Application for Development Consent Order to construct and operate the Rampion 2 Offshore Wind Farm (Project Reference EN010117)

West Sussex County Council (IP Reference 200445228)

Local Impact Report

Examination Deadline 1: 28 February 2024

Contents

1. Introduction

Terms of Reference

1.1. Rampion Extension Development Limited (the 'Applicant') has submitted an application for a Development Consent Order (DCO) for an extension to the currently operating Rampion 1 Offshore Wind Farm, known as the Rampion 2 Offshore Wind Farm (the 'Project').

1.2. This is the Local Impact Report (LIR) of West Sussex County Council ('WSCC'), one of the host authorities for the Project.

1.3. Section 104 of the Planning Act 2008 (the 'Act') requires the Secretary of State to have regard to LIRs in deciding applications. The Act defines an LIR as *"a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area)"* (section 60(3)).

1.4. Provided that the LIR fits within this definition, its structure and content is a matter for the Local Authority. However, guidance is provided in the Planning Inspectorate's Advice Note One: LIRs (version 2, April 2012), which states that the LIR should set out the local authority's view of likely positive, neutral and negative local impacts, and give its view on the relative importance of different social, environment or economic issues and the impact of the scheme upon them.

1.5. This LIR has, therefore, been prepared in accordance with section 60(3) of the Planning Act 2008 (as amended) and having regard to the guidance in the Planning Inspectorate's Advice Note. Accordingly, it seeks to assist the Examining Authority (ExA) by presenting WSCC's assessment of the likely impacts of the Project, based on local information, expert judgement, and evidence.

1.6. This LIR appraises the impacts likely to result from the Project and identifies whether the impacts are considered to be negative, positive or neutral, taking into account proposed mitigation measures. It also considers whether further work should be undertaken, including mitigation, to address negative issues identified, and raises any missed opportunities for enhancement measures.

1.7. This LIR appraises the DCO documents submitted by the Applicant at the submission stage, as well as those at the Procedural Deadline. It also provides additional commentary on the points raised during the Issue Specific Hearing (ISH 1) on 7 and 8 February 2024. Any further submissions will be addressed through subsequent written evidence through the Examination process.

1.8. The topic areas covered in the LIR are set out in Table 1 below. The topics covered do not reflect the full remit of those addressed in the Environmental Impact Assessment (EIA) but highlight what are considered by WSCC to be the key issues within their remit. As the remit of WSCC ends at the low water mark (with respect to the offshore elements of the Project), impacts beyond this point have not been addressed other than where they have onshore impacts (such as visual).

1.9. WSCC is the upper-tier local authority for the county of West Sussex as a whole and has a range of statutory responsibilities to provide services and discharge regulatory functions, which together affect a great many aspects of the built, natural, and social environment. These functions include acting as Local Highway Authority, Local Transport Authority, Waste Planning Authority, Waste Disposal Authority, Minerals Planning Authority, County Planning Authority, Lead Local Flood Authority, Fire Authority (including public safety), Public Health Authority, Local Education Authority, and Social Services Authority. WSCC also holds responsibility for maintaining the Definitive Map and the Historic Environment Record.

1.10. The LIR does not reflect the views of District and Borough Councils within the County or those of the South Downs National Park Authority (SDNPA).

1.11. In producing this LIR, WSCC has not sought the views of the public or local interest groups as to any particular matters that should be reflected in the LIR; however, reference is made to local representations made to WSCC where they support WSCC's findings.

1.12. WSCC has experience of the Nationally Significant Infrastructure Project (NSIP) planning regime. WSCC is a host authority for the proposed Gatwick Northern Runway Project DCO and the (currently paused) A27 Arundel Bypass Project DCO. WSCC was also a host authority and discharging authority for the consented Rampion 1 Offshore Wind Farm. A summary of relevant experience of key WSCC officers involved in writing this LIR is included in Appendix A.

Table 1: Topics considered within this Local Impact Report

Topic	**LIR Section**
Seascape, Landscape and Visual Impact	Section 7
Socio-economics	Section 8
Landscape and Visual Impact	Section 9
Noise and Vibration	Section 10
Onshore Ecology	Section 11
Arboriculture	Section 12
Traffic and Transport	Section 13
Minerals Safeguarding	Section 14
Historic Environment	Section 15
Water Environment	Section 16
Emergency Services	Section 17

Topic	LIR Section
Public Rights of Way	Section 18
Public Health	Section 19

2. Description of the Area

Natural Environment

2.1. The South Coast Plain within West Sussex is a flat, coastal landscape between the dip slope of the South Downs and the waters of Sussex Bay (English Channel) and the Solent. It has a low, sweeping coastline with extensive urban development along the coast, including inland towns and villages, an extensive string of seaside towns, and associated infrastructure including trunk and other major roads. The Manhood Peninsula is one of few undeveloped stretches of coastline, extending to its southerly headland at Selsey Bill.

2.2. The coastline also includes Chichester Harbour National Landscape (formerly Area of Outstanding Natural Beauty), one of several major inlets, which has distinctive landscapes and intertidal habitats. The offshore elements of the Project are primarily located within the Selsey Bill to Seaford Head Marine Character Area (07). This seascape is an extensive bay ('Sussex Bay') between the low-lying headland of Selsey Bill to the west and the distinctive chalk cliffs of Seaford Head to the east. Shingle beaches offset the major coastal resorts in the west of the MCA and vertical chalk cliffs characterise the east. The urban development along the coastline and on the coastal plain is backed to the north of the major settlements by the prominent ridge of the South Downs.

2.3. Stretching from its landfall on the flat Coastal Plain near Climping and over the South Downs to Bolney substation in the Low Weald, the nearly 39km long cable route passes through a number of geology types, including gravel, alluvium, chalk, greensand and clay. This varied geology supports a great diversity of landscapes and habitats within a predominantly farmed landscape. The cultural landscapes and ecology are of significance at the local, national, and international level. These are key issues for considering the impact of the proposed onshore works, including the importance of rapid and high-quality reinstatement of the landscape.

2.4. Climping, the chosen landfall for the Project, is an open, undeveloped and ecologically sensitive stretch of coastline (including a Site of Special Scientific Interest (SSSI), Local Nature Reserve (LNR) and Local Wildlife Site (LWS). Heading inland, the onshore cable route passes under the tidal River Arun near Littlehampton.

2.5. The route heads along the River Arun floodplain with its grazing marshes and ditch network. A 13km section of the cable route from the A27 at Hammerpot to just east of Washington lies within the South Downs National Park (SDNP), an area designated for its special qualities, including landscape and wildlife. The landscape here includes large blocks of ancient woodland on the dip slope of The Downs, open arable farmland and chalk downland. Entering the Low Weald, the cable route passes through a landscape of small ancient woodlands, the Adur Valley and its tributaries, small fields of pasture, and scattered ponds to the proposed substation location, east of Cowfold.

Historic Environment

2.6. The DCO Limits lie within the setting of multiple designated heritage assets, including Grade I, II* and II listed buildings, conservation areas and scheduled monuments. It also intersects with two designated heritage assets, the scheduled Medieval earthworks east and southeast of St Mary's Church (NHLE 1005828), located to the south of Ford and east of Horsemere Green villages, and also narrowly intersects with Sullington Conservation Area.

2.7. The onshore cable route represents a transect through the landscape, which crosses a variety of landscape types with rich and varied archaeological potential. Three zones are apparent, which reflects this diversity.

2.8. Zone 1: South Coast Plain, includes archaeological potential characterised by:

- early prehistoric artefactual material;
- buried prehistoric landscapes;
- later prehistoric settlement and agriculture practices;
- later prehistoric funerary activity;
- late Iron Age to Romano-British settlement and land-use;
- medieval settlement and agriculture;
- post medieval settlement agriculture; and
- military coastal defences.

2.9. Zone 2: South Downs, includes archaeological potential characterised by:

- early prehistoric artefactual material;
- prehistoric settlement and agriculture practices;
- prehistoric flint mining activity;
- prehistoric monumental funerary activity;
- early medieval mortuary activity;
- medieval settlement and agriculture;
- post medieval settlement agriculture; and
- military activity.

2.10. A section of the onshore cable route within Zone 2, formerly consulted on as LACR-01d, crosses an area of the South Downs that forms part of an incredibly rich and complex multi-period prehistoric landscape of national significance. The Early Neolithic flint mining features, concentrated at Black Patch, Harrow Hill, Cissbury and Church Hill, constitute the earliest evidence industrial activity in Britain and are of at least national significance in their own right. Extensive evidence is documented within the route corridor and study area for Bronze Age funerary activity, including multiple barrows and barrow cemeteries. A number of nationally significant Bronze Age monuments are present, including Middle Bronze Age Itford Hill style enclosed settlements at New Barn Down and Cock Hill, and a late Bronze Age farm at Blackpatch Hill.

2.11. Multi-period activity demonstrating continuity of occupation and reuse of earlier industrial and funerary sites is documented at multiple locations within the landscape, such as the late Bronze Age univallate earthwork enclosure that partially overlies the Neolithic flint mines on Harrow Hill. The landscape contains considerable evidence of later activity, including extensive Iron Age field systems and settlements, as well as Romano-British field systems and a Romano-British farmstead at Harrow Hill.

2.12. The geophysical survey has identified multiple dispersed pit-type anomalies or areas of enhanced magnetism with unclear origins within the proposed DCO Limits in the vicinity of known Neolithic flint mining sites.

2.13. Zone 3: Low Weald, includes archaeological potential characterised by:

- early prehistoric artefactual material;
- later prehistoric settlement and agriculture practices;
- later prehistoric industrial activity;
- Roman industry and communications;
- medieval settlement and agriculture;
- post medieval settlement, agriculture and emparkment;
- post medieval industry and communications; and
- military activity.

Economic Background

2.14. The West Sussex economy is generally a diverse economy and in 2021 (latest figures) was worth around £23.3bn. This was down from its peak in 2019 at £24.3bn, due to the impact of the pandemic and low levels of growth since. These diverse range of sectors, include health and life sciences, financial and business services, transport, distribution and wholesale, and the high-quality natural environment supporting a strong leisure and tourism offer.

2.15. Growth in Gross Value Added (GVA) in the last five years (2016-2021) was lower in West Sussex at 9% than nationally (14%) and regionally (15%); however, there was significant variation across the County.

2.16. Over the last year of records (2020-21), there was 2.2% growth in GVA in the County. Again, this was a lower rate of growth than seen nationally and regionally. This overall low level of growth and downturn in GVA can be attributed to the transport sector and the impact that the pandemic had on air transport. Accommodation and food services was another sector impacted by the pandemic; however, over the last year (2020-21), this sector has begun to see significant growth across the County.

2.17. In 2021, the accommodation and food service activities and its contribution to GVA was highest in Arun and grew by 24% over the last year (2020-2021), the highest growth rate seen in the sector in the County. This sector can be attributed to the strength of the visitor economy in Arun and across the coastal districts.

2.18. Recent research undertaken on the economic impact of tourism[1] finds the value of tourism in 2022 was estimated to be £2.0bn in West Sussex, an increase of 51% from the previous year (but a 5% decrease since 2019). Chichester and Arun are contributors to the county value, and also contribute the highest number of jobs to this sector. It was estimated that 14% of jobs in Chichester and Arun are tourism related.

2.19. In recent years, the West Sussex local authorities have collaborated on ambitions to support and grow the visitor economy through the countywide Experience West Sussex Partnership. From spring 2024, Experience West Sussex will transition into a new Experience Sussex partnership covering West Sussex and East Sussex to help deliver a pan-Sussex Plan for Growth. Experience Sussex and VisitBrighton will partner strategically to work with the national body Visit England through its Local Visitor Economy Partnership accreditation scheme, working with local destinations and businesses. This national recognition will bring additional opportunities and support to the sector.

Social and Demographic

2.20. At the time of the 2021 Census, the population of West Sussex was 882,800, up by over 75,000 (or 9.4%) from the 2011 Census, a higher percentage increase in population than the national and regional average, and also higher than the neighbouring upper tier authorities of Surrey, Hampshire, East Sussex and Brighton and Hove. The growth rate over this time was highest amongst the older age groups (over 65s), in line with national and regional trends, with Horsham seeing the highest percentage increase at 31% in over 65-year-olds. Arun has the largest population in the County (at 165,000) making up 19% of the total West Sussex population, and Adur the smallest at 7.3%.

2.21. The working age population of the county (20-64 years) made up 55.4% of the total population, lower than the national average. Generally, the south west of the county (Adur, Arun, Chichester, Worthing) has a lower proportion of working age population.

Traffic and Transport

2.22. Traffic associated with the Project is anticipated to use a combination of A-classified roads (A27, A259, A284, A280, A24, A281, A283, and A272) for the majority of journeys before approaching local construction or operational accesses using either B, C or unclassified roads. In some cases, for example for the Washington construction compound, Oakendene (west) compound, and the Oakendene substation, direct access is achieved onto A classified roads.

2.23. The majority of the roads are maintained by WSCC with the exception of the A27 and A23, which form part of the Strategic Road Network maintained by National Highways. All of the A roads not forming part of the SRN are either partly or entirely within the Major Roads Network. The majority of the WSCC-maintained A roads are physically unconstrainted single carriageways. Only the A24, A27 (except where this passes through Arundel and Worthing), A23,

[1] Economic Impact of Tourism 2022 results West Sussex county and districts– Destination Research

and sections of the A259 are dual carriageway. The nature of the A roads understandably vary where these pass through urban and rural areas. For the purposes of this Project, where access is proposed (either construction/decommissioning or operational) the nature of the roads is predominantly rural and subject to varying speed limits from 40mph through to the National Speed Limit.

2.24. The nature of other roads used for local access varies significantly. The majority of B and C class roads are variable in nature between urban and rural areas, have varying speed limits, and are generally unconstrained. Other unclassified roads, such as Michelgrove Lane, Spithandle Lane, and Kent Street, are also indicated to be required. These are single track roads that have insufficient width for large vehicles to pass.

2.25. It should be noted that, with few exceptions, that roads within rural areas outside of settlements lack any facilities for Non-Motorised Users (NMUs) irrespective of the classification or posted speed limit. Despite the lack of facilities, NMUs are still expected to be present albeit in small numbers particularly around settlement edges and rights of way crossings. There will be locations where equestrians and cyclists will use the carriageway.

2.26. Air Quality Management Areas are also in place on the A27 in Worthing, A283 at Storrington, and A272/A281 at Cowfold.

3. Policy Context

National Policy Statements – Energy Generation

3.1. Part 2 of the Planning Act 2008 makes provision for National Policy Statements (NPS). NPSs comprise the Government's objectives for the development of NSIPs and set out national policy against which NSIP applications are assessed. The Secretary of State (SoS) is required to determine a DCO Application in accordance with an NPS, except in certain limited circumstances set out in Subsections 104(4) to (8) of Planning Act 2008.

3.2. Para 1.1.6 of EN-1, states "*This NPS, in particular the policy and guidance on generic impacts in Part 5, may also be helpful to local planning authorities (LPAs) in preparing their local impact reports"*.

3.3. There are currently 12 designated NPSs of which six relate to energy generation. The three NPSs relevant to the Project, which were designated from revised drafts in November 2023, are:

- Overarching National Policy Statement for Energy (EN-1) (Department for Energy Security and Net Zero (DESNZ), 2023);
- National Policy Statement for Renewable Energy (EN-3) (Department for Energy Security and Net Zero (DESNZ), 2023); and
- National Policy Statement for Electricity Networks (EN-5) (Department for Energy Security and Net Zero (DESNZ), 2023).

3.4. However, for the purposes of this LIR, and as stated in Section 1.6 of EN-1 (DESNZ, 2023), for the purposes of transitional provisions following the designation, "*The Secretary of State has decided that for any application accepted for examination before designation of the 2023 amendments, the 2011 suite of NPSs should have effect in accordance with the terms of those NPS".*

3.5. As this is the case in this instance, the following NPS will be referenced:

- Overarching National Policy Statement for Energy (EN-1) (Department of Energy and Climate Change (DECC), 2011a)
- National Policy Statement for Renewable Energy (EN-3) (DECC, 2011b); and
- National Policy Statement for Electricity Networks (EN-5) (DECC, 2011c).

National Planning Policy Framework

3.6. The overall strategic aims of the National Planning Policy Framework (NPPF, December 2023) and the various NPS are consistent; however, they have differing but equally important roles to play.

3.7. The NPPF provides a framework upon which local authorities construct local plans to bring forward developments, and the NPPF would be a material consideration in planning decisions for such developments under the Town and Country Planning Act 1990. An important function of the NPPF is to embed the principles of sustainable development within local plans prepared under it.

The NPPF is also likely to be an important and relevant consideration in decisions on NSIPs but only to the extent relevant to that project.

Relevant WSCC Policies and Plans

3.8. The following are key documents that have policies and plans relating to the Project. Where appropriate they have been referred to throughout this LIR.

West Sussex Waste Local Plan (April 2014)

3.9. The current development framework for waste development in West Sussex is the West Sussex Waste Local Plan (WLP), adopted in April 2014. The WLP provides the spatial strategy for waste development in the county and contains policies governing decisions about applications for planning permission.

3.10. The WLP includes Policy W23 (Waste Management within Development), which is relevant to the proposal. Policy W23 seeks that waste generated during construction, demolition or excavation is minimised, and opportunities are maximised for re-using and recycling waste that arises.

West Sussex Joint Minerals Local Plan (July 2018, Partial Review March 2021)

3.11. The West Sussex Joint Minerals Local Plan (JMLP) adopted in July 2018, with partial changes adopted in March 2021, is the current development framework for minerals development in West Sussex. The JMLP provides the spatial strategy for minerals development in the county and contains policies governing decisions about applications for planning permission.

3.12. The JLMP is of importance to proposals related to the Project, as the DCO Limits are underlain by safeguarded minerals. Policy M9 seeks to protect mineral resources from sterilisation.

3.13. The JMLP is supported by the West Sussex Minerals and Waste Safeguarding Guidance, which provides information on how safeguarded policies are to be applied and the evidence that should be provided when considering safeguarding.

West Sussex Transport Plan 2022–2036 (2022)

3.14. The West Sussex Transport Plan was adopted in April 2022 and is the County Council's main policy on transport. The Plan contains a number of thematic and area transport strategies that the intended to deliver the plans objectives and address key challenged by improving, maintaining and managing the transport network.

West Sussex Walking and Cycling Strategy (2016-2026)

3.15. The West Sussex Walking and Cycling Strategy (2016-2026) contains the County Council's aims and objectives for cycling and walking during the period 2016 – 2026. It provides guidance in support of prioritising cycling and walking infrastructure in new development and contains a list of over 300 potential walking and cycling improvements.

West Sussex Rights of Way Management Plan (2018–2028)

3.16. The West Sussex Rights of Way Management Plan (2018–2028) sets out WSCC's approach to managing the Public Rights of Way network, as required under the Countryside and Rights of Way Act 2000 (i.e. to produce a Rights of Way Improvement Plan). It outlines opportunities available for considering improvements to the network and sits alongside the walking and cycling strategy.

West Sussex Local Flood Risk Management Strategy

3.17. The current Local Flood Risk Management Strategy (LFRMS) was approved in 2013. Work on the review of the LFRMS, which went out to public consultation in autumn 2021, is currently paused pending a wider review of related strategies and plans.

West Sussex County Council Climate Change Strategy (2020–2030)

3.18. The West Sussex County Council Climate Change Strategy (CCS) sets out the County Council's ambitions to be a carbon neutral and climate resilient organisation by 2030, in line with the commitments to tackle climate change and protect the environment that underpin all priorities in the Council Plan 2021-2025. It provides a framework for all other WSCC strategies and policies to reflect climate change action and embed mitigation and adaptation principles across all areas of work and service delivery. The CCS outlines commitments by the County Council on climate action. Specifically relevant are its commitments to reduce carbon emissions, particularly by increasing the amount of renewable energy used and generated in West Sussex, and to support a local green economy.

Our Council Plan (2021–2025)

3.19. The plan sets out the priorities for WSCC over four years and the outcomes WSCC wants to achieve for people who live and work in West Sussex.

3.20. It focuses on four priorities, all of which are underpinned by a cross-cutting theme of tackling climate change:

- Keeping people safe from vulnerable situations;
- A sustainable and prosperous economy;
- Helping people and communities to fulfil their potential; and
- Making the best use of resources.

3.21. The plan also contains a set of performance indicators that will be used to measure the impact of the work undertaken in the county and whether outcomes have been achieved and delivered on the four priorities in the plan.

County Council Economy Plan (2020–2024)

3.22. The plan is an update of the Economic Growth Plan 2018-2023 and sets out WSCC's priorities for supporting the recovery of the West Sussex economy.

3.23. The Economy Plan has nine priority themes, setting out where WSCC is best placed to make a difference:

- Themes 1-3 reflect the spatial economic challenges for Crawley and the wider Gatwick Diamond, and for the coastal and rural economies;
- Themes 4-5 focus on the fundamental platforms of business start-ups, existing businesses, and employment and skills;
- Themes 6-7 focus on two key sectors hit hard, the visitor economy, with links to hospitality and the health and social care market, under considerable strain from COVID-19; and
- Themes 8-9 focus on the opportunities we are keen to embrace around digital infrastructure and the application of digital technology to boost business productivity and enhance digital skills and the importance of embedding climate change and the environment in the reset approach.

4. Summary of the Proposed Development

Introduction

4.1. The Applicant is seeking development consent to construct and operate a new offshore wind farm located between 13km and 25km off the Sussex Coast. The Project is a proposed expansion of the existing Rampion Offshore Wind Farm (Rampion 1).

