Scotland England Green Link 1 - English Onshore Scheme

Planning Statement

Outline planning application for the construction of a converter station, 400 kV substation, and laying out of public open space, with all matters reserved.

May 2022

For: National Grid Electricity Transmission

Prepared for:

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List of Acronyms

Acronym	Description
AIS	Air insulated Switchgear
ALC	Agricultural Land Classification
BEIS	Department for Business, Energy and Industrial Strategy
BMV	Best and Most Versatile
CEMP	Construction Environment Management Plan
CDP	County Durham Plan
CTMP	Construction Traffic Management Plan
DCC	Durham Country Council
EAR	Environmental Appraisal Report
EIA	Town and Country Planning (Environmental Impact Assessment) Regulations 2017
EOS	English Onshore Scheme
FRA	Flood Risk Assessment
GIS	Gas Insulated Switchgear
GPDO	Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended)

GW	Gigawatts
HGV	Heavy Goods Vehicle
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
kV	Kilovolt
LVIA	Landscape Visual Impact Assessment
MMO	Marine Management Organisation
MSA	Mineral Safeguarding Area
MVA	Mega Volt Ampere
NCR-1	National Cycle Route 1
NETS	National Electricity Transmission System
NGET	National Grid Electricity Transmission
NGIL	National Grid International Ltd
NPPF	National Planning Policy Framework
NPS	National Policy Statement
OHL	Over Head Powerline
Project	The Scotland England Green Link 1 Project
PRoW	Public Right of Way
PS	Planning Statement
SEGL1	Scotland England Green Link 1
SPT	Scottish Power Transmission
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Urban Drainage System
SWMS	Surface Water Management Strategy
TCPA	Town and Country Planning Act 1990
VSC	Voltage Source Conversion

Executive Summary

National Grid Electricity Transmission (NGET) and Scottish Power Transmission (SPT) are developing a 2 giga watt (GW) high voltage electricity transmission link between Torness, East Lothian, and Hawthorn Pit, County Durham, known as the Scotland England Green Link 1 (SEGL1) Project. The SEGL1 Project will enable the transfer of green electrical energy from Scotland to England (and vice versa as required) via long-distance submarine cables, connected to converter and electricity substations in each country via short lengths of onshore underground cables.

The SEGL1 Project comprises the following development:

- **Scottish Onshore Scheme**: A converter station to the east of the Dunbar Energy Recovery Facility at Oxwell Mains, Dunbar, and a substation at Branxton in East Lothian, Scotland, with approximately 6.5 km of buried HVDC cable to a landfall south-east of Thorntonloch beach. The converter station and substation will be connected by approximately 3.5 km of HVAC cable. The substation connects the Scottish Onshore Scheme to the existing transmission system;
- **Marine Scheme**: Approximately 176 km of subsea HVDC cable from Thortonloch Beach, Torness on the east coast of Scotland to Seaham, County Durham, in the north-east of England. The Marine Scheme is being developed jointly by NGET and SPT who which will be submitting marine licence applications to the Marine Scotland Licensing Operations Team (MS-LOT) and the Marine Management Organisation (MMO); and
- **English Onshore Scheme (EOS)**: Approximately 10 km of underground HVDC cable from the mean low water mark at Seaham, to a converter station at Hawthorn Pit in County Durham. The converter station will be connected to a new 400 kilovolt (kV) substation by approximately 1 km of underground HVAC cable. The new 400 kV substation will connect the project to the existing 275/ 400 kV Hawthorn Pit substation and the existing electricity transmission system.

Proposed Development

As part of the SEGL1 Project, NGET is submitting an Application for Outline Planning Permission with Matters Reserved to Durham County Council for the following components of the EOS: the erection of a converter station; a new 400 kilo volt (kV) substation; and provision of replacement public open space at Hawthorn Pit. The Reserved Matters relate to: Means of Access, Appearance, Layout, Scale and Landscaping. The new converter station and substation will connect into the existing operational Hawthorn Pit substation. Installation of the associated underground cables and necessary temporary construction works are Permitted Development pursuant to class B of Part 15 of Schedule 2 to The Town and Country Planning (General Permitted Development) (England) Order 2015.

Environmental Appraisal Report

The EOS is not schedule 2 development for the purposes of the EIA Regulations. Durham County Council (DCC) has determined that the proposed development is not 'EIA development' and therefore does not require the undertaking of a formal EIA and production of a supporting Environmental Statement. That said, a scoped and comprehensive Environmental Appraisal Report (EAR) has been produced on a voluntary basis to support the Application for Outline Planning Permission and covers all components of the EOS.

Need for the Development

Both the UK and Scottish Governments have set legally binding targets to achieve Net-Zero across all greenhouse gases, by 2050 for England and Wales, and 2045 for Scotland. To meet these targets the UK will need to continue to move away from traditional and polluting forms of energy generation to heat homes, charge vehicles and power businesses, and there will be a greater need for cleaner, greener energy

In November 2020 the UK Government set out its Ten Point Plan for a Green Industrial Revolution. The Plan lays the foundations for the UK to meet its legal obligation to deliver Net Zero greenhouse gas emissions by 2050. The Plan also fully recognises that in order to connect green energy generation, specifically offshore wind, the UK must undertake a significant transformation and reinforcement of its existing electricity transmission network. This requirement has been further increased by the UK

Government's recent British Energy Security Strategy (April 2022) which now identifies a target of delivering 50 GW of renewable wind energy by 2030, a fivefold increase on what we produce today and enough energy to power every home in the UK.

The British Energy Security Strategy sets out the Government's aims to reduce reliance on coal and gas and to generate and store more renewable and nuclear energy in the UK and recognises the importance of the transmission network within this strategy, noting that accelerating our domestic supply of clean and affordable electricity also requires the expansion and growth of that transmission network to connect new green energy generation, and to transfer the power to where it is needed most.

Huge volumes of renewable energy generation, specifically offshore wind, are proposed to connect to the electricity transmission system over the next 10 years. Electricity demand is predominantly located in the south-east, necessitating the requirement to enable high north-south power flows. The purpose of SEGL1 is to reinforce and therefore increase electricity transmission capacity between Scotland and northern England.

The primary objective of SEGL1 is to reinforce the electricity network and increase transmission capacity across the B6 boundary between southern Scotland and northern England before 2030.

Optioneering, Routeing and Siting of the Proposed Development

The strategic options assessed comprised a fixed 'start' point on the network in Scotland, at Torness and appraised a number of alternative 'end' points at substations on the network in England, from Blyth in Northumberland as far south as Middlesbrough, both on the coast and inland.

Each strategic option assessed network capability and technical considerations, environmental and socio-economic impacts, programme and cost implications, and transmission boundary transfer capability. The existing Hawthorn Pit substation was identified as the connection point for the English end of SEGL1.

Once Hawthorn Pit substation was confirmed as the preferred English connection point, a number of terrestrial and marine siting and routeing studies were undertaken across the various project components. These focused on identifying a preferred subsea cable route, preferred landfall, and preferred underground cable routes, and converter station and substation sites, in proximity to Hawthorn Pit substation. Once identified, these preferences were subject to consultation and dialogue with the relevant local authorities (DCC, Sunderland City Council) and statutory consultees (Natural England, Historic England, and the Environment Agency). This further developed the preferred option, enabling it to be subject to effective public consultations during Spring 2021, and public information events during February 2022.

The proposed 400kV substation is sited immediately adjacent to the existing operational Hawthorn Pit substation. The proposed converter station is sited on arable agricultural land south and west of the proposed substation and can be efficiently and permanently accessed directly off the Jade Business Park roundabout. The converter site is set down in the landscape and located away from the settlements of South Hetton and Murton, reducing its potential landscape and visual impact. Furthermore, the converter station site is afforded substantial landscape screening to the south and east by the mature woodland of Coop House Wood. Whilst the converter station site is in proximity to the developing Jade Business Park it will not compromise the development or completion of the business park. It is also proposed that the converter station design will seek to echo the design, external appearance and colours of the existing and proposed Jade Business Park buildings to ensure consistency of treatment and mitigation of overall impact.

Development Plan and Planning Policy

The proposed development is located entirely on un-allocated land outside of a settlement boundary and is on land that is not designated for any specific purpose within the County Durham Plan (October 2020). The proposed development meets all of the tests set out in County Durham Plan Policy 6 regarding development on unallocated sites.

The proposed development has also been appraised against all relevant policies within the County Durham Plan and found to be in accordance with those Plan policies.

The proposed development also accords with the Government's adopted and draft overarching National Policy Statement for Energy (EN-1) and National Policy Statement for Electricity Networks Infrastructure

(EN-5), which are important material considerations for the EOS, particularly relating to their direction on siting electricity transmission projects.

Landscape and Ecological Mitigation Plan, and Biodiversity Net Gain

The proposed development will provide a 10% biodiversity net gain (BNG) through habitat creation and enhancement. Whilst not a current planning policy requirement this 10% BNG is an NGET target and commitment. The BNG Assessment Report sets out how 10% BNG can be achieved, and the Landscape Mitigation Plan shows the proposed locations for and types of habitat development and enhancement. These benefits will be secured through a 30-year Landscape and Ecological Management Plan (LEMP) which will detail and deliver the proposed creation and enhancement of grasslands, damp and wet habitats, stands of trees, tree belts, and hedgerows.

Replacement Public Open Space

Approximately 1.5 ha of informal Public Open Space will be removed through the development of the proposed 400kV substation. This will be redressed and improved upon by the creation of approximately 2 ha of replacement Public Open Space which will incorporate new habitats, landscaping and planting, and will form part of the LEMP which will be more advantageous to the public.

Public Rights of Way

There are 11 Public Rights of Way (PRoW) which are crossed by the project, including National Cycle Route 1 (NCR1). An Indicative Public Rights of Way Management Plan has therefore been developed and is included within the EAR. To minimise the impact on PRoW as far as possible it is intended that all PRoWs, including NCR1, will be kept open during construction works through implementation of a managed gate system through which PRoW users are prioritised. NGET is committed to working with DCC and other stakeholders to support a realisation of the Authority's aspirations as regards an enhancement of the PRoW network in the local area, including creation of new bridleways.

Socio-Economic Effects

The proposed development would require, on average, the services of 95-110 workers over the currently envisaged 38-month construction period, with an identified peak of 300-350 workers during periods of greatest construction activity. As a consequence, the multiplier effect of additional direct and indirect employment created during the construction period would generate an estimated Gross Value Added (GVA) of between £17.8 million - £20.8 million for the County Durham economy.

1. Introduction

1.1 The Proposed Development

National Grid Electricity Transmission (NGET) (the Applicant) is seeking outline planning permission for the construction, operation and maintenance of a converter station and a 400kV GIS substation and the laying out of replacement public open space, at Hawthorn Pit, County Durham (the Proposed Development). The Proposed Development is located entirely within the administrative area of Durham County Council (DCC) on land adjacent to Hawthorn Pit substation and south of Jade Business Park (the Site). The Site is shown edged red by Drawing SEGL1_T_PA_1_v3_20220517 (Site Location Plan) and in **Figure 2-1**, below. The proposed locations of the proposed Converter Station, Substation and replacement Public Open Space within the Site are shown on Drawing SEGL1_T_PA_2_v3_20220517 (Proposed Site Layout) and in **Figure 2-2**, below.

The Proposed Development is being promoted jointly by the Applicant and Scottish Power Transmission (SPT) and will form part of the Scotland England Green Link (SEGL1) Project (the 'SEGL1 Project'), creating a new high voltage electricity cable connection between Branxton in East Lothian, Scotland and Hawthorn Pit in County Durham, England. Section 1.2, below, and **Figure 1-1** provides an overview of the SEGL1 Project.

1.2 Overview of the SEGL1 Project

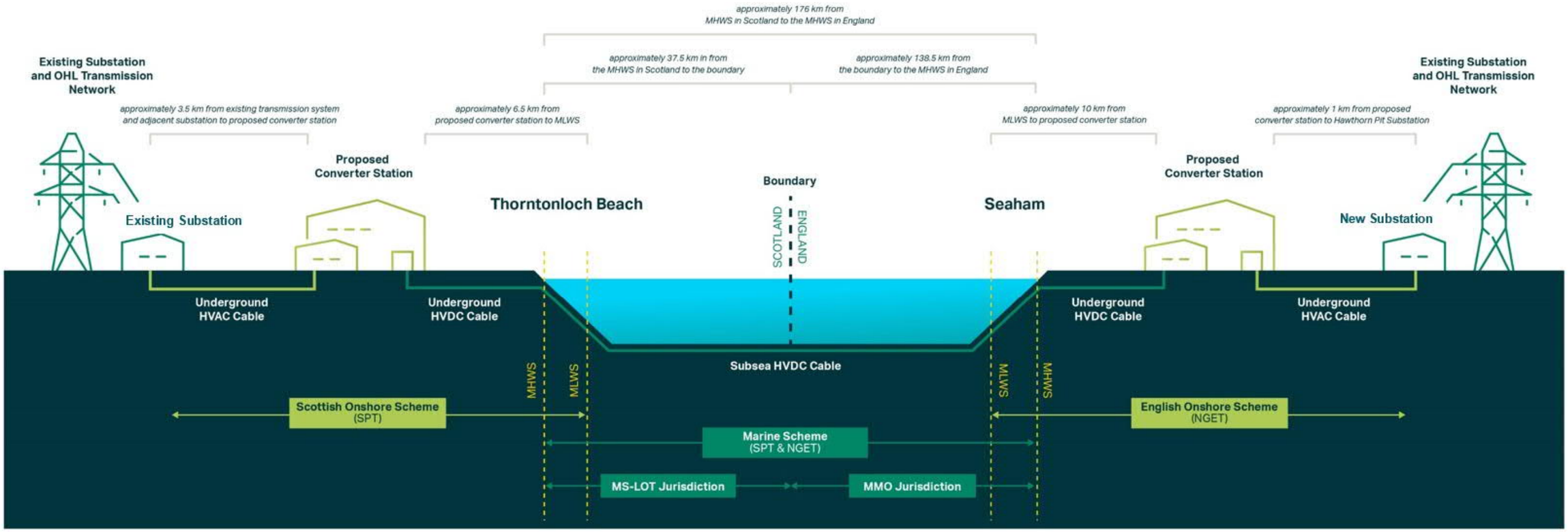
The SEGL1 Project is a major reinforcement of the England and Scotland electricity transmission system, which will provide additional north-south transmission capacity across transmission network boundaries ensuring that green energy is transported from where it is produced to where it is needed.

The existing electricity distribution networks in England and Scotland both operate using predominantly High Voltage Alternating Current (HVAC). However, High Voltage Direct Current (HVDC) technology allows electricity to be transmitted from point to point in much larger volumes, over greater distances with fewer transmission losses compared to an equivalent AC system. The Project, which extends between Torness, East Lothian and Hawthorn Pit, County Durham comprises both HVDC and HVAC technology as described below:

- **Scottish Onshore Scheme:** A converter station located south-west of Thurston Manor and a substation at Branxton in East Lothian, Scotland with approximately 7.5 km of buried HVDC cable to a landfall south-east of Thorntonloch beach. The Converter Station and Substation will be connected by approximately 5 km of HVAC cable. The Substation connects the Project to the existing transmission system.
- **Marine Scheme**: Approximately 176 km of subsea HVDC cable from Thortonloch Beach, Torness on the east coast of Scotland to Seaham, County Durham, in the north-east of England. The Marine Scheme is being developed jointly by NGET and SPT who will be submitting marine licence applications to the Marine Scotland Licensing Operations Team (MS-LOT) and the Marine Management Organisation (MMO).
- **English Onshore Scheme**: Approximately 10 km of underground HVDC cable from the landfall at Seaham, to a converter station at Hawthorn Pit in County Durham. The Converter Station will be connected to a new 400 kilovolt (kV) Substation by approximately 1 km of HVAC cable. The new 400 kV substation will connect the project to the existing 275/ 400 kV Hawthorn Pit substation and the existing electricity transmission system.

The EOS comprises works that require planning permission and works that are permitted development and do not require a grant of planning permission by DCC. Sections 1.4 and 1.5 explain the reasons for this and set out these works.

Figure 1-1: The SEGL1 Project



Key:

HVDC - High Voltage Direct Current
HVAC - High Voltage Alternating Current
OHL - Overhead Line

MHWS - Mean High Water Springs
MLWS - Mean Low Water Springs
MMO - Marine Management Organisation

MS-LOT - Marine Scotland Licensing Operations Team
NGET - National Grid Electricity Transmission
SPT - Scottish Power Transmission

Figure is not to scale.

1.3 The Applicant

The SEGL1 Project is being jointly developed by the Applicant and SPT which as Transmission Owners own the high-voltage electricity transmission network in England and Wales, and in southern and central Scotland respectively. They are responsible for making sure electricity is transported safely and efficiently from where it is produced to where it is needed.

NGET and SPT are transmission licence holders under the Electricity Act 1989 and have a number of statutory duties which includes the requirement *"to develop and maintain an efficient, coordinated and economical system of electricity transmission"* as well as specific responsibilities under Schedule 9 of having regard to the preservation of amenity.

1.4 Consenting Approach to Wider SEGL 1 Project

1.4.1 Introduction

The consenting approach for the Proposed Development is described in Section 1.5 This section describes the consenting position for the other elements of the English Onshore Scheme, the Marine Scheme and the Scottish Onshore Scheme that comprise the SEGL1 Project. These do not form part of the Proposed Development for this Planning Application and this section is included for information only, in order to provide context to the Planning Application for the Proposed Development.

1.4.2 Environmental Impact Assessment Screening

The Applicant submitted a request to DCC for an Environmental Impact Assessment (EIA) Screening Opinion for the EOS (including the substation and converter station that form the Proposed Development) on 11 February 2021 (the Screening Request). DCC issued its Screening Opinion on 25 March 2021 confirming that the EOS is not considered to be 'EIA Development'.

1.4.3 English Onshore Scheme - Permitted Development and other works

Article 3(10) of the Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended) (the GPDO) states that permitted development rights remain available where the local planning authority has adopted a screening opinion that the development is not EIA development. As a statutory undertaker the Applicant has specific permitted development rights available to it. The cabling elements of the EOS are permitted as Permitted Development under Part 15, Class B (a) the GPDO[1]. The temporary construction works constitute Permitted Development under Part 4, Class A of the GDPO. As such, Planning Permission is not required for these elements of the EOS.

Therefore, the elements of the EOS that are not part of the Proposed Development are:

- Approximately 10 km of underground HVDC cable from landfall to the Converter Station;
- Approximately 1 km of underground HVAC cable between the converter station and the new Substation; and
- Temporary cable construction haul roads and construction compounds.

Three pylons at the existing Hawthorn Pit substation and their adjoining overhead line spans will be taken down under their extant overhead line consent. It is proposed to erect a new pylon and new overhead line entries into the proposed Substation. In England and Wales overhead lines under 2 km in length are consented under section 37 of the Electricity Act 1989, and a separate application for a new short section of overhead line and new pylon will be made to the Secretary of State for the Department for Business, Energy and Industrial Strategy (BEIS).

[1]PART 15: Power related development, Class B – electricity undertakings
Permitted development
B. Development by statutory undertakers for the generation, transmission, distribution or supply of electricity for the purposes of their undertaking consisting of-
(a) the installation or replacement in, on, over or under land of an electric line and the construction of shafts and tunnels and the installation or replacement of feeder or service pillars or transforming or switching stations or chambers reasonably necessary in connection with an electric line

1.4.4 Scottish Onshore Scheme and the Marine Scheme

Consent for the Scottish Onshore Scheme and the Marine Scheme, where required, will be sought separately from East Lothian Council, MS-LOT and the MMO under the relevant consenting regimes.

1.5 The Planning Application for the Proposed Development

This Planning Application seeks outline planning permission for the Proposed Development, which comprises the elements of the EOS that require planning permission under the Town and Country Planning Act (TCPA) 1990[2]. These are:

- A new converter station (the Converter Station);
- A new 400kV Gas Insulated Switchgear (GIS) substation (the Substation); and
- Replacement public open space.

Detailed design of the Proposed Development is yet to be completed. As such, outline planning permission is sought for the Proposed Development for the parameters set out in the planning application. The matters set out below are proposed to be reserved for consideration as part of subsequent reserved matter applications to DCC:

- Appearance – the detailed design and materials of the Proposed Development;
- Layout – the detailed layout of the components of the Proposed Development within the Site;
- Scale – the final dimensions of the buildings and plant described, although indicative maximum dimensions are defined in the Planning Application;
- Landscaping – the creation of permanent landforms, drainage systems, landscape planting and habitat creation; and
- Access – the creation of permanent vehicle accesses to serve the Proposed Development.

The Planning Application comprises the following documents:

- This Planning Statement;
- Planning Application Form;
- Planning Application Drawings, comprising:
  - Site Location Plan, SEGL1_T_**PA_1**_v32_20220517;
  - Proposed Site Layout, SEGL1_T_**PA_2**_v3_20220517;
  - SEGL1 English Onshore Scheme, SEGL1_T_**PA_3**_v5_20220505;
  - Proposed Converter station Layout, SEGL1_T_**PA_4**_20220413;
  - Proposed Converter station Illustrative Elevations, PDD-30317-SK-005;
  - Proposed Substation Illustrative Layout, PDD_30317_LAY_504;
  - Proposed Substation Illustrative Elevations, PDD_30317_LAY_505; and
  - Landscape Mitigation Strategy Plan, 60641917-SHT-00-0000-L-001;
- Design and Access Statement;
- Environmental Appraisal Report; including:
  - Flood Risk Assessment (Appendix 11A of the Environmental Assessment Report (EAR));

[2] s55 - Meaning of "development" and "new development" – (1) Subject to the following provisions of this section, in this Act, except where the context otherwise requires, "development," means the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land

  - Transport Assessment (Appendix 14A of the EAR);
  - Indicative Public Rights of Way Plan (Appendix 15A of the EAR); and
  - Outline Construction Environmental Management Plan (Chapter 18 of the EAR).
- Electric and Magnetic Fields (EMF) short information document specific to the SEGL1 Project;
- Biodiversity Net Gain (BNG) Report;
- Habitat Regulations Assessment – Stage 1 Screening Report; and
- Consultation Report.

