busiest periods. Most of these are cargo ships carrying goods between UK and international ports. Fishing boats, tankers and ferries also regularly use these waters. Nearby ports, including Seaham, Sunderland and the Port of Tyne, support shipping, fishing and other sea activities that are important to the local economy. Leisure boats are also seen closer to the coast, particularly around Seaham and Sunderland. Overall, the wider offshore area is an active working environment that supports trade, fishing and leisure activities.

Onshore

Inland the A19 is the main road in the area and provides connections to nearby towns and cities such as Newcastle, Sunderland and Middlesbrough. Other roads, including the A182, help connect local communities, businesses and industrial areas. Seaham railway station provides connection to rail services along the Durham coast, while local bus services connect nearby towns and villages. The area is also crossed by public footpaths, bridleways and cycle routes, including National Cycle Route 1 and sections of the King Charles III England Coast Path, which are used by the local community and visitors to access the countryside and coastline. Together, these transport links help people travel, work, visit local attractions and access services across the area.

3.8 History and Heritage

Offshore

The sea and coastline around Seaham has a long history of human activity. For hundreds of years, people have used these waters for fishing, trade and travel. Records show that there are a number of historic shipwrecks on the seabed, along with submerged structures linked to old harbour activities around Seaham. The coastline may also contain traces of much older activity from times when sea levels were lower and parts of today's seabed were dry land. These remains help tell the story of how people lived, worked and travelled along the Durham coast in the past.

Onshore

The wider onshore area of the MHPGC Project passes through an area of County Durham with a rich history. The countryside around Hawthorn, Murton, South Hetton and Cold Hesledon contains historic buildings, old settlement sites and features linked to farming and industry. The wider onshore area is particularly well known for its coal mining heritage, with former collieries playing an important role in the development of local communities. Historic landmarks in the wider onshore area include Dalden Tower, High Haswell Chapel and Kinley Hill Tower. Together, these historic sites and landscapes provide a record of how people have lived and worked in this part of County Durham over many generations.

Kinley Hill Tower



4 How the Project could affect the offshore environment

The installation of the offshore export cables could temporarily disturb small areas of the seabed and temporarily increase the amount of sand and sediment in the water around the installation activities. Similar changes occur naturally as a result of tides, waves and storms, although construction would cause additional disturbance in the immediate area where work is taking place.

Studies carried out for the MHPGC Project show that these changes would be mainly limited to small areas close to where construction is taking place, with effects reducing rapidly with distance from the works and lasting for a relatively short period. Tides and currents would quickly spread and settle the disturbed sediment, allowing conditions to return to normal once the work has moved on.

The assessment also considered whether construction could affect the way sand and sediment move around the coast, alter patterns of coastal erosion, or affect nearby beaches. Because the cables would be installed beneath the beach using trenchless techniques, the MHPGC Project is not expected to cause noticeable changes to the coastline or the natural processes that shape it.

Construction and maintenance activities could also temporarily affect the quality of seawater by disturbing sediment on the seabed. Surveys undertaken for the MHPGC Project show that any material disturbed during construction would be limited and confined to a relatively small area. Nearby bathing waters, including those at Seaham and Crimdon, are not expected to be adversely affected.

Once construction is complete, the offshore export cables would remain buried beneath the seabed, or laid on the seabed with cable protection installed over the top. During operation of the MHPGC Project, the cables would not normally disturb the seabed. In the event that maintenance or repair works are required, there could be temporary and localised disturbance to seabed sediments similar to that experienced during construction, but on a much smaller scale. The assessment found that the MHPGC Project is not expected to result in lasting changes to the seabed, coastal environment, seawater quality or nearby beaches.

5 How the Project could affect onshore environment

Construction activities onshore could temporarily affect land, soils, watercourses and drainage features along the route. Areas of agricultural land may be required for temporary working areas, with some areas unavailable for normal farming activities during construction. Measures would be put in place in line with best practice guidance to protect and manage soils during the works. Some agricultural land and soils could be removed where permanent Project infrastructure including the new substation is constructed. Land temporarily affected during construction would be restored once work is complete and the majority of land would return to its previous use.