4.2. Rampion 1 has 116 wind turbine generators (WTGs) with a 140m blade tip height and an installed capacity of 400 megawatts (MW). The offshore elements of the Project will be located adjacent to Rampion 1, occupying an area of approximately 160km^2. The Project would have up to 65 WTGs with a maximum blade tip height of 325m. Marine cables would connect the WTGs to up to three offshore substations, and up to four cables from these substations will transfer the electricity onshore.

4.3. The onshore parts of the Project would comprise cable circuits to be buried underground along a route of approximately 39km from a landfall at Climping in the Arun District of West Sussex to a new onshore substation at Oakendene, 2km east of Cowfold in the Horsham District. This would then connect to the existing National Grid Bolney substation as the National Grid interface location in the Mid Sussex District.

4.4. The Applicant has signed a grid connection agreement with National Grid for a capacity of up to 1,200MW for the Project, powering the equivalent of 1 million UK homes.

4.5. The construction of the Project, including all off and onshore components, is anticipated to take approximately four to five years.

4.6. The turbines, substations and foundations are expected to operate for 30 years, after which a decision would be made whether to refurbish the offshore plant or remove it. It is anticipated that all offshore structures above the seabed would be completely removed. The onshore cables and any buried offshore cables would be left buried in situ. The onshore substation may be used as a substation site after decommissioning of the Project or it may be upgraded for use by another development (which would be subject to a separate planning application).

Offshore

4.7. The offshore components of the Project would comprise of:

- Up to 90 offshore wind turbine generators (WTGs);
- Associated foundations and inter-array cables;
- Up to three offshore substations;
- Up to four offshore export cables, each in its own trench; and
- Up to two offshore interconnector export cables between the offshore substations.

4.8. The WTGs would have a height to blade tip of up to 325m from the Lowest Astronomical Tide (LAT). The WTG towers, nacelles (i.e. casings) and blades will be transported from a port to the Project array area on the installation vessels or on separate transport vessels and assembled in location. The WTGs would comprise three WTG blades linked to an axis and attached to a nacelle which houses a gearbox, generator, and transformer. This would be placed at the top of a tower, which may be assembled in sections on top of a foundation. The nacelle would be able to rotate to face the oncoming wind direction. The transformer in the nacelle steps up generated electricity to a higher voltage to reduce losses during transmission over the longer distances to the substation. As such, the size and capacity of the WTGs for the Project would be determined during the final design stage prior to construction. The final turbine design would be selected in accordance with the parameters set out in the DCO. The maximum design scenario for the WTG layout is included in the Project Description chapter of the ES.

4.9. Offshore substations collect the electricity generated by the WTGs via electrical cables so that it can be transmitted onshore and then to the National Grid. It is anticipated that there would be up to three offshore substations. The substations would transform generated electricity from the WTGs to a higher voltage for transmission to shore via export cables. Although the location and extent of the offshore substations would be confirmed through the detailed design process, they would be located within the proposed DCO Limits.

4.10. The Project may use two offshore interconnector export cables to link together the offshore substations in the array area. This provides the transfer of generated power from the east side of the site to the west side where the export cable corridor is located. Electricity from the offshore substations will be transmitted via up to four export cables to the transition joint bays (TJBs) located at the landfall near Climping Beach.

Onshore

4.11. The onshore components of the Project, which would be landward of Mean High Water Springs, would comprise:

- A single landfall site using Horizontal Directional Drilling (HDD) installation techniques located at Climping;
- Buried onshore cables in a single corridor approximately 38.8km in length travelling through Arun District, the South Downs National Park, Horsham District and Mid Sussex District;
- A new onshore substation located at Oakendene near Cowfold, which would connect to the existing National Grid Bolney substation, Mid Sussex via underground cables; and
- An extension at the existing National Grid Bolney substation of up to 0.63ha comprising electrical components and equipment necessary to connect the electricity generated by the Project to the existing National Grid network.

4.12. The onshore cable corridor is proposed from the landfall at Climping through to a new substation at Oakendene, and then from the new onshore substation

at Oakendene to the existing National Grid Bolney substation. This also includes extension to and additional infrastructure at the existing National Grid Bolney substation (in Mid Sussex District) to connect the Project to the national grid electrical network.

4.13. The onshore cable corridor is approximately 38.8km in length and would include: a typical cable construction corridor of 40m in width (which varies across the length of the corridor); trenchless crossing compounds; temporary infrastructure, including trenchless crossing areas; and a permanent infrastructure corridor width up to 25m (or wider at trenchless crossing locations), including HVAC transmission cables and associated joint bays.

4.14. Open cut crossing methodology would predominantly be used. Where appropriate, trenchless crossing techniques would be used to cross, for example, main watercourses, railways, and roads that form part of the Strategic Highways Network.

4.15. During construction, temporary construction compounds would be required along the cable corridor for landfall works, trenchless crossings and logistics (storage of materials and equipment, location of CBS batching plant, and welfare facilities and office space). Five sites have been identified as locations for temporary construction or logistic compounds, these are:

- Climping compound (approximately 61,300m^2);
- Washington compound (approximately 39,100m^2);
- Oakendene substation compound (approximately 25,000m^2);
- Oakendene west compound (50,000m^2); and
- The existing National Grid Bolney substation compound (approximately 3,500m^2).

4.16. Temporary construction compounds would also be required where trenchless crossing techniques are used along the onshore cable route to cross features such as main watercourses, railways and roads that form part of the Strategic Highways Network. These trenchless crossing temporary construction compounds typically have an area of 50m x 75m. A temporary construction HDD compound would also be required for landfall works, with the temporary construction compound being used for the HDD activities, cable pulling and construction of the TJBs. The landfall temporary construction HDD compound would be located behind Climping beach either approximately 600m or 900m north east of Atherington with an area of approximately 100m x 120m.

4.17. The purpose of the new onshore substation at Oakendene is to increase the onshore cable route voltage to the 400kV required to connect to the existing National Grid Bolney substation. The onshore substation would comprise electrical components and equipment necessary to connect the electricity generated by the Project to the existing National Grid network, including, for example: transformers, switch room, control building, and welfare facilities. Some equipment will be placed outdoors and other equipment would be housed in buildings or enclosures. The maximum footprint for the proposed onshore substation at Oakendene would be up to six hectares within the onshore substation site boundary. The remaining site area includes a

combination of land to be reinstated and handed back to the landowner and landscaping and drainage works. The site would be securely fenced. New infrastructure is required at the existing National Grid Bolney substation to provide a cable connection from the proposed Oakendene substation to the existing National Grid Bolney substation as the National Grid interface location.

5. Local Impact Report Methodology

Introduction

5.1. This section provides details on how the local impacts have been identified, evaluated, assessed, and presented within the LIR. This section also identifies what is not included in the scope of this assessment.

Identification – a topic-based approach

5.2. The LIR presents the local impacts WSCC wants to be brought to the attention of the ExA, which primarily relate to the topics as presented in the Project ES or those where it is not specifically covered in the ES, but where it is considered, local impacts will be felt. These are:

- SLVIA;
- LVIA;
- Socioeconomics;
- Noise and Vibration;
- Onshore Ecology;
- Arboriculture;
- Traffic and Transport;
- Mineral Safeguarding;
- Historic Environment;
- Water Environment;
- Emergency Services;
- Public Rights of Way; and
- Public Health.

Data gathering- an evidence-based approach

5.3. Each topic-based section contains an assessment of positive, neutral, and negative impacts, during both construction and operation of the Project.

5.4. WSCC has based its evaluation of the local impacts on evidence gathered and the judgement of specialists, including both WSCC officers who have been consulted to identify the impacts in their own area of expertise and those external specialists contracted to support WSCC (see Appendix A for Pen Portraits). This evidence gathering comes from a number of sources, including:

- Via local knowledge of the DCO Limits;
- Previous experience from construction and operation of Rampion 1;
- Professional judgement;
- Knowledge gained on the Project via ETGs and consultation events during the pre-application period;
- Review and evaluation of the DCO documentation;
- Evaluation against WSCC policies and plans; and
- National Policy Statements.

5.5. To ensure a consistent approach, the topic specific sections have been collated into a standard format.

Evaluating the nature of the impacts

5.6. Once the evidence was gathered on the potential impacts, the next stage was the implementation of a systematic approach to clearly indicate if these impacts were positive, neutral, or negative and why.

5.7. Furthermore, additional refinement was added to clarify when such impacts were likely to occur, for example, during construction, operation or indeed long term strategic impacts on the local area.

Presentation of findings

5.8. For each relevant topic, the key issues for WSCC are identified and commentary is provided on the extent to which the Applicant addresses these issues by reference to the application documentation, including the DCO articles, requirements and obligations, as relevant.

5.9. For each topic area, this LIR sets out:

- National and WSCC policy (where applicable) context;
- The positive, neutral and negative impacts of the Project during the construction phase, as anticipated by WSCC;
- The positive, neutral and negative impacts of the Project during the operational phase, as anticipated by WSCC;
- The suitability of the measures proposed by the Applicant to avoid, reduce, mitigate or compensate the identified impacts;
- Where applicable, proposals by WSCC for alternative or additional measures to better address the identified impacts;
- The need for obligations and new or amended DCO Requirements.

Exclusions to the themed based approach

5.10. There are a number of things this LIR purposely does not do, which are detailed below.

- Environmental Statement (ES): The LIR does not replicate the ES nor is it necessary to replicate any assessment already produced in respect of the Project.
- Community consultation: In producing the LIR, WSCC did not, and is not required to, carry out its own consultation with the local community.
- Balancing exercise: In accordance with Advice Note One, this LIR consists of a statement of positive, neutral, and negative local impacts, but it does not contain a balancing exercise of the positives and negatives. That is the prerogative of the ExA.
- Representation of third-party comments; it is not the purpose of the LIR to duplicate the representations of Parish Councils, organisations and members of the public that have been made to WSCC or directly to the Applicant about the Project (prompted for example, by the Applicants consultation). Reference is made to local representations made to WSCC where they support WSCC findings; however, WSCC has also encouraged

such respondents to register as Interested Parties so their representations about the Project will be considered by the ExA.

- Statement of compliance with National Policy Statements (NPS); WSCC has not included an assessment of compliance with an NPS as this is the prerogative of the ExA in making a recommendation to the SoS, who as per the Act, must have regard to them in the decision-making process. WSCC consider that it is still helpful to refer to NPSs and other policy to use as a background for the assessment of impacts.

6. Principle of Development and Overarching Comments

Principle of Development

6.1. WSCC acknowledges the target set by the UK Government of delivering over a third of electricity from offshore wind by 2030 and, therefore, it is supportive of the principle of offshore wind development in helping to tackle the challenges faced by climate change.

6.2. WSCC recognises the national importance of having a balanced supply of electrical generation, including increasing renewable energy supplies from offshore turbines in helping decarbonise the UK's energy sector. Critical national infrastructure must not only deliver the Government's energy objectives, but also deliver sustainable societal and economic impacts in the regions that are hosting them. Therefore, the Project needs to be achieved without significant adverse effects on the environment, local communities, and economy of West Sussex.

6.3. The WSCC Council Plan sets out a key focus area for promoting a sustainable and prosperous economy and identifies the following objective: "*We will continue to deliver commitments in our Climate Change Strategy, in particular positioning the county as a place for innovation in green technology and renewable energy. We will […] play a key role in influencing others to make the right choice and encourage and enable the community and businesses to innovate and make decisions which optimise the use of renewable energy, reduce carbon impact and promote nature recovery and biodiversity*."

6.4. The WSCC 2030 Energy Strategy recognises the key role that the WSCC plays in enabling and influencing others to make changes beyond what it controls. Supporting the corporate Climate Change Strategy, the 2030 Energy Strategy identifies the following objective: *"We will develop, and support our partners to develop, more sustainable energy generation and (heat) networks in West Sussex which will contribute to the decarbonisation of energy (heat and power) in the country."*

6.5. The WSCC Climate Change Strategy further acknowledges the need to external partnerships to achieve carbon reductions across the County. It highlights the opportunity that WSCC has to engage with and support activities beyond its direct control: *"We want everyone in our communities to have the opportunity to move to, and benefit from, a low carbon and adapted way of living. The opportunities that extend beyond the reach of the County Council's operation and remit, and we want to work as effectively as we can to influence as best we can."*

6.6. The Applicant has identified that the offshore infrastructure associated with the Project will have potentially significant adverse impacts on the seascape, coastal landscapes, and people who live, work and visit West Sussex. The onshore infrastructure at the substation site also has the potential to negatively impact a number of environmentally sensitive areas and features, and on residential amenity during the lifetime of the Project.

Overarching Comments

6.7. Although the Project is supported in principle by WSCC (because it would make a significant contribution to the provision of renewable energy), there are number of matters of significant concern that have not been satisfactorily addressed to date by the Applicant and are presented within this LIR.

6.8. Therefore, it is crucial that essential mitigation, enhancement, and compensation is in place to ensure that the Project leaves a positive lasting legacy within the County.

6.9. There is currently a limited scope and scale of the draft section 106 principles presented by the Applicant, which indicate a disappointing level of commitment to West Sussex. The concerns are reflected in the gap in expectations that currently exist between the Applicant and WSCC.

6.10. WSCC and other stakeholders must have confidence that the commitments and mitigation measures proposed by the Applicant to reduce the adverse effects presented, are secured sufficiently with the control documents and dDCO.

6.11. It is noted within the latest version of the dDCO (PEPD-010), WSCC is included as having a role (either as approver or consultee) for a number of DCO Requirements. WSCC should only be party to DCO Requirements, as a consultee, that directly relate to its statutory functions as either the Local Highways Authority (LHA) or Lead Local Flood Authority (LLFA). It should also be noted that full cost recovery via a legal agreement would be required to undertake this consultee role, due to the substantial amount of work involved.

6.12. The Community Benefits Package, referenced within the submission documents is described as 'remaining separate' from the planning process. However, due to the adverse effects identified by the Project, WSCC considers that the Community Benefits Package should be a firm commitment and secured through the DCO.

7. Seascape, Landscape, and Visual Impact (ES Chapter 15)

Summary

7.1. Although WSCC recognises that offshore wind energy would inevitably result in changes to coastal seascapes and views, based upon the current Project (as presented in the DCO submission) WSCC has concerns about the scale of likely impacts of the Wind Turbine Generators (WTGs) and offshore substations. This is in combination with the currently operating Rampion 1 Offshore Wind Farm. Commentary within this LIR is focussed on the visual impacts of the offshore elements on West Sussex.

7.2. As acknowledged by the Applicant through the Seascape Landscape and Visual Impact Assessment (SLVIA) findings, the Project will result in adverse seascape, landscape, and visual effects to people living, working, and visiting West Sussex during both the construction and operational phases.

7.3. The SLVIA (APP-056) is detailed, and it provides useful information to enable the consideration of impacts on SLVIA aspects. Engagement has been undertaken with the Applicant through the pre-application process on identifying viewpoints and analysis of the Zones of Theoretic Visibility (ZTV) produced to date. WSCC is broadly satisfied with the methodology and its application within the assessment.

7.4. There is a concern however, that a worst-case scenario relative to West Sussex receptors has not been presented. It must be demonstrated that the Maximum Design Scenario (MDS), which has balanced the number of turbines between both Zone 6 and the western Extension Area, is truly the worst case for receptors in West Sussex if the dDCO allows for a greater number of turbines to be placed to the west. There are also concerns that the Requirement in the dDCO does not clearly limit the number and height of WTGs in accordance with the maximum parameters defined in the assessment.

7.5. The provided photomontages are useful tools that aid in the assessment of visual effects. They show the significance of impacts likely to be experienced by receptors in West Sussex, in particular, the impacts that would result from the lengthy westerly extension, which would significantly extend the field of view over which impacts on seascape would be experienced.

7.6. It is acknowledged that there has been an evolution in offshore design and reduction in offshore DCO Limits prior to submission, which has been welcomed by WSCC. However, the iterative changes to the design of the offshore elements has not resulted in a major reduction to the potential visual effects upon West Sussex receptors.

7.7. The findings of the SLVIA conclude that even with embedded mitigation measures, significant adverse effects for areas of West Sussex will be felt during all stages of the Project, predominantly along the coastal plain. No attempt at further mitigation through the reduction in size and scale of the WTGs has been undertaken by the Applicant. Neither has there been the production of a secured set of offshore design principles for the detailed design stage, if consented, to reduce the potential effects presented. WSCC is not

satisfied that the Applicant has demonstrably exhausted all reasonable mitigation measures in terms of design of the offshore elements.

7.8. The Applicant must continue to work with stakeholders to further develop commitments to the layout and extent of WTGs and offshore substations to reduce the significant visual impacts predicted. In working with stakeholders to secure a set of design principles specific to views experienced from West Sussex, there needs to be commitment by the Applicant that a lesser impactful design can be secured.

7.9. Should Development Consent be granted, WSCC considers it necessary to secure a package of community contributions secured through the DCO, in consideration of the harm caused by the significant adverse effects identified.

7.10. WSCC acknowledges the revised documents submitted by the Applicant at the Procedural Deadline. This has resulted in documentation missing from the original submission being presented by the Applicant, which has been considered within this LIR. It does not fundamentally change the position of WSCC regarding the SLVIA concerns raised to date.

Table 7: Summary of Impacts –Seascape, Landscape, and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
7a	Landscape and Visual effects (including nighttime effects) of construction and operation of the WTGs/offshore export corridor/offshore substations upon West Sussex receptors	C/O	Negative	**Avoid, Reduce, Mitigate** - The Applicant must continue to work with stakeholders to further develop commitments to reduce the layout and extent of turbines, to reduce the significant visual impacts as presented. This also requires further demonstration by the Applicant that the assessment is the worst case for receptors in West Sussex. **Compensate** - Should Development Consent be granted, WSCC therefore consider it necessary to secure a package of contributions secured within the DCO, in consideration of the harm caused by the significant adverse effects identified.	NPS EN-1 (Paragraphs 5.9.5-5.9.7 and 5.9.21) NPS EN-3 (Paragraphs 2.4.2, 2.6.202, and 2.6.204-2.6.206)
7b	Interaction/invisibility with onshore elements	C	Negative	**Mitigate** - The Applicant must provide a more detailed assessment of effects and mitigation for where receptors will be affected by more than one element of the Project, namely both on and offshore.	NPS EN-3 (Paragraph 4.26)

Policy Context

National Policy Statements

7.11. Both NPS EN-1 and NPS EN-3 include aspects relevant to seascape, landscape, and visual matters.

7.12. NPS EN-1, Overarching NPS for Energy, paragraphs 5.9.5 to 5.9.7 have regard to the assessment aspects, with 5.9.8 focusing upon decision making: "*Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate*."

7.13. Paragraphs 5.9.18 to 5.9.20 have regard to visual impact and includes, in para 5.9.18, "*All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The IPC will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. Coastal areas are particularly vulnerable to visual intrusion because of the potential high visibility of development on the foreshore, on the skyline and affecting views along stretches of undeveloped coast*".

7.14. Para 5.9.21 refers to mitigation: "*Reducing the scale of a project can help to mitigate the visual and landscape effects of a proposed project. However, reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, the electricity generation output. There may, however, be exceptional circumstances, where mitigation could have a very significant benefit and warrant a small reduction in function. In these circumstances, the IPC may decide that the benefits of the mitigation to reduce the landscape and/or visual effects outweigh the marginal loss of function",* and para 5.9.22 states "*Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration."*

7.15. NPS EN-3, Renewable Energy Infrastructure states in paragraph 2.4.2 "*Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology."*

7.16. Paragraph 2.6.202 states "*Where a proposed offshore wind farm will be visible from the shore, an SLVIA should be undertaken which is proportionate to the scale of the potential impacts",* along with paras 2.6.204 to 2.6.206 which focus on methodology and scope of the SLVIA.

7.17. With regards potential interrelated visual effects - Paragraph 4.2.6 states that the ES should: "…*consider how the accumulation of, and interrelationship*

between, effects might affect the environment, economy or community as a whole, even though they may be acceptable when considered on an individual basis with mitigation measures in place".

WSCC Policy

7.18. There are no WSCC policies of relevance to the Project.

Construction and Operational Phase - Impacts

7.19. The construction and operational impacts of the offshore elements have been assessed as being of the same magnitude and significance on all viewpoints and visual receptors by the Applicant within the SLVIA, albeit caused by differing activities. As with the ES, both phases are therefore discussed together for the purposes of this LIR section.

Positive

7.20. No positive impacts have been identified during the construction and operational phases for SLVIA aspects.

Neutral

7.21. No neutral impacts have been identified during the construction and operational phases for SLVIA aspects.

Negative

Construction and Operation of Offshore Elements

7.22. An assessment of the visual effects arising from the construction, operation, and maintenance of the offshore elements of the Project on representative viewpoints within West Sussex (outside of the South Downs National Park (SDNPA) is set out within the SLVIA. On the whole, WSCC is satisfy with the number of viewpoints produced, the location of these, and that the presented findings are robust, although it is felt they are downplayed in some circumstances.

7.23. There are a number of settlements within West Sussex that form the almost contiguous, linear urbanised coastline between Shoreham-by-Sea, Worthing, Lancing, Littlehampton, Selsey and Bognor Regis. The sensitivity of residents of these coastal edge settlements to the changes associated with the offshore elements of the Project is assessed by the Applicant as medium-high, reflecting that the views have medium value and the receptors experiencing the view have a high susceptibility to change.