1.6 Environmental Appraisal Report

The Applicant, in line with its statutory obligations has prepared a voluntary Environmental Appraisal Report (EAR) to accompany this Planning Application. The EAR is not an Environmental Statement but presents an assessment of the likely environmental effects of the Proposed Development.

The EOS is not schedule 2 development for the purposes of the EIA Regulations. While the development has been screened out and determined not to be EIA development, so that the EIA Regulations do not apply to this voluntary assessment, NGET has taken account of the requirements of the EIA Regulations in undertaking this voluntary assessment. The screening decision screened the development on the basis of development of a greater scale of development, and since the screening decision the parameters of certain elements of the EOS have been reduced (for example the height of the converter station has been reduced from a maximum height of 30 m to a maximum height of 26 m). The application for development consent relates to certain elements of the EOS only, and does not include the HVAC cable, the HVDC cable or the temporary construction compounds which are permitted development.

The environmental appraisal follows the methodology outlined in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the EIA Regulations). The Applicant has taken account of the requirements of the EIA Regulations in undertaking this voluntary appraisal.

The EAR was informed by a Scoping Report, which identified those aspects of the environment which could be affected by the EOS, including the Proposed Development, and set out the approach to the identification and assessment of those effects. It also scoped out those aspects of the environment which were considered unlikely to be affected. The EAR Scoping Report was submitted to DCC on 6 April 2021 and a Scoping Response was provided on 27 May 2021.

The structure of the EAR is set out in **Table 1-1** and comprises three volumes:

- **Volume 1: Non-Technical Summary**. This is intended to be readily accessible to the general public. It is concise and written in non-technical language providing a description of the EOS, a summary of the appraisal of the environmental effects and proposed mitigation measures.
- **Volume 2: Main Report**. This comprises the main text including a description of the EOS (including the alternatives considered), the baseline conditions, an assessment of the environmental effects resulting from the EOS, and proposed measures to mitigate those effects.
- **Volume 3: Appendices**. This comprises the supporting technical information which are cross referenced throughout Volume 2.

Table 1-1: EAR Structure

Chapter Number	Title
Volume 1: EAR Non-Technical Summary	
Vol 1	EAR Non-Technical Summary
Volume 2: EAR Main Report	
CH01	Introduction
CH02	Project Alternatives
CH03	Description of English Onshore Scheme

Chapter Number	Title
CH04	Planning Policy Context
CH05	Approach to Environmental Appraisal Report
CH06	Stakeholder Engagement and Consultation
CH07	Ecology and Nature Conservation
CH08	Landscape and Visual Impact Assessment
CH09	Archaeology and Cultural Heritage
CH10	Geology and Hydrogeology
CH11	Hydrology and Land Drainage
CH12	Agriculture and Soils
CH13	Noise and Vibration
CH14	Traffic and Transportation
CH15	Socio-Economic, Recreation and Tourism
CH16	Waste and Materials
CH17	Cumulative and In-Combination Effects
CH18	Outline Construction Environmental Management Plan
CH19	Summary and Conclusions
Volume 3 Appendices	
Appendix 5A	Scoping Opinion
Appendix 7A	Preliminary Environmental Appraisal Report (includes information regarding Wildlife Legislation and Planning Policy)
Appendix 7B	Bat Survey Report
Appendix 7C	Great Crested Newt Survey Report
Appendix 7D	Breeding and Wintering Bird Survey Report
Appendix 8A	Broad Landscape Character Types
Appendix 8B	Landscape Character Types
Appendix 8C	Visualisations
Appendix 9A	Archaeology and Cultural Heritage Desk-based Assessment
Appendix 9B	Geophysical Survey Report
Appendix 10A	Consultant's Coal Mining Report
Appendix 10B	Site Photographs
Appendix 11A	Flood Risk Assessment
Appendix 11B	Record of Licensed Discharges to Surface Waters
Appendix 12A	Post-1988 Agricultural Land Classification (ALC) Data for Hawthorn Pit
Appendix 12B	Soil Survey Data and ALC Calculations
Appendix 12C	Laboratory Data for Soil Particle Size Distribution
Appendix 12D	Droughtiness Calculations
Appendix 12E	Outline Soil Management Plan
Appendix 13A	Acoustic Terminology
Appendix 13B	Baseline Noise Surveys
Appendix 13C	Construction Noise Modelling

Chapter Number	Title
Appendix 13D	Operational Noise Modelling
Appendix 14A	Transport Assessment
Appendix 14B	Personal Injury Collision (PIC) Data
Appendix 14C	Outline Construction Traffic Management Plan
Appendix 14D	Traffic Flow Diagrams
Appendix 15A	Indicative Public Rights of Way Plan
Appendix 18A	Legal Register (Indicative)

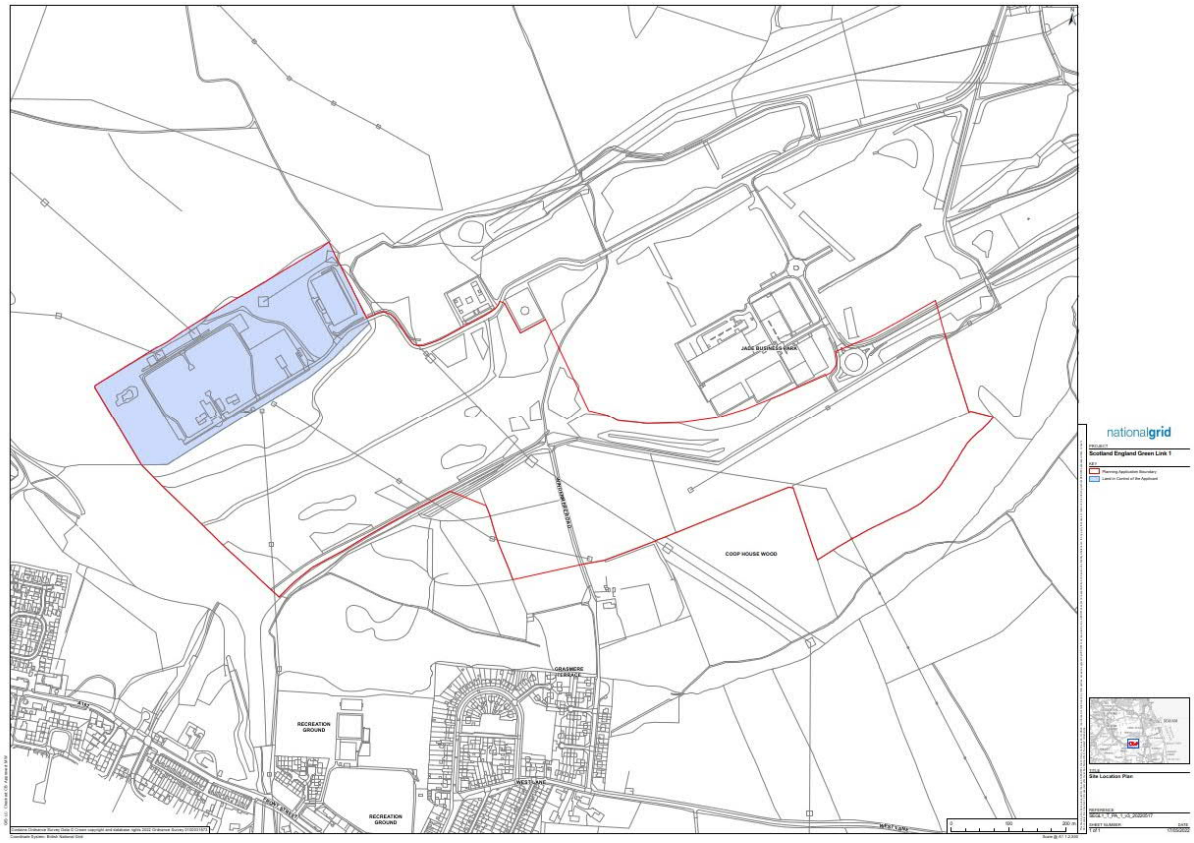
2. The Site and Surroundings

2.1 Description

The Site, shown in **Figure 2-1**, is a broadly level area set at the bottom of gently sloping ground between Murton and South Hetton, part of which used to be a colliery and a coking works. The Site comprises informal public open space, electricity transmission and distribution infrastructure including Hawthorn Pit 275/ 400kV substation, two Northern Powergrid 132 kV and 66kV substations, a National Grid 275kV lattice pylon overhead line and various Northern Powergrid lattice pylon and wood pole overhead lines; the south-eastern part of the Site is arable land. The site is crossed east – west by a bridleway and National Cycle Route 1 (NCR-1),

To the north of the Site is arable land, crossed by various Public Rights of Way (PRoW), beyond which is Murton; to the west of the site is an area of informal public open space, a former minerals railway line which is now NCR-1, and the settlement of South Hetton; to the east of the site is Jade Business Park, which is partly developed and proposed to expand, and informal public open space; and to the south is Coop House Wood, agricultural land, a caravan storage site, and South Hetton.

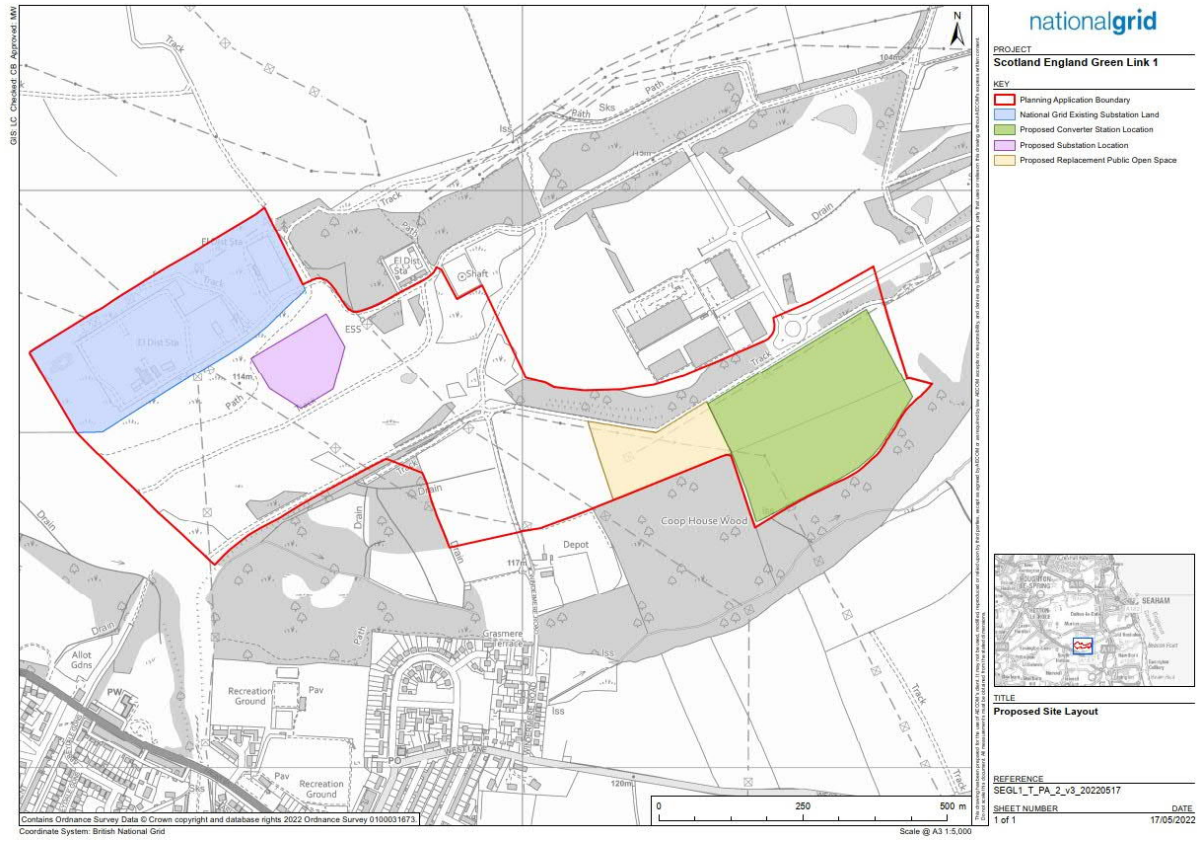
Figure 2-1: Site Location Plan



The Site is shown edged red by Drawing SEGL1_T_**PA_1**_v3_20220517, (Site Location Plan) and by **Figure 2-1**. It encompasses all land required for the proposed Converter Station, Substation and Public Open Space, including permanent access roads, associated landscaping, and habitat enhancement and creation.

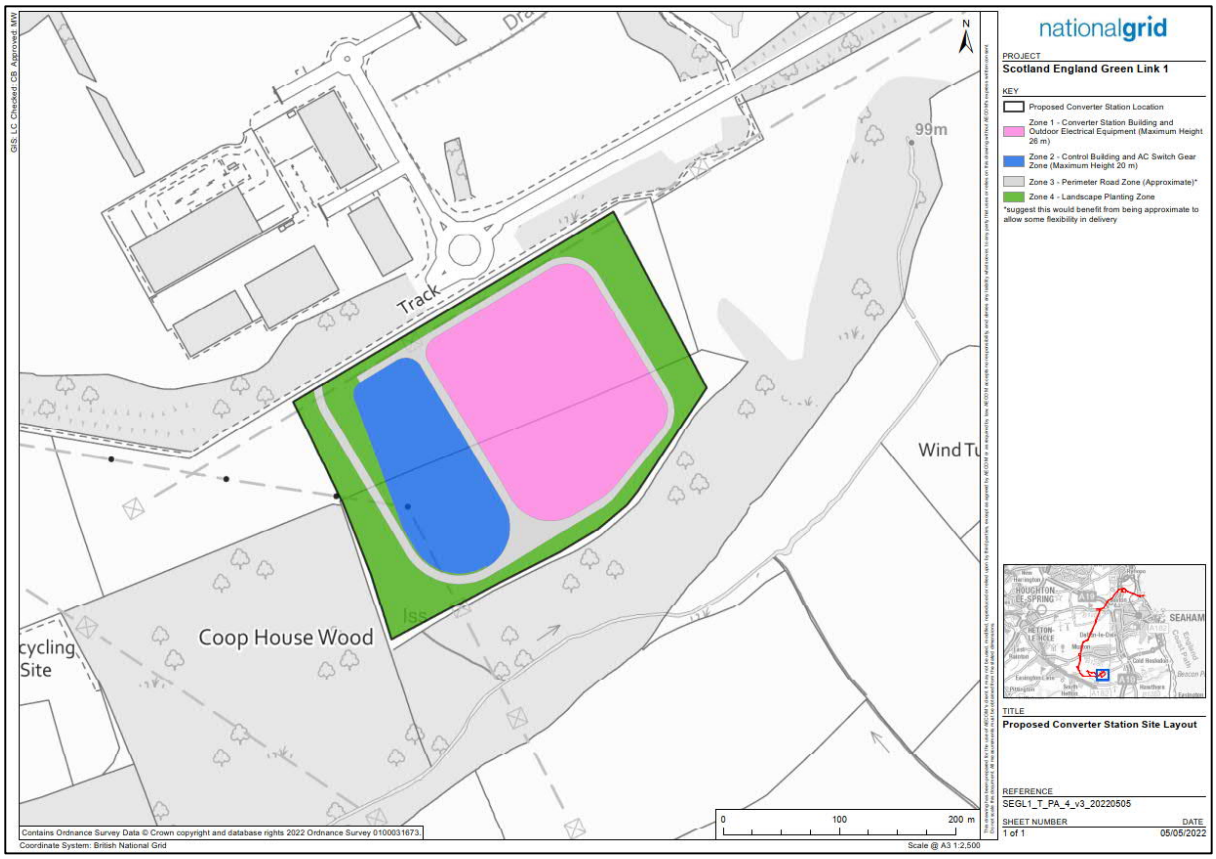
Drawing SEGL1_T_**PA_2**_v3_20220517 (Proposed Site Layout) and **Figure 2-2** show the proposed location of the Converter Station in green, the proposed location of the Substation in pink, and proposed replacement Public Open Space in light brown.

Figure 2-2: Proposed Site Layout



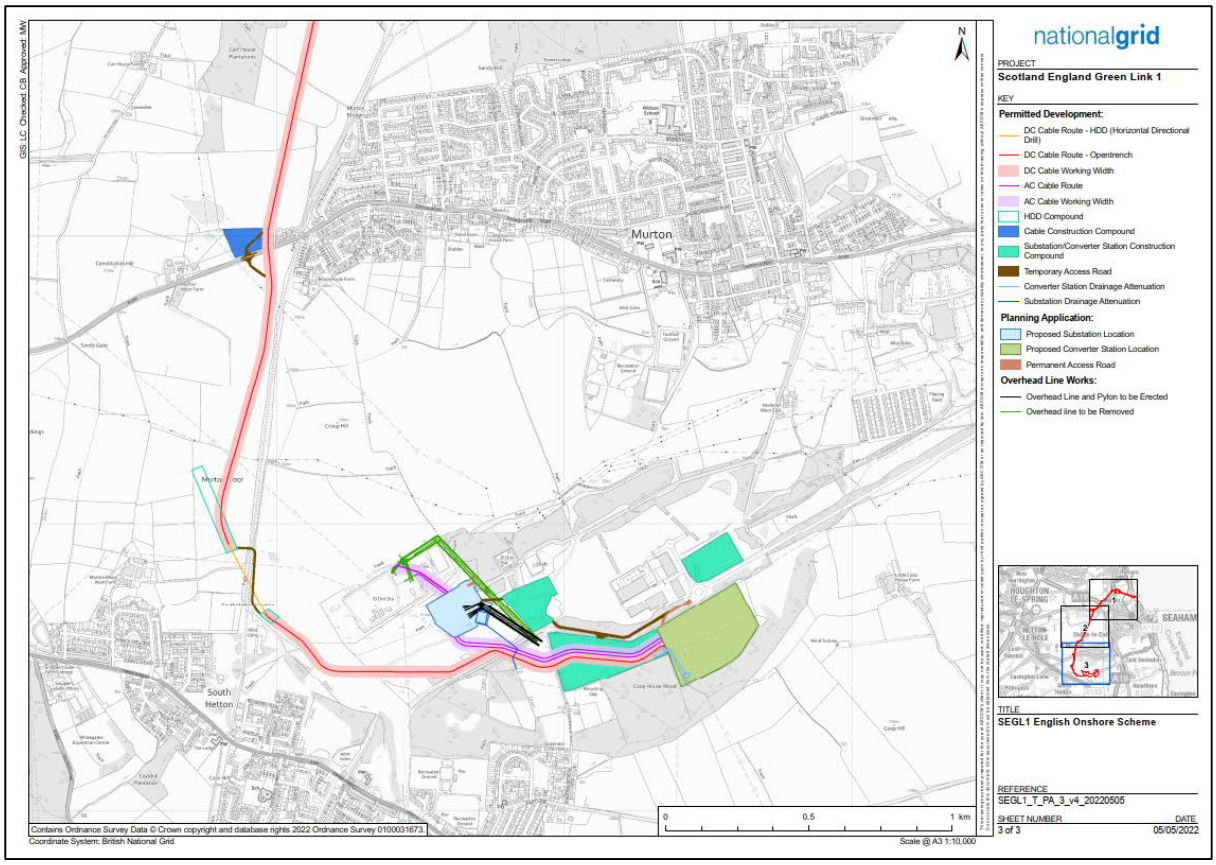
The Converter Station Site is shown by Drawing SEGL1_T_**PA**_**4**_v3_20220505 (Proposed Converter Station Site Layout) and **Figure 2-3**.

Figure 2-3: Proposed Converter Station Site Layout



The Converter Station Site covers an area of approximately 7 ha and is located approximately 890 m south east of the existing Hawthorn Pit substation. The Converter Station Site comprises agricultural land, bounded by Coop House Wood to the south and southwest, agricultural land to the west, and Jade Business Park to the north. The Converter Station Site gently slopes to the south, with a 7m change in elevation from north to south. The land to the northeast of the Converter Station Site is currently used as informal public open space and is proposed to be developed as part of Phase 2 of Jade Business Park. Access to the Converter Station Site would be via a new permanent access road off the 'stub' at the western end of the existing Jade Business Park roundabout on Spring Road, to the north of the Converter Station Site, as illustrated in brown by Sheet 3 of Drawing SEGL1_T_**PA_3**_v5_20220505, (SEGL1 English Onshore Scheme) and **Figure 2-4.**

Figure 2-4: SEGL1 English Onshore Scheme – Sheet 3



The Substation is proposed to be located approximately 50 m southeast of the existing Hawthorn Pit substation, as shown by Drawing SEGL1_T_**PA_2**_v2_20220505 (Proposed Site Layout) and **Figure 2-2**. The footprint of the Substation is approximately 1.5 ha and is located on land that comprises informal public open space for the purposes of the Acquisition of Land Act 1981, but which has no planning status. The Site is gently sloping, with a 4 m change in elevation from the north west to south east.

The remaining land within the planning application boundary is a combination of agricultural land and informal public open space. Agricultural land is located immediately to the west of the proposed converter station location and is proposed to be used as a temporary converter station construction compound and after development is completed will become replacement public open space for that lost to the footprint of the Substation. It would incorporate areas of landscape planting and habitat creation/ enhancement. The land to the south, east and west of the proposed Substation location is currently informal public open space and will also incorporate areas of landscape planting and habitat creation/ enhancement. The existing Hawthorn Pit substation land is also included within the Planning Application Boundary to allow for habitat enhancement within the Applicants land ownership.