Impacts to water resources, which includes watercourses would be managed through control of potential polluting substances (e.g. from refuelling of vehicles) and any runoff that could carry silt to waterbodies. Areas defined by the Environment Agency as at higher risk of flooding will be avoided where practicable by the MHPGC Project. Measures to control surface water and drainage during construction as well as any increased runoff from hard surfaces required as part of the new substation will be provided, with further detail to be outlined with the consent application. The assessment indicates that flood risk can be appropriately managed, and no increased risk of flooding to surrounding areas has been identified. Potential significant

impacts on water resources from water usage associated with the project and groundwater quality will be considered further as the project design is refined.

Initial desk studies have shown some areas of land are affected by historic activity such as mining and therefore may be subject to contamination. Further studies, investigations and testing will provide a more detailed understanding of existing ground and groundwater conditions ahead of construction. Appropriate measures would then be put in place to manage potential risks to land and water, such as controlling drainage and surface water, preventing pollution and managing soils and excavated materials appropriately.

At this stage, a precautionary approach to assessment of impacts to minerals resources identifies a potential significant effect on the magnesian limestone Mineral Safeguarding Area and the Hawthorn Quarry extraction site. These assessments will be updated based on further design refinement and review of progress of the application for the quarry to recommence extraction. Engagement will continue with the owner and operator of the quarry as the consent application evolves.

6 How the Project could affect Nature and Wildlife

Offshore

Construction of the offshore components could temporarily disturb wildlife living on or within the seabed, as well as wildlife in the surrounding sea. Areas of the seabed used by shellfish, crabs, worms and other small sea animals could be disturbed where the offshore cables are installed. Temporary increases in sediment in the water could also affect fish and shellfish species that use the area, including cod, herring, plaice, whiting, sandeel and Norway lobsters (nephrops). Marine mammals such as harbour porpoise, bottlenose dolphin, minke whale, grey seal and harbour seal could be disturbed by construction activity, underwater sound and vessel movements, causing them to move away from the area temporarily. The MHPGC Project includes measures to avoid and reduce effects on important wildlife areas along the coast and at sea. Most effects would be limited to the areas where construction or maintenance work is taking place and would only last for a short time.

Seabirds that use the waters for feeding, including red-throated diver, kittiwake, guillemot, razorbill, puffin and gannet, could also experience temporary disturbance due to construction vessels and activities. However, these effects would be limited to a relatively small area, and birds would continue to have access to large areas of the surrounding marine environment. Construction and maintenance activities would be planned carefully to minimise disturbance where possible.

Onshore

Construction of the onshore infrastructure associated with the MHPGC Project could temporarily affect habitats including grassland, hedgerows, woodland, ponds and watercourses. Some vegetation and habitat may need to be temporarily removed to allow construction to take place, which could temporarily limit wildlife movement and nesting opportunities. Any temporarily affected habitat would be reinstated following construction. The Hesledon Moor East SSSI would be avoided.

Where there is potential for temporary disturbance to wildlife, measures would be put in place to avoid or reduce effects. These could include pre-construction surveys to check for the presence of protected or sensitive species before works begin, and, where appropriate, timing certain activities to avoid sensitive periods such as breeding or nesting seasons. Other measures could include maintaining suitable buffers around sensitive habitats and providing appropriate supervision during works. Measures would be developed in line with relevant legislation and good practice to protect important wildlife and habitats.

The Project will also deliver improvements for nature through its commitment to Biodiversity Net Gain (see Section 11 for further information), helping to create and enhance habitats for local wildlife.



Red-throated diver

7 How the Project could affect Communities, Recreation and the Local Economy

The combined onshore and offshore components of the MHPGC Project will provide benefits through employment, training opportunities and spending in the local economy.

Offshore

Construction could temporarily affect people and business using the offshore area of the MHPGC Project. The main effect is expected to be on boats targeting Norway lobsters (nephrops), as access to some fishing grounds could be temporarily restricted during construction, and also decommissioning if the cables are removed. This could require fishing activities to move to other areas during the construction period. The MHPGC Project is committed to ongoing engagement with stakeholder organisations for commercial fisheries to mitigate this effect.

Activities, including boating, sailing and fishing for leisure, could also experience temporary disruption. Such impacts are expected to be small scale and temporary. Existing sea structures, such as subsea cables and pipelines, would be identified before construction begins. Installation works would be carefully planned in consultation with infrastructure owners, with agreed crossing arrangements put in place where required, to avoid damage and minimise disruption.