7.24. Even with the acknowledgement that the visual amenity experienced by some viewers is already influenced by the presence of the existing Rampion 1 OWF, the addition of the offshore elements of the Project would result in a significantly greater visual impact from a number of viewpoints than views of the existing Rampion 1 alone. This would, in turn, cause the offshore wind farms to become the dominant feature in the seascape and lead to a curtaining effect across Sussex Bay.

7.25. Based upon the MDS presented, the SLVIA findings indicate that the predominant adverse visual impacts will be felt by West Sussex receptors along the South Coast Plain. This is due to the low-level coastline where there are direct, large-scale, open views out to sea and sky. Key viewpoints include (from east to west), Lancing (Viewpoint F), Worthing (Viewpoint 10), Ferring (Viewpoint E), Littlehampton (Viewpoint 11), Climping Beach (Viewpoint 40), Bognor Regis (Viewpoint 12), Pagham (Viewpoint 13), and Selsey Bill (Viewpoint 14).

7.26. No attempt at further mitigation through the reduction in size and scale of the WTGs has been undertaken by the Applicant. It is, therefore, of concern to WSCC that viewers in these areas will be influenced by the offshore elements of the Project to such a degree of harm during both construction and operation.

Interrelated Effects - Visibility

7.27. The Applicant acknowledges in Chapter 30 (APP-071) that inter-related effects will occur on those viewpoints and visual receptors near the landfall, or near to the onshore cable corridor, where the construction of the onshore infrastructure will occur in areas that may also be susceptible to changes resulting from views of the construction of the offshore elements of Rampion 2. There are not many viewpoints that are shared between the SLVIA and LVIA, which makes it difficult to make robust conclusions upon the level of potential impact in these locations.

7.28. Views experienced by receptors within localised parts of the West Sussex coastal plain, the Lower Arun Valley, and its shoreline (between Littlehampton and Climping), could potentially experience significant inter-related effects during, and close to, the construction of the landfall and onshore cable route, together with the construction of the offshore elements of Rampion 2 in offshore views, over a short-term period when their construction periods overlap.

7.29. Potentially significant construction stage inter-related visual effects are likely to occur in close proximity to the construction of onshore infrastructure at the landfall and the onshore cable route, from where there is potential for simultaneous or sequential views of the construction of the offshore elements of Rampion 2 out to sea in sea views from these routes.

7.30. These include views from short sections of the Arun Way, NCR2, Littlehampton Golf Club and Littlehampton West Beach, including Climping Beach. Significant inter-related visual effects could potentially be experienced, particularly focused on views the western part of Littlehampton West Beach (also includes Climping Beach), including the Arun Way (England Coastal Path/PROW 829 all overlap with Arun Way) which passes along the beach, where there are likely to be close views of the landfall and cable route during construction, together with the construction of the offshore elements of Rampion 2 out to sea in offshore views.

Required Mitigation

Intervisibility

7.31. Secured outline construction documents, such as the Outline Code of Construction Practice (OCoCP) (and Construction Method Statements) (PEPD-033) should provide greater certainty on the duration, phasing, and sequencing of construction activities, particularly in areas where multiple construction activities both on and offshore will be undertaken.

Maximum Design Scenario (MDS)

7.32. Due to the significant adverse visual effects presented by the Applicant, WSCC is not satisfied that they have demonstrably exhausted all reasonable mitigation measures in terms of design of the offshore elements.

7.33. There is currently no securement through the dDCO of the MDS presented as part of the SLVIA (65 WTGs at 325m to blade tip), or securement of a less impactful design, through a set of offshore design principles.

7.34. Consideration should be given to an offshore layout that has an overall potential for lesser impacts upon West Sussex. WSCC requests that the below be further explored by the Applicant:

- Reduction in the height and number of WTGs;
- Consideration of using the full north-south extent of the offshore DCO Limits to reduce the lateral spread, and a design to allow for more coherent block layout; and
- A more detailed understanding and discussion of the balance between the potential locations of turbines in the western extension area (which would clearly be more detrimental to receptors along the West Sussex coastline) and that of Zone 6 (the unused area of the original Rampion 1 zone).

7.35. Securement within the dDCO of a robust set of offshore design principles is required to ensure the least impactful offshore design scenario is taken forward, if consented.

7.36. Should Development Consent be granted, WSCC considers it necessary to secure a package of community benefits, secured through the DCO, in consideration of the harm caused by the significant adverse effects identified by the Applicant in relation to West Sussex.

8. Socio-economics (ES Chapter 17)

Summary

8.1. During the construction phase of the Project, the Applicant estimates that out of a total of 4,060 FTE jobs created nationally during construction, 80 full time equivalent (FTE) jobs would be created in Sussex; however, there is no certainty that any of these opportunities will be taken-up by West Sussex's residents. Supply-chain expenditure retained by local businesses in Sussex is anticipated by the Applicant to be around £30.1m, some of which may be captured in West Sussex. According to the Applicant, between 40-50 FTE direct jobs will be generated by the Project once operational, with an additional 500 FTE indirect/supply chain jobs created. Again, there is no certainty that any of these opportunities will be created in West Sussex.

8.2. WSCC considers the low economic impact arising from the Project as a negative from the perspective of West Sussex. This is in view of the low level of supply chain expenditure and the likely very limited employment generation expected to occur in West Sussex that could benefit its local businesses and residents.

8.3. WSCC seeks to maximise potential benefits with regards to the local economy, skills, education and employment opportunities through working with the Applicant and engaging with local stakeholders where appropriate. For example, WSCC considers there to be potential for further development of programmes that support local businesses to grow and offer their services to become part of the Project supply chain. Further engagement should therefore include exploration of how local supply chain benefits, jobs, and training opportunities can be generated for local businesses and people.

8.4. Regarding recreation, WSCC considers that the construction of the Project will have a negative impact on a variety of onshore and inshore recreational activities that mitigation will not adequately address.

8.5. For tourism, the impact of both construction and operation of the Project at Paragraph 5.13.4 it is considered by WSCC to be potentially negative. Visitors may be deterred from undertaking visits, such as to coastal resorts, recreational routes, for water sports and to beaches. This would occur either due to the setting of these being changed by visual impacts from onshore and offshore works during construction, the visual presence of offshore infrastructure during operation, or from changes to the general perception of the area as a visitor location. This could result in loss of income and the jobs this supports.

8.6. The Applicant must provide more robust evidence of how it plans to mitigate negative impacts on the visitor economy, both in terms of recreational activities and tourism, and enhance local economic benefit. This should include additional mitigation to address visual impacts on users and businesses, and financial mitigation which provides compensation for adverse impact and to support the sector more generally.

8.7. The OSES has been updated by the Applicant (PEPD-037). Whilst it is clear progress has started to be made on the strategy, there is still some way to go.

The Applicant has engaged with a number of stakeholders including West Sussex as part of a first tranche of engagement. The document states that engagement covered key concerns and issues related to education, skills and employment; opportunities for collaboration and identification of existing programmes and activities. WSCC had one exploratory meeting but specific details on areas such as existing skills gaps and potential initiatives was not discussed. Whilst a second round of additional consultees has been identified in the OSES, the strategy makes no mention of continued engagement with WSCC.

8.8. The OSES now includes a list of existing skills programmes within Sussex that will be targeted but no clarity has been provided on how this list was selected and whether these programmes are actually relevant to target from both a geographical catchment or skills perspective. The Applicant has also provided a very basic list of potential initiatives in Table 5.2, however this lacks detail and is essentially just a generic list.

Table 8: Summary of Impacts – Socio-economics					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
Supply Chain and Economic Impact					
8a	Limited opportunities for supply chain expenditure to be captured by West Sussex businesses	C/O	Negative	**Mitigate:** through ensuring the Applicant carries out further work to understand how locally retained expenditure can be increased. **Mitigate:** through ensuring the Applicant works with local stakeholders to develop programmes to support local businesses in their ability to become suppliers to the Project.	NPS EN-1 (Paragraph 5.13.6) The WSCC 'Our Council Plan 2021-2025'
8b	Employment to be generated in West Sussex is either nil or minimal given the potential of the project to generate jobs nationally.	C/O	Negative	**Mitigate :** through ensuring the Applicant works with local stakeholders to develop programmes to support residents in accessing employment related to the project during the construction phase.	NPS EN-1 (Paragraph 5.13.4) The WSCC 'Our Council Plan 2021-2025' The WSCC 'Economy Plan 2020-2024'
Skills, Education and Employment					
8c	Insufficient impact on the enhancement of skills and employment for local people	C/O	Negative	**Mitigate:** through ensuring the Applicant to develop the Outline Skills and Employment Strategy to demonstrate how net additional benefit can be achieved. In addition, the Applicant should work with local stakeholders to understand local specific issues and need to provide lasting benefit for local skills, education and employment.	NPS EN-1 (Paragraph 5.13.4) The WSCC 'Economy Plan 2020-2024'

Table 8: Summary of Impacts – Socio-economics					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
Recreation and Tourism Economy					
8d	Adverse impact on onshore and offshore recreational activities during construction phase	C	Negative	**Mitigate and reduce:** the impacts (which are short term during construction) through environmental measures which reduce visual impacts. This includes minimising the duration of construction activities.	NPS EN-1 (Paragraph 5.13.6) The WSCC 'Economy Plan 2020-2024' The West Sussex Economic Collaboration Report 2023 report
8e	Potentially significant adverse impact on Sussex as a visitor tourism destination	C/O	Negative	**Mitigate and compensate:** through the provision of funding from the Applicant to support visitor economy initiatives, such as providing investment in marketing and business support across the sector, tourism business support grants and services or supporting attractions and events.	NPS EN-1 (Paragraph 5.13.6) The WSCC 'Economy Plan 2020-2024' The West Sussex Economic Collaboration Report 2023 report.

Policy Context

National Policy Statements (NPSs)

Overarching National Policy Statement for Energy, EN-1

8.9. The socio-economic impacts of National Significant Infrastructure Projects (NSIPs) are discussed in Section 5.13 of the Overarching National Policy Statement for Energy (EN-1). EN-1 sets out that construction, operation, and decommissioning of energy infrastructure may have socio-economic impacts at local and regional levels.

8.10. Paragraph 5.13.4 states socio-economic impacts for assessment may include:

- The creation of jobs and training opportunities (including their sustainability);
- The contribution to the development of low-carbon industries locally, nationally, and regionally;
- The provision of additional local services and improvements to local infrastructure, including the provision of educational and visitor facilities;
- The effects (positive and negative) on tourism and other users of the area impacted;
- The impact of a changing influx of workers during the different construction, operation, and decommissioning phases of the energy infrastructure. This could change the local population dynamics and alter the demand for services and facilities in the settlements nearest to the construction work (including community facilities and physical infrastructure). There could also be effects on social cohesion depending on how populations and service provision change as a result of development; and
- Cumulative effects – if development consent were to be granted for a number of projects within a region within a similar timeframe, there could be some short-term negative effects, such as a shortage of construction workers to meet the needs of other industries and major projects in the region.

8.11. Paragraph 5.13.5 states the Applicant should describe the existing socio-economic conditions in the areas surrounding the proposed development and state how the development's socio-economic impacts correlate with local planning policies.

8.12. Paragraph 5.13.6 notes socio-economics may be linked to other impacts, such as visual impacts, but also impact tourism and local businesses. The Applicant is encouraged to demonstrate that local suppliers have been considered in any supply chain.

8.13. Paragraph 5.3.17 notes that the Applicant should consider developing strategies for accommodation, especially during construction and decommissioning phases, to include the need to provide temporary accommodation for construction workers if required.

National Policy Statement for Renewable Energy Infrastructure, EN-3

8.14. EN-3 is to be read in conjunction with EN-1 and provides planning guidance for developers of nationally significant renewable energy projects. The NPS does not discuss specific socio-economic impacts to be considered; however, paragraph 2.10.69 states the Applicant should set out what would be decommissioned and removed from the site at the end of its operational life, considering where there may be socio-economic benefits in retaining site infrastructure after the operational life, such as retaining pathways through the site or a site substation.

National Policy Statement for Electricity Networks Infrastructure, EN-5

8.15. EN-5 is to be read in conjunction with EN-1 and EN-3 and provides planning guidance for developers of nationally significant electricity network infrastructure projects. The NPS does not specifically refer to socio-economic impacts; however, paragraph 2.9.25 states the Secretary of State should only grant development consent for underground or subsea sections of a proposed line over an overhead alternative if they are satisfied the benefits accruing from the former proposal clearly outweigh any extra economic, social or environmental impacts that it presents.

WSCC Policy

Our Council Plan 2021-2025

8.16. The Plan sets out the ambitions for what WSCC would like to achieve for communities in West Sussex by 2025. This includes a sustainable and prosperous economy and to make the best use of local resources. It seeks to implement a social value framework that will ensure procurement processes are accessible to local providers to maximise the use of local suppliers in supply chains, securing added economic, social, and environmental benefits for residents. This is to include jobs and opportunities for local people, and access to education, training, and support.

WSCC Economy Plan 2020-2024

8.17. The Plan was prepared in response to the economic challenges resulting from Covid-19. Prior to the pandemic, West Sussex had higher than national and regional levels of economic activity and employment rates. The Plan seeks to set realistic ambitions for the local economy and identify ways to partner with different entities, such as business and trade organisations, to address the economic challenges being faced.

8.18. It introduces a range of themes, setting out related headline actions to achieve associated goals. Theme 2 seeks to 'protect and revive coastal towns', working with partners to generate long-term career opportunities in coastal areas and secure infrastructure investment. Theme 5 of the plan is to 'enable employment and skills recovery and resilience'. WSCC will focus on higher value, knowledge economy sectors and skills, responding to business needs and growth opportunities. Theme 6 of the Plan is to 'protect and revive

tourism and the visitor economy'. Development proposals will need to protect the high-quality natural environment, the character and distinctiveness of the county, and maintain the attractiveness to businesses and employees.

West Sussex Economic Collaboration Report 2023

8.19. The report was carried out to review how WSCC and the seven District and Borough Councils can collaborate on economic development, regeneration, growth, and to propose next steps. Its findings include recognition that green technology, sustainability, digital and IT are key areas with increasing demand for skills. It states opportunities for education and skills providers to continue to work towards delivering skills in shortage areas and places with increasing demand, including in technical, engineering, and digital skills.

8.20. The report highlights the unique selling points of West Sussex's rurality, coast, and sea environments for the visitor economy. There are strategic pan-Sussex developments on the visitor economy with a key principle of adopting a sustainable, high value green tourism approach that leverages natural assets. Development must therefore seek to protect and enhance these natural assets whilst also supporting communities to access services and employment sites.

West Sussex Transport Plan 2022-2036

8.21. The purpose of the Plan is to set out how WSCC, working with its strategic partners, will address key challenges in improving, maintaining, and managing the transport network in the period to 2036 and facilitate access to education, healthcare, employment, and leisure facilities (see Transport section of this LIR for more details).

West Sussex Rights of Way Management Plan 2018 – 2028

8.22. The Plan serves to protect Public Rights of Way (PRoW) for residents and visitors to enjoy the West Sussex countryside, including public footpaths, bridleways, restricted byways and byways open to all traffic (see Public Rights of Way section of this LIR for more details).

Construction Phase – Impacts

Positive

8.23. No positive socio-economic impacts arising from construction of the Project have been identified.

Neutral

8.24. No neutral socio-economic impacts arising from construction of the Project have been identified.

Negative

Supply Chain Expenditure

8.25. The Applicant assesses that the overall level of supply chain expenditure retained by local businesses is anticipated to be minimal. WSCC considers the limited supply chain engagement to be a missed opportunity to provide meaningful local economic benefit. The Council Plan 2021-2025 identifies measures to maximise the use of local suppliers in supply chains. Further work by the Applicant was expected in respect of scenarios to increase local supply chain expenditure and improve the low economic impact of the project during construction; however, this work does not seem to have not been undertaken. The Applicant's assessment (refer Table 17-7) indicates that locally retained expenditure could be higher in practice and has been conservative in assessing a worst case, but without reference to the further work that was expected.

Local Economic Impact

8.26. The Applicant assesses that 80 full-time equivalent (FTE) jobs FTE will be generated in Sussex out of 4,060 FTE jobs nationally during construction of the Project. WSCC considers the limited generation of employment within West Sussex to be a missed opportunity to provide meaningful local economic benefit. A key theme within WSCC's Economy Plan 2020-2024 is the recovery of employment levels. Further work was expected to be prepared by the Applicant in respect of scenarios to increase local supply chain expenditure that would generate more employment opportunities locally and improve the low economic impact of the Project during construction; however, this has not been prepared.

8.27. Also, although an explanation of why induced socio-economic impacts have not been assessed is provided, the implications of not considering these impacts are not explained and is unclear as this is not stated as a limitation.

8.28. Finally, reporting effects at a more local level (i.e. by each local authority, West Sussex, East Sussex, and Brighton & Hove) would be more appropriate to show how the employment opportunities will be spread within Sussex and aid interpretation of the conclusions.

Skills, Education, and Employment

8.29. As discussed above, a key theme in the WSCC Economy Plan 2020-2024 is to enable the recovery of skills and employment. Our Council Plan 2021-2025 sets out WSCC's aim to implement procurement processes which maximise education, training, and skills opportunities for West Sussex residents. WSCC welcomes that the Applicant has prepared an Outline Skills and Employment Strategy (OSES) (APP-256) which has recently been updated (PEPD-037); however, it has a number of concerns with the proposals.

8.30. It lacks detail on potential initiatives that are directly aligned with local specific issues and need. The OSES also provides no explanation on whether it would differentiate between the provision and outputs offered through the Project against the those offered in a 'business as usual' scenario. It also does not

demonstrate net additional benefit. A route map for developing the strategy further is not provided; for example, it is not clear on the timeline for developing the strategy when stakeholder engagement will take place and how regular this will be.

Recreation

8.31. WSCC considers that the construction of the Project will have a negative impact on onshore and inshore recreational activities. Local visitors value the coastal area for the quality and connectivity of the access network, which enables enjoyment of the scenery and recreational activities, both onshore and inshore. These activities include users of PRoW (see Section 18) wind/kite surfers, recreational anglers, village green users and scuba diving activities, as well as events. These would be impacted in a range of ways, including through temporary or intermittent obstruction to public access routes, including to PRoW, temporary exclusion from areas of Access Land, and temporary or intermittent disturbance/reduced amenity and interruption to events.

8.32. The Applicant's assessment itself concludes that construction of the Project is predicted to have significant residual adverse effects on users of the PROWs with other residual adverse effects also expected.

Tourism Economy

8.33. The tourism sector is a priority in economy plans across Sussex, including West Sussex's Economy Plan 2020-2024, Our Council Plan 2021-2025, and the West Sussex Economic Collaboration Report 2023. A report for the Sussex Visitor Economy Initiative published in September 2023 identifies that the economic impact of tourism in Sussex (pre pandemic in 2019) was £5bn, with the area attracting over 62 million visitors and supporting 74,000 FTE jobs. Of this, West Sussex accounted for some 24 million of these visitors and 38,250 jobs.

8.34. As acknowledged in the Applicant's assessment, both in ES Chapter 17 Socio-economics (APP-058) and ES Chapter 15 Seascape, Landscape and Visual Impact Assessment (APP-056), uninterrupted sea views are important to the character and sense of space when within the settlements and popular tourist/visitor areas along the seafront; this includes at Worthing and Bognor Regis, particularly their historic setting, and also at Littlehampton, and Selsey. The assessment in ES Chapter 15 notes specifically that no measures are available to completely mitigate impacts on views from coastal settlements and significant adverse effects on users of all of these seafronts are assessed. It is evident, therefore, that these locations are at a heightened risk of a negative impact on their tourism.

8.35. Also, visitors to coastal locations, such as Climping Beach and Littlehampton, which are at or close to the cable route landfall area will experience both onshore and offshore impacts from construction activities concurrently.

8.36. WSCC considers there is likely to be a negative impact on the ability to attract visitors to the area, which is not adequately assessed; this raises several key concerns as outlined below.

8.37. The Applicant provided a significant amount of secondary evidence on the impact of energy infrastructure projects to support its assessment in ES Chapter 17 Socio-economics (APP-058) in both Section 17.6 and Section 17.9; however, it highlighted the lack of evidence gathered after developments are in operation as a limitation in its assessment at Paragraph 17.5.16. The implications of this limitation for its findings have not been set out by the Applicant. WSCC considers that such evidence would have a potentially important bearing on assessment findings as it would more conclusively demonstrate whether visitors are deterred from locations of infrastructure of this scale, and the loss of any income and the jobs this supports. This is particularly important given that no local primary research has been undertaken into potential impacts on holiday/short-break planning by visitors.

8.38. An example of such research was that undertaken for Navitus Bay Wind Park development [PINS Reference Number: EN010024], as referred to in Bournemouth Borough Council's Written Representations. Based on primary research prepared by that scheme's applicant, the Council forecast that, under the lowest impact scenario alone, there would be a 20% downturn in economic value in the tourism economy as a result of the project. WSCC considers that a comparable impact resulting from the Project would constitute a negative effect on the visitor economy if realised in West Sussex.

8.39. There is also a lack of assertion within the assessment of potential impacts on the perception of Sussex as a place to visit. Only visitor trend analysis for Brighton & Hove is presented which, given the diversity of its offering, may be influenced by other unrelated factors such that its suitability for informing the assessment conclusion should only be given limited weight. Sussex-wide evidence referred to in this paragraph above has recently become available, which should be considered. Finally, reporting effects at a more local level (i.e. by each local authority, Arun, Brighton & Hove, Horsham, Mid Sussex) would be more appropriate to show how impacts would be experienced within Sussex and aid interpretation of the conclusions.