2.3 Designations and Allocations

2.3.1 Development Plan Allocations

The Development Plan for County Durham includes the County Durham Plan (CDP), which includes the Proposals Map (2020). This shows that the permanent works associated with the converter station and substation Sites are not allocated for any specific land use within the plan period. An area of land to be used temporarily for a construction compound is allocated as Employment Land under Policy 2 of the CDP as part of the 'Jade Park' employment land allocation.

The CDP Proposals Map (2020) does not show the Site to be within any other designated or allocated areas. However, the CDP online interactive map[3] identifies the Site as falling within the following areas:

- Minerals – Coalfield Development Low Risk Area. This references Policy 32 of the County Durham Local Plan.
- Minerals – Minerals Safeguarding Area. This references Policy 56 Glacial Sand and Gravel and Policy 56 River Sand and Gravel of the CDP.
- Safeguarding area around High Moorsley Meterological Office radar site. The interactive map notes that the following are relevant 'any development building works exceeding 15.2 m above ground level' and 'any development involving pylons over 10 m in height'. This references under Policy 28 of the County Durham Local Plan.

The Development Plan for County Durham comprises a number of other documents as set out in Section 5.2 of this PS; however, none are relevant to this particular area.

2.3.2 Ecology and Nature Conservation Designations

There are no statutory ecological designated sites within the Substation or Converter Station Sites, however, Hesledon Moor West Site of Special Scientific Interest (SSSI) lies approximately 160 m to the south of the substation Site.

There are a further three statutory sites that lie within 2 km of the Planning Application Boundary:

- Hesledon Moor East SSSI – approximately 374 m north east;
- Eppleton Grassland SSSI – approximately 1.8 km north west; and
- Pig Hill SSSI – approximately 1.7 km south west.

Hesledon Moor West and Coop House Wood Local Wildlife Sites lie adjacent to the south of the Planning Application Boundary.

2.3.3 Landscape Designations

The converter station and substation Sites are not within any nationally designated landscape or any locally designated area of high landscape value.

2.3.4 Heritage Designations

There are no World Heritage Sites, conservation areas, registered battlefields or registered parks within 2 km of the Site. There are no designated heritage assets present within the Site and no non-designated heritage assets recorded on the Historic Environment Record. The baseline assessment carried out for the EAR identified the potential for post-medieval field boundaries to be present within the Site but these are assessed to have very low heritage value and impacts to these assets would not result in significant effects. The nearest designated heritage asset to the Site, located approximately 2.16 km to the south west, is the Bronze Age or Iron Age enclosed hilltop settlement at Pig Hill, which is a Scheduled Monument. The EAR assessed there would be no significant effects to the Scheduled Monument as a result of the Project.

[3] https://maps.durham.gov.uk/localplan/default.aspx

2.3.5 Flood Zone

The Site is located entirely within Flood Zone 1 (lowest risk) according to the Environment Agency's Flood Map for Planning.

2.3.6 Socio-Economics, Recreation and Tourism

There are no residential properties, business premises, community facilities or visitor attractions within the Site. There is an extensive network of public rights of way and informal paths around the Site, and a public footpath, bridleway and NCR-1 cross the Site near the proposed Converter Station and Substation locations.

2.4 Planning History

Appendix A provides an overview of relevant planning history that either interacts directly with the Planning Application Boundary or is located within close proximity to the Proposed Development. Sections 2.3.1 and 2.3.2, below, set out specific cases of significance when considering this planning application.

2.4.1 Previous Planning Permission at Hawthorn Pit

In 2002, National Grid International Ltd (NGIL) sought outline planning permission for an electricity interconnector between Norway and Great Britain, with a connection at Hawthorn Pit 275kV/ 400kV substation via a new converter station proposed to the south of the existing substation. Easington District Council Planning Committee refused outline planning permission, against Officer recommendation, on the grounds of scale, location and layout (Ref: 01/654). Easington District Council no longer exists, and the authority area became part of Durham County Council unitary authority area in 2009.

NGIL appealed against the refusal of outline planning permission and permission was granted by the Planning Inspectorate in 2003 (Ref: APP/H1325/A/02/1032788 and Ref: APP/H1325/A/02/1092789). In advance of the planning permission being implemented an area of water vole habitat was created at the western end of the existing Hawthorn Pit substation. However, the project did not go ahead, and development did not commence on the site, as such the planning permission eventually lapsed. An interconnector between Norway and Great Britain was subsequently granted planning permission at Blyth in Northumberland.

The planning history provides a material consideration that the same type of development of a very similar scale for which the Applicant is currently seeking outline planning permission has previously been acceptable in planning terms within the Planning Application Boundary of the Proposed Development, at Hawthorn Pit.

2.4.2 Planning Applications Awaiting Determination

Planning Application DM/21/02901/OUT, which was validated in November 2021 and is pending determination, seeks outline planning permission for a mixed-use development comprising of E(g), B2 and B8 units up to 20 m in height. These would be located adjacent and east of the existing Jade Business Park and directly to the north of the proposed Converter Station. This is often known as the Jade Phase 2 project.

Planning application DM/21/03420/FPA, which is pending determination, is for a solar farm on agricultural land to the north of the Site and comprises installation and operation of a ground mounted photovoltaic solar farm, inclusive of solar arrays, transformers, substation, landscaping, fencing, internal access tracks, access, CCTV and other associated works.

The cumulative effects of these two proposed developments are considered in Chapter 17: Cumulative Assessment of the EAR.

3. The Proposed Development

3.1 Introduction

The Proposed Development comprises of:

- The Converter Station;
- The Substation;
- Creation of replacement public open space; and
- Associated landscaping, drainage systems and habitat creation.

The following Sections provide a description of each of the above elements, along with details of the operation and construction of the Proposed Development. As an outline application, the detailed appearance, scale, layout and access of the Proposed Development is reserved at this stage, however, the parameters for each of the components are set out in the following paragraphs.

3.2 Converter Station

3.2.1 Permanent Development

The Converter Station is required to convert 2 Gigawatts (GW) electricity from alternating current (AC) to direct current (DC) and *vice versa*. It will comprise specialist electrical equipment, some of which must be located within buildings as well as some which can be located outdoors. Both the buildings and outdoor electrical equipment range in size up to a maximum of 26 m in height, above final ground level.

The Converter Station will utilise self-computed voltage source conversion (VSC) technology, which allows for greater control over reactive and active power and also allows for a more compact converter station layout reducing the operational land take required for the Proposed Development.

The proposed locations of the component elements of the converter station have been identified based on the location and size of building units and outdoor electrical equipment as well as other requirements such as landscape planting and drainage. The Converter Station Site is split into the following four main 'Zones' which are shown by Drawing SEGL1_T_**PA**_**4**_v3_20220505 (Proposed Converter station Site Layout):

- Zone 1: the Converter Station building and outdoor electrical equipment zone in which the main components of the converter station will be located;
- Zone 2: the Control Building and AC Switch gear zone in which the Control Building and AC Switch gear will be located, along with a backup generator and spares building.
- Zone 3: Perimeter road zone which will contain a permanent perimeter road which would form a continuous circuit around the converter station to facilitate movement of vehicles and access; and
- Zone 4: Landscape planting zone which will comprise landscape planting and earthworks around the site in order to provide permanent screening.

Table describes the component parts of the Converter Station and defines their parameters and locations in relation to the above Zones.

Drawing PDD-30317-SK-005 (Proposed Converter station Illustrative Elevations) presents illustrative north and west elevations and maximum parameters of the Converter Station.

The converter station Site will require a level development platform and to achieve this there will be a balanced cut and fill which will set down the northern end of the converter station site 4 m below the level of the Jade roundabout. This will have the effect of reducing the overall height of the converter station building when viewed from the north by users of Jade Business Park and by users of the formal and informal paths and routes across the wider site.

Table 3-1: Converter Station Parameters

Component	Description	Reserved Matters	Parameters	Location on Drawing SEGL1_T_PA_4_20220413
DC Hall	The DC onshore underground cables terminate here. The switch hall also contains DC switchgear to connect to power electronics. This equipment can be enclosed in a building up to 26 m in height or located outdoors.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 26 m above finished ground level	Zone 1
Valve Halls and AC Inductors	Contain high voltage power electronics equipment that converts electricity from DC to AC and vice-versa. This equipment must be located indoors in buildings up to 26 m height within a controlled environment.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 26 m above finished ground level	Zone 1
Transformer bays	These change the AC voltage to an appropriate level for transmission via the AC system/ or prior to conversion to DC. The transformers are normally sited outdoors and separated by concrete fire protection walls. Typical dimensions are 15 m long by 15 m wide by 16 m high. Cooling fans are also provided on transformers.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 16 m above finished ground level	Zone 1
Control Building	Contains control panels and associated operator stations, protection and communication equipment, offices and welfare facilities and other auxiliary systems all located within an enclosed building up to 15 m high.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 15 m above finished ground level	Zone 2
AC Switch gear and filters (“switch yard”)	Connects the converter station to the AC transmission system. It includes a range of electrical equipment including harmonic filtration and reactive compensation equipment, circuit breakers, transformers, busbars and insulators. The main function is to allow the effective integration of the DC system into the AC system. Commonly the AC switchyard and associated equipment is located outdoors although this equipment can be enclosed in a building or series of	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 20 m above finished ground level	Zone 2

Component	Description	Reserved Matters	Parameters	Location on Drawing SEGL1_T_ PA_4_20220413
	buildings and would be the subject of detailed design.			
Backup Generator	The converter station requires its own power typically provided at 11 kV, the diesel back-up generator would be used to provide back-up electricity supply in the event of a failure of the low voltage electricity supply.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	N/A	Zone 2
Spares Building	A building to house spare parts and components; this will be supplemented by hardstanding areas provided for storage of a spare transformer and spare cable drums.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	N/A	Zone 2
Perimeter road	This will contain a permanent perimeter road which would form a continuous circuit around the converter station to facilitate movement of vehicles and access	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	N/A	Zone 3
External lighting	Lighting columns within the Converter station Site are required during maintenance but are designed to avoid light pollution by facing inward, lighting only areas within the site where works are taking place and being off by default during hours of darkness.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: Approximately 6 m	Within the Converter Station Site
Security fence	Perimeter security fence.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 4 m	Zone 3
Landscape works	Landscape planting zone which will comprise grassed areas and landscape planting around the site in order to provide permanent screening.	Landscaping (details)	N/A	Zone 4

3.2.2 Operation

Following a period of commissioning and testing, the proposed Converter Station will operate continuously throughout the year. The proposed Converter Station will be operated by a small team that visit the site weekly and otherwise as and when required. During maintenance (planned and unplanned) the number of personnel present on site would increase with the number of staff proportionate to the nature of the maintenance works being undertaken.

3.2.3 Construction

Construction of the Converter Station is expected to take approximately 2 years. Outline Construction Environment Management Plan (CEMP) and Construction Traffic Management Plan (CTMP) accompany this planning application to provide control throughout this period. The exact phasing of some activities will depend on the contractor, when appointed, and detailed design, but the main construction activities will include:

- Preliminary works;
- Access road construction;
- Site establishment;
- Earthworks;
- Civil engineering works;
- Building works;
- Cable installation;
- Provision/ installation of permanent services;
- Mechanical and electrical works;
- Commissioning; and
- Site reinstatement and landscape works.

Vehicle movements to and from the Site during construction are expected to be a peak of 280 vehicles day.

3.3 Substation

3.3.1 Permanent development

The Substation will be a new 400 kV Gas Insulated Switchgear (GIS) substation. It will provide termination for the AC circuits connecting the Converter station. The substation Site will be located as shown by Drawing SEGL1_T_**PA**_**2**_v2_20220505 (Proposed Site Layout). It will be a flat surface of grey gravels ('substation chippings') and will include internal roads, car parking and footpaths and enclosed by fencing that is required for security and safety purposes.

The northwest of the substation Site will comprise the GIS building, which will contain the new 400 kV switchgear and will have a maximum height of 14 m. An attached annex will contain the staff amenity and welfare facilities as well as the equipment required to supply, control and protect the Substation. The GIS building will be a portal frame structure with cladding walls and duo pitched roof and the annex will have a single pitch, attached to the southern elevation.

The northeast of the substation Site will contain a 1,000 Mega Volt Ampere (MVA) 400/ 275 kV Super Grid Transformer (SGT) comprising the main tank and cooler bank. The main tank will be within a noise enclosure and the cooler bank consists of a set of larger outdoor fans immediately adjacent to the east.

The southern half of the substation Site will comprise Air Insulated Switchgear (AIS) equipment including gantries that connect to the new overhead line (OHL) pylon to the south east.

The Substation will also contain small buildings including:

- Static 120,000 l cylindrical above ground water tank for fire-fighting purposes;
- Diesel generator for back-up power supply;
- Workshop (7 m x 3 m container); and
- Stores (7 m x 3 m container).

The detailed lighting design will be specified by the contractor but is likely to comprise 6 m high lighting columns that will be required for maintenance activities. These will be designed to avoid light pollution

by facing inward, lighting only areas within the site where works are taking place and being off by default during hours of darkness.

The Substation and will be connected to the existing Hawthorn Pit substation by two AC cable circuits.

Table 3-2 defines the parameters for the components of the Substation.

Drawings PDD_30317_LAY_504 (Proposed Substation Illustrative Layout) and PDD_30317_LAY_505 (Proposed Substation Illustrative Elevations), respectively, show an indicative layout and indicative elevations of the proposed Substation in order to provide an indication of how it may appear.

Table 3-2: Substation Parameters

Component	Description	Reserved Matters	Parameters
Substation platform	Approximately 2 ha in size.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Up to 2 ha in size
Gas Insulated Switchgear (GIS) Hall	This will contain the new 400 kV switchgear.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 14 m
Security fence	Perimeter security fence.	Scale (final dimensions) Layout (precise location) Appearance (materials and finish)	Maximum height: 3.4 m

3.3.2 Operation

Following a period of commissioning and testing, the proposed Substation will operate continuously throughout the year. There will be no permanent personal working at the substation Site; during maintenance (planned and unplanned) the number of personnel present on site would be proportionate to the nature of the maintenance works being undertaken.

3.3.3 Construction

Construction of the proposed Substation is planned to be undertaken over a period of 2 to 3 years from approximately 2023 to 2026. The exact phasing of some activities will depend on the contractor, to be appointed, and detailed design, but the main construction activities will be similar to those outlined for the Converter Station in section 3.2.3.

The construction of the substation Site will require a balanced earthwork cut and fill as the site is currently sloped and is required to be flat before the GIS building and other equipment can be erected. Construction works will include vegetation and topsoil clearance, excavation of existing made ground subsoils, import of new stone materials, and the subsequent construction of the Substation described above.

A temporary construction compound is proposed to the west of the substation Site. This will require vegetation clearance and soil removal as required, and comprise temporary welfare facilities, laydown and storage areas, and security fencing/ hoarding. The construction compound will seek to connect to 11 kV electricity supply, water supply, sewerage and telecommunications if available (note these works are permitted development).

3.4 Public Open Space and Landscaping

The location of replacement public open space to be provided as part of the Proposed Development is shown on Drawing, SEGL1_T_**PA_2**_v3_20220517 (Proposed Site Layout). This will comprise open species rich grassland with informal paths, scattered trees and areas of scrub under-storey planting, as illustrated by Drawing 60641917-SHT-00-0000-L-001 (Landscape Mitigation Strategy Plan).

Drawing 60641917-SHT-00-0000-L-001 (Landscape Mitigation Strategy Plan) also illustrates proposals for planting and other landscaping details included in order minimise and mitigate the landscape and visual impact of the Proposed Development and provide mitigation and enhancement to biodiversity.

4. Need for the Proposed Development and Site Selection

4.1 Overview

In response to the UK and Scottish Government's legally binding targets to reach net zero in their greenhouse gas emissions by 2050 and 2045 respectively, the way in which energy is generated is undergoing transformational change. The past year has seen increased ambition for offshore wind, with the Government's Ten Point Plan re-affirming the commitment to reach 40 GW of installed capacity by 2030. Huge volumes of renewable energy generation including onshore and offshore wind will connect to the electricity transmission system over the coming years.

Electricity demand is predominantly located in the south, leading to high north-south power flows. These flows are highly variable due to the intermittent nature of wind generation and interconnection. The transmission system will need to be prepared to manage large swings in power flows. The north-south flows contribute significantly to system constraints across the entire Great Britain transmission system. To operate the network safely, we must make sure that the power flow across the Scotland England boundary does not exceed the capability of the network between the two regions.

In order to economically and efficiently transmit this energy from where it is generated to where it is needed there is a requirement to increase the capability/ capacity of the electricity transmission system.

In the short to medium-term, increased power flows through Scotland and between Scotland and England are caused by generation already connected to the transmission network, and by generation contracted to connect to the network in the Scotland and North of England region.

In the medium to the long-term there are significant increases in north to south power flows across a diverse and credible range of scenarios including a tripling of wind generation connected across the Scottish networks by 2030, driving higher north-to-south power transfers, and at least a doubling of transfer requirements from northern Scotland to the Midlands over the next 10 years. New reinforcements will be required to facilitate these power flows through the North of England. The Project is one of those reinforcements.

The following sections set out the legislative and policy background to the above and describes how the specific need for the Proposed Development, as part of the SEGL1 Project, has been identified.

4.2 Legislative and Policy Context

4.2.1 Climate Change Act 2008

The UK is legally bound through the Climate Change Act (2008) (CCA2008) to reduce carbon emissions. The CCA2008 is underpinned by further legislation and policy measures which have developed in the last 13 years. This has been based on an increased need and urgency for decarbonisation in order to meet the UK's obligations under the Paris Agreement (2015).

In October 2018, following the adoption by the UN Framework Convention on Climate Change of the Paris Agreement, the Intergovernmental Panel on Climate Change (IPCC) published a Special Report on the impacts of global warming of 1.5°C above pre-industrial levels. This report concluded that human-induced warming had already reached approximately 1ºC above pre-industrial levels, and that without a significant and rapid decline in emissions across all sectors, global warming would not be likely to be contained, and more urgent international action is required.

4.2.2 The Climate Change Act 2008 (2050 Target Amendment) Order 2019

The targets for carbon emissions reduction have tightened more so since the CCA2008, including a legally binding commitment for the UK to reach net zero carbon emissions by 2050. In June 2019, parliament passed legislation requiring the government to reduce the UK's net emissions of greenhouse gases by 100% relative to 1990 levels by 2050. Doing so would make the UK a 'net zero' emitter. Prior

to this, the UK was committed to reducing net greenhouse gas emissions by at least 80% of their 1990 levels, also by 2050 (the CCA2008).

4.2.3 The Committee on Climate Change: The Sixth Carbon Budget (December 2020)

The main recommendations are set out in The UKs Path to Net Zero report, which sets out a recommended pathway requiring a 78% reduction in UK territorial emissions between 1990 and 2035, bringing forward the UK's previous 80% target by nearly 15 years. These recommendations are a clear indication of the increased ambition implied by the Government's net zero target.

The 78% reduction in emissions from 1990 to 2035 recommendation was then introduced by the Government in April 2021.

4.2.4 National Infrastructure Delivery Plan 2016 – 2021 (March 2016)

Prepared by the infrastructure and Projects Authority, the plan explains requirements and funding for national infrastructure. In the current Parliament and beyond, it recognises that network companies face an unprecedented investment challenge to maintain a reliable, secure network, and deal with changes in demand and generation that will occur in a low carbon future.

4.2.5 Committee on Climate Change Net Zero Publications (May 2019) - Net Zero – The UK's Contribution to Stopping Global Warming (May 2019)

In May 2019 the Committee on Climate Change published Net Zero – The UK's Contribution to Stopping Global Warming. The report recommended a new target of net zero greenhouse gas emissions by 2050. This was passed into law in June 2019.

The report recognises that transmission network capacity will need to keep pace with developments on generation (e.g., large-scale offshore wind) and interconnections, and recognises the need for enhanced system flexibility.

4.2.6 Energy White Paper 2020

The Energy White Paper published in December 2020 is one of the more recent Government policy papers setting out how the UK will reach net zero emissions by 2050.

The White Paper explains that it is likely that overall demand for electricity will double by 2050 due to the electrification of other sectors such as transport heating. On page 42, it states that meeting this demand by 2050 would require *"a four-fold increase in clean electricity generation with the decarbonisation of electricity increasingly underpinning the delivery of our net zero target"*.

It identifies the Government's aim for a fully decarbonised, reliable and low-cost power system by 2050, including 40 GW of wind generation capacity by 2030, which is enough to power every home in the UK.

At page 76, the Energy White Paper explains the importance of electricity network infrastructure in enabling the successful delivery of this objective. It states:

"The transformation of our energy system will require growing investment in physical infrastructure, to extend or reinforce the networks of pipes and wires which connect energy assets to the system and maintain essential resilience and reliability."

4.2.7 Ten Point Plan for a Green Industrial Revolution (November 2020)

The Government set out a 10-point plan to lay the foundations to meet its legal obligation to reach net zero greenhouse emissions by 2050 and encourage a Green Industrial Revolution. The Ten Point Plan

recognises that in order to integrate clean technologies like offshore wind, we must transform our energy system, building more network infrastructure.

4.2.8 Net Zero Strategy: Build Back Greener, 2021

The Net Zero Strategy Policy Paper sits alongside the Energy White Paper, 2020 and sets out the governments vision of using the necessary action to tackle climate change as an economic opportunity to crate prosperity. Part 3i (Power) sets out key commitments to deliver a decarbonised power system by 2035. These include:

- Subject to supply, all electricity will come from low carbon sources by 2035;
- Delivery of 40GW of offshore wind by 2030;
- Investing in supply chains, infrastructure and early-coordination of offshore transmission networks for the offshore wind sector;
- Ensuring the planning system can support the deployment of low carbon energy infrastructure.