Onshore

Construction of the onshore elements of the MHPGC Project could temporarily affect people living and working in the nearby communities. Residents close to construction areas may notice increased activity, including additional vehicles movements, with potential for temporary increase in dust and potential significant noise impacts. These assessments would be updated following the process of further design refinement and application of best practice measures to manage noise and dust arising from the works.

During construction, some farmland would be required temporarily for working areas, which may affect farming activities until the land is restored. Public paths, cycle routes and horse-riding trails may also need to be temporarily diverted to allow construction to take place safely, with appropriate signage provided to help people continue their journeys. Local businesses, tourist attractions and community facilities may also experience temporary disruption, and visitor numbers in some areas may change during construction. Once construction is complete, land and access routes temporarily affected by the works would be restored where possible.

During operation, equipment at the Land Substation (LSS) may generate noise. The design of the LSS would take account of operational noise, with appropriate measures incorporated where required to reduce noise effects on nearby communities.



Marine vessels

8 How the Project could affect Landscape and Views

Offshore

At the MHPGC Project landfall, at Blast Beach, people visiting the coast, using the King Charles III England Coast Path and other coastal paths, or enjoying views from locations such as Beacon Hill and Nose's Point may temporarily see construction activity and equipment. This could result in temporary changes to views across the Durham Heritage Coast, which is valued for its natural scenery, open views and sense of space. Once construction is complete, the offshore cables would be buried in the seabed or laid on the seafloor, with no associated structures visible above the water during operation.

Onshore

The onshore area of the MHPGC Project passes through mainly rural areas of farmland, hedgerows and open countryside between the Durham coast and Hawthorn Pit. The area is crossed by many public paths, cycle routes and trails that people use for walking, cycling and enjoying the countryside. During construction, people living nearby and those using local paths, trails, sports facilities and open spaces could notice temporary changes to the surrounding views. These changes would be caused by construction work, temporary work areas, machinery and vehicles. The people most likely to notice these changes include local residents, walkers and cyclists, and visitors to the Durham Heritage Coast.

Once construction is complete, temporarily affected land would be restored. The onshore substation (LSS) and its associated above ground structures, would remain in the landscape and continue to influence some views of the area during operation. The design will be developed and refined with inputs from landscape architects and provide measures including planting to help reduce the effects on surrounding views and the landscape. Such details will be developed and provided as part of the consent application.

9 How the Project could affect Transport and Shipping

Offshore

During construction, vessels working on the offshore export cable installation may temporarily affect other people and businesses using the sea. Fishing boats, leisure users and dredging vessels operating near Seaham, Nose's Point, and along parts of the cable route may need to alter their usual routes or avoid some areas while works are taking place. As the work progresses along the route, any disruption in one area would usually only last for a short time. The MHPGC Project includes measures to keep people using the sea informed, and to help vessels move safely through the area during construction and the operation and maintenance phase.

Onshore

During construction onshore, there would be an increase in vehicles travelling to and from the working areas, including workers, and vehicles and lorries supplying equipment and construction materials. The largest proportional increase in construction traffic is expected on the Jade Business Park Access Road, the A182 and at Hawthorn Junction where it connects to the A19. People travelling on these roads, as well as walkers and cyclists using nearby paths and routes, may experience temporary delays, more traffic and increased construction activity. These effects would be managed through implementing traffic management measures and the careful planning of vehicle movements to reduce disruption for local people and others using the roads. Traffic management measures will be detailed in documents submitted with the consent application. Once the MHPGC Project is operational, traffic associated with the Project is expected to be minimal, with limited effects on the local road network and road users.

10 How the Project could affect History and Heritage

Offshore

During construction, work to prepare the seabed and install the offshore cables could affect historic remains if they are present on or beneath the sea floor. These remains could include evidence of past human activity that has been preserved beneath the seabed for a very long time. Detailed surveys have been carried out to identify important heritage features, and the cable corridor has been planned to avoid these areas where possible. Overall, any effects on marine cultural heritage are expected to be limited, and the surveys carried out for the MHPGC Project will be able to provide further records about the areas past.

Onshore

Construction of the onshore cables, land substation and connection to the National Grid substation could disturb buried remains that are not currently visible at the surface. Detailed desk studies and field surveys have been undertaken to understand these heritage features further, including two bronze age round barrows. Further design refinement will be undertaken to seek to avoid such assets. Where the MHPGC Project is unable to avoid features or known remains, archaeologists would investigate and record their findings prior to construction. If previously unknown remains are discovered during construction, work would be managed carefully to protect and record them.