8.40. The Applicant's assessment fails to identify measures and commitments that would support a boost to the tourism sector to overcome any adverse impacts, which is particularly important given the priority that this is given in economy plans across Sussex.

Operational Phase - Impacts

Positive

8.41. No positive socio-economic impacts arising from operation of the Project have been identified.

Neutral

8.42. No neutral socio-economic impacts arising from operation of the Project have been identified.

Negative

Skills, Education and Employment

8.43. As discussed above, a key theme within the WSCC Economy Plan 2020-2024 is to enable the recovery of skills and employment. Our Council Plan 2021-2025 sets out the aim to implement procurement processes which maximise education, training, and skills opportunities for West Sussex residents. WSCC welcomes that the Applicant has prepared an OSES which has recently been updated (PEPD-037); however, it has a number of concerns with the proposals as have been outlined in the construction section above. WSCC expects the Applicant to work with local stakeholders to further develop the OSES as a means for providing lasting benefit.

Tourism Economy

8.44. The tourism sector is a priority in economy plans across Sussex, including within both West Sussex's Economy Plan, Our Council Plan and the West Sussex Economic Collaboration Report. A 2023 report estimated the economic impact of tourism in Sussex as being £5bn in 2019, which attracted over 62 million visitors and supported 74,000 FTE jobs. Of this, West Sussex accounted for some 24 million of these visitors and 38,250 jobs.

8.45. WSCC considers an adverse effect on the ability to attract visitors to the area to be likely with this being greatest during operation and from the offshore infrastructure. The Applicant provided a significant amount of evidence on the impact of energy infrastructure projects to support its assessment, yet it highlighted the lack of ex-post evidence of this impact as a limitation in its assessment. The implications of this limitation for its findings have not been set out by the Applicant. WSCC considers that such evidence would have a potentially important bearing on assessment findings and is particularly important given that no primary research has been undertaken into potential impacts on holiday planning/short breaks by visitors.

8.46. There is also a lack of assertion within the assessment of potential impacts on the perception of Sussex as a place to visit. Only visitor trend analysis for Brighton & Hove is presented which, given the diversity of its offering, may be influenced by other unrelated factors such that its suitability for informing the assessment conclusion should only be given limited weight. Sussex-wide evidence referred to in this paragraph above has become available, which should be considered. Finally, reporting effects at a more local level (i.e. by each local authority, Arun, Brighton & Hove, Horsham, Mid Sussex) would be more appropriate to show how impacts would be experienced within Sussex and aid interpretation of the conclusions.

8.47. The Applicant's assessment also fails to identify measures and commitments that would support a boost to the tourism sector to overcome any adverse impacts, which is particularly important given the priority that this is given in economy plans across Sussex.

Required Mitigation

Supply Chain Expenditure, Local Economic Impact, Skills, and Employment

8.48. The Applicant has not yet provided proposals that were expected to outline scenarios to increase local supply chain expenditure and improve what WSCC sees as the low economic impact of the Project. To address this, WSCC expects to see a clear, realistic, positive mitigation strategy with key targets that the Applicant is proposing in respect of supply chain expenditure and the local economy. WSCC also expects clarification on local economic benefits generally and how they can be increased, as detailed in the sections above.

8.49. Commitments from the Applicant are sought by WSCC on the following issues:

- Maximising the potential for local recruitment from within West Sussex;
- Creating tangible mechanisms to develop a local supply chain that includes businesses within the local area;
- Delivering social value for example through maximising the Project's opportunity to increase educational inspiration; and
- Adopting and funding a dynamic approach to monitoring skills, employment and education outcomes to maximise benefits.

8.50. Suggestions for the potential outputs and outcomes that these proposals should deliver include:

- Apprenticeship opportunities;
- Promoting take up of jobs by local residents;
- Providing supplier events for local businesses;
- Raising STEM education and careers engagement and awareness; and
- Delivering additional training for the employed workforce.

8.51. WSCC would welcome the Applicant engaging with it to further discuss proposals and funding to increase economic benefits including its OSES (PEPD-037) which it notes has recently been updated.

Recreation and Tourism Economy

8.52. Due to the potential displacement of visitors from the area, both local and wider users of recreational activities and tourists, and the effect on the tourism economy sector, WSCC is seeking to engage with the Applicant to reduce, mitigate and compensate impacts.

8.53. In respect of the onshore and inshore recreational activities identified as being significantly adversely impacted by visual effects, the Applicant should provide additional mitigation to that currently proposed to reduce impacts (see Seascape, Landscape and Visual section of this LIR for more details on additional mitigation proposed).

8.54. For visitors including local and wider users of recreational activities and tourists, WSCC is seeking to secure funding from the Applicant to support local

visitor economy initiatives to mitigate impact. The Applicant's proposals for funding could be set out within a funding proposal and potentially a tourism strategy and action plan to be discussed and agreed with WSCC and relevant partners.

8.55. The plan or funding proposal would benefit from including a firm commitment from the Applicant to support marketing and promotion activities to be undertaken by our partner body 'Experience Sussex'. Potential themes and areas that the mitigation fund could deliver against include:

- Direct support for attractions and events;
- Tourism business support grants;
- Support resources for tourism businesses;
- Research visitor/business surveys;
- Destination marketing; and
- Development of visitor experience enhancements.

8.56. A clear indication of the scale of investment proposed should be provided as part of any firm commitment so that relevant campaign and marketing activities can begin to be prepared. WSCC strongly recommends that any mitigation fund proposals are properly funded, managed, and delivered through Experience Sussex. WSCC would welcome the Applicant engaging with it to further discuss such proposals.

9. Landscape and Visual Impact (ES Chapter 18)

Summary

9.1. The submitted Landscape Visual Impact Assessment LVIA (APP-059) demonstrates that, even with mitigation, the Project would give rise to wide ranging significant impacts on several Landscape and Visual Receptors, both during construction and operation.

9.2. It is accepted that the scale and nature of construction activities and utilitarian built infrastructure involved, is such that avoidance of landscape and visual impacts is difficult to achieve. In this regard, proposed embedded mitigation measures are, in principle, welcomed as generally well-considered measures to reduce and mitigate landscape and visual impacts.

9.3. However, WSCC remains concerned that landscape and visual impacts have been underestimated, that there is considerable uncertainty over the extent to which mitigation can be guaranteed/successful, and that further assessment, mitigation, and compensation should be considered.

9.4. WSCC is concerned that the LVIA places reliance on reinstatement being carried out as soon as possible, which cannot be guaranteed. Visual impacts on individual properties may have been underestimated with the methodology for the Residential Visual Amenity Assessment (RVAA) being unclear. Further, many of the proposed mitigation commitments include significant caveats such as 'where this is the best environment solution and is financially and technically feasible' or 'where practicable/necessary/possible', meaning it is unclear as to what can or will be realistically secured by DCO requirements (and associated control documents).

9.5. WSCC is concerned that visual impacts of the Oakendene substation may have been underestimated, with additional View Point (VP) locations and associated visualisations required to best represent key visual receptors and provide accurate assessment of the level of impacts, and to inform appropriate mitigation and compensation. Design principles and outline landscaping proposals identified in the Design and Access Statement (AS-003) are welcomed, however, need further refinement, to be presented in a clearer manner, and to provide greater certainty over the likely site levels and the appearance, scale, and design of structures proposed.

9.6. Given the Project will inevitably result in significant residual landscape and visual impacts, WSCC consider that these should be offset/compensated through the enhancement of retained hedgerows and trees both within and around the DCO Limits (e.g. through gapping up of hedgerows, additional native planting, management and enhancement of key landscape characteristics), and the delivery of PRoW enhancements and thus amenity benefits to negatively affected receptors. This should be secured both as part of stage specific LEMPS (and through the provision of a S106 fund for any works/enhancements offsite).

9.7. In accordance with National Policy Statements, the Examining Authority will need to be satisfied that all landscape and visual impacts have been

minimised/mitigated as far as practicable, and to determine whether any impacts would be outweighed by the benefits of the Project.

9.8. WSCC acknowledge the revised documents submitted by the Applicant at the Procedural Deadline and these do not substantively affect the comments and concerns raised in this LIR.

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
9a	Significant adverse landscape and visual impacts of the onshore cable corridor and construction compounds.	C/O	Negative	The embedded environmental measures set out within the various commitments (Table 18-25) are welcomed and supported, in principle. Such measures must be secured as part of the DCO and associated requirements, the draft version of which is welcomed, in principle. The following control documents will be of key importance, the outline versions of which (where provided) are welcomed, in principle; • Construction Method Statement • Code of Construction Practice (CoCP); • Landscape and Ecology Management Plan (LEMP): • Public Right of Way Management Plan (PRoWMP); and • Access Plans (Requirements 15 & 16). However, in addition to those measures, submitted in draft/outline, the following must also be considered:	NPS EN-1 (Paragraphs 4.5.3, 5.9.8, 5.9.17, 5.9.18, 5.9.22, and 5.9.23). NPS EN-3 (Paragraph 2.4.2). NPS EN-5 (Paragraph 2.8.2).

				Reduce: • As a minimum, all trees and hedgerows identified in the OCoCP Vegetation Retention Plans must retained and protected (unless there are truly exceptional circumstances as may be approved by the relevant planning authority); and • Removal of hedgerows to form accesses should be minimised as far as practicable. DCO Requirements 15 and 16 require review. **Mitigate**: • CoCPs (and Construction Method Statements) to provide greater certainty on the duration, phasing, and sequencing of construction activities, and how this will be programmed to ensure reinstatement can be maximised/expedited; • OLEMP to provide greater detail around the timing and specification of planting, maintenance and monitoring provisions, and to closely align with any details of phasing and sequencing, and arboricultural impacts as identified in stage specific CoCPs; and • Consider lessons learnt from Rampion 1 regarding success of reinstatement planting and improved recording, monitoring,	

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				and adherence to maintenance requirements and an effective handover mechanism to the OTFO. **Compensate**: • Enhancement of retained hedgerows and trees both within and around the around the DCO Limits to be secured as part of stage specific LEMPS and through the provision of a S106 fund. • Delivery of wider PRoW enhancements and thus amenity benefits to negatively affected receptors through the provision of a S106 fund.	
9b	Significant adverse landscape and visual impacts of the Oakendene substation and construction compounds.	C/O	Negative	The embedded environmental measures are set out within the various commitments (Table 18-25) are welcomed and supported, in principle. Such measures must be secured as part of the DCO and associated requirements, the draft version of which is welcomed, in principle. The following control documents will be of key importance, the outline versions of which (where provided) are welcomed, in principle;	NPS EN—1(Paragraphs 4.5.3, 5.9.8, 5.9.17, 5.9.18, 5.9.22, and 5.9.23). NPS EN-3 (Paragraph 2.4.2). NPS EN-5 (Paragraph 2.8.2).

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				• CoCP; • Construction Method Statement; • LEMP; • PRoWMP; • Access Plans (requirements 15 & 16); and • DAS. However, in addition to those measures, submitted in draft/outline, the following must also be considered. **Reduce**: • As a minimum all trees and hedgerows identified in the OCoCP Vegetation Retention Plans must retained and protected (unless there are truly exceptional circumstances as may be approved by the relevant planning authority). Omitted hedgerow south of the A272 must be considered; • Removal of hedgerows to form accesses should be minimised as far as practicable. DCO Requirements 15 and 16 require reviewed; and	

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				• Maximum extent of the two Oakendene construction compounds (as set out in Works Plans - Work No. 10) must be reduced as far practical (with a clear commitment to do so identified) and in accordance with OCoCP Vegetation Retention Plans. **Mitigate**: • Consider lessons learnt from Rampion 1 regarding success of reinstatement planting and improved recording, monitoring, and adherence to maintenance requirements and an effective handover mechanism to the OFTFO; • Design and Access Statement (DAS) 'design principles' to be presented in a clear and consolidated table and to provide greater certainty over the measures adopted to secure a sympathetic, layout, appearance, scale and design/finishes; • DAS to set out the maximum extent of cut and fill operations and changes in final site levels. Consider opportunities to utilise	

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				final site levels to further minimise landscape and visual impacts; • DAS landscaping scheme to be refined and reinforced, to ensure screening effects maximised from key receptors; • DAS advance planting areas to be refined and added to; • Assessment must demonstrate that the DAS proposed 'curve' in the access road would be effective and/or this feature to be further emphasised/additional planting considered; and • DAS design principles to ensure the permanent access from the A272 will be 'low key' to be refined. **Compensate**: • Enhancement of retained hedgerows and trees both within and around the around the DCO limits to be secured as part of stage specific LEMPS and through the provision of a S106 fund. • Delivery of wider PRoW enhancements and thus amenity benefits to negatively affected	

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				receptors through the provision of a S106 fund.	
9c	Adverse landscape and visual impacts of the Bolney substation extension and construction compound.	C/O	Negative	The embedded environmental measures are set out within the various commitments (Table 18-25) are welcomed and supported, in principle. Such measures must be secured as part of the DCO and associated requirements, the draft version of which is welcomed, in principle. The following control documents will be of key importance, the outline versions of which (where provided) are welcomed, in principle: • CoCP; • Construction Method Statement; • LEMP; and • PRoWMP; and • DAS However, in addition to those measures, submitted in draft/outline, the following must also be considered:	NPS EN-1 (Paragraphs 4.5.3, 5.9.8, 5.9.17, 5.9.18, 5.9.22, and 5.9.23). NPS EN-3 (Paragraph 2.4.2). NPS EN-5 (Paragraph 2.8.2).

Table 9: Summary of Impacts – Landscape and Visual Impact					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				Reduce: • OCoCP to clearly identify the substation extension construction compound; • DAS to be updated to provide for additional reinforcement tree planting north of Bob Lane and management of the hedge and trees to enhance screening (for AIS option); • DAS to make clear that all tree/vegetation losses will be avoided where possible; and • DAS landscaping plans to provide for advance planting and tree/hedgerow management. **Compensate**: • Enhancement of retained hedgerows and trees both within and around the around the DCO Limits to be secured as part of stage specific LEMPS and through the provision of a S106 fund. • Delivery of wider PRoW enhancements and thus amenity benefits to negatively affected receptors through the provision of a S106 fund.	

Policy Context

National Policy Statements

Overarching National Policy Statement for Energy (EN-1) (July 2011)

9.9. Of key relevance to the Project in landscape and visual impact considerations are the following paragraphs.

9.10. Paragraph 4.5.3: "*In the light of the above, and given the importance which the Planning Act 2008 places on good design and sustainability, the IPC needs to be satisfied that energy infrastructure developments are sustainable and, having regard to regulatory and other constraints, are as attractive, durable and adaptable (including taking account of natural hazards such as flooding) as they can be. In so doing, the IPC should satisfy itself that the applicant has taken into account both functionality (including fitness for purpose and sustainability) and aesthetics (including its contribution to the quality of the area in which it would be located) as far as possible. Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation. Furthermore, the design and sensitive use of materials in any associated development such as electricity substations will assist in ensuring that such development contributes to the quality of the area*."

9.11. Paragraph 5.9.8: "*Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate*."

9.12. Paragraph 5.9.17: "*The IPC should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*."

9.13. Paragraph 5.9.18: "*All proposed energy infrastructure is likely to have visual effects for many receptors around proposed sites. The IPC will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project."*

9.14. Paragraph 5.9.22: "*Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration*."

9.15. Paragraph 5.9.23: "*Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista*."

National Policy Statement for Renewable Energy Infrastructure (EN-3) (July 2011)

9.16. Of key relevance to the Project in landscape and visual impact considerations are the following paragraphs.

9.17. Paragraph 2.4.2: "*Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology*."

National Policy Statement for Electricity Networks (EN-5)(July 2011)

9.18. Of key relevance to the Project in landscape and visual impact considerations are the following paragraphs.

9.19. Paragraph 2.8.2:"*New substations, sealing end compounds and other above ground installations that form connection, switching and voltage transformation points on the electricity networks can also give rise to landscape and visual impacts.*"

WSCC Policy

9.20. There are no WSCC policies of relevance to the Project.

Cable Corridor and Compounds

Construction Phase - Impacts

Positive

9.21. It is not considered that there are positive impacts on the landscape during the construction phase. Construction works, whilst temporary, are generally disruptive in nature and are not expected to provide any positive impacts on the landscape.

Neutral

9.22. No neutral impacts have been identified during the construction phase.

Negative

9.23. Construction works for the installation of the onshore cable route would result in a 40m wide fenced construction corridor traversing 38.8km, wherein soil stripping/storage, trench excavation, cable laying/jointing, horizontal directional drilling (HDD), and temporary haul roads would occur. Further, the Project would require the provision of two large construction compounds at Washington and Climping (for up to 3.5 years), a large landfall construction compound proximate to the shoreline at Climping (for up to 2 years), and a

minimum of 27 HDD compounds at various locations along the route (the precise duration of which are unclear at this stage). All compounds would contain large plant and equipment, staff welfare facilities, stockpiles/storage of materials, vehicular parking, lighting, and result in increased human and vehicular activity.

9.24. The Project also requires significant volumes of removal and/or reduction (e.g. lopping/topping/coppicing/transplant) of mature hedgerows/trees impacting on the pattern of existing field boundaries, both of which in general terms form key landscape characteristics of the affected character areas and are important features influencing the views of visual receptors.

9.25. Such activities will inevitably be at odds with the predominantly rural landscape in which the corridor and construction compounds are located and would result in significant adverse landscape character and visual impacts over a lengthy period, experienced by several receptors including adjacent residential properties, PRoW users, and those traveling through the area on adjacent roads.

9.26. During construction, the LVIA concludes moderate to major (significant) effects on 14 Local Character Areas (all of those which are directly crossed by the cable corridor) and moderate to major (significant) impacts on a wide range of visual receptors (11 transport routes, 4 long distance recreational routes, 4 recreational and tourist destinations, 47 Public Right of Way (PRoW) and 2 areas of Open Access Land). WSCC concurs with this assessment; however, as set out below, it is considered that impacts may have been underestimated and further assessment and mitigation/compensation should be considered.

9.27. WSCC is concerned that the LVIA downplays the potential landscape and visual impacts of construction activities, considering them short-term, when 3.5-4 years is in fact a considerable period to be subjected to moderate to major, significant impacts.

9.28. Whilst the proposed mitigation measures as set out in the commitments register (Table 18-25) and associated outline control documents are welcomed, in many cases there is considerable uncertainty as to extent of mitigation they may realistically provide. Many of the commitments include significant caveats such as '*where this is the best environment solution and is financially and technically feasible*' or '*where practicable/necessary/possible'*, meaning it is unclear as to what can or will be realistically secured by DCO requirements (and associated control documents).

9.29. For the cable route, the assessment of Landscape and Visual impacts seemingly takes into account of reinstatement being carried out as soon as possible, which cannot be guaranteed as phasing/sequencing of works has yet to be determined. This does not represent a consideration of the worst-case scenario. Based on experience of Rampion 1, large lengths of the cable route and associated fencing, soil storage and haul routes are likely to remain in place throughout the entire construction period to provide access, and for cable pulling/jointing activities, which extend the periods over which landscape

and visual impacts take place (and prolong the period before which reinstatement planting is possible).

9.30. It is not clear how selected Viewpoint Locations and Analysis (Appendix 18.2 – APP-168) has considered the impacts of visibility splays (be that for new or upgraded side access points), with the LVIA suggesting that Commitment C-165 (visibility to DMRB standards) would reduce landscape impacts. To the contrary, such a specification would likely open views and give rise to increased landscape/visual impacts. In this regard, although it is welcomed that the Outline Construction Traffic Management Plan (OCTMP) (PEPD -036a) suggests splays would be either minimised or avoided through traffic management, or coppicing (where possible), Table 4-2 of the OCTMP suggests there remains a potential for large lengths of vegetated roadside boundaries for 69 access points to be impacted, which has potential for significant impacts.

9.31. With specific regard to VPs identified, it is considered that those proximate to the construction compounds are not wholly sufficient or representative, potentially resulting in landscape and visual impacts being underestimated at these key disruptive features in within the landscape. VPs selected to assess construction compounds have not been discussed with WSCC as part of Expert Topic Groups (ETGs) prior to submission. Additional VPs and/or amended photography/visualisations are, therefore, suggested to understand the extent of visual impacts and inform mitigation or compensation, at construction compounds located at Washington, Climping and at landfall.

9.32. The following VPs should be considered (and visualisations provided where appropriate):

- Landfall Compound -VP(Q): This should include views to the south, as at present only views of the cable route are included;
- Climping Compound -VP(B): This should include westerly views from the caravan park (noting that structures of up to 20m in height may be required and thus would not be screened by intervening vegetation); and
- Washington Compound – Additional viewpoints are required (possibly from the north-west) to assess potential impacts of the construction compound on the caravan park and other receptors. Further, public footpath 2701 passes directly through this compound (and will require diversion around the perimeter) the impacts upon which do not appear to have been considered (i.e. not included within Table 18-46). Impacts on views from this PRoW receptor are likely to be significant.

9.33. WSCC is concerned that visual impacts on individual properties have been underestimated. The assessment of impacts for individual properties is seemingly reliant on the findings of the accompanying RVAA (APP-171), the findings of which have not been incorporated in to the wider LVIA.