4.2.9 British Energy Security Strategy, 2022

The British Energy Security Strategy sets out the Government's aims to reduce reliance on coal and gas and to generate and store more renewable and nuclear energy in the UK.

The Government recognise the importance of the transmission network within this strategy, and that accelerating our domestic supply of clean and affordable electricity also requires accelerating the connecting network infrastructure to support it. One of the Government's objectives is to dramatically reduce timelines for delivering strategic onshore transmission network infrastructure by around three years.

4.2.10 Planning Policy

The planning system seeks to aid the delivery of the Government's strategy and objectives through national policy such as the National Planning Policy Framework (NPPF), National Policy Statements for Energy (NPS), and through Local Plans. Section 5 of this PS describes the local and national planning policy context that supports the delivery of the Project, and the Proposed Development.

4.3 The Need for the SEGL1 Project

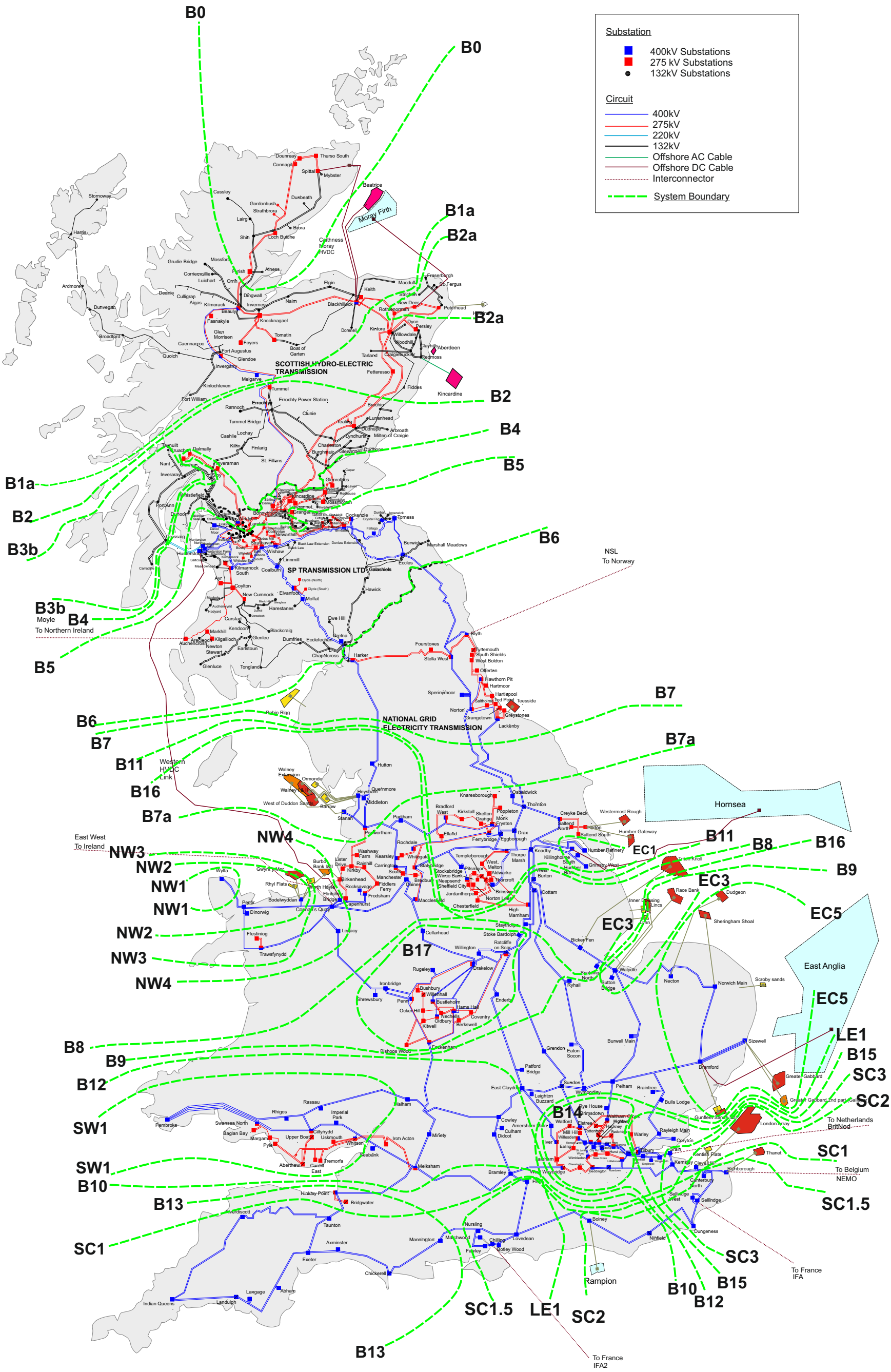
The electricity transmission system across Great Britain is divided by a number of boundaries, which are notional lines used to represent areas of high-power flows between different parts of the system (**Figure 4-1**). Boundaries split the system into parts, crossing critical transmission circuit paths that carry power between areas where power flow limitations may be encountered. When flows across a boundary are forecast to be above the capability of the network, then energy generation needs to be managed to ensure that the capability of network is not exceeded. Managing shortfalls in network capability across boundaries results in additional costs, referred to as 'constraint costs', to operate the network. Some level of constraint is expected as part of the economic operation of the network, however, where excessive constraints occur then investment in new infrastructure may be needed to provide additional network capability.

The Project is required to increase transmission capacity across the B6 boundary between southern Scotland and northern England. **Figure 4-1** shows the extent of the B6 area. The boundary transfer requirements for B6 already exceed the existing boundary capability. The required boundary transfer capability starts to pick up in all four Future Energy Scenarios (produced by National Grid Electricity System Operator (ESO) in the mid-2020s with a significant gap between capability and requirements starting to emerge. The shortfall in capability is on average, 5.3 GW in 2027 increasing to almost 6.4 GW in 2029 across all four FES.

The existing Anglo-Scottish transmission network across the B6 boundary primarily consists of two double-circuit 400 kV routes and a High Voltage Direct Current (HVDC) subsea link on the west coast. There are also some limited capacity 132 kV circuits across the boundary. The key transmission routes are 400 kV circuits from Strathaven to Harker and from Eccles to Blyth/ Stella West, and the Western HVDC link from Hunterston in Ayrshire to Flintshire Bridge (Connah's Quay) in North Wales.

Since the early 1990s, works have been completed to maximise the existing alternative current (AC) network and increase the capacity over B6 to enable larger power transfers, predominantly in the north to south direction. These works include the uprating of existing circuits from 275 kV to 400 kV, modifications to existing generator control systems for improved system damping and the installation of both series and shunt compensation. On top of the AC system improvements, additional boundary transfer capability has been delivered by the commissioning of the Western HVDC Link.

Figure 4-1: Great Britain Electricity Transmission System Boundaries



4.4 Need for the Proposed Development

The Proposed Development, comprising a new Converter Station and Substation are needed to enable the HVDC link from Scotland to connect to the NETS in England, and distribute electricity to where it is needed. Without the Proposed Development the SEGL1 Project would not be able to operate.

4.5 Site Selection

4.5.1 Introduction

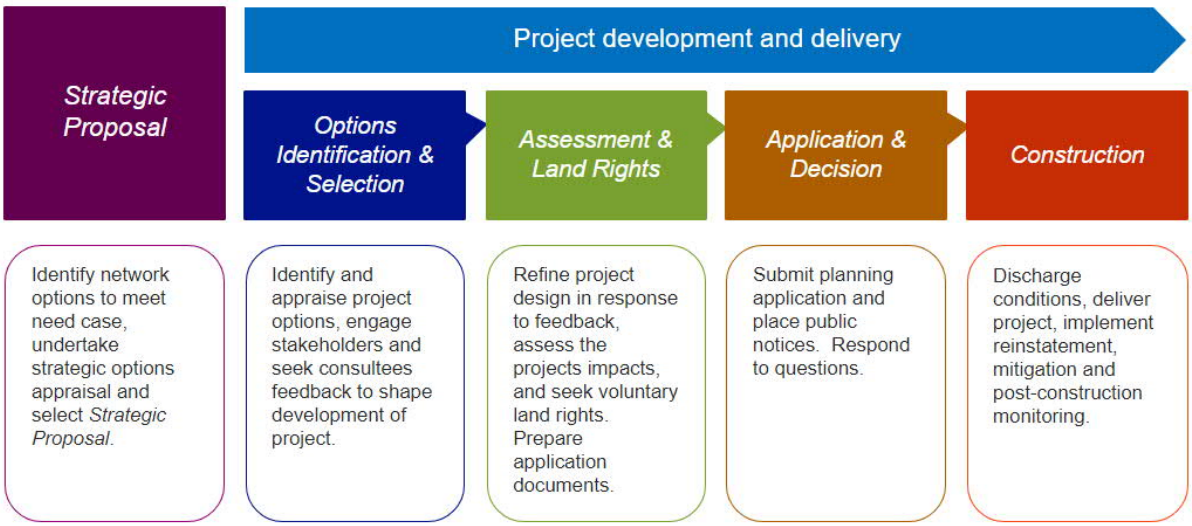
Chapter 2 of the EAR explains the reasons for selecting the converter station Site and the substation Site, along with the landfall location and cable route corridor, in detail. These set out that in identifying the location and route of the EOS, the Applicant has given consideration to a range of alternatives at both a strategic and project-specific level, and has included considerations of alternative landfall, substation, converter station sites and cable route corridors.

As a transmission licence holder under the 1989 Act the Applicant has a number of statutory duties which it must take account of in developing and maintaining its network. These duties are set out in the Applicant's Stakeholder, Community and Amenity Policy. As a transmission licence holder, The Applicant is required to develop and maintain an efficient, coordinated and economical electricity transmission system and to facilitate competition in the supply and generation of electricity.

Under Schedule 9 of the 1989 Act the Applicant is required to consider ways to preserve amenity in England and Wales, which it interprets to mean the natural environment, cultural heritage, landscape and visual quality, and also includes the impact of its works on communities, such as the effects of noise and disturbance from construction.

The Applicant has a systematic approach to developing new infrastructure projects which follows five main stages, as set out in **Figure 4-2.** The Applicant considers a range of engineering, economic, environmental and social factors consistent with its statutory duties, as well as consulting with stakeholders and members of the public at key stages by being open with information and transparent about the judgements it makes.

Figure 4-2: NGET's Approach to Project Development



4.5.2 Selection of Hawthorn Pit as the 'End' Point of the EOS

In developing SEGL1, consideration was given to developing subsea links from the existing Torness substation in East Lothian to substations within NGET's licence area as far south as substations around Middlesbrough. Overhead line options were considered and discounted as part of this exercise.

The strategic options assessed comprised a fixed 'start' point on the network in Scotland at Torness in East Lothian, which was identified by Scottish Power Transmission (SPT). It is planned that ahead of

the completion of SEGL1, a new 400 kV substation will be constructed in the Torness area, known as Branxton 400 kV substation. The Proposed Substation will become a key node on the main interconnected transmission system. Its connectivity to the existing 400 kV system, and location close to the east coast, means that it will become a collector substation for offshore wind in the Firth of Forth and further offshore as well as providing the connection point for the Scottish end of the SEGL1 Project.

The strategic options appraisal identified a number of alternative 'end' points at substations on the network in England, in an area from Blyth in Northumberland as far south as Middlesbrough, both on the coast and inland. The objective of the strategic options appraisal was to identify a preferred Strategic Proposal which would best meet the need case by providing additional network capability when it is needed while also taking account of our statutory and licence obligations.

For each strategic option, different factors were assessed including:

- **Network capability and technical considerations**: this included different transmission technologies, the additional network capability it would provide as well as factors influencing construction and operation.
- **Environmental and socio-economic impacts**: this included high-level consideration of the potential impacts of different options on the environment and people and included a range of onshore and offshore considerations such as biodiversity, archaeology and other land/ sea users.
- **Programme and cost implications**: this included consideration of how much different options might cost and how long it would take to develop, consent and construct them taking into account when network capability will be needed in order to prevent constraints.
- **Boundary transfer capability**: this included consideration of the level of boundary transfer capacity that could be provided and how quickly it could be provided.

At a strategic level, a key factor influencing all the options considered was the distance between the 'start' and 'end' points. A shorter reinforcement would cross fewer network boundaries and provide less network capability but could be delivered more quickly alleviating potential constraints in the short term. Conversely, a longer reinforcement would cross more network boundaries and provide greater network capability but would take longer to deliver increasing the risk of constraints in the short term.

Following the strategic options assessment, Hawthorn Pit substation was identified as the connection point for the English end of the Project. It meets the network capability and technical requirements considered and has the benefit of being relatively close to the coast when compared to the other options, reducing the length of onshore cable routes required. Hawthorn Pit substation also benefits from land around the existing substation on which to locate a new Substation and Converter Station.

4.5.3 Selection of Marine Route, Landfall and Terrestrial Route

Once Hawthorn Pit was chosen as the preferred 'end' point in England, parallel marine and terrestrial routeing/ siting studies were undertaken. These focused on identifying a preferred subsea cable route to be subject to seabed survey and a preferred underground cable route, Converter Station and Substation in the vicinity of Hawthorn Pit substation.

A preferred marine cable route, cable landfall, onshore cable route, converter station and substation Site were identified and were the subject of consultation with DCC, Sunderland City Council, Natural England, Historic England, and the Environment Agency. Following feedback from the statutory consultees, the preferred option was further developed and was the subject of public consultation on the proposed option in Spring 2021.

This process is discussed in detail in Section 2.8 of Chapter 2 the EAR, culminating in the selection of a marine route, landfall location and terrestrial routing corridor. Whilst these provide useful context, those elements of the Project do not form part of the Proposed Development, for which planning permission is being sought. The following section outlines the reasons for the selection of the Converter station Site.

4.5.4 Selection of the Converter station and Substation Sites

4.5.4.1 Initial Options (Sites A – D)

The optioneering for converter station sites was based on assumptions about footprint, height, and temporary construction areas based on similar NGET infrastructure. Converter station sites were sought as close as reasonably possible to the Substation Site to reduce the length of the AC cable circuits which require a wider swathe than DC cables and therefore have greater potential for environmental effects and can limit routeing options.

Four converter station locations were identified with the aim of minimising the landscape and visual effects of the permanent built elements taking into account landform and any existing features which could help screen it as well as adjoining land uses and the amenity of local inhabitants. Known ecological and historic environment mapped constraints as well as the engineering design parameters and requirements were also considered.

Figure 4-3 shows the location of four converter station Sites A, B, C and D initially identified within broad route corridor 1B. The four sites were collectively reviewed and analysed to help justify the selection of an emerging preferred option.

The review of the key constraints associated with all converter station sites and their access identified converter station Site A as the emerging preferred option, noting that further investigation was needed to confirm potential links via surface and groundwater with the SSSI to the south, as well as with regard to geotechnical risks such as depth of made ground and potential contamination. The intention was that the Converter Station and new Substation would be sited together at Site A adjacent to the existing Hawthorn Pit substation.

Site A is partially screened to the north by the existing Hawthorn Pit substation and is part of a landscape that already contains substations and overhead lines. Existing ground disturbance also limits the potential for effects on heritage assets. Although there are potential biodiversity and visual effects from building a converter station in this location there is also the potential to provide measures to mitigate these effects.

Site B was less favoured than Site A on visual grounds as it would locate development on agricultural land in the open countryside and affect the more-open views from Murton to the north and would be located in closer proximity to the round barrow heritage asset to the west. The intention was that the converter station and new substation would be sited together at Site B adjacent to the existing Hawthorn Pit substation.

Sites C and D were less favoured due to poor road access and extending urban development into open countryside. The required widening and other upgrades to the existing roads, or creation of new roads, would result in further environmental effects and would also affect users of these roads for walking, cycling and horse riding. In addition, both sites would need a much greater length of HVAC cable compared to Sites A and B also potentially increasing land take and environmental effects. A converter station at Site C would also have adverse effects on the Areas of High Landscape Value immediately to the south. Given the distance of Site C and Site D from the existing Hawthorn Pit substation the intention was that a new Substation would be sited adjacent to the existing Hawthorn Pit substation to minimise the length of the wider AC cable swathe.

Following on from completion of the initial converter station location analysis, a back check and review of the preferred converter station site was undertaken. This process is undertaken at key project milestones to ensure that the assumptions in relation to the Strategic Proposal remain valid, and/ or where potentially material changes to the Project may arise. Additional constraints identified at the preferred Site A and secondary preferred converter station at Site B, set out below, triggered the need for identification and appraisal of a new converter station site.

Discussions with DCC identified that the developer of Jade Business Park was due to submit a planning application in 2021 for development of the remainder of the Jade Business Park site, known as Phase 2. The extent and location of ecological mitigation for this development was not known at that time, but it was understood that it may affect Site A and any future proposed use of that site. In addition, a previously safeguarded route for the East Durham Link Road was identified, which crosses Site A. The Link Road, which would form a bypass to the south of Murton, has not been built (other than a section

from the A19 to provide access to the Jade Business Park development) and the East Durham Link Road is not safeguarded in the recently adopted County Durham Plan. Supporting text to Policy 23 (Allocating and Safeguarding Transport Routes and Facilities) states:

> *"A number of other schemes have been considered for inclusion in this policy however for various reasons including the limited benefits that would result, they have not been included at this time. These schemes will be reconsidered as part of future reviews of the Plan. This is particularly relevant to the proposed East Durham Link Road which would improve east-west links in the county and into Sunderland City Council's administrative area. However, the part of the route in Sunderland's area has not been included in their current local plan and therefore if it was included in our Plan, it would be impossible to complete. If Sunderland were to include it in a future version of their local plan, then this position would be revisited."*

In discussions with the Applicant, DCC indicated that plans to implement the East Durham Link Road around Murton may still come forward in the next decade. DCC Planning Policy Team confirmed that there is no safeguarded route alignment that would need to be considered from a planning policy perspective. Notwithstanding, NGET gave the supporting statement to Plan Policy 23 due weight as a material consideration in the potential siting of a converter station on Site A, because it could sterilise the East Durham Link Road alignment south of Murton and prejudice its development or the development of the Proposed Development if the Link Road came forward in the near future. On this basis NGET discounted Site A for a converter station site and considered alternative sites.

Subsequently, Site B was preferred, which performed better overall than Site C and Site D. In considering Site B in more detail the Applicant was approached by Aura Power which was in the advanced stages of developing a solar farm scheme on the agricultural land to the north of the existing Hawthorn Pit substation. The Applicant learned that Aura Power had a three-year option agreement with the landowner which included Site B. On that basis the Applicant considered that Site B was not available as a converter station option to meet the project timescales.

4.5.4.2 Identification of a New Converter Station Location (Site E)

As a consequence of the potential constraints on Site A, and lack of availability of Site B, the Applicant identified a new converter station site on agricultural land south of Jade Business Park and north of Coop House Wood, referred to as Site E (see **Figure 4-3**Error! Reference source not found.). Converter station Site E had not previously been considered because it is located approximately 1 km beyond Hawthorn Pit substation and would require cabling past the Substation to the converter station with DC cables and then cabling back to the Substation with AC cables, which constrains cable routeing options. The strategic options were re-considered in light of the requirement for a small amount of additional onshore cabling, and Hawthorn Pit remained the preferred option given the extent of additional onshore cabling.

Site E was big enough to accommodate the Converter Station but not the Substation as well. Site A could accommodate a substation without prejudicing the alignment of the East Durham Link Road. A decision was therefore taken to locate the Converter Station on Site E and the Substation on Site A.

Converter station Site E was then reassessed against converter station Sites A to D. From an environmental perspective, Site E was preferred to Site A for the physical environment, landscape and visual and socio-economic constraints. There was not expected to be any Made Ground or contaminated land present at Site E which reduced potential risk of contamination or need for off-site disposal. The majority of the converter station at Site E will be screened from South Hetton by the mature woodland of Coop House Wood. Access to Site E can be taken directly from the Jade Business Park access road (Spring Road); and there will be no loss of public amenity space.

Site E was slightly preferred over Site A with respect to biodiversity, given its greater distance from Hesledon Moor West SSSI. Siting the converter station on the agricultural land at Site E would be preferred rather than the draft priority habitat at Site A, which is more likely to support a diverse terrestrial invertebrate community, reptiles and amphibians. The screening provided by Coop House Wood at Site E was preferred to the open views from Murton to the north of Site B. Best practice during construction would include a buffer of 10-15 m from the boundary of Coop House Wood in order to ensure no direct impact on the trees and/ or roots during construction. Development of a converter station on Site E and a substation on Site A maintains a future route alignment for the East Durham Link Road to be extended and allows a Murton bypass to be delivered.