Though historic buildings like Kinley Hill Tower would experience some temporary changes to their surroundings (visually or from noise for example) during construction, they would not be directly affected and no permanent impact would occur during operation.

Excavation trench

11 Biodiversity Net Gain

Biodiversity Net Gain (BNG) is a way of making sure the habitat for wildlife is in a better state than it was before a development takes place. As part of the MHPGC Project, a minimum of 10% BNG will be achieved.

For this stage of the project, an Initial BNG assessment has been undertaken to understand the onshore habitats currently present within the MHPGC Project area and identify where biodiversity losses could occur as a result of the MHPGC. This provides an early understanding of the scale and type of biodiversity gains that may be required and

helps inform the development of the MHPGC Project's BNG strategy. The assessment has been based on the current design and uses a precautionary approach, meaning it is likely to overestimate rather than underestimate potential losses. As the design develops, the assessment will be refined to reflect a better understanding of the habitats affected, opportunities for habitat reinstatement and enhancement for the purposes of BNG. An area of the onshore boundary has been shown in **Figure 5** where potential habitat enhancement for BNG could take place.

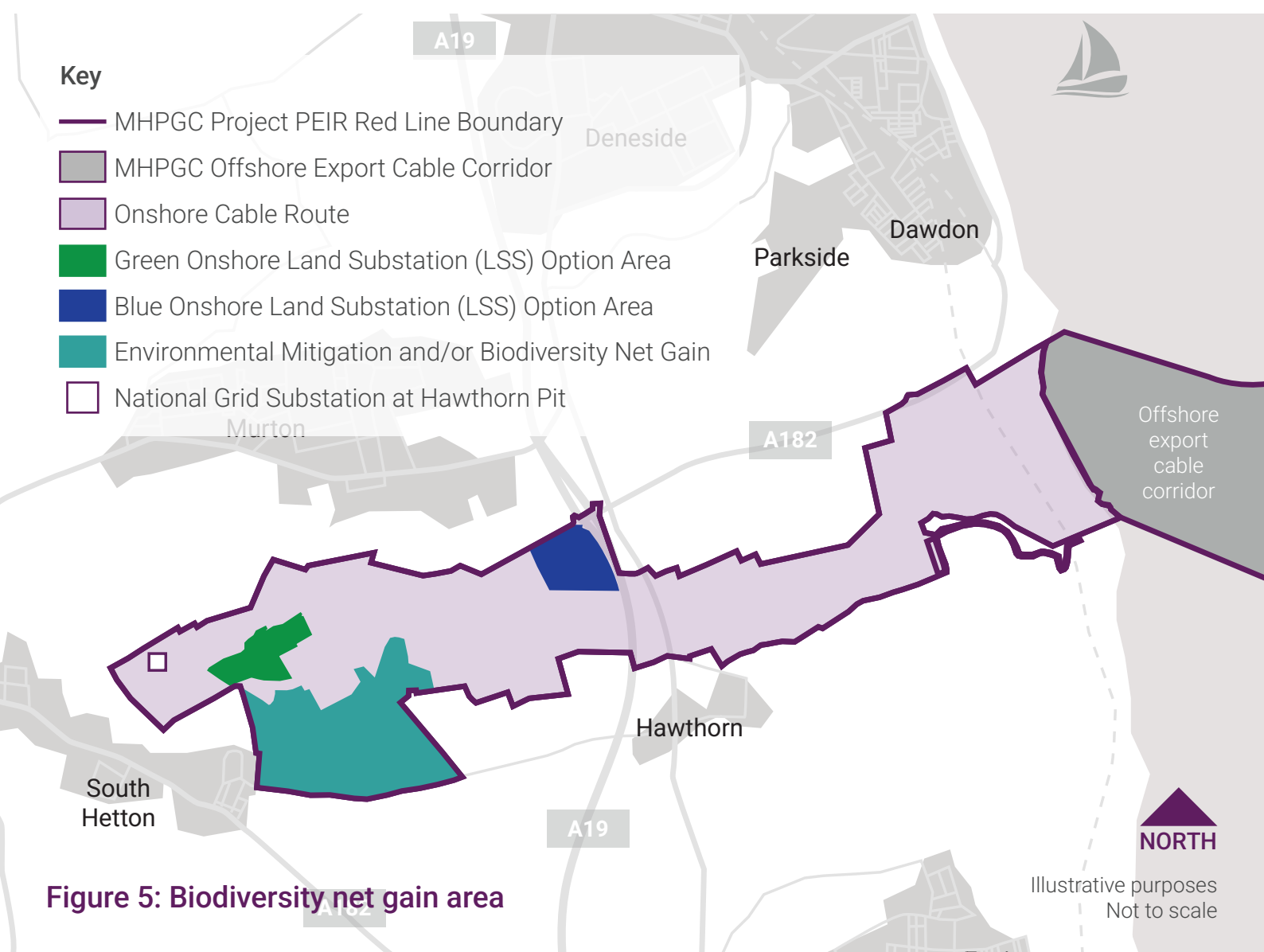


Figure 5: Biodiversity net gain area

12 Cumulative, inter-related and transboundary effects

The assessment has considered how the MHPGC Project could interact with other planned developments in the area (cumulative effects), and whether different effects of the Project could combine and affect the same people, places or environmental features (inter-related effects). In addition, consideration has been given to whether effects from the Project could extend beyond UK waters and affect other countries (transboundary effects). The preliminary assessment indicates that no additional significant effects have been identified as a result of these interactions, and no significant transboundary effects have been identified. These assessments will be reviewed and updated as the Project design is refined and the EIA is updated.

13 Next Steps