9.34. In this regard, it is noted that the RVAA identifies significant visual impacts for most individual properties assessed; however, it goes on to conclude that none of the 21 properties identified would be subject to unacceptable effects on visual amenity. This is surprising given the magnitude of impacts identified. There is little discussion of the methodology for concluding 'No

residential amenity impact' and as such the objectivity of these conclusions is unclear. It is questioned whether final conclusions have taken into account public interests (i.e. the benefits of the wider proposals), which should not influence conclusions on impacts on visual amenity. Further, many of the assessments for individual properties seemingly rely on temporary construction activity along the cable corridor being transient with progressive backfill and reinstatement (some stating "The duration of these effects will be limited to 3 to 4 months"). As highlighted above this cannot be guaranteed as phasing/sequencing of works has yet to be determined, and as such does not represent a consideration of the worst-case scenario.

Operational Phase - Impacts

Positive

9.35. It is not considered that there are positive impacts on the landscape during operational phase of the Cable Corridor.

Neutral

9.36. During the operational phase, cables and associated infrastructure (e.g. link boxes etc.) will all be buried underground, and operational and maintenance activities would be limited (e.g. periodic testing of the cable every 2-5 years requiring access to link boxes is light vehicles, and/or any repairs in the unlikely event of a failure). As a result, once operational land has been reinstated, the landscape impacts of the cable corridor are likely to be largely neutral (except for that set out below). Similarly, decommissioning would result in the cables being severed and left in place, thus resulting in limited potential for any landscape or visual impacts.

Negative

9.37. Following completion of construction, regardless of proposed reinstatement planting, landscape impacts resulting from tree, hedge, and vegetation removal are likely to continue for several years whilst new planting/seeding is established, and any coppiced/lopped or notched trees/hedgerows recover.

9.38. The submitted LVIA concludes that there would be no significant effects on landscape character during the operation and maintenance phase; however, it recognises that there would inevitably be some significant residual effects arising from the loss of landscape features during construction. This would also be experienced by several visual receptors, including public roads, recreational routes, and up to 20 PRoW. Such impacts could last (albeit decreasing over time) for up to 10 years. WSCC concurs with this assessment; however, as set out below, it is considered that impacts have been underestimated and further mitigation and/or compensation should be considered.

9.39. As above, any reliance placed on reinstatement being carried out as soon as possible is questioned. Experience of Rampion 1 has shown that in some cases, cable corridor reinstatement planting was not carried out progressively (only at the end of the construction period), that some areas have been subject to significant and consistent planting failures, some wildflower field

margins have not been created, and there have been failures to remove temporary cable corridor fencing in some locations. As a result, the residual landscape impacts in the years following construction of the cable route may be greater than that assessed.

Required Mitigation

9.40. Given the scale and nature of construction activities involved, avoidance of landscape and visual impacts is difficult to achieve.

9.41. The embedded measures set out in Table 18-25 (to be secured by relevant control documents and DCO Requirements) are supported, in principle, as methods to reduce and mitigate landscape and visual impacts. However, in addition to those measures, WSCC recommends the following should also be considered.

9.42. Proposed Requirements and Outline Control documents need to provide greater certainty/clarity over the information that will be provided on the detailed duration, phasing, and sequencing of construction activities, and how this will be programmed to ensure reinstatement can be maximised as quickly as possible for each stage of the construction works. This is a considerable area of uncertainty that will be a key factor in determining the magnitude of landscape and visual impacts.

9.43. The OCoCP (PEPD-034) is welcomed insofar as it includes provisions to minimise the loss of such landscape features (as identified in the accompanying Vegetation Retention Plans). However, it is concerning that at 5.6.27 the OCoCP states "*Where the construction approach would result in additional losses over those stated in the VRP, they must be highlighted in the stage specific CoCP and justified in consultation with the competent authority…..*" which leaves considerable uncertainty. Concerns are also raised as to whether these plans accurately reflect all likely required impacts on tree/hedgerow features given that detailed access designs and visibility splays have not been confirmed. As a minimum, all trees and hedgerows identified in the OCoCP Vegetation Retention Plans must retained unless there are truly exceptional circumstances to be approved by the relevant planning authority. The wording of the document should be updated to reflect this.

9.44. The ES provides little justification for the selected locations of the five main construction compounds that would be in place for lengthy periods. WSCC has concerns about the size of these compounds and proximity to visual receptors and would wish to see evidence to demonstrate they have been sited in the most environmentally acceptable locations.

9.45. Any removal of hedgerows to form accesses should be minimised as far as practicable (and consideration given to traffic management measures that can further reduce any splay requirements). In this regard, it is imperative that any access plans to be submitted in respect of DCO Requirements 15 and 16, fully take into account the relevant commitments and retention of hedgerows as set out in OCoCP Vegetation Retention Plans. The wording of these requirements may need review to reflect this.

9.46. Of key importance to mitigating the landscape impacts of the cable corridor during the operational phase will be the success of reinstatement and replacement planting. As a result, the effectiveness of stage specific LEMPs (DCO Requirements 12 and 13) is crucial. At present, it is considered that the OLEMP provides very limited detail around the timing and specification of planting, or maintenance and monitoring provisions, which requires greater clarification and certainty.

9.47. There will be a need for stage-specific LEMPs to closely align with any details of phasing and sequencing, and arboricultural impacts as may be identified in stage specific CoCPs. At this stage, it is unclear how/if such submissions will align.

9.48. It is imperative that the lessons learnt from Rampion 1 are considered and further mitigation or compensation identified. In this regard, poor success of reinstatement and mitigation/compensation planting has often been linked to the responsibility for planting and maintenance being devolved to individual landowners. It is imperative that any proposed contractual arrangements for reinstatement planting (if not carried out by the Applicant) ensure consistency of approach, regular monitoring, and adherence to maintenance requirements. Similarity, it is crucial that any LEMP secures monitoring and maintenance requirements, and an effective recording and handover mechanism, to ensure that once the cable asset is taken on by the OFTO, that all required provisions of the LEMP are adhered to for a minimum of the 10-year reinstatement period.

9.49. Overall, there remains considerable uncertainty as to the potential magnitude of landscape and visual impacts, and even with mitigation, significant landscape and visual impacts are likely to occur. As a result, WSCC consider that the Applicant should offset/compensate these impacts through the enhancement of retained hedgerows and trees both within and around the around the DCO Limits (e.g. through gapping up of hedgerows, additional native planting, management and enhancement of key landscape characteristics) and the delivery of wider PRoW enhancements and thus amenity benefits to negatively affected receptors. Such enhancements should be secured both as part of stage specific LEMPs and through the provision of a S106 fund for works offsite. Given the duration of construction works, all such enhancements should be delivered as early as possible (where they would be unaffected by the works) which would aid in minimising the period over which landscape and visual impacts would be experienced.

9.50. Reference is also made to Sections 11 and 12 regarding Onshore Ecology and Arboriculture, which further outline concerns about the extent of key tree/hedgerow features impacted, and lack of suitable mitigation identified. Given such features are crucial elements in respect of impacts upon landscape and visual receptors, suitable mitigation and compensation must be secured.

Oakendene Substation & Construction Compounds

Construction Phase - Impacts

Positive

9.51. It is not considered that there are positive impacts on the landscape during the construction phase. Construction works, whilst temporary, are generally disruptive in nature and are not expected to provide any positive impacts on the landscape.

Neutral

9.52. No neutral impacts have been identified during the construction phase.

Negative

9.53. The construction of the Oakendene substation and associated compounds would result in the development of greenfield agricultural land, loss of mature hedgerows/trees and impact on the pattern of existing field boundaries, all of which form key landscape characteristics of the local character area. It would also result in the provision of two large construction compounds and associated accesses, for a period of up to four years, containing various plant and equipment, including cranes, concrete batching plants, staff welfare facilities, stockpiles/storage of materials, vehicular parking, and result in increased human and vehicular activity.

9.54. Such activities would inevitably be at odds with the predominantly rural landscape in which the site is located and would result in significant adverse landscape character and visual impacts over a lengthy period, experienced by several receptors in the locality including adjacent residential properties, PRoW users, and those traveling through the area on adjacent roads.

9.55. During construction, the LVIA concludes major (significant) effects on the Local Character Area (J3 Cowfold & Shermanbury Farmlands), and Major/Moderate (significant) visual effects on two transports routes (A272 and Kent Street), and two PRoW (1786 and 1788). WSCC concurs with this assessment; however, as set out below, is concerned that impacts may have been underestimated and further assessment and mitigation should be considered.

9.56. As is the case for the cable corridor and construction compounds, concerns are equally applicable to the Oakendene substation area in terms of the uncertainty of proposed mitigation measures within the commitments register given the caveats included (please see earlier sections, not repeated here to avoid duplication).

9.57. With specific regard to VPs selected/assessed for the Oakendene substation area, it is somewhat surprising that no VPs or receptors north of the A272 (and within the High Weald National Landscape) have been identified.

9.58. Additional VP locations and associated visualisations are recommended to best assess the level of impacts at key receptors and to better inform mitigation

and compensation (and substation design). The following VPs should be considered (and visualisations provided where appropriate):

- Footpath 1787 (wrongly excluded from identified visual receptors for the Oakendene substation by the LVIA). Parts of this footpath provide elevated northerly views across the substation site via an existing field access, which would likely to be exacerbated by the proposed cable route crossing also in this location (and associated temporary hedgerow removal which provides screening);
- A272, looking directly south at newly created access point. This is essential and requires a visualisation. At present, viewpoint SA2 is too far east, underplaying likely effects;
- Footpath 1786 south of Oakendene Manor (north of pond). A key viewpoint with obvious views likely (more representative of a worst case than viewpoint SA7); and.

9.59. Further, as discussed above, concerns are raised that individual residential visual receptors have not be adequately assessed by the LVIA/RVAA.

Operational Phase - Impacts

Positive

9.60. It is not considered that there are positive impacts on the landscape during operational phase of the substation.

Neutral

9.61. No neutral impacts have been identified during the operational phase.

Negative

9.62. Once constructed, the Oakendene substation would comprise a large-scale development of an industrial/utilitarian nature, containing large buildings and various tall external electrical infrastructure, and be surrounded by security fencing.

9.63. As a result, despite the presence of existing electrical infrastructure in the wider locality, it would be a significantly alien feature at odds with the predominantly rural landscape in which it is located and give rise to permanent adverse landscape and visual impacts on adjacent residential properties, PRoW users, and those traveling through the area on adjacent roads.

9.64. Regardless of proposed planting, landscape impacts resulting from tree, hedge and vegetation removal, are likely to continue for several years whilst new planting/seeding is established, and any coppiced/lopped or notched trees/hedgerows recover.

9.65. During operation, the LVIA concludes major (significant) effects on the Local Character Area (J3 Cowfold & Shermanbury Farmlands), reducing to moderate to major 10 years after completion (after planting has had time to establish). In terms of visual receptors, it concludes moderate to major (significant) impacts on Kent Street (up to five years following completion of construction),

and moderate to major (significant) impacts on PRoW 1786. WSCC notes this assessment; however, as set out below, is concerned that impacts may have been underestimated and further assessment, mitigation and compensation should be considered.

9.66. In the absence of evidence demonstrating the contrary (and further VPs/visualisations), WSCC considers that, once constructed, the substation would also be likely to result in significant visual impacts upon PRoW 1787 (south of the site), the A272, and Oakendene Manor.

9.67. Regarding views from Oakendene Manor, WSCC is concerned that despite the RVAA identifying significant visual impacts on views from this property, it concludes no significant impacts on visual amenity at this property, without robust or objective reasons for coming to this conclusion.

9.68. Visualisations of the substation are provided at Figures 18.10 onwards and demonstrate that the substation will be an apparent and industrial feature a rural landscape. However, additional visualisations from the recommended VPs as set out above are required to better determine the magnitude of impacts and inform any mitigation and compensation measures (including the substation site design, layout and planting proposals). Further, it is concerning that the visualisations omit the tallest proposed structure (lightning mast – 18m) and thus do not provide a true representation of that proposed.

9.69. The design, layout, and provision of landscaping at the substation will be crucial to minimising and mitigating the landscape and visual impacts of the Project. The design principles identified in the DAS need further refinement and to be presented in a clearer manner. They also need to provide greater certainty over the likely layout, appearance, scale, and design of structures proposed.

9.70. No details of site levels have been provided by the Applicant. Given a slope is present on the site and that all maximum heights for plant/structures are based on 'finished' ground levels, it is crucial to understand the extent of any cut and fill operations and likely final site levels. Any substantive change in site levels could result in significant changes to landscape and visual impacts.

9.71. It is not clear if the proposed 'curve' in the access road will achieve visual screening from the A272 (and further visualisations are required to confirm this).

Required Mitigation

9.72. The scale and nature of activities and built electrical infrastructure proposed is such that avoidance of landscape and visual impacts is difficult to achieve.

9.73. The embedded measures set out in Table 18-25 (to be secured by relevant control documents and requirements) are supported, in principle, as methods to reduce and mitigate landscape and visual impacts. However, in addition to those measures, WSCC recommends the following should also be considered.

9.74. 'Works Plans' (Work No. 10) and the OCoCP identify the maximum extent of the two Oakendene construction compounds. Within these areas (most

notably the northern Oakendene substation compound), there are several trees and hedgerows that form important landscape features and provide screening from public views.

9.75. It is important that various trees and hedgerows within these areas be retained and protected and, as a minimum, those identified in the accompanying Vegetation Retention Plans. As such, the OCoCP and Draft DCO Requirements must ensure that construction compounds are limited to areas realistically available, with this vegetation retained (i.e. compound areas be reduced as appropriate).

9.76. Any removal of hedgerows on the southern side of the A272 to form accesses should be minimised as far as practicable (and during construction, consideration given to traffic management measures that can further reduce any splay requirements). It is concerning, therefore, that the A272 roadside hedgerow for the Oakendene west compound is not included in the OCoCP Vegetation Retention Plan (and for which coppicing maybe required to achieve required visibility splays). This is an important hedgerow for screening view from the A272 and adjacent residential properties. This hedgerow should be retained as far as is practicable.

9.77. The design, layout, and provision of landscaping at the substation will be crucial to minimising and mitigating its landscape and visual impacts. The final proposed layout of the substation and accompanying landscaping plans have not been discussed with WSCC as part of Expert Topic Groups (ETGs) prior to submission. As set out in NPS EN-1, there are several good design criteria that the applicant must adhere to including: appropriate siting of infrastructure within that site relative to existing landscape character, landform and vegetation; sensitive design of buildings and structures including careful selection of materials and finishes; and the provision of landscaping schemes (including offsite planting where appropriate).

9.78. In this regard, the details contained in the submitted DAS are welcomed and contain overarching principles that will generally aid in minimising the impacts of the Project. The Indicative Landscape Plan (Appendix D) is generally well thought out insofar as it seeks to surround the built development with new planting, and to bolster existing landscape features, with a view to screening the Project from key visual receptors. Advance planting proposals are also welcomed. However, there are several matters that could help ensure landscape and visual impacts are minimised and mitigated as far as is practicable, as follows.

9.79. Given that 'design principles' will be the key benchmark against which any final design will be assessed by the relevant authority (as stipulated within DCO Requirement 8), it is crucial that they are presented in a clear and consolidated table, ordered by topic as relevant.

9.80. Design principles also should provide greater certainty over the likely layout, appearance, scale, and design of structures proposed, which is currently lacking. Consideration should be given to sympathetic design and finishes of both perimeter fencing (e.g. dark green) and the main buildings on site (the DAS only suggests this '*will be considered as part of an architectural strategy*

to soften their appearance'). Key design matters, such as roof lines/building styles, materials/finishes of key buildings, should be established and set out in greater detail, if possible. It is further noted that the layout plan appears to show a structure on the southern elevation of the GIS building (not included in any visualisations), which should be explained. Consideration should also be given to a design principle that minimises any rooftop plant or ancillary structures for both the GIS substation and Control Room Buildings.

9.81. It is crucial to understand the extent of any cut and fill operations and likely final site levels. Dependant on any changes, there may be opportunities to utilise final site levels to further minimise landscape and visual impacts.

9.82. It is considered that proposed landscaping could be both refined and reinforced to ensure that existing tree/hedgerow losses are compensated, and screening effects maximised. In this regard, to the south of the substation, an area is excluded from advance planting where the cable alignment enters the site. Given it is proposed that the cable would be installed by trenchless techniques in this location (and thus at a greater depth), it is not clear why this has been excluded or why scrub planting is proposed. It is recommended that this be reviewed, as taller/denser planting in this location would aid in screening the site from viewpoints to the south (notably PRoW 1786 and 1787).

9.83. In terms of advance planting, in addition to that identified in the DAS, it is considered that proposed native woodland buffers alongside the A272 (east and west of the proposed access) should also be included. Although it is recognised that some areas could not be advance planted owing to the need for temporary construction access visibility splays, advance planting would still be possible to the rear of splays and would aid in screening of the site establishing more quickly.

9.84. Given the uncertainty as to the effectiveness of the proposed 'curve' in the access road, this feature may need to be further emphasised and/or additional planting considered. The design principle to ensure the permanent access from the A272 will be 'low key, matching the style of existing farm/estate access with limited signage' is welcomed. Consideration should also be given to sympathetic signage design, markings and surfacing materials (e.g. avoid large painted markings in favour of granite setts, consider an appropriate hard surface typical of the rural environment as installed at the Rampion 1 substation).

9.85. Overall, as is the case for the cable corridor, there remains considerable uncertainty as to the potential magnitude of landscape and visual impacts, and even with mitigation, significant landscape and visual impacts are likely to occur. WSCC considers that the Applicant should offset/compensate these impacts through the enhancement of retained hedgerows and trees both within and around the around the DCO Limits (e.g. through gapping up of hedgerows, additional native planting, management and enhancement of key landscape characteristics) and through a fund to provide for the delivery of wider PRoW enhancements and thus amenity benefits to negatively affected receptors.

9.86. Reference is also made to Sections 11 and 12 regarding Ecology and Arboriculture, which further outline concerns about the extent of key tree/hedgerow features impacted and lack of suitable mitigation identified. Given such features are crucial elements in respect of impacts upon landscape and visual receptors, suitable mitigation and compensation must be secured.

Extension at the existing National Grid Bolney Substation and Construction Compound

Construction Phase - Impacts

Positive

9.87. It is not considered that there are positive impacts on the landscape during the construction phase. Construction works, whilst temporary, are generally disruptive in nature and are not expected to provide any positive impacts on the landscape.

Neutral

9.88. No neutral impacts have been identified during the construction phase.

Negative

9.89. The construction of the extension to the national grid substation will result in the development of a limited area greenfield agricultural land, and the loss of a section of mature hedgerow/trees, which form key landscape characteristics of the local character area. It would also result in the provision of a 0.35ha construction compound on an area of hardstanding to the north of existing substation (not identified in the OCoCP plans – Appendix A) for a period of up to 3.5 years, containing various plant and equipment including cranes, staff welfare facilities, stockpiles/storage of materials, vehicular parking, and result in increased human and vehicular activity.

9.90. Such activities will inevitably be at odds with the predominantly rural landscape in which the site is located and would result in some adverse landscape character and visual impacts over a lengthy period, in particular experienced users of PRoW 1T.

9.91. During construction, the LVIA concludes none to minor effects on the Local Character Area (LW1 Hickstead and Low Weald) and Major (significant) visual effects upon part of PRoW 1T. WSCC concurs with this assessment; however, as set out below, it is considered that further mitigation should be considered.

9.92. It is surprising that a VP has not been provided for footpath 1T, the western extent of which passes close to the proposed construction compound, associated access and physical works, and which the LVIA concludes would be a significantly affected visual receptor. Nonetheless, on the basis there are limited opportunities to provide any meaningful screening and LVIA acknowledgement of major visual impacts for this receptor, it is not considered that an additional VP is required.

Operational Phase - Impacts

Positive

9.93. It is not considered that there are positive impacts on the landscape during the operational phase of the substation extension works.

Neutral

9.94. No neutral impacts have been identified during the operational phase.

Negative

9.95. Once constructed, the substation extension would be of an industrial/utilitarian nature, containing tall buildings and/or external electrical infrastructure, and be surrounded by security fencing. However, given the presence/context of the existing Bolney National Grid and Rampion 1 substations immediately adjacent and mature boundary vegetation/screening in the locality, any landscape and visual impacts would likely be minor and predominantly limited to users of PRoW 1T/Bob Lane and any impacts on the character of the locality resulting from the loss of trees/hedgerow.

9.96. During operation, the LVIA concludes negligible to minor effects on both landscape character and visual receptors. Although WSCC concurs with this assessment, further mitigation and compensation should be considered.

Required Mitigation

9.97. The embedded measures set out in Table 18-25 (to be secured by relevant control documents and DCO Requirements) are supported, in principle, as methods to reduce and mitigate landscape and visual impacts. However, in addition to those measures, WSCC recommends the following should also be considered.

9.98. 'Works Plans' (Works Nos. 20 and 10) and the OCoCP identify the maximum extent of the substation extension. However, the OCoCP omits the substation extension compound which must be included.

9.99. The retention and provision of additional landscaping at the substation extension will be important in minimising and mitigating its landscape and visual impacts. In this regard, the details contained in the submitted DAS are welcomed and contain overarching principles that will generally aid in minimising the impacts of the Project.

9.100. The DAS (AS-003) presents two options for the substation extension (GIS or AIS). Indicative Landscape Plans (Appendix C) for both options provide for additional reinforcement tree planting north of Bob Lane and management of the hedge and trees to enhance screening, which is welcomed. However, the AIS option highlights the potential for a much larger area of existing vegetation/trees to be removed ('subject to detailed design). The DAS should make clear that all such losses will be avoided, where possible. Further, given the potential for additional vegetation loss associated with the AIS option, it is considered that the corresponding planting proposals should provide for

replacement planting and/or additional tree planting in the immediate locality to compensate for losses.