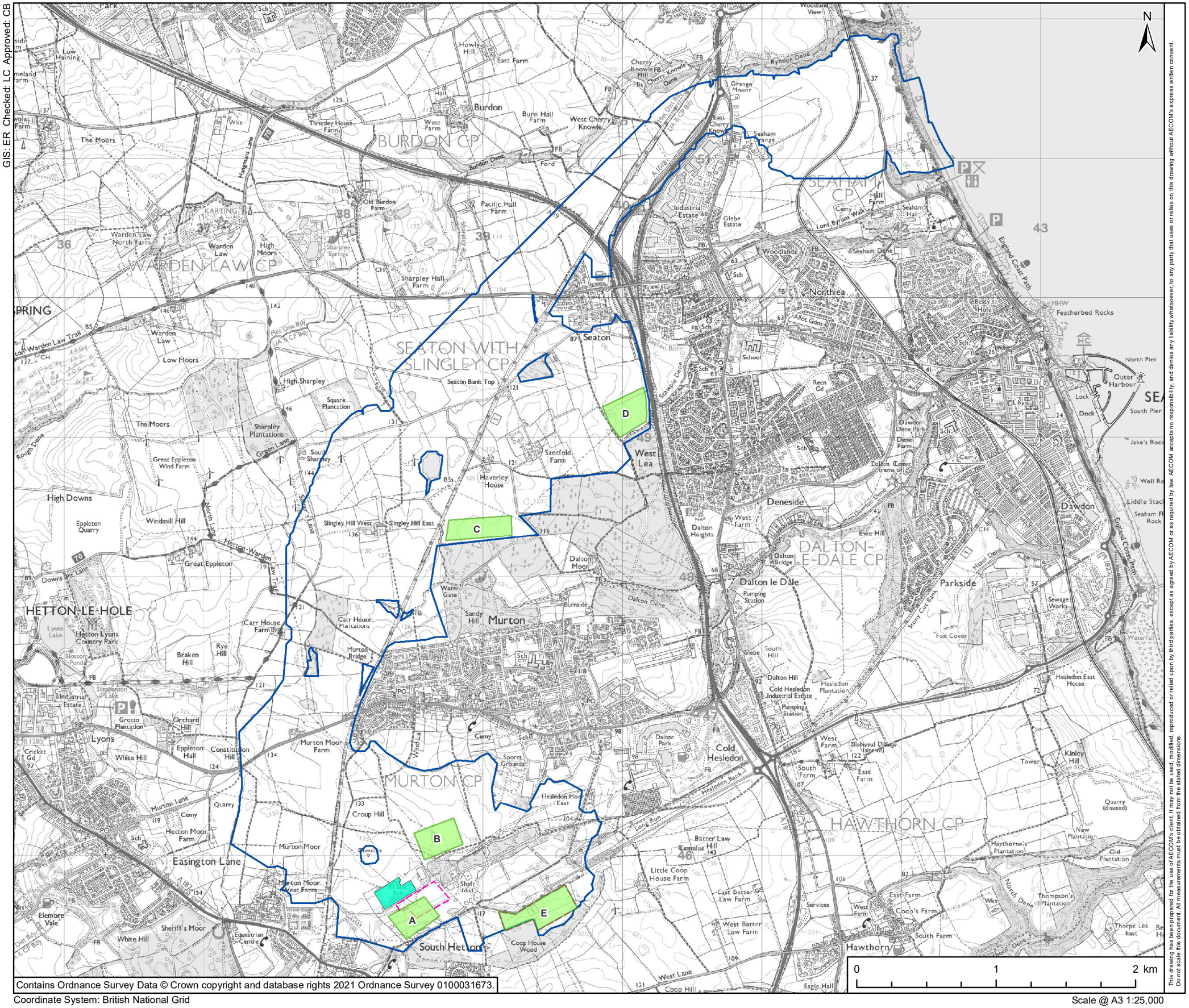
In summary, Site E:

- Enables converter station access directly off the Jade roundabout which minimises the amount of land take for the permanent access road;
- Is set down in the landscape and away from the settlements of South Hetton and Murton, reducing its potential visual effects;
- Is afforded landscape screening to the south and east by the mature woodland of Coop House Wood;
- Is sited on the opposite side of the road from the allocated Jade Business Park site and will be seen in the context of the Jade Business Park development on the wider site; and
- Does not prejudice any future development of the East Durham Link Road.

Site E is preferred over the previously 'parked' converter station Sites A, B, C, and D for the reasons set out above.

DCC, Natural England, Historic England and Sustrans were consulted as part of the back check and review process that identified Site E as the preferred converter station site and Site A as the preferred substation site and agreed with the reasons for the selection of these sites.

GIS: ER Checked: LC Approved: CB



Coordinate System: British National Grid

Scale @ A3 1:25,000

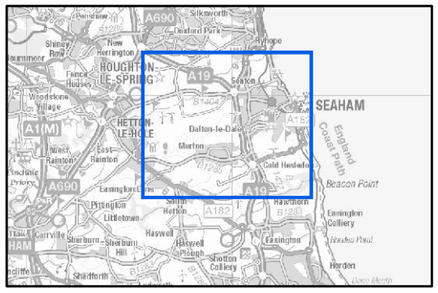
nationalgrid

PROJECT

Scotland England Green Link 1

KEY

- Onshore Area of Search
- Potential Converter Station Location (Wood, 2020)
- Hawthorn Pit Substation
- Indicative Substation and Converter Station Boundary



TITLE

Figure 4-3
Convertor Station Sites A to E

REFERENCE

SEGL1_T_ES_4-3_v2_20220323

SHEET NUMBER

1 of 1

DATE

23/03/2022

5. Planning Policy Summary

5.1 Introduction

The Planning Application falls to be determined by the Authority in accordance with Section 38(6) of the Planning and Compulsory Purchase Act 2004. DCC is required to determine the planning application in accordance with the Development Plan unless material considerations indicate otherwise.

This section sets out a summary of the planning policy context relevant to the Proposed Development (and the SEGL1 Project, where applicable), including the Development Plan, plus relevant policies of the emerging Development Plan and other national and local polices that are likely to be material considerations in the planning decision.

5.2 National Planning Policy

5.2.1 Energy National Policy Statements (NPS)

The Energy National Policy Statements provide the primary basis for decisions taken on Development Consent Order (DCO) applications for Energy Nationally Significant Infrastructure Projects (NSIP). Whilst the Proposed Development and the SEGL1 Project does not comprise an NSIP, the relevant Energy National Policy Statements can be a material consideration in deciding the application for planning permission. Paragraph 5 of the NPPF states that:

> *"National policy statements form part of the overall framework of national planning policy and may be a material consideration in preparing plans and making decisions on planning applications."*

Section 1.2.1 of NPS EN-1 and EN-5 makes it clear that this NPS is likely to be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended). This is an important material consideration where the development comprises 2GW of transmission capacity.

5.2.1.1 Overarching National Policy Statement for Energy (EN-1)

The overarching National Policy Statement (NPS) for Energy (NPS EN-1) is part of a suite of NPSs issued by the Secretary of State for Energy and Climate Change. It sets out the Government's policy for delivery of major energy infrastructure. Paragraph 2.1.2 recognises that:

> *"energy is vital to economic prosperity and social well-being and so it is important to ensure that the UK has secure and affordable energy. Producing the energy the UK requires and getting it to where it is needed necessitates a significant amount of infrastructure, both large and small scale."*

Paragraph 2.20 of EN-1 notes that it is critical that the UK continues to have secure and reliable supplies of electricity as we transition to a low carbon economy and notes that to manage the risks to achieving security of supply, we need sufficient electricity capacity to meet demand at all times and that electricity demand must be simultaneously and continuously met by its supply.

Paragraph 3.7.2 of EN-1 states that both demand and supply of electricity will increase in the coming decades and that existing transmission networks will have to evolve and adapt to handle increases in demand.

Paragraph 3.7.4 states that new electricity infrastructure projects will add to the reliability of the national energy supply provide crucial national benefits which are shared by all users of the system. Paragraph 3.7.10 develops this point noting that there is an 'urgent need for new electricity transmission and distribution infrastructure to be provided'.

5.2.1.2 National Policy Statement for Electricity Networks Infrastructure (EN-5)

NPS EN-5 taken together with the NPS EN-1, provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure under the Planning

Act 2008 and is a key consideration for energy infrastructure projects consented under the Town and Country Planning Act 1990. Section 2.2 discusses site selection, with paragraph 2.2.2 stating:

> *"The general location of electricity network projects is often determined by the location, or anticipated location, of a particular generating station and the existing network infrastructure taking electricity to centres of energy use. This gives a locationally specific beginning and end to a line. On other occasions the requirement for a line may not be directly associated with a specific power station but rather the result of the need for more strategic reinforcement of the network. In neither circumstance is it necessarily the case that the connection between the beginning and end points should be via the most direct route (indeed this may be practically impossible), as the applicant will need to take a number of factors, including engineering and environmental aspects, into account."*

Whilst NPS EN-5 sets out its own policies, it makes regular reference to the policies in EN-1 and therefore they should be read in conjunction.

5.2.2 Emerging National Planning Policy

5.2.2.1 Draft National Policy Statements for Energy

The Government is currently reviewing and updating the Energy NPSs. It is doing this to reflect its policies and strategic approach for the energy system that is set out in the Energy White Paper (December 2020), and to ensure that the planning policy framework enables the delivery of the infrastructure required for the country's transition to net zero carbon emissions. As part of the Energy NPS review process, the Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. These include Draft Overarching National Policy Statement for Energy (EN-1) (draft NPS EN-1) and Draft National Policy Statement for Electricity Networks Infrastructure (EN-5) (draft NPS EN-5).

The Revised (Draft) National Policy Statement for Energy were presented to a House of Commons Committee on the 22nd of February 2022. The report has been presented to the Government who have two months to respond.

Section 1.6.1 of Draft NPS EN-1 makes it clear that any emerging draft NPSs are capable of being important and relevant considerations in the decision-making process. Section 1.2.1 of Draft NPS EN-1 and EN-5 makes it clear that this NPS is likely to be a material consideration in decision making on applications that fall under the Town and Country Planning Act 1990 (as amended). This is an important material consideration where the development comprises 2GW of transmission capacity.

5.2.2.2 Draft Overarching National Policy Statement for Energy (EN-1)

In its revised overarching policy statement EN-1, the government acknowledged that much of its plans to decarbonise the UK's economy involves electrification, such as in the areas of transport, heat and industry, and that this in itself would likely result in more than half of the UK's energy demand being met by electricity by 2050, up from just 17% in 2019.

The draft policy also sets out the need to ensure that there is security of energy supply in the UK and that the cost of energy is affordable for end-users. It states the government considers that in order to meet its objectives for the energy system, the need for new large-scale energy infrastructure is urgent.

The draft EN-1 also acknowledges that different types of electricity infrastructure will be needed and includes an explanation of the need for new generation, network, storage and interconnection infrastructure, alongside energy efficiency and demand-side response measures.

Paragraphs 3.3.46 to 3.3.58 of draft NPS EN-1 set out the need for new and enhanced electricity network infrastructure in particular. At Paragraph 3.3.46, draft NPS EN-1 states that:

> *"electricity networks are needed to connect the output of other types of electricity infrastructure with consumers and with each other. Therefore, as new generation, storage and interconnection facilities are built, we will also need electricity networks that connect these sources of electricity with each other, and with centres of consumer demand."*

Paragraph 3.3.47 sets out that new electricity network infrastructure will be needed not only to connect to new sources of electricity generation, but to protect against the risk of large-scale supply interruptions

as the electricity system grows in scale, dispersion, variety, and complexity. In particular it identifies that new high voltage electricity lines (which include underground cables) are needed, concluding that:

> *"While existing transmission and distribution networks must adapt and evolve to cope with this reality, development of new transmission lines of 132kV and above will be necessary to preserve and guarantee the robust and reliable operation of the whole electricity system."*

Paragraph 3.3.48 goes on to state that reinforcements are required over the next decade specifically to enable energy generated from wind in Scotland to be transferred to where it is needed:

> *"…National Grid ESO forecasts that over the next decade the onshore transmission network will require: a doubling of north-south power transfer capacity due to increased wind generation in Scotland; substantial reinforcement in the Midlands to accommodate increased power flows from Scotland and the North of England; substantial reinforcement in London and the South of England to allow for Europe-bound export of excess wind generation from Scotland and the North of England…"*

5.2.2.3 Draft National Policy Statement for Electricity Networks Infrastructure (EN-5)

Draft NPS EN-5 reflects the importance of building electricity network infrastructure that not only connects new generation with centres of demand, but also guarantees system robustness and security of supply even as the energy system grows increasingly complex. It has been revised from the 2011 NPS EN-5 to reflect the current policy and regulatory landscape. Draft NPS EN-5 states at paragraph 2.2.1 that:

> *"…new electricity networks infrastructure is not substantially within the control of the Applicant but is rather a function of i) the location of new generating stations or other infrastructure requiring connection to the network, and/or ii) system capacity and resilience requirements determined by the Electricity System Operator. These twin constraints, coupled with the government's legislative commitment to Net Zero by 2050 and strategic commitment to new interconnectors with the European mainland and 40GW of offshore wind generation, will inevitably mean significant new electricity networks infrastructure construction, including in areas hosting comparatively little build-out to date (for instance, the North Sea coast of England)."*

Paragraph 2.2.2 notes that applicants retain substantial control over routing and site selection within the identified macro-level location or development zone. Moreover, the locational constraints identified above do not exempt applicants from their duty to consider and balance the site-selection considerations set out below, much less the policies on good design and impact mitigation.

Paragraph 2.8.1 states that:

> *"When planning and evaluating the proposed development's contribution to environmental and biodiversity net gain, it will be important – for both the Applicant and the Secretary of State – to supplement the generic guidance set out in EN-1 (Section 4.5) with recognition that the linear nature of electricity networks infrastructure allows excellent opportunities to: i) reconnect important habitats via green corridors, biodiversity stepping zones, and reestablishment of appropriate hedgerows; and/or ii) connect people to the environment, for instance via footpaths and cycleways constructed in tandem with biodiversity enhancements."*

With regard to landscape impacts draft EN-5 states at paragraphs 2.11.3 – 2.11.6:

> *"2.11.3 New substations, sealing end compounds, and other above-ground installations that serve as connection, switching, and voltage transformation points on the electricity network may also give rise to adverse landscape and visual impacts. Nonetheless, government does not believe that the development of these installations is incompatible in principle with developers' statutory duty under Schedule 9 of the Electricity Act 1989.*
>
> *2.11.4 Cumulative adverse landscape and visual impacts may arise where new overhead lines are required along with other related developments such as substations, wind farms, and/or other new sources of generation.*

2.11.5 Landscape and visual benefits may arise through the reconfiguration, rationalisation, or undergrounding of existing electricity network infrastructure.

2.11.6 Though mitigation of the landscape and visual impacts arising from overhead lines and their associated infrastructure is usually possible, it may not always be so, and the impossibility of full mitigation in these cases does not countermand the need for the infrastructure."

5.2.3 National Planning Policy Framework (Updated 2021)

The National Planning Policy Framework (NPPF) was revised on 20th July 2021 and sets out the national policies for England that guide plan-making and decision taking at local level. At its heart is a *"presumption in favour of sustainable development"* (Paragraph 10) that is necessary to allow sustainable development to be pursued in a positive way. Paragraph 11 explains that…:

"…For decision-taking this means:

c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

In addition, Paragraph 12 sets out that planning authorities also may take decisions that depart from an up-to-date Development Plan if material considerations indicate that the plan should not be followed. Paragraph 38 expands on this, stating that that *"planning authorities should approach decisions on proposed development in a positive and creative way"* and *"should seek to approve applications for sustainable development where possible"*.

Paragraph 20(b) explains that strategic policies of Development Plans should set out an overall strategy that makes sufficient provision for infrastructure, including energy infrastructure.

Sections 5 to 17 of the NPPF set out how planning policies and decisions should contribute to achieving particular thematic objectives.

Section 9 of the NPPF concerns transport. Paragraph 111 sets out that *"development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."*

Paragraph 130 sets out that planning decisions should ensure that, amongst other things, developments:

- function well over the long term;
- make use of good architecture, layout and effective landscaping in order to be visually attractive; and
- are sympathetic to local character, landscape and history, whilst not preventing or discouraging appropriate innovation or change.

'Meeting the challenge of climate change, flooding and coastal change' is the theme of Section 14. This sets out that "the planning system should support the transition to a low carbon future in a changing climate", and "support renewable and low carbon energy and associated infrastructure" (Paragraph 152). Paragraphs 159, 167 and 169 seek to developments remain safe from flooding for their lifetime and do not increase the risk of flooding elsewhere.

Section 15 considers the theme of 'conserving and enhancing the natural environment'. This sets out at Paragraph 174 that planning decisions should, amongst other things:

- protect and enhance valued landscapes, sites of biodiversity value and soils in a manner commensurate with their statutory status;
- recognise the value of the countryside, including best and most versatile agricultural land, trees and woodland;
- minimise impacts on biodiversity and provide net gains, including by establishing ecological networks; and
- prevent new development from contributing to unacceptable levels of soil, air, water or noise pollution.

Paragraph 175 explains that planning should distinguish between the hierarchy of international, national and locally designated sites, and Paragraphs 179 to 182 address 'habitats and biodiversity'. Paragraph 179 sets out that planning authorities should apply the below principles when determining planning applications.

- Planning permission should be refused if significant harm to biodiversity cannot be avoided, adequately mitigated, or (as a last resort) compensated for;
- Development that would have an adverse effect on a Site of Special Scientific Interest (SSSI) should only normally be permitted if the benefits of the development in the location outweigh its impact on the features of the site that make it of special scientific interest; and
- Only approve development that would result in the loss or deterioration of irreplaceable habitats such as ancient woodland or veteran trees is there are wholly exceptional reasons and a suitable compensation strategy.

Paragraph 185 sets out that planning policies and decisions should ensure that new development is appropriate for its location taking account of likely effects on health, living conditions and the natural environment, including (at sub-paragraph (a)) by mitigating potential adverse impacts from noise from new development, and avoid noise giving rise to significant adverse effects on health and quality of life.

Section 16 of the NPPF concerns the historic environment. Paragraph 202 sets out that less than substantial harm to heritage assets should be weighed against the public benefits of a proposed development.

5.3 Local Planning Policy

5.3.1 The Local Development Plan

The Development Plan for the Site comprises the following documents:

- County Durham Plan, 2020-2035 (adopted 2020);
- Saved Policies of the County Durham Minerals Local Plan (adopted 2000); and
- Saved Policies of the County Durham Waste Local Plan (adopted 2005).

The Site is located within Murton Parish, which does not have an adopted Neighbourhood Plan.

5.3.1.1 County Durham Plan 2020-2035 (2020)

The County Durham Plan (the 'CDP') was adopted on 21 October 2020 and superseded the former District Local Plans. The CDP comprises 21 Objectives and 61 Policies to provide the framework for the county up to 2035 to build a successful and sustainable future in which all of residents have the opportunity to access good housing and employment in an environment which delivers a healthy and fulfilled lifestyle.

Objectives 4, 8, 9, 16, and 17 are considered most relevant to the consideration of the Proposed Development and are reflected throughout the CDP Policies. These objectives comprise:

- **Objective 4: Infrastructure** – promotes the provision of the necessary infrastructure to support development and the economic, social and environmental ambitions of the county.

- **Objective 8: Effective Use of Land** – seeks to make the most effective use of land and existing infrastructure and promotes the reuse of previously developed land where possible.
- **Objective 9: Natural Environment** – seeks to protect and enhance locally, nationally and internationally important natural environment, deliver net gains and protect connectivity.
- **Objective 16: Adaption to Climate Change** – promotes adaption to the impacts of climate change, including through sustainable drainage systems.
- **Objective 17: Low Carbon** – seeks to reduce the causes of climate change and support the transition to a low carbon economy by encouraging and enabling the use of low and zero carbon technologies, supporting the development of appropriate renewable energy sources.

The main policies of the CDP that are relevant to the Proposed Development are described in the following paragraphs.

Policy 1 (Quantity of New Development) sets out that 300 ha of employment land for office, industrial and warehousing purposes, along with 24,852 new homes, is required to meet the requirements and aspiration of residents of County Durham to 2035.

Policy 2 (Employment Land) allocates land for the development or extension of employment sites for uses comprising B1 (Business), B2 (General Industrial) and B8 (Storage and Distribution). This includes 18.85 Ha of land referred to as Jade Park which is adjacent to the converter station and substation Sites. The policy sets out that non-employment development on employment sites may be permitted where active marketing for employment use has been shown to have been unsuccessful, or where the proposal would not compromise the main use of the site for B class uses.

Policy 6 (Development on Unallocated Sites) sets out criteria for the consideration of development proposals that fall on sites that are within built-up areas, or outside the built-up area but well-related to a settlement. These include:

a) compatibility with uses of adjacent land;

b) impact on the coalescence of settlements;

c) loss of open land with recreational, ecological, heritage or particular character value where this cannot be adequately mitigated or compensated;

d) appropriateness of scale, design and layout to the character, function, form, and setting of a settlement;

e) impact on highway capacity and safety;

f) access to sustainable forms of transport;

g) loss of a settlement's or neighbourhood's facilities;

h) minimises vulnerability and provides resilience to the impacts of climate change; and

i) makes use of previously developed land, where possible.

Policy 10 (Development in the Countryside) sets out that Development in the countryside will not be permitted unless allowed for by specific policies in the CDP, relevant policies within a Neighbourhood Plan or where one or more of the exceptions referred to can be met. This include criterion 'e' Infrastructure Development, including "*essential infrastructure where the need can be demonstrated for that location"*.

Policy 14 (Best and Most Versatile Agricultural Land and Soil Resources) seeks to ensure that the best and most versatile agricultural land is safeguarded unless the benefits of an alternative use of the site can be proven to outweigh its loss. It sets out that where the land is previously undeveloped, soils will need to be managed and conserved in a viable condition and used sustainably in accordance with best practices.

Policy 21 (Delivering Sustainable Transport) requires that *"the transport implications of development must be addressed as part of any planning application, where relevant this could include through Transport Assessments, Transport Statements and Travel Plans"*, with the overarching requirement for

development to deliver sustainable transport. The policy sets out a number of tests to ensure all forms of transport are considered throughout the development process.

Policy 26 (Green Infrastructure) seeks to preserve the County's Green Infrastructure (GI) network and to achieve this, development will be expected to maintain, protect and improve any assets. The policy makes it clear that development proposals that result in harm to GI will not be permitted unless the benefits of the development outweigh any loss. Mitigation should be considered where harm is identified. Development proposals should look to deliver new GI on site, and where it is being proposed offsite, this should have regard to the Strategic GI Framework. Public Rights of Way (PRoW) must be maintained or improved, and where a development threatens a PRoW it will not be permitted unless unless equivalent alternative provision of a suitable standard is made.