This NTS has been provided as part of the consultation for the MHPGC Project. Local communities, statutory bodies, landowners and other interested parties are being invited to review the proposals and provide feedback. Comments received during the consultation will be carefully considered alongside environmental studies and technical assessments and will help inform further development of the MHPGC Project. Where appropriate, the design may be refined, ways of controlling impacts may be updated and further measures may be introduced to help reduce effects on people and the environment.

Following this engagement and the completion of the necessary assessments, applications for the required consents will be submitted, including a DCO application under the Planning Act 2008 to the Planning Inspectorate (PINS) for the MHPGC Project components in England and English waters, and Marine Licence application(s) under the Marine and Coastal Access Act 2009 to the MD-LOT for MHPGC Project assets located within Scottish Waters. The relevant decision-making bodies will then review the applications, environmental information and consultation responses before decisions are made.

Take part

The views of stakeholders and the community are important to us and will help shape the final proposals before the Development Consent Order and Marine Licence applications are finalised.

This consultation will run from 6 October to 15 November 2026. Please provide your feedback by 23:59 on 15 November 2026 to ensure it is considered.

Meet the team

As part of the consultation, we are holding a series of public events. These are a great opportunity to meet the team, find out more about the MHPGC Project and ask questions.

Consultation events

Friday 16 October 2026

15:00 – 19:00

Hawthorn Community Centre,
Seaham, SR7 8SG

Saturday 17 October 2026

10:00 – 15:00

Seaham Scout Centre, Dow House,
South Crescent, Seaham, SR7 7HD

Tuesday 3 November 2026

15:00 – 19:00

Robin Todd Community Centre,
Front Street, South Hetton, DH6 2TH

Tuesday 10 November 2026

15:00 – 19:00

Glebe Centre, Durham Place,
Murton, SR7 9BX

Online webinar

We will also be hosting an online webinar on **22 October 2026, 18:00 – 19:00**. To register to attend, please visit our website www.morvenoffshorewind.com.



Consultation materials

To support this consultation, we have published the following materials, available on our website:

- Consultation brochure
- Feedback form
- Statement of Community Consultation (SoCC)
- Preliminary Environmental Information Report (PEIR)
- Non-technical summary of the PEIR
- Interactive project map

Information points

Hardcopies of the consultation brochure, non-technical summary of the PEIR and feedback form are available at the following information points:

Seaham Library

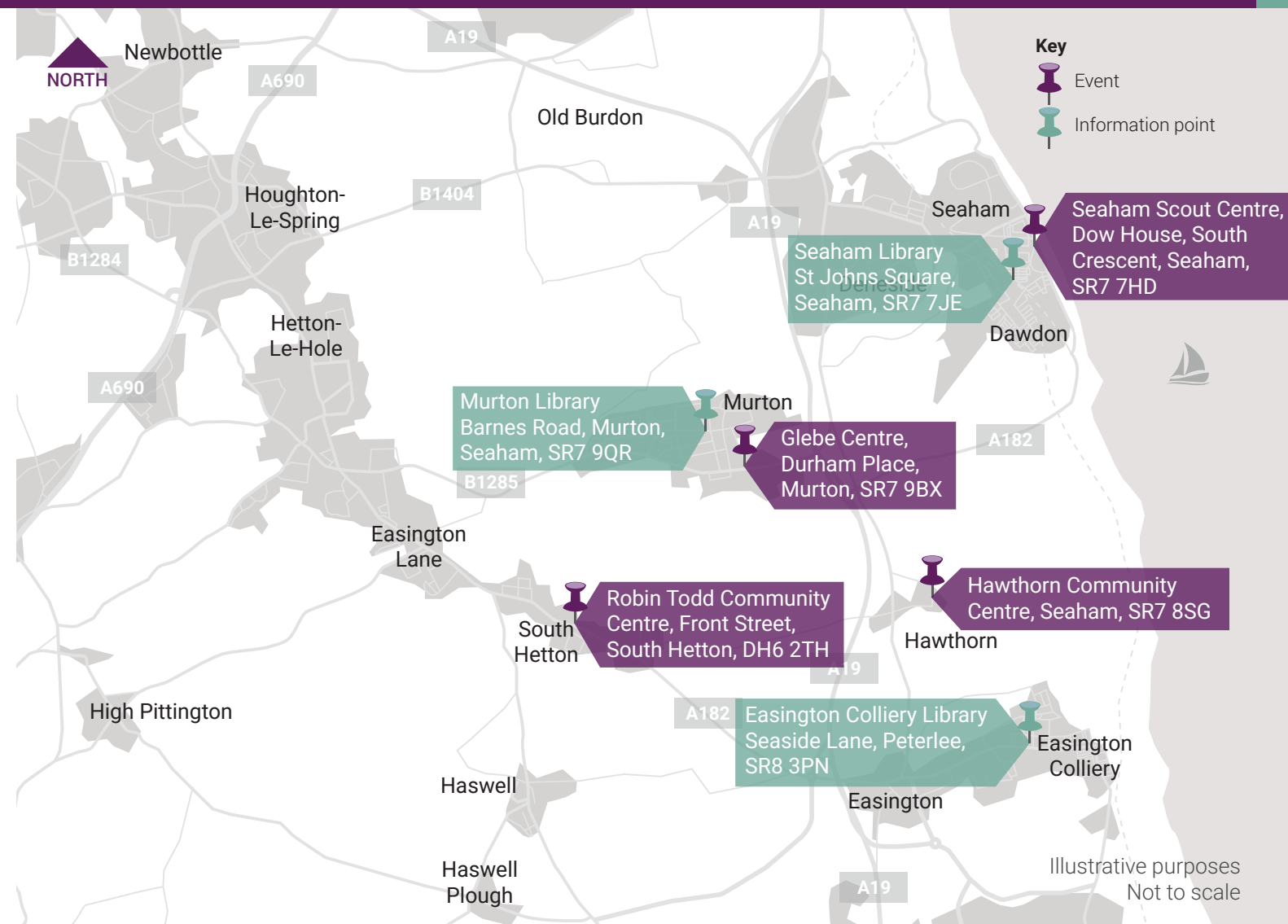
St Johns Square, Seaham, SR7 7JE

Murton Library

Barnes Road, Murton, Seaham, SR7 9QR

Easington Colliery Library

Seaside Lane, Peterlee, SR8 3PN



Share your views

You can share your feedback in the following ways:

-  **Online:** visit our website and complete our online feedback form www.morvenoffshorewind.com;
-  **Email:** send your feedback to: info@morvenoffshorewind.com; or
-  **Post:** send a letter or hard copy feedback form (available at events or on request) to our freepost address, **Freepost MORVEN** (no stamp required).

Contact the team

If you have any questions about the MHPGC Project or this consultation, you can contact the team by:

-  **Phone:** 0800 669 6110; or
-  **Email:** info@morvenoffshorewind.com.



Find out more on our website
morvenoffshorewind.com or scan the QR code.



info@morvenoffshorewind.com



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If you would like this brochure or any of our other materials in a different format, please contact the Morven team by email info@morvenoffshorewind.com or phone 0800 669 6110.



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