9.101. For the Oakendene substation, areas of advance planting are indicated. However, outline Landscape Plans for the substation extension do not include any such reference. New planting and management of the hedge and trees alongside Bob Lane are seemingly unaffected by constitution works; as a result, this should be identified as an area of advance planting (and management), and the DAS/supporting plans updated as necessary.

9.102. Even with mitigation, significant landscape and visual impacts are likely to occur (in particular for PROW users during construction). WSCC considers that the Applicant should offset/compensate these impacts through the enhancement of retained hedgerows and trees both within and around the around the DCO limits (e.g. through gapping up of hedgerows, additional native planting, management and enhancement of key landscape characteristics), and through a fund to provide for the delivery of wider PRoW enhancements and thus amenity benefits to negatively affected receptors.

10. Noise and Vibration (ES Chapter 21)

Summary

10.1. Given the technical nature of Noise and Vibration assessments submitted, WSCC defer to Environmental Health Officers to provide a detailed review of likely noise and vibration impacts from the Project. Nonetheless, based on experience of Rampion 1, WSCC has the following observations/concerns.

10.2. The submitted assessment of noise and vibration impacts concludes that noise arising from the construction and operation of the offshore elements of the Project (i.e. offshore turbines and substation), would be negligible to minor (not significant) based on the limited levels of noise generated and the distance from onshore receptors. WSCC does not dispute these findings, albeit notes a lack of reference to experience/lessons learnt from Rampion 1 (where offshore piling activities resulted in noise complaints from the local community).

10.3. Construction works will result in the use of large machinery/plant and HGV movements over a wide linear geographical area, including the siting of large construction compounds for up to four years, and use of HDDs at several locations along the cable route; this will inevitably result in some noise impacts for receptors proximate to the works.

10.4. Given the nature and duration of construction activities (in particular, at construction compounds) and noting the generally low background noise levels associated with the predominantly rural location of the works, WSCC is concerned that construction noise impacts may have been underestimated. There is also concern that there is considerable uncertainty over the duration of some noise producing activities and the extent to which noise mitigation can be guaranteed/successful.

10.5. During the construction phase, mitigation of noise impacts would be secured principally through stage specific CoCPs and associated Noise Management Plans (NMPs). The outline provisions for these control documents as well considered measures to reduce noise impacts; therefore, they are supported in principle. However, further details/clarifications are required and an outline NVMP (ONVMP) should be provided to give greater certainty of the duration/sequencing of works and to demonstrate that noise impacts would be minimised, and mitigation measures maximised.

10.6. During operation, the key potential for noise impacts arises from the proposed Oakendene substation and siting of large electrical plant, which would inevitably result in permanent elevated localised noise levels in a rural area where background noise levels are relatively low.

10.7. WSCC is concerned that operational noise impacts of the substation have been underestimated and that a number of residential properties in close proximity to the site, may experience adverse noise impacts, in particular during the night-time. Concerns are also raised that there has been no assessment of potential noise impacts on the amenities of neighbouring Public Rights of Way (PRoW).

10.8. Mitigation of noise impacts from the operational phase of the substation would be secured principally through selection of plant and integral attenuation features that would achieve specified rating levels at the nearest sensitive receptors (as specified within the DAS (AS-003), and the implementation of an operational noise management plan (including monitoring provisions). Such measures are supported in principle; however, it is considered that the proposed noise maximum rating levels for sensitive receptors should be lower and that the plant/enclosures should be selected from the outset to minimise noise as far as practicable (regardless of any set rating levels).

10.9. Given the Project would inevitably result in some adverse noise impacts for several receptors over a wide area (including residents and PRoW users), WSCC considers that this should be offset/compensated through a Community Benefit Fund and through s106 PRoW enhancement contribution and thus provide amenity benefits to negatively affected leisure users.

10.10. In accordance with NPS the ExA will need to be satisfied that significant adverse impacts on health and quality of life from noise have been avoided, and that remaining adverse noise impacts have been mitigated and minimised (including through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and the use attenuation features to reduce noise transmission).

10.11. WSCC acknowledge the revised documents submitted by the Applicant at the Procedural Deadline and these do not substantively affect the comments and concerns raised in this LIR.

Table 10: Summary of Impacts – Noise and Vibration					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
10a	Offshore noise and vibration impacts	C	Neutral	Based on there being no likelihood of significant noise impacts, no mitigation is specified. However, noting that construction of the offshore elements of Rampion 1 resulted in several noise complaints/concerns being reported because of foundation piling works combined with specific weather conditions/piling locations, it is not clear how lessons learnt from these events have been considered/taken forward. As a result, the following should be considered: **Reduce**: Demonstrate that lessons learnt from Rampion 1 have been considered and consider whether there may be a need to restrict hours of offshore piling activities during certain periods of combined atmospheric conditions/piling locations that could lead to noise disturbance. **Mitigate:** Consider whether there is need for any monitoring of offshore noise to demonstrate no impacts and/or a provide a clear process for investigating, responding to, and addressing any noise complaints received.	EN-1 (Paragraphs 5.11.4, 5.11.9 and 5.11.11).

Table 10: Summary of Impacts – Noise and Vibration					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	Offshore noise and vibration impacts	O	Neutral	On the basis that the submitted assessment of noise and vibration impacts concludes that noise arising from the construction and operation of the offshore elements of the Project would not be significant (and no issues are apparent as were for Rampion 1), WSCC defers to Environmental Health Officers to provide detailed comments for any offshore related noise and vibration impacts.	EN-1 (Paragraphs 5.11.1–5.11.13)
10b	Onshore noise and vibration impacts	C	Negative	The embedded environmental measures are set out within the various commitments (Table 21-20) are welcomed and supported, in principle. Such measures must be secured as part of the DCO and associated requirements, the draft version of which is welcomed, in principle. The following control documents will be of key importance, the outline versions of which (where provided) are welcomed, in principle: • CoCP (to contain NMPs); and • Construction Method Statement. However, in addition to those measures, submitted in draft/outline, the following must also be considered. **Mitigate**:	EN-1 (Paragraphs 5.11.1, 5.11.4, 5.11.5, 5.11.6, 5.11.8, 5.11.9, 5.11.10, 5.11.11 and 5.11.12).

Table 10: Summary of Impacts – Noise and Vibration					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				• OCoCP to provide greater certainty on the duration, phasing, and sequencing of construction activities, and clarify how this will affect methodologies for any further assessment/monitoring of noise and required mitigation; • OCMS to clarify the methodologies to demonstrate that detailed trenchless HDD proposals would result in '*no new or materially different environmental effects arising compared to those assessed in the ES'*. • An outline NVMP should be provided including details of how stage specific submissions would be structured, key noise management provisions to be adopted, the methodologies/scope (including timings) for proposed further noise survey/assessment and specify all relevant noise threshold limits. It should also set out how monitoring will be undertaken and outline mechanisms to address any reported noise issues (or exceedance of set thresholds). • Proposed Construction and Communications Plans (CCPs) should build upon similar arrangements adopted for Rampion 1, and experience gained. Availability of direct contacts for overseeing	

Table 10: Summary of Impacts – Noise and Vibration					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				contractors (on a 24hr basis) is recommended. • Controls over working hours require greater certainty/refinement. Any justified 'out of hours' works should only take place in exceptional circumstances where approved by the relevant planning authority. **Compensate**: • A Community Benefits Fund to provide for the delivery and improvement of wider community facilities and a s106 PRoW enhancement contribution in area where residents and leisure users would be negatively affected.	
10c	Onshore Cable Corridor noise and vibration impacts	O	Neutral	During the operational phase, cables and associated infrastructure (e.g. link boxes etc.) will all be buried underground and are not typically noise generating.	EN-1 (Paragraphs 5.11.1–5.11.13)
10d	Oakendene substation noise and vibration impacts	O	Negative	The proposal to ensure maximum noise rating levels at the nearest residential receptors and subsequent monitoring compliance therewith are supported, in principle, as methods to reduce and mitigate noise and vibration impacts. In addition, the inclusion of specific physical mitigation measures for plant at the substation (e.g. harmonic filter dampening, dampening and potentially	EN-1 (Paragraphs 5.11.1, 5.11.3, 5.11.4, 5.11.6, 5.11.8, 5.11.9, 5.11.10, 5.11.11, 5.11.12).

Table 10: Summary of Impacts – Noise and Vibration					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				enclosures for transformers) are also welcomed. Such measures must be secured as part of the DCO and associated requirements, the draft version of which is welcomed, in principle. The following control documents will be of key importance, and are welcomed, in principle: • Design and Access Statement: and • Operational Noise Management Plan. However, in addition to those measures, the following must also be considered. **Reduce:** Proposed threshold rating levels at sensitive receptors proximate to the substation (as specified in Commitment 231, the DAS and/or Requirement 29), in particular for night-time periods, should be set closer to existing background levels. **Mitigate:** • The quietest practicable substation plant/and physical noise mitigation measures must be selected from the outset (to include consideration of optimisation of plant layout, containment of noise generating plant within buildings, and use of noise barriers). A specific design principle	

Table 10: Summary of Impacts – Noise and Vibration					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				should be added to the DAS to this effect. • Controls over working hours require greater certainty/refinement. Any justified 'out of hours' works should only take place in exceptional circumstances where approved by the relevant planning authority. **Compensate**: A Community Benefits Fund to provide for the delivery and improvement of wider community facilities and a s106 PRoW enhancement contribution in area where residents and leisure users would be negatively affected.	

Policy Context

National Policy Statements

10.12. Of key relevance to the proposals for noise and vibration impacts is Section 5.11 (Paragraphs 5.11.1–5.11.13) in National Policy Statement for Energy (EN-1) (July 2011), which are replicated in the Table 21-2 of the submitted noise and vibration assessment (APP-062).

10.13. This NPS highlights that excessive noise can have wide-ranging impacts on quality of human life through sleep disturbance, annoyance and enjoyment of areas of value, and upon biodiversity. It sets out the key factors that determine likely noise impacts as being the levels and nature of noise created and the proximity to sensitive receptors. Of particular relevance to the comments of WSCC are the following specific paragraphs.

10.14. Paragraph 5.11.4: "*Where noise impacts are likely to arise from the proposed development, the applicant should include the following in the noise assessment*:

- *a description of the noise generating aspects of the development proposal leading to noise impacts, including the identification of any distinctive tonal, impulsive or low frequency characteristics of the noise;*
- *identification of noise sensitive premises and noise sensitive areas that may be affected;*
- *the characteristics of the existing noise environment;*
- *a prediction of how the noise environment will change with the proposed development;*
- *in the shorter term such as during the construction period;*
- *in the longer term during the operating life of the infrastructure;*
- *at particular times of the day, evening and night as appropriate.*
- *an assessment of the effect of predicted changes in the noise environment on any noise sensitive premises and noise sensitive areas; and*
- *measures to be employed in mitigating noise.*

The nature and extent of the noise assessment should be proportionate to the likely noise impact."

10.15. Paragraph 5.11.8: "*The project should demonstrate good design through selection of the quietest cost-effective plant available; containment of noise within buildings wherever possible; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission"*.

10.16. Paragraph 5.11.9: "*The IPC should not grant development consent unless it is satisfied that the proposals will meet the following aims:*

- *avoid significant adverse impacts on health and quality of life from noise;*
- *mitigate and minimise other adverse impacts on health and quality of life from noise; and*

- *where possible, contribute to improvements to health and quality of life through the effective management and control of noise*.'

10.17. Paragraph 5.11.10: "*When preparing the development consent order, the IPC should consider including measurable requirements or specifying the mitigation measures to be put in place to ensure that noise levels do not exceed any limits specified in the development consent*."

10.18. Paragraph 5.11.11: "*The IPC should consider whether mitigation measures are needed both for operational and construction noise over and above any which may form part of the project application. In doing so the IPC may wish to impose requirements. Any such requirements should take account of the guidance set out in Circular 11/95 (see Section 4.1) or any successor to it*."

10.19. Paragraph 5.11.12: "*Mitigation measures may include one or more of the following:*

- *engineering: reduction of noise at point of generation and containment of noise generated;*
- *lay-out: adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings; and*
- *administrative: restricting activities allowed on the site; specifying acceptable noise limits; and taking into account seasonality of wildlife in nearby designated sites*."

WSCC Policy

10.20. There are no WSCC policies relevant to the Project.

Construction Phase - Impacts

Positive

10.21. It is not considered that there are any positive noise and vibration impacts during construction. Construction works, whilst temporary, are generally disruptive in nature and result in elevated noise levels in the local environment.

Neutral

10.22. The submitted assessment of noise and vibration impacts concludes that noise arising from the construction of the offshore elements of the Project (i.e. offshore turbines and substation) would be negligible to minor (not significant), based on the limited levels of noise generated and the distance from onshore receptors. WSCC defers to Environmental Health Officers to provide detailed comments. However, it is noted that construction of the offshore elements of Rampion 1 did result in several complaints/concerns being reported (including report of sleep disturbance), which the Rampion 1 team reported were attributable to foundation piling works combined with specific weather conditions. It is not clear how lessons learnt from these events have been considered/taken forward.

Negative

10.23. Construction works will result in the use of large machinery/plant and traffic (including HGVs), for soil stripping/storage, trench excavation, cable laying/jointing, Horizontal Directional Drilling (HDD) and construction/upgrade of substations. Further, the works would require the provision of four large construction compounds (two at the Oakendene substation area (for up to 4 years), one at Washington, and one at Climping (for up to 3.5 years)), a large landfall construction compound proximate to the shoreline at Climping (for up to two years), and some 27 HDD compounds at various locations along the route (the precise duration of which are unclear at this stage) wherein large plant would be located and in increased human and vehicular activity can be expected. There will also be the use of the existing National Grid Bolney substation compound, for the National Grid substation extension works.

10.24. Such activities will inevitably result in some noise impacts for several receptors over a wide area proximate to the works, including adjacent to residential properties, community services, commercial buildings, leisure areas (including PRoW), heritage assets, and terrestrial ecology.

10.25. During construction, the submitted assessment of noise and vibration impacts concludes that there would be no significant noise and vibration impacts on any identified receptors. Given the nature of construction activities (and their significant duration, in particular, at main compounds) and noting the low background noise levels in what are predominantly rural locations, this is surprising. In this regard, whilst WSCC defer to Environmental Health Officers for any detailed review of likely impacts, WSCC has the following observations/concerns.

10.26. Table 21-10 of the assessment identifies the relevant noise sensitive receptors that are to be considered. However, Figure 21.2 (APP-106) does not appear to include all types of receptors identified. In this regard, there is a lack of consideration of PRoW (listed as a 'leisure receptor'). Although it is recognised that impacts on PRoW users would be largely transitory, such impacts remain of importance, particularly for PRoW likely to be subject to a longer duration of impacts (e.g. at construction compound locations). Further, no noise contours for the cable route trenching activities have been provided.

10.27. Given the assessment of noise impacts are largely reliant on impacts identified at 'key' receptors identified in Figure 21.2 (APP-106), the full extent/number of receptors potentially adversely affected is unclear. Even if only a 'low' impact, the reader should be in no uncertain terms as to the number and extent of receptors likely to be adversely affected to understand the scale/extent of impacts arising (and any compensation attributed accordingly).

10.28. Consideration of noise impacts of cable route construction and use of side accesses are seemingly dismissed as short in duration, despite having the potential to result high noise levels at sensitive receptor locations. It is purported that construction noise would be time limited as trenching operations would pass quickly (less than 10 days). However, this fails to take into account longer duration works associated with construction of haul roads, joint bays, cable pulling, cable jointing (which may require use of mobile

generators). Furthermore, it does not recognise that the cable route may serve as a key haul route in rural areas and remain in place for long periods in some cases. Therefore, the duration of noise impacts cannot be guaranteed until detailed phasing arrangements have been established at the Requirement stage.

10.29. The methodology to establish the magnitude of construction impacts is such that, in some cases, noise levels above BS5228 thresholds only result in low impacts, which are deemed as 'not significant'. This is seemingly predicated on a limited duration of noise generating activities, however, it is unclear whether the worst case scenario (a maximum of 3.5 years) has been considered. As a result, this may be an underestimation of potential impacts. BS5228 thresholds are 'thresholds for a medium impact' and, as such, impacts above these levels will be greater. Of key concern is the potential for noise impacts on receptors close to main construction compounds (and the Climping landfall compound), which will be in place for up to four years.

10.30. The submitted assessment places too much reliance on 'embedded measures', all to be captured as part of stage specific Code of Construction Practices (CoCP), the effectiveness of which cannot be certain at this stage. Although such measures would help to reduce noise, the extent to which they can do so is uncertain at this stage (noting measures in some cases will be adopted '*where practicable*').

10.31. In this regard, it is noted that that OCoCP (APP-224), Section 4.2 suggests that the detailed design for HDD crossings will be confirmed at the detailed design stage as part of Construction Method Statements (CMS). This leaves significant uncertainty as the potential for noise impacts. Further, the Outline Construction Method Statement (OCMS) suggests that for any changes to trenchless crossings (currently identified as preferred options), confirmation will be provided that there are no new or materially different environmental effects arising compared to those assessed in the ES. However, no methodology as to how this will be assessed/established has been provided.

10.32. There is considerable reliance of stage specific NVMPs to be provided as part of CoCPs. Although such NVMPs are welcomed, no outline drafts have been provided to date, leaving uncertainty as to the mitigation measures that may be possible in individual circumstances. It will be vital that NVMPs specify appropriate noise controls for each stage.

10.33. The relevant commitment (C-263) states "*Where any significant deviation from the initial sound level predictions is identified, such that levels in excess of the BS 5228 thresholds of significance are likely, the Noise and Vibration Management Plan (NVMP) shall be updated or a Section 61 application will be made to the relevant Local Planning Authority"'*. It is somewhat concerning that the potential for noise impacts is seemingly reliant on further noise assessment at the detailed design stage and that noise levels above ES predictions will only be addressed by subsequent review. The scope/methodologies of any such assessments are unclear and trigger levels undefined (e.g. 'significant deviation' not defined).

10.34. There is limited, if any, detail on how Commitment 19 (C-19) will be secured and the type of information that will be provided on detailed phasing and sequencing of construction activities. Given noise assessments are predicated on the durations of construction activities, it is essential to understand the scope of the information to be provided and for it to be demonstrated that timescales of activities would not be longer than that assessed as a worst case.

10.35. Noise impacts from construction compounds at night-time appear to have been underestimated. Despite noise level predictions identifying several properties/receptors close to trenchless crossings (night-time) being subject to noise levels above BS5228 thresholds, conclusions seemingly downplay the magnitude of impacts as 'low' predicated on the use of acoustic barriers. The effectiveness of acoustic barriers will presumably depend upon their length, height, and position relative to the noise source/sensitive area. At this stage, tit is uncertain if barriers will be effective or practicable in all circumstances.

10.36. Cumulative impacts have excluded consideration of cable trenching works and trenchless crossing activities. Paragraph 21.12.4 (of APP-062) suggests cable trenching and trenchless crossings are sufficiently temporary that cumulative impacts with other developments do not need to be considered. Given the potential duration and impacts of such works (which remains uncertain until phasing, access arrangements and trenchless crossing techniques have been confirmed) and high levels of noise generated by trenchless crossings on a 24hr basis, concerns are raised about this omission.

10.37. Except for trenchless crossings, there is limited consideration of the potential noise impact of works outside of normal working hours. It is accepted that provisions are made for further approval to be required as part of stage specific CoCPs; however, based on experience of Rampion 1, requests for weekend working in rural locations were commonplace and there were several late/early working hours requests for programmed activities (e.g. concrete pours/floating, delivery and oil filing of transformers, cable jointing etc), which would inevitably require extended working hours. Such activities, particularly at the Rampion 1 substation area, resulted in considerable annoyance/disturbance to local residents. As a result, the likely frequency, duration and impacts of 'out of hours' works should be assessed, based on experience of Rampion 1.

Operational Phase - Impacts

Offshore Turbines (WTGs) and Offshore Substations

Positive

10.38. No positive noise impacts have been identified for the operational phase of the Project.

Neutral

10.39. The submitted assessment of noise and vibration impacts concludes that noise arising from the construction and operation of the offshore elements of the proposal (i.e. offshore turbines and substation), would be negligible to minor

(not significant) based on the limited levels of noise generated and the distance form onshore receptors. WSCC does not dispute these findings, albeit it defers to Environmental Health Officers to provide detailed comments.

Negative

10.40. No negative noise impacts have been identified for the operational phase of the Project.

Cable Corridor

Positive

10.41. No positive noise impacts have been identified for the operational phase of the Project.

Neutral

10.42. During the operational phase, cables and associated infrastructure (e.g. link boxes etc.) will all be buried underground and are not typically noise generating. Operational and maintenance activities would be limited (e.g. periodic testing of the cable every 2-5 years requiring access in light vehicles to link boxes and/or any repairs in the unlikely event of a failure). As a result, once operational and land has been reinstated, noise impacts of the cable corridor are likely to be neutral. Similarly, decommissioning would result in the cables being severed and left in place, thus resulting in limited potential for noise impacts and/or noise producing activities that would likely be short in duration.

Negative

10.43. No negative noise impacts have been identified for the operational phase of the Project.

Oakendene Substation

Positive

10.44. No positive noise impacts have been identified for the operational phase of the Project.

Neutral

10.45. No neutral noise impacts have been identified for the operational phase of the Project.

Negative

10.46. Oakendene substation would result in the permanent siting of large electrical plant, including transformers, shunt reactors, harmonic filters and heat exchangers, and will result in elevated noise emissions in a rural locality where background noise levels are relatively low. As a result, the substation would inevitably result in changes to the immediate noise environment and have a

negative impact on several nearby receptors, including neighbouring residential properties and PRoW users.