Policy 27 (Utilities, Telecommunications and Other Broadcast Infrastructure) highlights that new or extensions to existing energy generation will be permitted where:

- the scheme would not cause significant adverse impacts or where its benefits outweigh any adverse negative effects;
- it is located at an existing transmission site, where it is technically and operationally feasible and does not result in visual clutter; and
- where applicable, it does not cause significant or irreparable interference with other electrical equipment, air traffic services or other instrumentation operated in the national interest.

Policy 28 (Safeguarded Areas) development within the relevant safeguarding areas will need to consult with the relevant authority. The Site is within the High Moorsely Meteorological Office radar and development will have to demonstrate there will be no unacceptable adverse impact upon the operation of the site.

Policy 31 (Amenity and Pollution) seeks to ensure that development does not create, or result in adverse health, living or working conditions or the natural environment. Developments that cause visual intrusion, visual dominance or loss of light, noise or privacy will not be permitted unless satisfactory mitigation measures can be demonstrated. Development must not cause unacceptable levels of air quality and should minimise light pollution. Finally, development that is likely to cause pollution will not be permitted near to sensitive uses unless the impacts can be adequately mitigated.

Policy 32 (Despoiled, Degraded, Derelict, Contaminated and Unstable Land) requires evidence to demonstrate that the appropriate mitigation measures are taken with respect to ground conditions. It sets out that, where required, a risk assessment will need to be carried out by suitably qualified persons, and it must be proven that the site is suitable for the proposed use and will not result in an adverse impact towards the environment, human health and the amenity of local communities.

Policy 33 (Renewable and Low Carbon Energy) states that renewable and low carbon development in appropriate locations will be supported in principle. Significant weight will be given to the achievement of wider social, environmental and economic benefits when development proposal is being determined. Ancillary and incidental infrastructure should be presented through the development application process.

Policy 35 (Water Management) requires consideration of flood risk and surface water management. Proposals will be required to complete a Flood Risk Assessment (FRA), providing that the *"development, including the access, will be safe, without increasing or exacerbating flood risk elsewhere, any residual risk can be safely managed and where possible will reduce flood risk overall"*. For major development, surface water flood risk and management must be an intrinsic part of the overall development and the policy sets out a number of tests which will need to be factored into the scheme. Water quality will need to be considered and shown not to be adversely impacted.

Policy 39 (Landscape) states that development proposals will be permitted where they would not cause unacceptable harm to the character, quality or distinctiveness of the landscape, or to important features or views; and that new development should incorporate appropriate measures to mitigate adverse landscape and visual effects.

Policy 40 (Trees, Woodlands and Hedges) identifies the measures that should be taken with respect to trees, woodlands and hedges. It sets out that development should minimise its impact on such features and should set out appropriate mitigation.

Policy 41 (Biodiversity and Geodiversity) requires development to adequately protect biodiversity and geodiversity, and where harm is unavoidable, set out suitable mitigation. New development is expected to minimise impacts and provide biodiversity net gain. The loss or deterioration of irreplaceable habitat(s) will not be permitted unless there are wholly exceptional reasons, and a suitable compensation strategy exists.

Policy 43 (Protected Species and Nationally and Locally Protected Sites) sets out that a development that would result in an adverse impact on a SSSI, National Nature Reserve, Local Nature Reserve or Local Geology or Wildlife Site will only be permitted where the benefits of development in that location clearly outweigh the impacts on the interest features on the site and any wider impacts on the network of sites. Should an adverse effect on a designated site result from a development, this should be mitigated, or as a last resort, compensated for. The policy also seeks to protect protected species and their habitats.

Policy 44 (Historic Environment) states that “development will be expected to sustain the significance of designated and non-designated heritage assets, including any contribution made by their setting”. The policy identifies the relevant tests and requirements depending on the type and state of the heritage assets.

Policy 47 (Sustainable Minerals and Waste Resource Management) promotes the efficient use and management of waste and minerals, including management of waste on site where possible and in accordance with the wate hierarchy.

Policy 56 (Safeguarding Mineral Resources) seeks to protect Mineral Safeguarding Areas from sterilisation by non-mineral development unless the reserve is not economically viable or there is an overriding need for the non-minerals development which outweighs the need to safeguard the mineral.

5.3.1.2 Saved Policies from the Minerals Local Plan 2000

The County Durham Minerals Local Plan was adopted in 2000 and covered until 2006. The majority of the policies of the ‘saved’ County Durham Minerals Local Plan policies have now been replaced by the policies of the County Durham Plan which was adopted by the council in October 2020. However, 15 remain ‘saved’ and still form part of the development plan for County Durham. These remaining saved Waste Local Plan policies are set out in Appendix B of the CDP. These generally concern mineral development, and therefore are not directly relevant to the Proposed Development.

A review of the CDP Proposals Map has identified a Mineral Safeguarding Area for glacial sand and gravel partially within the footprint of the proposed Substation.

The entire Site and wider surrounds are identified as being within the ‘Coalfield Development Low Risk Area’. A small area of ‘Coalfield Development High Risk Area’ has been identified approximately 200 m east of the location to the proposed Substation.

5.3.1.3 Saved Policies from the Waste Local Plan 2005

The County Durham Waste Local Plan was adopted in April 2005, and it covered until 2016. Most of the policies of the ‘saved’ Waste Local Plan have now been replaced by the County Durham Plan which was adopted in October 2020. However, 13 remain 'saved' and still form part of the development plan for County Durham. These remaining saved Waste Local Plan policies are set out in Appendix B of the CDP. These generally concern waste development, and therefore are not directly relevant to the Proposed Development.

A review of the CDP Proposals Map does not identify the Proposed Development as being located within a Waste Safeguarded Site or a Waste Safeguarding Zone.

5.3.2 The Emerging Development Plan

5.3.2.1 County Durham Minerals and Waste Policies and Allocation Document

DCC is currently preparing a Minerals and Waste Policies and Allocation Document (M&WDPD). Once completed and adopted this will replace the remaining saved policies of the Minerals Local Plan 2000 and Waste Local Plan 2005. DCC consulted on the scope of the emerging M&WDPD in February 2021 under Regulation 18 of the Planning and Compulsory Purchase Act 2004. The Local Development Scheme[4] sets out the following timetable:

- Regulation 19 consultation - Nov/Dec 2021;
- Examination in Public - Jul 2022; and
- Adoption - May 2023.

At the time of writing this PS, DCC notes that it is considering the responses to the Regulation 18 scoping consultation. The Draft M&WDPD is not yet available for review.

4 https://www.durham.gov.uk/media/22975/County-Durham-Local-Development-Scheme-2020/pdf/CountyDurhamLocalDevelopmentScheme.pdf?m=637812500694070000#:~:text=The%20Local%20Development%20Scheme%20(LDS,a%20particular%20area%20or%20issue.

6. Planning Appraisal

6.1 Introduction

Following the review of the Development Plan and other main planning policy material considerations, the following main policy themes have been identified.

- Theme 1: The urgent need for electricity network reinforcement;
- Theme 2: Site Selection – Development in the Countryside;
- Theme 3: Agricultural Land and Soils;
- Theme 4: Design;
- Theme 5: Landscape and Visual Impact;
- Theme 6: Ecology and Nature Conservation;
- Theme 7: Flood Risk and Surface Water;
- Theme 8: Socio-economics, Recreation and Tourism;
- Theme 9: Traffic and Transport;
- Theme 10: Noise, Vibration and Air Quality;
- Theme 11: Amenity;
- Theme 12: Archaeology and Cultural Heritage;
- Theme 13: Sustainable Waste and Resource Management;
- Theme 14: Geology and Hydrogeology;
- Theme 15: Mineral Safeguarding; and
- Theme 16: Telecommunications.

6.2 Theme 1: The urgent need for electricity network reinforcement

Enhancement of the electricity network in order to facilitate the transition to a low carbon is supported in both national and local policy and objectives. This includes CDP Policy 33 which refers to low carbon energy developments and associated developments including transmission lines and other ancillary buildings.

Objective 17 of the CDP also seeks to reduce the causes of climate change including by encouraging and enabling the use of low and zero carbon technologies, supporting the development of appropriate renewable energy sources. Objective 4 of the CDP supports the provision of infrastructure that is necessary to deliver environmental ambitions. The purpose of the Proposed Development, as part of the overall Project directly aligns with these objectives. As infrastructure that is needed to facilitate the transmission of electricity from renewable sources in Scotland to centres of demand in England, it directly supports and facilitates renewable energy generation in locations that are geographically suitable.

National policy including the NPS EN-1, draft NPS EN-1, NPS EN-5, draft NPS EN-5 and the NPPF, which can be material considerations in the determination of this planning application, set out the national context as to why enhancements to the electricity generation and transmission system are needed, and the planning system's response to it.

Paragraph 152 of the NPPF articulates that the planning system should support the transition to a low carbon future, including by supporting renewable and low carbon energy and associated infrastructure. Paragraphs 3.7.10 of NPS EN-1 and 3.1.2 of draft NPS EN-1 set out that there is an urgent need for new electricity transmission infrastructure, and that substantial weight should be given to that need.

As set out in Section 4 of this PS the Proposed Development and the SEGL1 Project represents an essential enhancement to the NETS and is necessary to facilitate power flows between Scotland and England and through the North of England as part of a reliable, secure and low carbon energy system. This position has been reinforced by the recent House of Commons Committee report on the revised (draft) NPS for Energy, which states at paragraph 74[5]:

> *"Overall, we recommend that the revised (draft) NPS needs to place greater emphasis on the impact of climate change and the speed at which new* infrastructure will need to be built to meet the Government's net zero target. It must clearly articulate how the decision-making process will weigh the urgent need for developments which contribute to climate change mitigation, against other relevant considerations."

The Proposed Development, as part of the overall SEGL1 Project directly responds to the existing and emerging Energy NPS's, delivering on the policy requirement to facilitate the transmission of a significant amount of renewable energy from where it is generated to where it is needed, in the context of an increasing demand for electricity. The national energy and planning policy and guidance that is summarised in Sections 4.2 and 5.2 of this PS sets out that the delivery for improvements to the energy system to meet the Government's objectives and commitments will result in wide reaching socioeconomic benefits, including reduction in the reliance on fossil fuels which will reduce carbon emissions and to deliver secure and affordable energy. In accordance with national policy, the contribution of the Proposed Development to meeting the Government's objectives and commitments for the energy system, including net zero, should be given very substantial weight in determination of this planning application.

6.3 Theme 2: Site Selection – Development in the Countryside

The application Site is located outside of the settlement boundary adjacent to the existing Hawthorn Pit substation. The Site has not been allocated for any specific future use in the CDP.

Policy 1 of the CDP identifies the quantum of land required:

> *"In order to meet the needs and aspirations of present and future residents of County Durham and to deliver a thriving economy, the following levels of development are proposed up to 2035:*
>
> *a. 300 hectares of strategic a*nd general employment land for office, industrial and warehousing purposes"

Policy 2 of the CDP provides a comprehensive list of employment land allocations, including 18.85ha at Jade Business Park, immediately adjacent to the Site.

Policy 6 of the CDP provides a range of tests (a-j) by which development proposals on unallocated sites, stating that:

> *"The development of sites which are not allocated in the Plan or in a Neighbourhood Plan which are either (i) within the built-up area; or (ii) outside the bu*ilt-up area (except where a settlement boundary has been defined in a neighbourhood plan) but well-related to a settlement, will be permitted provided the proposal accords with all relevant development plan policies".

Para 4.109 of the CDP states that policy 6 *"recognises that in addition to the development of specifically allocated sites, there will be situations where future opportunities arise for additional new development over and above that identified in the development plan for the area."*

Policy 10 of the CDP focuses specifically on development in the countryside, and states that:

> *"Development in the countryside will not be permitted unless allowed for by specific policies in the Plan, relevant policies within an adopted neighbourhood plan relating to*

[5] https://publications.parliament.uk/pa/cm5802/cmselect/cmbeis/1151/report.html#heading-8

> the application site or where the proposal relates to one or more of the following exceptions."

The 'exceptions' include 'Infrastructure Development', and where the development is necessary to support:

> "e. essential infrastructure where the need can be demonstrated for that location."

The scale of the Proposed Development, and its specific locational requirements limit where it could be efficiently constructed, as set out in detail in Chapter 2 of the EAR. This includes the need to locate the Proposed Development in close proximity to the identified point of connection to the NETS, which is at Hawthorn Pit substation. This approach is supported by draft NPS EN-5 which notes that new electricity networks infrastructure is not substantially within the control of the Applicant but is rather a function of other infrastructure requiring connection to the network, system capacity and resilience requirements of the network.

Finding a suitable location is further limited due to the Use Class of the Proposed Development, *Sui Generis*, which is not specifically allocated for in the CDP – Jade Park for example seeks traditional business / industrial uses such as Classes E(g), B2 and B8 which typically provide a greater amount of employment. Given the nature of the use and the limited operational employment requirements of the Proposed Development, siting it within Jade Business Park for example could result in conflict with policies 1 and 2, potentially undermining the aspirations of the CDP in terms employment uses and job generation. Siting out of, but adjacent to, an employment location provides industrial continuity within the landscape, removing perceived 'isolation'. Therefore, there is no conflict with Policies 1 or 2 of the CDP.

The range of tests set out in Policy 6 have been considered in turn (below). The location of the Proposed Development is in accordance with all relevant development plan policies:

a) The use would be compatible with adjacent allocations, and although it would result in the loss of agricultural land, the co-locational benefits reduce the overall spatial impacts of the area.

b) The Proposed Development can be read as an extension to the existing electricity transmission and distribution infrastructure, and industrial/commercial uses, maintaining separation from Murton and South Hetton.

c) The encroachment 'into the countryside' is mitigated through embedded measures and is policy compliant through the exception to policy 10 given the need for the development in this location, with specific public realm enhancements through the provision of a greater amount of replacement public open space than that lost to the proposed development, enhancement of the public rights of way network, and enhancement of the amount and quality of landscaping and biodiversity of the Site.

d) As above, the detailed design of the Proposed Development will take account of other adjacent developments and seek to be in keeping with the character and appearance of the existing industrial/ commercial and electricity infrastructure. Sections 8.11.3.1 and 8.11.4.1 of the EAR conclude that the Proposed Development would not have a significant effect on the character of the area, resulting in no more than a minor or negligible impact on landscape character. The scale of the Proposed Development, including the maximum height of the Converter station, has been minimised whilst retaining sufficient flexibility to ensure the Proposed Development will be deliverable. This includes the proposed floor level of the Converter station being 4 m below the level of the Jade roundabout to minimise the height above existing ground level and keep the roof level at a comparable height to the adjacent business park. Following consultation responses, the Applicant has been able to reduce the converter station height by 4 m with it now being up to 26 m in height. When combined with the balanced cut and fill for the converter station platform the northern end of the converter station site will be 4 m below the level of the Jade roundabout. This will have the effect of reducing the overall height of the converter station building to being up to 22 m high when viewed from the north by users of Jade Business Park and by users of the formal and informal paths and routes across the wider site. By way of context Jade Phase 2 is proposed to be up to 20 m high.

e) Operational vehicle movements will be limited, with permanent access to the development to the Converter Station and Substation being taken from existing roads used for utilities, industrial/

commercial purposes and therefore no impact on residential movements or amenity is anticipated, as set out in the EAR.

f) As above, limited operational access is required and given the nature of visits, public transport is unlikely to be conducive to efficient operations, maintenance, or planned works.

g) Mitigation is provided to ensure enhanced access to and use of the countryside through new public open space and enhanced landscaping and habitat creation. There is no loss of community facilities because the site is outside the settlement boundary.

h) The Flood Risk Assessment (FRA) and Surface Water Management Strategy (SWMS) show that the proposed development provides a resilient system for the ongoing management of water, taking account of local characteristics and climate change, as set out in more detail in section 6.8, Theme 7 of this PS.

i) and j) The specific locational requirements of the Proposed Development, including the need to be in close proximity to the point of connection to the NETS at Hawthorn Pit substation, means that it has not been possible to prioritise the use of 'brownfield' land. The scale and nature of the Proposed Development would be incompatible within an urban setting (town or village) and would fail to provide regeneration benefits in the same way residential or commercial uses would.

In the context of the overall need for the Proposed Development set out in Theme 1, and the provisions of Policy 10(e) of the CDP and paragraphs 119, 120(a) and 124(a) of the NPPF, the location of the Proposed Development 'in the countryside', adjacent to other similar infrastructure, is considered to be justified and therefore in accordance with all relevant development plan policies. It does not result in an adverse or harmful land use that would not be outweighed by the benefits of the Proposed Development.

6.4 Theme 3: Agricultural Land and Soils

Chapter 2 of the EAR provides a detailed assessment of the optioneering process when selecting the site for the Proposed Development. Four sites were initially identified (sites A-D), with a fifth (site E) added at a later date, the locations of which are shown in **Figure 4-3**.

The initial aim was to find a site that could accommodate the Converter Station and the Substation. Due to a number of constraints and availability as set out on the EAR, sites A-D were discounted. As a consequence of the potential constraints on Site A, and lack of availability of Site B, the Applicant identified a new Converter station site on agricultural land south of Jade Business Park and north of Coop House Wood, referred to as site E (also shown in **Figure 4-3)**.

Policy 14 of the CDP states that:

> *"Development of the best and most versatile agricultural land, will be permitted where it is demonstrated that the benefits of the development outweigh the harm, taking into account economic and other benefits"*

Paragraph 174 of the NPPF makes it clear, that:

> *"Planning policies and decisions should contribute to and enhance the natural and local environment by… b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land"*

An agricultural land classification (ALC) survey has been undertaken for the Site and is reported in Chapter 12 of the EAR. Figure 12-3 and Table 12-13 of the EAR show that approximately 7.7 ha (77%) of the surveyed area of the Converter station Site (Site E) comprises Grade 3a agricultural land, which is classed as 'best and most versatile' (BMV). Small pockets of Grade 2 land (0.3 ha, 3%) which is also classed as BMV, and Grade 3b land (2 ha, 20%), which is not BMV, are also present.

Site E had not previously been considered because it is located approximately 1 km beyond Hawthorn Pit substation and would require cabling past the substation to the converter station with DC cables and then cabling back to the substation with AC cables, which constrains cable routeing options. The

strategic options were re-considered in light of the requirement for a small amount of additional onshore cabling; however, Hawthorn Pit remained the preferred option given the extent of additional onshore cabling.

Site E was big enough to accommodate the Converter Station but not the Substation as well. Site A could accommodate a substation without prejudicing the alignment of the East Durham Link Road. As such the decision was made to locate the Converter Station on site E and the Substation on Site A. The substation Site is shown to be Grade 3b agricultural land, which is not BMV.

Converter Station Site E was then reassessed against converter station sites A to D. From an environmental perspective, Site E was preferred to site A for the physical environment, landscape and visual and socio-economic constraints. There was not expected to be any Made Ground or contaminated land present at Site E which reduced potential risk of contamination or need for off-site disposal. The majority of the Converter Station at Site E will be screened from South Hetton by Coop House Wood. Access to Site E can be taken directly from the Jade Business Park access road (Spring Road); and there will be no loss of public amenity space.

Site E was preferred over Site A with respect to biodiversity, given its greater distance from Hesledon Moor West SSSI. Siting the Converter Station on the agricultural land at Site E is considered preferable when compared to the draft priority habitat at Site A, which supports a diverse terrestrial invertebrate community, reptiles and amphibians. The visual screening provided by Coop House Wood at Site E was preferred to the open views from Murton to the north of Site B.

The outcome of the detailed optioneering process is that the Converter Station will be located on mostly BMV agricultural land and result in the permanent loss of 6.6Ha hectares of BMV soils. However, a threshold of 20 Ha of permanent BMV loss is used to determine whether the loss of agricultural land is significant or not. As the permanent loss of BMV land due to the Proposed Development (and the EOS as a whole) is less than 20 Ha, the effect is not significant.

The Proposed Development is an integral part of the SEGL1 Project, and fundamental to the provision of energy resilience benefits into the NETS. The Applicant has demonstrated a clear and thorough consideration of alternative locations for the converter station, but no other suitable alternative site on non-agricultural or lower grade land has been identified. The Proposed Development will provide substantial public benefits in terms of the energy benefits, meeting Government's legally binding targets to reach net zero greenhouse gas emissions by 2045 and the commitment to reach 40 GW of installed renewable generation capacity by 2030, which is considered to significantly outweigh the loss of 6.6 Ha of BMV agricultural land and has complied with Policy 14 of the CDP.

Paragraph 174 of the NPPF states that:

> *"Planning policies and decisions should contribute to and enhance the natural and local environment by: a) protecting and enhancing… soils (in a manner commensurate with their statutory status or identified quality in the development plan);"*

Policy 14 of the CDP also covers soils, adding that:

> *"All development proposals relating to previously undeveloped land must demonstrate that soil resources will be managed and conserved in a viable condition and used sustainably in line with accepted best practice."*

The disturbance to soil resources is likely to result in further impacts through the potential for loss of and damage to soil resources. However, via the adoption of embedded mitigation measures (i.e., industry best practice, including pre-commencement survey of remaining agricultural land, and production and implementation of a site-specific SMP, etc), the residual effects of the Proposed Development to soils and agricultural land are not significant and are therefore in accordance with Policy 14.

6.5 Theme 4: Design

The Proposed Development seeks outline consent for a new Convertor Station and Substation associated with the EOS and wider Project. Although all matters are reserved, descriptions of the indicative design and layout are set out in Section 3 of this PS, and in Chapter 3 of the EAR.

Policy 29 (Sustainable Design) of the CDP provides a comprehensive set of design criteria and tests. The Policy states:

> *"All development proposals will be required to achieve well designed buildings and places having regard to supplementary planning documents and other local guidance documents where relevant."*

Section 12 of the NPPF focuses on achieving well designed places, advises that:

> *"The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities."*

Specific design parameters have been set by the Applicant and used to inform the LVIA. These parameters are necessary in order to meet the functional demands of the overall project. The Applicant has however sought to define the maximum heights to give an appreciable sense of scale. In the case of the converter station, this is assisted by lowering the ground level which will reduce the relative height and apparent scale of the structure.

The Converter Station will have a maximum height of 26 m and the base will be set 4m below the Jade roundabout. This will have the effect of reducing the overall height of the converter station building to being up to 22 m high when viewed from the north by users of Jade Business Park and by users of the formal and informal paths and routes across the wider site.

Where further reductions in height and volume can be achieved through the detailed design process, this will be presented at reserved matters stage. Embedded design mitigation will also be used to further reduce the impact and attempt to give the converter station a sense of being 'in keeping' with nearby developments.

Therefore, at an early stage of the design development, the Applicant has considered the site's context to ensure that the Proposed Development is designed so as to be as in keeping with its surroundings as practicable, in accordance with the Policy 29 of the CDP and the guiding principle set out in Section 12 of the NPPF.

In addition, and not taken into account by the above conclusion, it is noted that the structures of the Proposed Development would become less prominent should the Jade Phase 2 planning application DM/21/02901/OUT for additional units up to 20 m in height at Jade Business Park be approved and that development constructed.

6.6 Theme 5: Landscape and Visual Impact

The County Durham landscape is described in the CDP as being one of *"enormous contrast and diversity",* and its industrial and agricultural heritage has clearly influenced the environment in and around the Site. Policy 39 of the states that:

> *"Proposals for new development will be permitted where they would not cause unacceptable harm to the character, quality or distinctiveness of the landscape, or to important features or views. Proposals will be expected to incorporate appropriate measures to mitigate adverse landscape and visual effects.*
>
> *Development affecting Areas of Higher Landscape Value defined on Map H, will only be permitted where it conserves, and where appropriate enhances, the special qualities of the landscape, unless the benefits of development in that location clearly outweigh the harm.*

> *Development proposals should have regard to the County Durham Landscape Character Assessment and County Durham Landscape Strategy and contribute, where possible, to the conservation or enhancement of the local landscape."*

Paragraph 174 of the NPPF adds that decisions should contribute to and enhance the natural and local environment by:

> *"a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);*
>
> *b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services."*

It is also noted that paragraphs 2.11.3 – 2.11.6 of NPS EN-5 acknowledge that large scale electricity transmission infrastructure is likely to give rise to landscape and visual effects, but that this is not incompatible in principle with developers' statutory duty under Schedule 9 of the Electricity Act 1989 to have regard to the preservation of amenity.

As shown by Figure 8-4 of the EAR, the Proposed Development is not located within an area of high landscape value or within any other locally or nationally designated landscape.

Sections 8.11.4.1 and 8.11.4.2 of the EAR concludes that the Proposed Development would have no more than a negligible or minor impact on landscape character and no more than a minor effect on visual receptors, except for on users of the PRoW (FP11) near Little Coop House Farm, which would experience a moderate affect due to the presence of the Converter Station within midground views at a particular viewpoint along this PRoW. This location is identified as Viewpoint 10 by Chapter 8 of the EAR and the impact of the Proposed Development on this view is illustrated by visualisations included as Figure 8C-10 of the EAR. The visualisations show that the Converter Station would be seen from Viewpoint 10 in the context of existing commercial and electrical infrastructure. These also show that there would be an associated beneficial impact of the SEGL1 Project as a result of the rationalisation of overhead lines in the western part of the view, as per paragraph 2.11.5 of NPS EN-5.

The limited landscape and visual impact of the Proposed Development is the result of careful site selection and design of the scheme. Siting the Converter Station and Substation in a location with a context of existing electrical infrastructure and industrial/ commercial development avoids adding electrical infrastructure to a landscape where it would be out of context. Mitigation measures have been embedded within the Proposed Development in order to reduce its impact on landscape character and visual amenity as far as practicable. These have been developed through an iterative process of assessment and design. They include incorporation of robust landscape treatment around the converter station and substation to aid landscape fit.

Overall, it is considered that the Proposed Development complies with Policy 9 of the CDP and Paragraph 174 of the NPPF since it avoids designated landscapes and would not cause unacceptable harm to the character, quality or distinctiveness of the landscape, or to important features or views. Whilst a moderate visual impact at one location is likely to result from the Proposed Development, it is not considered that this constitutes an unacceptable impact given the existing influence of electricity and commercial/ industrial development on the character of view, the transitory impact of the view from the PRoW, and the substantial benefits of the Proposed Development in helping to meet the urgent need for electrical infrastructure to support the delivery of the Government's objectives and commitments for the energy system, including the achievement of net zero carbon emissions.

6.7 Theme 6: Ecology and Nature Conservation

The Site is not formally recognised in the CDP for having any specific ecological or biodiversity value but lies adjacent to sites identified as being both locally and national important, as set out in more detail in Chapter 7 of the EAR.

The Converter station has the potential to result in the permanent loss of habitat within approximately 7 ha development footprint, including the permanent access road from Jade Business Park, temporary impacts due to construction of drainage attenuation, and potential operational impacts on adjacent Coop

House Wood LWS (noise and visual disturbance). However, the Converter Station Site is agricultural land with limited ecological value.

The Substation has the potential to result in the permanent loss of habitat within approximately 1.5 ha development footprint including permanent access road from existing road to Hawthorn Pit substation, temporary impacts due to construction of drainage attenuation, and potential operational impacts. The wider Substation footprint is up to 2 ha, but this includes underground drainage attenuation and swales that will form part of the habitat creation and biodiversity enhancement.

Policy 26 of the CDP states that:

> *"Development will be expected to maintain and protect, and where appropriate improve, the county's green infrastructure network", [which in turn will] "help to protect and enhance the county's natural capital and ecosystem services network."*

Policy 26 adds further that:

> *"Development proposals will not be permitted that would result in the loss of open space or harm to green infrastructure assets unless the benefits of the development clearly outweigh that loss or harm and an assessment has been undertaken which has clearly shown the open space or land to be surplus to requirements. Where valued open spaces or assets are affected, proposals must incorporate suitable mitigation and make appropriate provision of equivalent or greater value in a suitable location."*

Policy 40 of the CDP sets out the requirements for development with respect to Trees, Woodlands and Hedges with the overarching position being that proposals for new development will not be permitted that would result in an adverse impact on trees woodlands and hedgerows unless the benefits of the proposal clearly outweigh the harm. The policy requires appropriate protection, mitigation enhancement to the assets to be incorporated into development proposals.

Policy 41 of the CDP, in the context of biodiversity, states that:

> *"Proposals for new development will not be permitted if significant harm to biodiversity or geodiversity resulting from the development cannot be avoided, or appropriately mitigated, or, as a last resort, compensated for."*

Policy 43 of the CDP considers protected species, and nationally and locally important sites. The policy sets out the provisions where development interacts with SSSIs and National Nature Reserves (national designations) and Local Sites (Geology and Wildlife) and Local Nature Reserves (LNRs) (local designations). The policy states that:

> *"In all cases where development impacts adversely on a designated site, mitigation, or as a last resort compensation, must be provided and it must be demonstrated that the proposed mitigation or compensatory measures are appropriate to the designations assigned to the site and deliver clear net gains for the habitats and/or species assemblages the site is designated for."*

Chapter 7, Ecology, of the EAR presents an assessment of the Proposed Development (and the other elements of the EOS) on ecology. This includes on habitats, species and designated sites. In particular it considers the loss of habitat within the Substation and Converter Station footprints and the potential for noise and visual disturbance impacts on Coop House Wood Local Wildlife Site (LWS), which is located adjacent to the proposed site of the Converter Station.

It sets out that the Proposed Development avoids direct impacts on designated sites, and that a minimum 10 m undeveloped buffer has been incorporated into the Converter Station Site layout, to ensure that Coop House Wood LWS is not subject to physical disturbance/ damage or lighting impacts as a result of the Proposed Development. The EAR concludes at Sections 7.6.3.5 and 7.6.4.4, that with the proposed mitigation the LWS will not be significantly affected by the Proposed Development. The EAR also concludes that the Proposed Development will have no significant impact on protected species. The Proposed Development therefore accords with Policy 43 of the CDP and Paragraph 175 of the NPPF in terms of the protection of designated sites and protected species. (NPPF Para 175).

Table 7-10 of the EAR sets out that permanent and temporary losses of habitat within the footprint of the Substation or Converter Station, or associated construction of these, will be mitigated including by replacement habitat creation and enhancements, enabling any significant impact on habitats to be avoided, in accordance with CDP Policies 26, 40, 41 and NPPF Paragraph 179.

In addition, Section 7.10 of the EAR concludes that a biodiversity net gain assessment has been undertaken using Defra metric 3.0 and sufficient reinstatement, replacement, enhancement and offsetting of habitat units will be delivered to meet a minimum of 10% net gain in accordance with National Grid policy and UK guidance.

6.8 Theme 7: Flood Risk and Surface Water

The Site is located entirely within Flood Zone 1, which are areas deemed to have been shown to be at less than 0.1% chance of flooding in any year. The Proposed Development (as part of the EOS) has been identified as being at low risk from sources of flooding, including fluvial, tidal, groundwater, sewers and drains, reservoir and residual. Being wholly located inside areas defined as Flood Zone 1, the impacts from flood risk are determined as being low.

Policy 35 of the CDP states that:

> *"All development proposals will be required to consider the effect of the proposed development on flood risk, both on-site and off-site, commensurate with the scale and impact of the development and taking into account the predicted impacts of climate change for the lifetime of the proposal. This includes completion of a Flood Risk Assessment (FRA) where appropriate. Development will not be permitted unless:*
>
> *c. it can be proven through a FRA that the development, including the access, will be safe, without increasing or exacerbating flood risk elsewhere, any residual risk can be safely managed and where possible will reduce flood risk overall."*

When considering Surface Water Flood Risk, Policy 35 adds that:

> *"d. for major developments the management of water must be an intrinsic part of the overall development."*

Policy 31(s) adds that development should:

> *"minimise vulnerability and provide resilience to impacts arising from climate change, including but not limited to, flooding."*

In line with government guidance, and due to the Site being over 1ha in size, a FRA has been undertaken and is presented in Appendix 11A of Chapter 11 of the EAR.

Chapter 11 of the EAR presents the baseline studies and the assessment of the potential impacts of the Proposed Development (as part of the EOS) to and from hydrology and land drainage. As well as flood risk, surface water resources, surface water quality, water dependent sites, and drainage infrastructure are considered.

It also sets out that a SWMS will be prepared to ensure the run-off rates and discharge from the Substation and Converter Station to the surrounding water environment are maintained at the current greenfield run off rate. The converter station drainage system that will achieve this is subject to detailed design but will be a sustainable urban drainage system (SuDS). Chapter 11 of the EAR presents a more detailed description of the expected SuDS system.

With the management of surface water via SuDS as described above (which is an intrinsic part of the overall development) and embedded design and construction mitigation measures, the Proposed Development would be safe during its lifetime and would not exasperate the risk of flooding elsewhere and is therefore compliant with the CDP, as set out above.

In addition, Proposed Development is in accordance with paragraph 159 of the NPPF, avoiding *"inappropriate development in areas at risk of flooding";* as well as meeting the tests set out in paragraph 167 and the requirements of paragraph 169.

Chapter 11 of the EAS, the FRA, and the text above has demonstrated that adequate consideration has been given to the impacts of flood risk and the management of surface water both during construction and operational phases of the Proposed Development and as such, is considered to accord with local or national policy.

6.9 Theme 8: Socio-economics, Recreation and Tourism

The likely socio-economic, recreation and tourism effects associated with the Proposed Development, have been assessed and relate to the construction phase only (as set out in the methodology section of the Chapter 15 of the EAR):

- Potential economic impacts (potential employment and training, and gross value added (GVA) effects);
- Potential impacts on users of recreational routes and PRoW;
- Potential community severance effects;
- Potential impacts on private assets (including residential properties, local business premises, community facilities, development land, visitor attractions and open space); and
- Potential impacts on development land.

These sub-themes are expanded on below.

6.9.1 Economy

Policy 33 of the CDP notes that when determining applications, *"significant weight will be given to the achievement of wider social, environmental and economic benefits"*.

Chapter 15 concludes that the construction phase of the Proposed Development, and the EOS as a whole, will require 300-350 full time equivalent jobs over the 38-month construction period. Allowing for leakage, displacement, and multiplier effects this is likely to be equivalent to 270-315 construction-related jobs within County Durham. Furthermore, the construction phase would generate an estimated Gross Value Added of between £17.8million-£20.8million in County Durham. The Proposed Development would support economic growth, whilst developing an increasingly skilled workforce and as such, accords with Policy 33 of the CDP and the wider intentions of Chapter 6 of the NPPF.

6.9.2 Public Rights of Way (PRoW) and Community Severance

The Proposed Development will interact with a range of pedestrians, equestrians and cyclists and recreational routes as a result of the construction phase; and consideration has been given to the importance of these routes in terms of connectivity and permeability.

Policy 21 of the CDP states that all development should deliver sustainable transport by:

> *"providing appropriate, well designed, permeable and direct routes for walking [and] cycling…so that new developments clearly link to existing services and facilities together with existing routes for the convenience of all users."*

Policy 26 of the CDP identifies that:

> *"development will be expected to maintain and protect, and where appropriate improve, the county's green infrastructure network" and that "development proposals will not be permitted that would result in the loss of open space or harm to green infrastructure assets unless the benefits of the development clearly outweigh that loss or harm and an assessment has been undertaken which has clearly shown the open space or land to be surplus to requirements. Where valued open spaces or assets are affected, proposals must incorporate suitable mitigation…".*

Furthermore, and with reference to Public Rights of Way (PRoW), the Policy 26 notes that:

> *"development will be expected to maintain or improve the permeability of the built environment and access to the countryside for pedestrians, cyclists and horse riders.*

> *Proposals that would result in the loss of, or deterioration in the quality of, existing Public Rights of Way (PRoWs) will not be permitted unless equivalent alternative provision of a suitable standard is made. Where diversions are required, new routes should be direct, convenient and attractive, and must not have a detrimental impact on environmental or heritage assets."*

There are no anticipated closures to the use of recreational routes and PRoW during construction of the Proposed Development, and construction will be managed such that temporary crossings and minor managed diversions will be provided to accommodate PRoW users to continue journeys while construction works associated with the Proposed Development are underway. Implementation of a managed gate system will give PRoW users priority over construction vehicles. Further details are provided in the Indicative Public Rights of Way Management Plan, which is an Appendix to EAR Chapter 15.

Murton 29 Public Bridleway and a section of NCR-1 traverse the southern section of the Site at the location of the proposed Substation, Converter Station and associated access and construction compounds to the north of South Hetton. Realignments of these routes are proposed, with surfacing and details to be agreed with DCC PRoW Team. The rerouting of the Murton 29 Public Bridleway would add a distance of approximately 460m to the route during the construction phase. The realignment of NCR-1 causes no increase to journey distance.

As such, the likely effect on PRoW users would therefore be Negligible, which would not be significant. Given the high sensitivity of NCR-1 the likely effect of any disruption to the route would be Minor Adverse, which would not be significant.

The Proposed Development is not considered to conflict with the CDP, and ensures that pedestrians, equestrians and cyclists are not disadvantaged or prejudiced and retain good access to, and between, open pace and settlements during and after the construction of the Proposed Development. The Proposed Development will provide enhancement to existing recreational routes thus improving connectivity and access.

6.9.3 Private Assets

During the feasibility and design stages of the Proposed Development, consideration has been given to reduce the impacts towards other landowners, facilities and sensitive receptors.

General Design Principles (L – R), of Policy 10 of the CDP seek to ensure cohesive integration of new development. Furthermore, and as set out in Policy 31 of the CDP, development will be required to demonstrate that:

> *"there will be no unacceptable impact, either individually or cumulatively, on health, living or working conditions or the natural environment and that can be integrated effectively with any existing business and community facilities."*

The construction of the Proposed Development would not require the demolition of or temporary or permanent land take from residential properties, business premises, community facilities or visitor attractions; with any potential adverse amenity impacts mitigated by environmental measures as set out in Chapter 08: Landscape and Visual, Chapter 12: Soils and Agriculture, Chapter 14: Traffic and Transport and Chapter 13: Noise and Vibration.

The likely land take and amenity effects on residential properties, business premises, community facilities or visitor attractions as a result of the Proposed Development and are therefore assessed to be Negligible. Whilst informal public access to the substation Site would no longer be possible following construction of the Proposed Development, this is offset by the provision of replacement public open space adjacent to the proposed Converter station as part of the Proposed Development. There will be a permanent loss of up to 1.5 ha informal public open space from the footprint of the Substation and this will be replaced with 2 ha of landscaped public open space which will be more beneficial to the public in general throughout the operational lifetime of the Proposed Development. On this basis, the Proposed Development accords with the CDP.

6.9.4 Development Land

The construction of the Proposed Development is assessed to have a Very Low magnitude of impact on development allocations and planning applications as it would not affect land take or viability of any of the allocations or schemes (as assessed by Chapter 15 of the EAR). Overall, the likely effect on development land in the study area arising from the EOS is assessed to be negligible. On this basis no policy conflict is found with Policies 1 and 2 of the CDP, in particular with respect to employment land at Jade Business Park, therefore the Proposed Development is in accordance with local and national policy.

6.10 Theme 9: Traffic and Transport

The construction and operation of the Proposed Development will result in an increase in traffic movements over and above existing conditions. Chapter 14 of the EAR establishes the baseline for the entire EOS and considers the impacts of the two phases, construction and operation.

The Policy 21 of the CDP which states that development should ensure that:

> *"any vehicular traffic generated by new development, following the implementation of sustainable transport measures, can be safely accommodated on the local and strategic highway network and does not cause an unacceptable increase in congestion or air pollution and that severe congestion can be overcome by appropriate transport improvements."*

Further to the CDP, Paragraph 111 of the NPPF states that:

> *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."*

In separating out the two phases the report demonstrates that whilst the overall impact of traffic and transport is negligible on the existing road network, there will be a slightly more discernible impact during the construction phase owing to HGV movements and other associated activities.

The principal impact will be felt along Jade Business Park access road (Spring Road), which is to be used for the construction of the Proposed Development. Table 14-8 and Figure 14-7 of the EAR set out the Access Points (AP) for the EOS in its entirety. AP16, AP17 and AP18 are fundamental to the Proposed Development, with principal access along the existing Jade Business Park access road which connects to the A19, and the wider strategic network.

The Jade Business Park access road has been assessed further against several effects which are described in more detail in Chapter 14 of the EAR. Adopting a proportionate assessment in the context that the main traffic and transport impacts are temporary, it has been concluded that the resulting impact on the road network, its environs and identified receptors would be Negligible. Further mitigation measures in relation to traffic and transport are discussed in more detail in the Outline Construction Traffic Management Plan (CTMP) presented at Appendix 14C of Chapter 14 of the EAR. This also includes general measures related to the prevention of traffic generated dust, debris and fumes; road cleaning; and vehicle maintenance.

The Proposed Development will operate continuously throughout the year but will not be permanently manned, rather it will be operated by a small team who will visit site on an anticipated weekly basis. During maintenance (planned and unplanned) the number of personnel present on site would increase with the number of staff proportionate to the nature of the maintenance works being undertaken.

As summarised above and set out in more detail in the Chapter 14 of the EAR, the impacts of the proposal on the highway network will only be felt during the construction phase, but as set out, these will not be harmful. Upon completion of the Proposed Development, the road network is unlikely to notice any traffic impacts associated with its operation and maintenance. In the context that the construction phase is temporary and covered by an Outline CTMP, and the completed development will not result in any noticeable traffic, no local or national policy conflict is found, with impacts adequately

dealt with through proposed mitigation measures. As such, the proposed development is in accordance with national and local planning policy.

6.11 Theme 10: Noise, Vibration and Air Quality

Section 13.6 of Chapter 13 of the EAR explains that potential noise and vibration impacts during the construction phase are likely to result from work activities associated with plant installation, Converter Station and Substation construction, and construction-related vehicle movements within the Site boundary and along access routes.

Policy 31 of the CDP states that:

> *"Development which has the potential to lead to, or be affected by, unacceptable levels of air quality, inappropriate odours, noise and vibration or other sources of pollution, either individually or cumulatively, will not be permitted including where any identified mitigation cannot reduce the impact on the environment, amenity of people or human health to an acceptable level."*

Operational traffic movements are expected to be limited, as discussed in more detail in Chapter 14 of the EAR. Any such changes in road traffic noise resulting from the Proposed Development are also expected to be limited and therefore potential effects have been scoped out of the impact assessment. Noise and vibration effects from the construction phase will be temporary and reversible with no lasting residual effect.

The operation of the Converter Station and Substation will result in noise from the electrical and mechanical equipment. This will be a long-term operational sound source. Its impact on sensitive receptors, including within the community of South Hetton, has been assessed by the EAR. Judicious design and, where necessary, appropriate attenuation measures, will be employed to ensure that the day-to-day operational noise from the Converter station does not exceed the existing background noise levels at the nearest existing noise sensitive receptor by more than 5 dB, thereby avoiding unacceptable noise impacts. This is regarded to be eminently achievable based on the options and opportunities available to the contractor for detailed design.

The potential for low frequency noise from the Converter Station and Substation will be considered during the detailed design stage and if necessary appropriate isolation and attenuation measures will be incorporated into the design. This will ensure amenity is preserved and the Proposed Development will accord with Policy 31 of the CDP, and Paragraph 185(a) of the NPPF.