10.47. During operation, the submitted assessment of noise and vibration impacts concludes that there would be no significant noise and vibration impacts on any identified receptors. Given the potential for the substation to produce noise and background noise levels are low in what is a predominantly rural location, WSCC considers this surprising and likely to be an underestimation. WSCC defers to Environmental Health Officers for any detailed review of likely impacts; however, the following observations/concerns are raised.

10.48. Noise level predictions for the Oakendene substation (with mitigation) identify three proximate residential properties (two properties on Kent Street and Oakendene Manor) that would be likely to experience noise above background levels by +4 or +5dB during the night-time. However, the submitted assessment concludes the magnitude of impacts as 'low' and not significant. BS4142 suggests that the greater the noise level above background, the greater the magnitude of impact, and that a difference of +5dB is likely to be an indication of an adverse impact, depending on the context. As a result, it is concerning that permanent night-time noise impacts of the Project on these properties may have been underestimated.

10.49. It is therefore similarly concerning that the noise limits specified in the dDCO Requirement 29 (which refers to those set out in the DAS and Commitment C-231) have adopted +5dB above background as a noise threshold that the substation design would need to achieve.

10.50. It is also concerning that there appears to be no assessment of the potential noise impacts on neighbouring PRoW (an identified leisure receptor); this includes public footpath 1786, which would pass immediately alongside the southwest boundary of the substation. Although any noise impacts on users of PRoW are likely to be transitory, the amenities of adjacent PRoW will inevitably be permanently adversely impacted by noise arising from the substation.

10.51. Mitigated noise impacts at identified receptors are reliant on the selection of specific physical/plant at the substation, including harmonic filter dampening and potentially enclosures for transformers. It is understood that such mitigation would be secured where necessary to achieve noise specified noise limits. On the basis that adverse noise impacts at some receptors would occur (in the range of a Lowest Observed Adverse Effect Level), the NPS requires noise to be mitigate and reduced as far as practicable.

10.52. The requirement for an operational noise management plan (NMP) for Oakendene substation (Draft DCO Requirement 29) is welcomed. However, it is concerning that a NMP would only be required prior to commissioning, by which point, the substation design and plant choices (and thus likely noise emissions) are already likely to have been fixed.

Required Mitigation

Construction Phase

10.53. The scale and duration of construction activities is such that avoidance of noise and vibration impacts is difficult to achieve.

10.54. The embedded measures set out in Table 21-20 (to be secured in the main as part of an OCoCP and DCO Requirements) are supported, in principle, as they are considered by WSCC to be appropriate methods to reduce and mitigate noise and vibration impacts. However, in addition to those measures, WSCC recommend the following should also be considered.

10.55. Given the reliance placed on further noise assessment, mitigation, and monitoring to be secured as part of stage specific NVMPs (to be submitted as part of any stage specific CoCP), an outline NVMP should be provided. As a minimum, this should include details of how such plans would be structured, key noise management provisions to be adopted, the methodologies/scope (including timings) for proposed further noise survey/assessment, and specify all relevant noise thresholds that would be adhered to (including a definition of 'significant deviation'). It should also set out how monitoring will be undertaken and outline details of the likely mechanisms that will be adopted to address and respond to any reported noise issues (or exceedance of set thresholds).

10.56. Given noise assessments are predicated on the durations of construction activities (which influence the methodologies and thresholds adopted for noise assessment), it is essential to understand the scope of the information to be provided in respect of Commitment C-19 (cable route completed in discrete sections with reinstatement as soon as practicable) and how any such details will be reflected in any stage specific COCP and NVMP. Control documents/DCO Requirements will need to clearly specify timescales of activities to ensure that they are no longer than that assessed as a worst case.

10.57. Similarly, there is a need to understand how any detailed design for trenchless crossings (HDD) confirmed as part of CMS, intend to demonstrate that there would "*no new or materially different environmental effects arising compared to those assessed in the ES"*.

10.58. Proposed Construction and Communications Plans (CCP – the likely content of which are very broadly outlined at section 2.6 and 2.7 of the OCoCP), are welcomed and should build upon similar arrangements adopted for Rampion 1 and experience gained. Availability of contacts (on a 24hr basis where necessary) is vital to ensure that action can be taken quickly to remediate noisy activities. For Rampion 1, a direct report/discussion with overseeing contractors was the most expedient and effective way for corrective action to be taken.

10.59. At present working hours are only specified in the OCoCP. It is recommended, as was the case for Rampion 1, that requirements set out construction hours as this could provide for greater certainty of control. Further, any specific control over construction hours (be that via requirement or as worded in the OCoCP) should build on the wording set out at section 4.4 of the OCoCP as

follows. It should be made clear that working hours apply to the use of any generators. 'Shoulder hours' should be considered (e.g. 0700-0900 and 1700-1900 hrs) restricting the use of noisy plant where proximate to sensitive receptors. 'Out of hours' works should only be agreed by the relevant planning authority where justified and in exceptional circumstances. Any 'other works requiring extended working hours' must be justified and approved by the relevant planning authority rather than only a notification made.

10.60. Given construction activities would inevitably result in some adverse noise impacts for several receptors over a wide area (including residents and PRoW users), WSCC consider this should be offset/compensated through a Community Benefits Fund to provide for the delivery and improvement of wider community facilities and a s106 PRoW enhancement contribution in areas where residents and leisure users would be negatively affected.

Operational Phase

10.61. The avoidance of noise and vibration impacts with the development of a permanent substation within a largely undeveloped rural location is difficult to achieve.

10.62. The proposed measures to set maximum rating levels at the nearest residential receptors (via DCO Requirement 29) and subsequent monitoring (via an operational NMP) to demonstrate compliance with set limits are supported, in principle, as they are appropriate methods to reduce and mitigate noise and vibration impacts. In addition, the inclusion of specific physical mitigation measures for plant at the substation (e.g. harmonic filter dampening, dampening and enclosures for transformers) are also welcomed.

10.63. However, in addition to those measures, WSCC recommends that the following should also be considered.

10.64. Proposed threshold rating levels at sensitive receptors proximate to the substation should be revisited, in particular, for night-time periods where assessments show there may be potential for adverse impacts. It is recommended that for the thresholds specified in Commitment 231, the DAS (and/or Requirement 29) should be set closer to existing background levels to minimise the potential for impacts upon neighbouring receptors.

10.65. The design of the substation, selection of the quietest plant practicable, and maximisation of physical noise attenuation measures, should be specified from the outset (i.e. not only to achieve specified limits). To achieve this, it is recommended that DAS) should include such a commitment (and outline details of the physical measures to be adopted).

10.66. Given the permanent siting of the Oakendene substation would inevitably result in adverse noise impacts for several receptors in the immediate locality (including residents and PRoW users). WSCC consider this should be offset/compensated through a Community Benefits Fund to provide for the delivery and improvement of wider community facilities and a s106 PRoW enhancements contribution in areas where residents and leisure users would be negatively affected.

11. Onshore Ecology (ES Chapter 22)

Summary

11.1. The Terrestrial Ecology and Nature Conservation chapter of the ES (APP-063) identifies a range of impacts, mostly arising during the construction phase of the Project. These include temporary and permanent habitat loss (including broadleaved semi-natural woodland, hedgerow and semi-improved grassland), habitat fragmentation (with consequent reduction in ecological connectivity) and disturbance to species (such as from noise and lighting). The assessment within the ES is based on a 'maximum design scenario' approach. Thus, there should be potential to reduce some impacts at the detailed design stage. WSCC seeks more robust design principles to secure this.

11.2. The Project is reliant on a large number of embedded environmental measures to avoid or reduce impacts. These embedded environmental measures, which are presented as a commitments register, include the use of HDD to cross designated sites and ancient woodland, vegetation retention plans, pre-commencement surveys of protected species, scheduling of construction activity to minimise disturbance to sensitive species, micro-siting of cable ducts, reinstatement of habitats, and the delivery of at least 10% Biodiversity Net Gain (BNG). Whilst WSCC welcomes the commitments register, concern is raised over the use of ambiguous wording, such as 'wherever possible' (Commitment C115), 'as far as reasonably possible' (C27), 'are not practical' (C17), 'where appropriate' (C115), 'shortest practicable timeframe' (C133) and 'as short a timeframe as practicable' (C229). The commitments need to be strengthened to give confidence in delivery of mitigation measures.

11.3. The Project is heavily reliant on the success of HDD in avoiding significant impacts to a number of sensitive sites, including ancient woodland and Sullington Hill LWS. Concern is raised over the absence of any contingency measures should the HDD technique fail.

11.4. To avoid a deficit in biodiversity growing as the construction programme progresses, the Project will follow two courses of action. The first is to enable a progressive reinstatement of habitats, whilst the second is to secure 70% of the deficit in biodiversity (as calculated using Natural England's Biodiversity Metric 4.0) prior to commencement of construction. Any remaining shortfall identified following detailed design, will be secured prior to construction works being completed. Successful implementation of these courses of action will be crucial to mitigating biodiversity impacts during the construction phase.

11.5. Rapid and successful reinstatement of habitats and landscape features along the cable corridor and at the temporary construction compounds, will be key. It is proposed to reinstate habitats to their current condition only (i.e. no enhancement proposed). It is intended that the majority of habitats temporarily lost during construction works would be reinstated within two years, other than in specific locations such as the temporary construction compounds, some haul roads, and Oakendene substation. Rapid and successful restoration of habitats and landscape features to their former condition, or better, will be crucial to minimise the impacts of habitat loss and fragmentation. WSCC is concerned that successful reinstatement may take

considerably longer than the Applicant anticipates. Regular monitoring, combined with rapid remedial measures, will be critical.

11.6. Woodland is the only habitat that would not be reinstated within the cable easement; due to operational reasons, scrub will be established. According to the Applicant, the loss of semi-natural broadleaved woodland will be compensated by the planting of 2.7ha of woodland at Oakendene substation.

11.7. WSCC welcomes the commitment to deliver a minimum of 10% BNG for the onshore works, including the cable route, trenchless crossing compounds, temporary construction compounds, and Oakendene substation. This would comprise of both on-site BNG, focused on habitat creation at Oakendene substation, and off-site BNG. The proposal to deliver significant elements of BNG prior to the commencement of construction, plus more during the early stages of construction, are key to addressing biodiversity impacts during the construction phase.

11.8. WSCC has some concerns about the delivery of BNG according to this timescale, given it would involve the purchase of BNG units from third party providers. Once the detailed design stage of the Project has been completed, the Applicant would produce more refined proposals for BNG for discussion and agreement with the relevant planning authority, which would be secured through a requirement of the DCO.

11.9. WSCC acknowledges the revised documents submitted as part of Procedural Deadline and is reflected where relevant within this LIR section.

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
11a	Permanent habitat loss along the onshore cable corridor	C / O	Negative	**Avoid/Reduce:** Detailed design must seek to minimise habitat loss. Design Principles to commit to this are required for the cable corridor within the Design and Access Statement (DAS- AS-003). **Compensate/Enhance:** WSCC seeks clarity on the purpose and content of the BNG Strategies to be produced for each stage, referred to in DCO Requirement 14. **Compensate/Enhance:** WSCC requests that the mechanism to deliver off-site BNG, including the sign off process and proof of purchase of biodiversity units, is secured through DCO Requirement 14. **Compensate/Enhance:** WSCC seeks a landscape, ecology and heritage enhancement fund through a S106 Agreement. **Monitor:** WSCC requests further detail in the Outline Landscape and Ecology Management Plan (OLEMP) (APP-232) regarding maintenance regimes, season and frequency of monitoring, recording methods, identification and implementation of remedial works, and reporting mechanisms. **Monitor:** Details are requested in the OLEMP regarding handover arrangements to an OFTO, including management and monitoring. **Monitor:** WSCC seeks an environment and heritage Compliance Officer for the duration	NPS EN-1 (Paragraphs 5.3.3, 5.3.7, 5.3.8 and 5.3.18).

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
				of the construction and 10-year aftercare periods through a S106 Agreement.	
11b	Temporary habitat loss along the onshore cable corridor and at the five temporary construction compounds	C / O	Negative	**Avoid/Reduce:** Detailed design must seek to minimise habitat loss. Design Principles to commit to this are required for the cable corridor within the DAS. **Compensate/Enhance:** WSCC seeks clarity on the purpose and content of the BNG Strategies to be produced for each stage, referred to in DCO Requirement 14. **Compensate/Enhance:** WSCC requests that the mechanism to deliver off-site BNG, including the sign off process and proof of purchase of biodiversity units, is secured through DCO Requirement 14. **Compensate/Enhance:** WSCC seeks a landscape, ecology and heritage enhancement fund through a S106 Agreement. **Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans. **Compensate/Enhance/Monitor:** WSCC requests further detail in the OLEMP regarding maintenance regimes, season and frequency of monitoring, recording methods, identification and implementation of remedial works, and reporting mechanisms.	NPS EN-1 (Paragraphs 5.3.3, 5.3.4, 5.3.7, 5.3.8 and 5.3.18).

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
				Compensate/Enhance/Monitor: WSCC requests that a detailed maintenance, management and monitoring protocol (MMMP) is secured under Requirement 13 (Implementation and maintenance of landscaping). **Monitor:** WSCC seeks an environment and heritage Compliance Officer for the duration of the construction and 10-year aftercare periods through a S106 Agreement.	
11c	Temporary habitat fragmentation/loss of ecological connectivity along the onshore cable corridor and at the site compounds and substation sites	C	Negative	**Avoid/Reduce:** Detailed design must seek to minimise habitat loss. Design Principles to commit to this are required for the cable corridor within the DAS. **Compensate/Enhance:** WSCC seeks clarity on the purpose and content of the BNG Strategies to be produced for each stage, referred to in DCO Requirement 14. **Compensate/Enhance:** WSCC requests that the mechanism to deliver off-site BNG, including the sign off process and proof of purchase of biodiversity units, is secured through DCO Requirement 14. **Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.3, 5.3.4, 5.3.7, 5.3.8 and 5.3.18.)
11d	Habitat loss at Oakendene Substation	C / O	Negative	**Compensate/Enhance:** WSCC seeks clarity on the purpose and content of the BNG	NPS EN-1 (Paragraphs 5.3.3,

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
				Strategies to be produced for each stage, referred to in DCO Requirement 14. **Compensate/Enhance:** WSCC requests that the mechanism to deliver off-site BNG, including the sign off process and proof of purchase of biodiversity units, is secured through DCO Requirement 14. **Compensate/Enhance/Monitor:** WSCC requests further detail in the OLEMP regarding maintenance regimes, season and frequency of monitoring, recording methods, identification and implementation of remedial works, and reporting mechanisms. **Compensate/Enhance/Monitor:** WSCC requests that a detailed maintenance, management and monitoring protocol (MMMP) is secured under Requirement 13 (Implementation and maintenance of landscaping). **Compensate/Enhance/Monitor:** All habitats at Oakendene substation must be managed for a minimum of 30 years, not just those which count towards the commitment to BNG, as currently proposed in the OLEMP. **Monitor:** Details are requested in the OLEMP regarding handover arrangements to an OFTO, including management and monitoring.	5.3.4, 5.3.7, 5.3.8 and 5.3.18).
11e	Habitat loss at Bolney Substation	C / O	Negative	**Compensate/Enhance/Monitor:** WSCC requests further detail in the OLEMP	NPS EN-1 (Paragraphs

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
				regarding maintenance regimes, season and frequency of monitoring, recording methods, identification and implementation of remedial works, and reporting mechanisms. **Compensate/Enhance/Monitor:** WSCC requests that a detailed maintenance, management and monitoring protocol (MMMP) is secured under Requirement 13 (Implementation and maintenance of landscaping). **Compensate/Enhance/Monitor:** All habitats at Bolney substation must be managed for a minimum of 30 years, not just those which count towards the commitment to BNG, as currently proposed in the OLEMP.	5.3.3, 5.3.4, 5.3.7, 5.3.8 and 5.3.18).
11f	Impacts to ecologically important and sensitive sites: Climping Beach SSSI, Littlehampton Golf Course and Atherington Beach LWS, Sullington Hill LWS, and ancient woodland at Michelgrove Park and Calcot Wood. All to be crossed by trenchless crossing (HDD), thus avoiding terrestrial habitats.	C	Neutral	**Mitigate:** The Construction Method Statements should consider contingency measures in the event of HDD failure or frac out.	NPS EN-1 (Paragraphs 5.3.3, 5.3.4, 5.3.7, 5.3.8, 5.3.10, 5.3.11 and 5.3.18).
11g	Impacts on semi-natural broadleaved	C / O	Negative	**Avoid/Reduce:** Detailed design must seek to minimise habitat loss. Design Principles to	NPS EN-1 (Paragraphs

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
	woodland, including habitat loss, root damage and increased incidence of windthrow			commit to this are required for the cable corridor within the DAS **Compensate:** Woodland above the cable ducts to be reinstated as scrub. The OLEMP needs to describe how this scrub will be designed and managed, including its long term management. **Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	5.3.3, 5.3.4, 5.3.7, 5.3.8 and 5.3.18).
11h	Impacts on ancient woodlands at Michelgrove Park and Calcot Wood, including pedestrian access to monitor path of HDD drill using hand-held monitoring equipment	C	Neutral	**Avoid/Reduce:** Detailed design must seek to minimise habitat loss. Design Principles to commit to this are required for the cable corridor within the DAS. **Mitigate:** Further information is required on pedestrian monitoring of HDD drill head as it passes beneath ancient woodland and how ecological impacts will be avoided. The proposed method should be detailed in the stage specific CoCP. **Mitigate:** The Construction Method Statement should consider contingency measures in the event of HDD failure or frac out.	NPS EN-1 (Paragraphs 5.3.3 and 5.3.14).
11i	Loss of trees	C and O	Negative	**Compensate:** The OCoCP (PEPD -034) states that trees removed along the cable corridor will be replaced by new planting elsewhere within the proposed DCO Limits '*as far as*	NPS EN-1 (Paragraphs 5.3.14 and 5.3.18).

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
				possible'. All trees lost must be replaced, either within the DCO Limits or nearby. **Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	
11j	Large tree species within the cable easement will be cut down or reduced in size to avoid root damage to the transmission cables throughout their operational life	O	Negative		NPS EN-1 (Paragraphs 5.3.4, 5.3.7 and 5.3.18).
11k	Loss of approximately 378m of tree line	C and O	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.7, 5.3.14 and 5.3.18).
11l	Impacts on veteran trees, including the seven known to be within or close to DCO Limits	C	Neutral		NPS EN-1 (Paragraphs 5.3.7, 5.3.14 and 5.3.18).
11m	Impacts on hedgerows, notably the 89 hedgerows which will suffer loss (1440m temporarily lost including 244m	C and O	Negative	**Mitigate:** WSCC has concerns over the success of hedgerow 'notching' and thus requests reassurance in the OLEMP that any necessary remedial measures, such as re-planting, will be implemented as soon as possible.	NPS EN-1 (Paragraphs 5.3.3, 5.3.7, 5.3.8 and 5.3.18).

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
	species-rich, and 622m permanently lost)			**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	
11n	Impacts on scrub	C	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.4, 5.3.7 and 5.3.18).
11o	Impacts on calcareous grassland and semi-improved species-rich grassland	C	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.3, 5.3.7, 5.3.8 and 5.3.18).
11p	Impacts on coastal and floodplain grazing marsh	C	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.3, 5.3.7, 5.3.8 and 5.3.18).
11q	Impacts on rivers, including River Arun and Adur: All main rivers to be crossed by trenchless crossing avoiding likely impacts	C	Neutral	**Mitigate:** The Construction Method Statements should consider contingency measures in the event of HDD failure or frac out.	NPS EN-1 (Paragraphs 5.3.3, 5.3.7, 5.3.8 and 5.3.18).
11r	Impacts on streams and wet ditches: 39 stream/wet ditches will	C	Negative	**Avoid/Reduce:** Detailed design must seek to minimise habitat loss. Design Principles to	NPS EN-1 (Paragraphs 5.3.3,

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
	be crossed by the cable route. Of these, the cable ducts and haul road will cross 22 by open trenching techniques involving the removal of 30m of bankside vegetation			commit to this are required for the cable corridor within the DAS. **Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	5.3.7, 5.3.8 and 5.3.18).
11s	Impacts on ponds: Although there are 13 ponds within the DCO Limits, none will be lost or directly impacted	C	Neutral		NPS EN-1 (Paragraphs 5.3.3, 5.3.8 and 5.3.18).
11t	Impacts on legally protected species due to habitat loss, habitat severance and disturbance, including bats, hazel dormouse, water vole, badger, great crested newt and reptiles	C	Negative	**Mitigate:** An ECoW to implement destructive searches in potential reptile habitat at the site compounds, not just along the cable route. The OCoCP needs to be amended to reflect this change. **Compensate/Enhance:** WSCC seeks a landscape, ecology and heritage enhancement fund through a S106 Agreement. **Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.3, 5.3.8 and 5.3.18).
11u	Impacts on rare or notable species, including nightingale, turtle dove, skylark,	C	Negative	**Avoid/Reduce:** Detailed design must seek to minimise impacts on rare or notable species. Design principles must commit to this.	NPS EN-1 (Paragraphs 5.3.3, 5.3.4 and 5.3.18).