No major vibration sources are expected as part of the Proposed Development and therefore operational vibration has been scoped out of the impact assessment.

Air quality was considered by Durham County Council through the EAR Scoping request, where it was agreed that this could be scoped out of further environmental assessment. Best practice mitigation will be used during construction to reduce the effect of dust and emissions; although it is not anticipated that there will be any significant health impacts relating to air quality as a result of the Proposed Development.

The Outline CEMP and CTMP will ensure that any environmental effects resulting from the construction of the Proposed Development are minimised thus ensuring the that Proposed Development accords with local and national policy.

6.12 Theme 11: Amenity

The Proposed Development is sited outside of the Murton and South Hetton settlement boundaries, the closest residential property being approximately 500m away (Windermere Road).

Policy 31 of the CDP focuses on amenity and pollution, and sets out the following test to which development must adhere to:

> *"Development will be permitted where it can be demonstrated that there will be no unacceptable impact, either individually or cumulatively, on health, living or working*

> *conditions or the natural environment and that can be integrated effectively with any existing business and community facilities. The proposal will also need to demonstrate that future occupiers of the proposed development will have acceptable living and/or working conditions. Proposals which will have an unacceptable impact such as through overlooking, visual intrusion, visual dominance or loss of light, noise or privacy will not be permitted unless satisfactory mitigation measures can be demonstrated whilst ensuring that any existing business and/ or community facilities do not have any unreasonable restrictions placed upon them as a result"*

Paragraph 130(f) of the NPPF states planning decisions should ensure that developments:

> *"create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."*

The EAR clearly sets out that issues such as noise, dust, vibration, and traffic, would be associated with the construction phase, and as such are temporary and Embedded mitigation is proposed to minimise effects on local receptors, including users of Jade Business Park.

The nature of the Proposed Development and the way in which it is operated means impact upon amenity, in terms of noise, nuisance etc would be negligible, with specific mitigation included to remove adverse effects. Issues such as loss of daylight, shadow, privacy are not expected due to the separation of the distances of the Site to established settlements. Light spillage is unlikely to be an issue due to embedded mitigation measures in the lighting design, which is to be confirmed through the reserved matters application. The presence of natural visual buffers and the added benefit of new and more public open space provides residents of South Hetton and Murton with improved amenity and countryside access, along with pedestrians, equestrians and cyclists.

On this basis, the Proposed Development does not result in a loss of amenity to existing residential dwellings or local businesses. Mitigation measures will ensure that during, and post construction impacts are minimal and as such, will ensure the Proposed Development accords with CDP Policy 31 and the NPPF.

6.13 Theme 12: Archaeology and Cultural Heritage

Chapter 9 of the EAR has established the cultural heritage baseline conditions, assessing the potential for further cultural heritage assets to be present.

Policy 44 of the CDP states that:

> *"Development will be expected to sustain the significance of designated and non-designated heritage assets, including any contribution made by their setting. Development proposals should contribute positively to the built and historic environment and should seek opportunities to enhance and, where appropriate, better reveal the significance and understanding of heritage assets whilst improving access where appropriate."*

When considering non designated heritage assets, Policy 44 sets out the following position:

> *"A balanced judgement will be applied where development impacts upon the significance and setting of non-designated heritage assets. In determining applications which would affect a known or suspected non-designated heritage asset with an archaeological interest, particular regard will be given to the following:*
>
> *i. ensuring that archaeological features are generally preserved in situ; and*
>
> *j. in cases where the balanced judgement concludes preservation in situ should not be pursued, it will be a requirement that they are appropriately excavated and recorded with the results fully analysed and made publicly available."*

The EAR has considered the impact of the Proposed Development, concluding that the resulting significance of its impact is a minor adverse. This is based solely on the removal of any surviving

remains of the former field boundaries where the Converter station is to be located, which are considered to hold an asset sensitivity/value score of 'very low'. No other setting issues have been identified with respect to other designated or non-designated assets.

Further, and as reported in section 9.6 of EAR Chapter 9, the Substation, substation compound and enabling compound are located in areas of previously disturbed ground therefore their construction is unlikely to result in additional impacts to heritage assets.

In the absence of any setting issues or identified significant harm, and on the basis that the mitigation set out in Chapter 9 of the EAR is accepted by the LPA, the Proposed Development would accord with Policy 44 of the CDP and paragraph 202 of the NPPF.

6.14 Theme 13: Sustainable Waste and Resource Management

Extensive engineering and ground works are required for the construction of the Proposed development. Policy 47 of the CDP seeks:

> *"the development of a sustainable resource economy in County Durham will be promoted, encouraged and facilitated by: a. ensuring that waste is managed in line with the waste hierarchy in sequential order. In particular:*
>
> > *1. supporting proposals that minimise waste production; help prepare waste for re-use; and increase the capacity and capability of the county's network of waste management facilities to reuse, recycle and recover value from waste materials; and*
> >
> > *2. resisting proposals for the disposal of residual waste via landfill or via the incineration of waste without energy recovery unless a need can be demonstrated which cannot be met by existing facilities and by treatment solutions higher in the waste hierarchy."*

Chapter 16 of the EAR sets out that the Proposed Development will achieve more than 90% of re-use of the site won material. It has also been assumed that the aggregates and stones supply will consist of recycled and secondary aggregates, in line with regional adopted Plan target, where technically appropriate and economically feasible. Hence, the impacts on the raw minerals and quarries site will be slight adverse.

The earthworks strategy will be updated during detailed design, based on site investigation data however the study also demonstrates that there is sufficient waste infrastructure in North East of England to accommodate waste resulting from the Proposed Development.

The EAR also sets out that the Proposed Development is not expected to generate inert waste. If Hazardous waste is generated, this will not be of significant quantity. The Proposed Development will generate some non-hazardous waste which if landfilled, will occupy 0.09% of the non-hazardous landfill capacity of the northeast of England. Hence, the impacts on the generation and management of waste will not be significant.

Chapter 16 of the EAR concludes that the residual significant effects for use of material resources and generation and management of waste will not be significant. It is therefore considered that the approach set out in the EAR and summarised above accords with the requirements of CDP Policy 47 and CDP Objective 16, adopting a sustainable and low impact method. The impact will further be reduced through detailed design and mitigation measures, also outlined in the supporting documentation.

6.15 Theme 14: Geology and Hydrogeology

Geology and hydrogeology are considered in Chapter 10 of the EAR. This includes the potential for effects of ground and groundwater contamination materials on human health.

Policy 32 of the CDP requires demonstration that:

> *"any existing despoiled, degraded, derelict, contaminated or unstable land issues can be satisfactorily addressed by appropriate mitigation measures prior to the construction or occupation of the proposed development"; and that "the site is suitable for the proposed use, and does not result in unacceptable risks which would adversely impact on the environment, human health and the amenity of local communities."*

Policy 35 of the CDP states that:

> *"the quantity and quality of surface water and groundwater bodies shall be protected and where possible enhanced. All… development must demonstrate control of surface water runoff during construction and for the lifetime of the development… Development adjacent to, over or in a watercourse should consider opportunities to improve… and water quality. Development which could adversely affect the quality or quantity of surface or groundwater, flow of groundwater or ability to abstract water will not be permitted unless it can be demonstrated that no adverse impact would occur, or mitigation could be put in place to minimise this impact."*

Policy 41 of the CDP states that:

> *"proposals for new developments will be expected to protect geological features and have regard to Geodiversity Action Plans*."

The assessment has shown that in the vicinity of Hawthorn Pit would be underlain by Made Ground, up to 10 m in thickness. Historically, coal mining activities were undertaken in the vicinity of Hawthorn Pit/ the Site, and lies within a Coal Mining Reporting Area, although no High-Risk Development areas are present within the working width.

No designated geological features or sites have been identified in the vicinity of the Site.

Sites of potentially contaminative current and/ or historic land uses have been identified. The identified potential impacts which may occur during the construction phase are primarily associated with spillages and leaks of fuel/ oil associated with plant/ machinery, disturbance of contaminated soils and potential degradation of soil quality during handling and movement of soil or tracking of heavy plant, as well as the potential for dewatering to locally affect groundwater levels.

In addition, there may be potential limited effects associated with the former underground mine workings in the vicinity of Hawthorn Pit, including ground stability and mine gas, as well as creation of pathways to deeper groundwater depending on the construction techniques employed. The majority of these effects can be controlled through good practice and standard mitigation measures outlined in Chapter 18 of the EAR. Implementation of subsequent design changes and/ or remedial measures, if required depending on the outcome of further assessments (listed within Chapter 10), would result in the residual effects being of Negligible to Minor significance.

During the operational phase, identified potential impacts are limited to effects resulting from potential land contamination on site users and groundwater receptors. Mitigation of the potential impacts put in place at construction phase would also aid in the reduction of operational effects. Required mitigation will be confirmed by means of risk assessments based on ground investigation data (when available) and may include removal of contaminant sources, and installation of gas protection measures on the buildings (i.e., the Converter Station).

Overall, the mitigation required to address the potential impacts is standard practice. As a result, the overall assessment of effects of the Proposed Development in relation to geology and hydrogeology is predicted to be of Negligible significance. The Proposed Development is therefore in accordance with the CDP.

6.16 Theme 15: Mineral Safeguarding

Part of the substation Site is located within a Mineral Safeguarding Area (MSA) for Glacial Sand and Gravel.

Policy 56 of the CDP states that:

> *"Planning permission will not be granted for non-mineral development that would lead to a sterilisation of mineral resources within a Mineral Safeguarding Area… unless… there is an overriding need for the non-minerals development which outweighs the need to safeguard the mineral…"*

The relevant MSA comprises a small area that is already partly constrained by the existing Hawthorn Pit substation on it. The proposed Substation represents a relatively small footprint in the context of the extent of the MSA and would therefore result in the sterilisation of only a small amount of safeguarded mineral. Given the small remaining area of the MSA, the former colliery and coking works on the site and the extent of Made Ground above it, it is not anticipated that the mineral would be viable to extract as a stand-alone operation.

Notwithstanding, the impact on the mineral is considered to be outweighed by the overriding need for the Proposed Development which will deliver an essential reinforcement to the electricity transmission network. The Proposed Development therefore accords with CDP Policy 56.

6.17 Theme 16: Telecommunications

The Site is located High Moorsely Meteorological Office safeguarding area. Policy 27 (Utilities, Telecommunications and Other Broadcast Infrastructure) of the CDP states that:

> *"Proposals will be permitted for new or extensions to existing energy generation, utility transmission facilities… …where:…*
>
> > *…c) where applicable, it does not cause significant or irreparable interference with other electrical equipment, air traffic services or other instrumentation operated in the national interest."*

Policy 28 of the CDP states that:

> *"Within safeguarded areas, as shown on the policies map, development will be subject to consultation with the relevant authority and will be permitted…*
>
> > *…c) within the defined safeguarding area around the High Moorsely Meteorological Office radar site where it can be demonstrated that there will be no unacceptable adverse impact upon the operation of the site."*

The Site is approximately 5 km east of the High Moorsely Meteorological Office radar site and is situated adjacent to numerous existing electricity transmission infrastructure of similar or greater height than that which the Proposed Development will achieve. It is therefore considered unlikely that the Proposed Development will result in adverse interference with highlighted infrastructure and as such, is in accordance with the CDP polices. Notwithstanding, the Applicant has engaged with Met Office to understand and address any concerns.

7. Conclusion

The Proposed Development will comprise an essential part of the SEGL1 Project, which is a major reinforcement to the National Electricity Transmission System (NETS) between England and Scotland. It is needed to enable the transmission of electricity, including that generated from renewable sources such as wind, from where it is generated to where it is used. As such, the Proposed Development represents enhanced electricity infrastructure that is urgently needed in order to achieve the Government's objectives and commitments for a secure and low carbon energy system. Local planning policies seek to support the achievement of these objectives and national planning policy sets out that the need for infrastructure such as the Proposed Development is urgent. These matters weigh heavily in favour of planning permission being granted.

The location of the Proposed Development at Hawthorn Pit has been carefully selected to provide the transmission benefits that arise from the Converter Station and Substation being located close to the point of connection to the NETS, whilst balancing the environmental and financial implications of its delivery. Section 4 of this PS and the accompanying EAR explain how due consideration of alternatives that has taken place.

The scale of the Proposed Development is necessary for it to operate effectively and has been kept to the minimum envelope that is needed to ensure the Proposed Development and the benefits that will result can be delivered. Approval of the design of Proposed Development will be sought via a reserved matters planning application, and the detailed design process will seek to further minimise effects of the Proposed Development.

The approach to the layout of the Site has had due consideration to ecology and landscape, providing mitigation and enhancement measures. Proposed landscape mitigation measures will reduce the visual impact of the Proposed Development over time as planting becomes more established. The future resilience of ecology, habitats and locally important landscape features will be further protected through well-designed SuDS features, coupled with the fact that local geological and hydrogeological conditions are unlikely to cause issues.

This PS and the supporting EAR have set out the positive, solutions led approach being taken by the Applicant which has mitigated many of the identified impacts of the Proposed Development ensuring that the likely effects are in most cases negligible and significant effects are avoided. This applies to both the construction and operational phases of the Proposed Development, where matters relating to ecology and nature conservation, flood risk and surface water, waste and resource use, noise and vibration, amenity, socio-economic, community cohesion and severance, traffic and transport, archaeology and cultural heritage, minerals, ground conditions and telecommunications have been assessed. Significant impacts on landscape character have been avoided. Whilst a significant visual impact will result at one PRoW viewpoint, this is not considered unacceptable in light of the existing context of the view and the benefits that the Proposed Development will deliver.

The policy appraisal in Section 6 demonstrates it is in accordance with Government policy and the Development Plan and the Proposed Development at the Site will deliver the nationally significant benefits of the SEGL1 Project in a way that has due regard to its surroundings and appropriately minimises and mitigates its impacts. The overarching need and benefits of the Proposed Development are clear and should be afforded significant weight in the determination of the planning application. In light of the national need and broad compliance with the Development Plan, it is considered that the evidence weighs heavily in favour of outline planning permission being granted.

Appendix A Planning History

Appendix A provides a list of planning applications associated with the Site and its surrounding land (approximately 200 m).

Appendix A shows that the most recent planning applications on land that forms part of the Site are planning permissions DM/22/00377/FPA for a telecommunications tower and permissions DM/18/03556/FPA and DM/18/00852/FPA for a modular unit. These were approved in April 2022, February 2019 and May 2018, respectively. The approved telecommunications tower would be located to the east of the proposed Substation. Aerial photography shows that the approved modular unit has already been constructed. Other planning permissions on the Site were granted in or before 2012 and it is therefore not expected that there are any other approved developments yet to be commenced or completed on the Site.

Regarding land near to the Site, Planning Application DM/21/02901/OUT was validated in November 2021 and is awaiting determination. This seeks outline planning permission for a mixed-use development comprising use Class E(g), B2 and B8 units up to 20 m in height. These would be located adjacent to the existing Jade Business Park and directly to the north of the Proposed Converter Station.

Planning application DM/21/03420/FPA seeks approval for a solar farm on land to the north of the site.

CDP Planning Reference Number	Description of Proposal	Site Address	Application Valid	Decision Outcome	Decision Date
Coincides with boundary of the Proposed Development (in full or in part)					
DM/22/00377/FPA Web Link	Proposed NTQ telecommunications installation to include 40 m Fli T3A heavy duty lattice tower on concrete base with associated works.	Hawthorn Pit Church Street South Hetton Durham DH6 2RX	10 Feb 2022	Approved	07 Apr 2022
DM/18/03556/FPA Web Link	Modular Unit with above Ground Effluent Tank	Site Of Former Hawthorn Cokeworks Windermere Road South Hetton SR7 9TP	07 Jan 2019	Approved	13 Feb 2019
DM/18/00852/FPA Web Link	Modular Unit	Site Of Former Hawthorn Cokeworks Windermere Road South Hetton SR7 9TP	27 Mar 2018	Approved	22 May 2018
5/PLAN/2006/0759 Web Link	Scheme revisions to planning permission 03/618 to provide an alternative road layout	Land North Of South Hetton And South Of Murton Durham	09 Oct 2006	Approved	22 Dec 2006
8/928/H/130(2) Web Link	Regulation 3 application for construction of A182 East Durham Link Road	Land North Of South Hetton And South Of Murton, County Durham - Revisions To	27 Sep 2006	Approved	22 Dec 2006

CDP Planning Reference Number	Description of Proposal	Site Address	Application Valid	Decision Outcome	Decision Date
Coincides with boundary of the Proposed Development (in full or in part)					
		Approved Scheme			
5/PLAN/2006/0194 **Web Link**	Electricity converter station and associated landscaping - details of siting, design and external appearance and landscaping (reserved matters)	Former Hawthorn Colliery Murton	08 Mar 2006	Approved	13 Sep 2006
5/HIST/2004/0300 **Web Link**	Information not available	Former Hawthorn Colliery Coke works Murton Murton	04 Oct 2004	Approved	12 Nov 2004
5/HIST/2003/2499 **Web Link**	Construction of link road	Land North Of South Hetton & South Of Murton	28 Jul 2003	Approved	07 Aug 2006
8/928/H/130 **Web Link**	Regulation 3 application for construction of A182 East Durham Link Road	Land North Of South Hetton And South Of Murton, County Durham	15 Jul 2003	Approved	04 Aug 2006
5/HIST/2002/0864 **Web Link**	Electricity converter station & associated landscaping(resubmission)	Former Hawthorn Colliery Murton Murton	12 Dec 2002	Refused	31 Jan 2003
5/HIST/2002/1435 **Web Link**	Underground cables	Hawthorn Colliery Substation Murton Murton	20 Jun 2002	Approved – Appeal Withdrawn 5/APP/8/02(02/442)	19 Sep 2002
5/HIST/2002/1653 **Web Link**	Earthworks to create wildlife habitat, including provision of ponds and ditches	Land Adjacent Hawthorn Colliery Substation Murton Murton	23 May 2002	Approved	25 Jul 2002
5/HIST/2001/1871 **Web Link**	Electricity convertor station & associated landscaping(outline)	Former Hawthorn Colliery Murton Murton	29 Oct 2001	Refused - Appeal Allowed 5/APP/4/02(01/654	08 May 2002
5/HIST/2001/1122 **Web Link**	Installation & operation of 2 no. Underground electricity cables & 1NO. Fibre optic cable	Former Railway Line West Of Seaton & Murton & Land West Of Hawthorn Elec	17 Dec 2001	Refused – Appeal Allowed	08 May 2002

CDP Planning Reference Number	Description of Proposal	Site Address	Application Valid	Decision Outcome	Decision Date
Coincides with boundary of the Proposed Development (in full or in part)					
		Substation & A1018		5/APP/02(01/750	
5/HIST/1999/0292 Web Link	Coal recovery operations as part of the scheme of reclamation	Former Hawthorn Colliery Murton	08 Jul 1999	Approved	20 Oct 1999
5/HIST/1999/0018 Web Link	Reclamation, remediation and landscaping works	Former Hawthorn Colliery Murton Murton	01 Jul 1999	Approved	20 Oct 1999
5/HIST/1998/1027 Web Link	Phase i of former hawthorn coke works reclamation scheme inc. Fencing, access, drainage, demolition	Hawthorn Mine Hawthorn	27 Jul 1998	Approved	01 Oct 1998
5/HIST/1998/0684 Web Link	Reclamation of former railway embankment	Information not available	19 Feb 1998	Approved	05 Aug 1998
Outside of boundary of the Proposed Development					
DM/22/00747/FPA Web Link	Creation of battery energy storage facility with associated works and access	Hawthorn Grid Site Murton DH6 2RX	18 Mar 2022	Pending Consideration	N/A
DM/21/02901/OUT Web Link	Outline application for a mixed use development comprising of E(g), B2 and B8 units	Jade Business Park Murton SR7 9TP	19 Nov 2021	Pending Consideration	N/A
DM/21/03420/FPA Web Link	Installation and operation of a ground mounted photovoltaic solar farm, inclusive of solar arrays, transformers, substation, landscaping, fencing, internal access tracks, access, CCTV and other associated works	Land At Croup Hill South Of Beaconsyde Farm Broadoaks Murton SR7 9SF	04 Oct 2021	Pending Consideration	N/A
DM/19/01316/FPA Web Link	Erection of 7 units (5 buildings) for B2/B8 industrial use with integrated offices and associated service yards, car parking and landscaping	Jade Business Park Phase 1 Jade Enterprise Zone Murton SR7 8RN	25 Apr 2019	Approved	12 Jul 2019
DM/19/01068/OUT Web Link	71 dwellings (outline - all matters reserved)	The Woodlands South Hetton	05 Apr 2019	Application Withdrawn	01 Jul 2021

CDP Planning Reference Number	Description of Proposal	Site Address	Application Valid	Decision Outcome	Decision Date
Coincides with boundary of the Proposed Development (in full or in part)					
		Durham DH6 2RX			
5/PL/2011/0473 **Web Link**	Variation of timescale to carry out highway works to the A182 as required by condition no. 14 of planning permission ref no. PLAN/2005/0955 (resubmission)	Hawthorn Industrial Estate Murton	10 Nov 2011	Approved	08 Feb 2012
5/PLAN/2005/0955 **Web Link**	Industrial development comprising B1 business use, B2 general industrial use and B8 storage and distribution	Former Hawthorn Colliery Murton	4 Dec 2005	Approved	08 Feb 2007
5/HIST/2004/1056 **Web Link**	Outline application for B1, B2 & B8 uses	North Of South Hetton, South Of The Proposed A.182	13 Jul 2004	Refused - Appeal Dismissed 5/APP/05(04/685)	25 Nov 2004