Table 11: Summary of Impacts – Onshore Ecology					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Change/Requirement/Obligation)	Policy Context
	common toad and glow-worm.			**Mitigate/Enhance:** OLEMP must ensure that all habitat reinstatement and enhancement in areas known to support notable species, such as breeding nightingale, has particular regard to their specific requirements.	
11v	Impacts on breeding birds	C	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.3, 5.3.4 and 5.3.18).
11w	Impacts on wintering birds, including waterfowl which are designated features of nearby SPAs.	C	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.3, 5.3.4 and 5.3.18).
11x	Impacts on fish	C	Negative	**Enhance:** Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought and included in the stage specific LEMPS and landscape plans.	NPS EN-1 (Paragraphs 5.3.4, 5.3.7 and 5.3.18).

Policy Context

National Policy Statements

National Policy Statement for Renewable Energy Infrastructure (NPS EN-1)

11.10. NPS EN-1 paragraph 5.3.3 states that "*Where the development is subject to EIA the applicant should ensure that the ES clearly sets out any effects on internationally, nationally and locally designated sites of ecological or geological conservation importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity*."

11.11. Paragraph 5.3.4 states that "*The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity*." This policy is also highly relevant as the proposed works extend across ecologically sensitive landscapes, including some 13km of cable route within the South Downs National Park.

11.12. As a general principle, paragraph 5.3.7 states, "*development should aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives (…); where significant harm cannot be avoided, then appropriate compensation measures should be sought*)".

11.13. In decision-making, appropriate weight should be attached to: designated sites of international, national and local importance; protected species; habitats and other species of principal importance for the conservation of biodiversity; and to biodiversity and geological interests within the wider environment (para 5.3.8). NPS EN-1 recognises that SSSIs "*should be given a high degree of protection"* (paragraph 5.3.10) and "*where a proposed development on land within or outside an SSSI is likely to have an adverse effect on an SSSI development consent should not normally be granted unless benefits of the development outweigh impacts after mitigation*" (paragraph 5.3.11).

11.14. NPS EN-1 highlights the importance of ancient woodland and that "*once lost it cannot be recreated"* (paragraph 5.3.14). Development consent should not be granted for any development that would result in the loss or deterioration of ancient woodland unless the benefits of the development in that location outweigh the loss of the woodland habitat. The biodiversity value of aged or 'veteran' trees is also highlighted and that their loss should be avoided.

11.15. NPS EN-1 paragraph 5.3.18 is of considerable relevance to the Project in stating that: "*The applicant should include appropriate mitigation measures as an integral part of the proposed development. In particular, the applicant should demonstrate that:*

- *during construction, they will seek to ensure that activities will be confined to the minimum areas required for the works;*
- *during construction and operation best practice will be followed to ensure that risk of disturbance or damage to species or habitats is minimised, including as a consequence of transport access arrangements;*

- *habitats will, where practicable, be restored after construction works have finished; and*
- *opportunities will be taken to enhance existing habitats and, where practicable, to create new habitats of value within the site landscaping proposals*."

WSCC Policy

11.16. There are no WSCC policies that are relevant to the Project.

Construction Phase – Impacts

Positive

11.17. It is not considered that there are positive impacts on ecology during the construction phase. Construction works, whilst temporary, are generally disruptive in nature and are not expected to provide any positive impacts on ecology.

Neutral

11.18. The proposal to deliver significant elements of BNG prior to the commencement of construction, plus more during the early stages of construction, are key to alleviating a growing biodiversity deficit as the construction programme progresses. The amount of BNG to be delivered early in the Project, and its predicted success, including speed of establishment, are currently unknown.

11.19. An HDD approach is proposed as the method to cross a number of sensitive sites, including Climping Beach SSSI, Littlehampton Golf Course and Atherington Beach LWS, Sullington Hill LWS, ancient woodland at Michelgrove Park and Calcot Wood, River Arun and River Adur. Assuming the HDD is successful, it will avoid the need for any ground-breaking operations within these sensitive sites, thereby avoiding the likelihood of significant impacts. There are, however, some risks associated with the HDD technique as discussed below under 'Negative' impacts.

11.20. Significant impacts to ancient woodland should be avoided through implementation of the proposed mitigation and avoidance measures, including a 25m buffer zone.

11.21. There are at least seven veteran trees within or close to the DCO Limits. Since all will be retained through design avoidance (Commitment C174, APP-254), no impacts are predicted.

11.22. Although there are thirteen ponds within the DCO Limits, none will be lost or directly impacted.

Negative

11.23. Construction phase impacts include temporary and permanent habitat loss (including broadleaved semi-natural woodland, hedgerow and semi-improved

grassland), habitat fragmentation (with consequent reduction in ecological connectivity) and disturbance to species (such as from noise and lighting).

11.24. Temporary habitat loss during the construction phase will include 2.5ha of coastal and floodplain grazing marsh, 0.96ha of semi-improved grassland, 0.4ha of woodland, 1ha of scrub, 1130m of hedgerow (of which 244m is species-rich) and 378m of tree line. There will be 41 crossings of rivers, streams, and ditches, of which 22 are proposed for crossing using open trenching techniques and 19 through the use of trenchless methods. Each open cut crossing will require the removal of 30m of bankside vegetation.

11.25. Although most of the habitat loss is temporary, there will be some permanent habitat loss, notably along the cable route and at Oakendene substation, including 622m of hedgerow. 0.4ha of woodland along the cable route will be reinstated as mixed scrub.

11.26. The proposed extension to the existing National Grid Bolney substation lies within semi-improved grassland, broadleaved woodland and scattered scrub and would sever habitat connectivity between two areas of broadleaved woodland.

11.27. Construction activities, notably noise, lighting, disturbance and habitat severance, have the potential to impact a range of species. There is potential for impacts on legally protected species, including bats, water vole, badger, great crested newt, and reptiles. Safeguards to ensure legal compliance would be included in a stage specific Biodiversity Management Plan (BMP) within the stage specific Code of Construction Practice prepared by the appointed contractor(s). An ECoW would work in conjunction with the contractors to ensure compliance with relevant wildlife legislation, agreed mitigation and best practice.

11.28. Construction activities may also impact a number of rare or notable species, such as nightingale, turtle dove and skylark, all of which are on the UK Red List. Measures to minimise impacts on these, and other notable species, will be included in the stage specific BMPs.

11.29. WSCC is concerned that successful reinstatement of habitats, such as hedgerows, may take considerably longer than the Applicant anticipates. As a consequence, the impacts of temporary habitat loss and habitat fragmentation may persist for longer. The ES appears to assume that most habitats would be reinstated within two years of loss, other than at temporary construction compounds and Oakendene substation. WSCC's experience from Rampion 1 was that the speed, quality, and ultimate success of habitat reinstatement was extremely variable. Factors associated with failure included drought, poor aftercare maintenance (such as weeding of planted trees and lack of animal protection), inadequate monitoring, and delays in re-planting following failure. Repeated failure was also an issue. WSCC is concerned that similar issues could arise again. To ensure all reinstated habitats are effectively established, they would be subject to appropriate maintenance, management (including adaptive management) and monitoring for a period of 10 years, as stated in Commitment C199. Regular monitoring of all reinstated habitats, combined with rapid remedial measures, will be critical.

11.30. Although WSCC has concerns about the success of hedgerow 'notching', it recognises that this technique does offer some advantages and therefore is worth attempting provided any necessary remedial measures, such as re-stocking, are implemented immediately.

11.31. Early delivery of BNG will be important to alleviating a growing biodiversity deficit as the construction programme progresses.

11.32. As mentioned under 'Neutral' impacts, above, HDD may well avoid significant ecological impacts. However, WSCC expresses concern that there appear to be insufficient feasibility studies for the Applicant to be totally confident in the success of HDD. Indeed, the ES states that '*should HDD fail, additional consent would be required to deliver an alternative solution*' (ES Chapter 22: Terrestrial ecology and nature conservation, Table 22-6 APP-062). It is therefore of concern that the Applicant has not considered any contingency measures should HDD fail. Furthermore, there is a risk of accidental loss of drilling fluid (frac out), although it would appear that any resultant ecological impacts are likely to be localised.

Operational Phase - Impacts

Positive

11.33. WSCC welcomes the commitment to deliver a minimum of 10% BNG. This will comprise of both on-site BNG, focused on habitat creation at Oakendene substation, and off-site BNG. It is anticipated that some BNG delivered early in the Project, including prior to the commencement of construction, plus more during the early stages of construction, would be established and making a positive contribution to local biodiversity. During the early years of operation, new habitats will continue to be created and others enhanced through further delivery of off-site BNG.

11.34. There is an exciting opportunity for the Project, through BNG, to make an early and significant contribution to the West Sussex Local Nature Recovery Strategy (LNRS), due to be published in draft by March 2025. Further information is available on The Sussex Nature Partnership website: https://sussexlnp.org.uk/local-nature-recovery-strategies-for-sussex/.

11.35. WSCC understands that the Applicant is in discussion with the Weald to Waves Project (https://www.wealdtowaves.co.uk/) regarding delivery of local, off-site BNG. Importantly, this BNG would be secured and managed for a minimum period of 30 years.

Neutral

11.36. A few habitats, such as coastal and floodplain grazing marsh, may be restored to their original condition within a couple of years.

Negative

11.37. There will be some permanent loss of woodland along the cable route. In accepting that this woodland would be reinstated as mixed scrub, the replacement scrub habitat must be designed and managed to maximise

biodiversity, such as providing nesting habitat for nightingales. It would require regular and long-term management, such as coppicing at an appropriate time of year. There appears to be a lack of information and commitment as to how this would be achieved after the 10-year maintenance, management and monitoring period.

11.38. Approximately 622m of species-poor hedgerow with trees will be permanently lost at Oakendene substation. A total of 36 individual trees will be lost, including mature hedgerow trees.

11.39. The Bolney National Grid substation extension will result in the loss of 0.3ha of broadleaved woodland leading to severance of habitat connectivity between two areas of broadleaved woodland.

11.40. The negative impacts of temporary habitat loss may persist longer than hoped due to poor or failed habitat reinstatement. WSCC recalls situations of repeated failure in reinstating hedgerows, species-rich grasslands and field margins along the Rampion 1 onshore cable route. There is particular concern should re-planting be required in say year 9 of a 10-year aftercare plan. Any necessary remedial works, such as re-planting, must be implemented as soon as possible.

11.41. Large tree species within the cable easement would be cut down or reduced in size to avoid root damage to the transmission cables throughout their operational life.

11.42. The requirement to sell the transmission assets to an Offshore Transmissions Owner (OFTO) part way through the 10-year aftercare period has the potential to disrupt the maintenance and monitoring activities. A poor handover process resulted in such issues with Rampion 1.

Required Mitigation

Construction Phase

Amendments requested to DAS

11.43. Detailed design must seek to minimise habitat loss, and therefore a set of robust design principles to commit to this are required for the cable corridor, which currently are not included as part of the DAS.

11.44. The detailed design must seek to minimise impacts to rare or notable species, such as nightingale, glow-worm, great crested newt, common toad and grass snake, many of which are found outside designated sites. This is particularly relevant for the works at Oakendene substation, and the cable route from the A281 near Partridge Green to Bolney substation via Oakendene. The design principles in the DAS should commit to minimising impacts to rare or notable species.

Amendments requested to OCoCP

11.45. An ECoW must implement destructive searches in potential reptile habitat at the construction compounds, not just along the cable route. The OCoCP needs to be amended to reflect this change.

11.46. Further information is required on pedestrian monitoring of the HDD drill head as it passes beneath ancient woodland and how ecological impacts will be avoided. The proposed method should be detailed in the stage specific CoCP.

11.47. The OCoCP states that trees removed along the cable corridor would be replaced by new planting elsewhere within the proposed DCO Limits '*as far as possible'*. All trees lost must be replaced, either within the DCO Limits or nearby. The OCoCP should be amended to reflect this required commitment.

Amendments to Construction Method Statements

11.48. It is of concern that the Applicant has not considered any contingency measures should HDD technique fail, which must be addressed through the Construction Method Statements.

Amendments to the OLEMP

11.49. Opportunities for habitat enhancement, rather than simply reinstatement, should be actively sought along the onshore cable corridor and at the five temporary construction compounds, and included in the stage specific LEMPS and landscape plans. It might, for example, be possible to create species-rich grassland at the Washington site compound, and further exploration of opportunities across the Project need to be undertaken by the Applicant. This needs to be highlighted in the OLEMP.

11.50. WSCC is concerned over potential impacts to breeding nightingales along the northern section of the cable route through loss of thick hedgerow and scrub habitat, and disturbance. The OLEMP must ensure that all habitat reinstatement and enhancement in areas known to support breeding nightingale has particular regard to their specific requirements.

11.51. WSCC has concerns about the success of hedgerow 'notching' and thus requests reassurance in the OLEMP that any necessary remedial measures, such as re-planting, would be implemented as soon as possible.

Construction and Operational Phases

Amendments to the OLEMP

11.52. The success of habitat reinstatement and creation would be critical to mitigating ecological impacts during both the construction and operational phases. The effectiveness of stage specific LEMPs (DCO Requirements 12 and 13) would be crucial. Thus, WSCC requests further detail in the OLEMP regarding maintenance regimes, season and frequency of monitoring, recording methods, identification and implementation of remedial works, and reporting mechanisms.

11.53. Woodland above the cable ducts would be reinstated as mixed scrub. The OLEMP should describe how this scrub habitat would be designed and managed to maximise biodiversity, such as providing nesting habitat for nightingales. It would require regular and long-term management, such as coppicing at an appropriate time of year. Furthermore, there is a lack of information and commitment as to how this scrub would continue to be managed after the 10-year maintenance, management, and monitoring period.

11.54. Since the transmission assets would be sold to an OFTO, details are requested in the OLEMP regarding handover arrangements and measures to ensure that the required provisions of the stage specific LEMPs (DCO Requirements 12 and 13) are adhered to for a minimum of the 10-year aftercare period.

11.55. WSCC requests that both retained and newly created habitats at Oakendene and Bolney substations are managed for a minimum of 30 years, not just those which count towards the commitment for BNG, as currently proposed in the OLEMP.

Requirements and Obligations

11.56. WSCC requests that a detailed maintenance, management, and monitoring protocol (MMMP) is secured under Requirement 13 (Implementation and maintenance of landscaping).

11.57. WSCC assumes that the BNG Strategy associated with DCO Requirement 14 (Biodiversity net gain) will comprise a detailed BNG implementation plan as Requirement 14 (3) of the Draft DCO states: "*The biodiversity net gain strategy for each stage must be implemented as approved*." However, clarity is requested on the purpose and content of this BNG strategy and whether it will cover both on-site and off-site BNG.

11.58. The proposal to deliver significant elements of BNG prior to the commencement of construction, plus more during the early stages of construction, are key to addressing biodiversity impacts during the construction phase. WSCC is concerned that the Applicant may find this timescale difficult to achieve given it would involve the purchase of BNG units from third party providers who would then be responsible for its implementation. Whilst the commitment to BNG is secured through DCO Requirement 14, the mechanism to ensure the delivery of off-site BNG, to an agreed timescale, is unclear. Greater clarity is requested on the BNG sign off process with the relevant planning authority. Furthermore, WSCC requests that this sign off process and proof of purchase of biodiversity units are both specifically referred to in DCO Requirement 14 through which they need to be secured.

11.59. WSCC seeks the following through S106 Agreement, which is further explained in Appendix F.

- An environment and heritage Compliance Officer for the duration of the construction and 10-year aftercare periods; and
- A landscape, ecology, and heritage enhancement fund.

11.60. The Environment and heritage Compliance Officer would monitor compliance with the approved documents, including the stage specific CoCPs, stage specific Biodiversity Management Plans, stage specific BNG Strategies and stage specific LEMPs. They would provide a key point of contact for the Applicant and their contractor(s) in relation to addressing unforeseen ecological issues (perhaps in liaison with the ECoW), receipt of monitoring reports, and reaching agreement, where necessary, over remedial works, such as where habitat re-instatement or creation has failed.

11.61. A landscape, ecology and heritage enhancement fund would be used to deliver measures to conserve and enhance cultural landscapes, habitats and heritage features across the diversity of landscapes impacted by the onshore cable route. This fund would be made available to landowners for projects such as hedge planting to improve habitat connectivity, restoration of chalk grassland through scrub control, creation of dewponds and management of veteran trees.

12. Arboriculture (ES Chapters 18 and 22)

Summary

12.1. The submitted Arboricultural Impact Assessment (AIA) (APP-194) demonstrates the significant impact of the Project on arboricultural features. This includes the loss of: 1440m of hedgerow; 0.1ha of woodland; 2.05ha of tree groups; and 63 individual trees. Further impact to retained arboricultural features will occur, though mitigation measures are proposed to prevent adverse effects. Whist the AIA has been submitted in support of the Environmental Statement (ES) and informs on impacts to arboricultural features as material planning considerations, it is recognised that the assessment does not directly correlate to the various assessments of significance made within the ES chapters but rather helps inform the resulting impact leading to the effect.

12.2. As a result of the above stated arboricultural impacts, it has been demonstrated within the ES that the Project would give rise to wide ranging significant effects on landscape and visual receptors, as well as ecological receptors, both during construction and operation. Both of which are considered by WSCC within their topic specific sections of this LIR.

12.3. It is accepted that the scale and nature of construction activities and utilitarian built infrastructure involved, is such that avoidance of arboricultural impacts is difficult to achieve. The proposed embedded mitigation measures and control documents are welcomed as they consider most measures to reduce, compensate or mitigate such impacts.

12.4. However, WSCC remains concerned with the removal of highly valued arboricultural features within the footprint of the Oakendene substation are of significant concern. Further evidence is required to understand how the assessment of alternative substation sites considered these receptors in the evaluation process. Despite the limited compensation measures proposed within the DCO Limits, the impacts here are permanent leading to a 'lifetime' effect. WSCC considers that the landscape design principles and outline landscaping proposals require further clarity and expansion to demonstrate the appropriateness and effect of the current proposals for their desired use.

12.5. WSCC acknowledges the revised documents within the Procedural Deadline submission, which have been considered in this section of the LIR.

Table 12: Summary of Impacts – Arboriculture					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	Significant loss of high and moderate quality trees (category A & B), including locally notable trees (historically) and unjustified tree loss within Oakendene substation.	O	Negative	The reasoning for the removal of the following trees has not been demonstrated and should be retained - ref: T280, T324, T325, T326, T327 & T328. **Avoid**: Detailed design should look to further reduce tree loss within the substation site wherever possible. **Compensate**: Oakendene substation landscape design principles within the OLEMP should look to enhance retained trees and provide replacement planting to replicate landscaped characteristics of the trees lost within the substation vicinity.	NPS EN-1 (Paragraphs 5.8.5, 5.9.8 and 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180).
	No unnecessary loss of, or adverse impacts to, retained arboricultural features to facilitate the final project design-subject to implementation of mitigation measures.	C	Neutral	**Avoid**: Detailed design should look to reduce tree loss stated as a worst-case scenario. **Mitigation**: Secure mitigation measures identified within the arboricultural impact assessment within the OLEMP. **Change**: The OLEMP must secure the delivery of stage specific LEMPs in accordance with the AIA. This includes the provision of arboricultural methods statements and tree protection plans.	NPS EN-1 (Paragraphs 5.3.14, 5.8.5, 5.9.8 and 5.9.17 NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180).

Table 12: Summary of Impacts – Arboriculture					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	No adverse impacts or loss of veteran trees and ancient woodland - subject to implementation of mitigation measures.	C	Neutral	**Mitigation**: Within the OCoCP and OLEMP, secure mitigation measures identified within the AIA. **Change**: The OLEMP must secure the delivery of stage specific LEMPs in accordance with the AIA. This includes the provision of arboricultural methods statements and tree protection plans. Buffer zones should remain as stated within the OCoCP. **Obligation**: Submit all recorded veteran trees within the Woodland Trusts, Ancient Tree Inventory to provide a record in time of their presence.	NPS EN-1 (Paragraph 5.3.14) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraph 186).
	No loss of deciduous woodland or traditional orchards (HPI) within surveyed features.	C	Neutral		NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180)
	Woodland fragmentation due to tree loss at Bolney Substation extension, identified as potential for deciduous woodland.	C	Negative	**Compensation**: Provide replacement planting, characteristic of existing species, and enhanced connectivity to woodland ref W67 from G1075. Secure within the OLEMP as essential compensation.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180)

Table 12: Summary of Impacts – Arboriculture					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	Partial loss of tree groups and hedgerows within wood pasture or parkland (HPI).	C	Negative	**Avoid**: Detailed design should look to further reduce tree loss within tree group G887 wherever possible. **Compensation**: Provide replacement planting, characteristic of existing species, to provide connectivity of G887, H281 and H282.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 & 180).
	A worst case scenario requiring the removal of: 1440m of hedgerow; 0.1ha of woodland; 2.05ha of tree groups; and 63 individual trees.	C	Negative	**Compensation**: Within the OLEMP, secure essential compensatory tree planting methodology, as identified within the AIA. Proposed essential compensation should be distinguishable from that being proposed as biodiversity net gain. **Change**: The OLEMP must secure the delivery of stage specific LEMPs in accordance with the arboricultural impact assessment. This includes methodology for the adequate provision of replacement tree planting.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180).
	Retention of trees, woodland, hedgerow and tree lines through trenchless crossings (HDD) – subject to mitigating working practices.	C	Neutral		NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180
	Reduced impacts to trees, woodland, hedgerow and tree lines through reduced	C	Negative	**Change**: The OCoCP should secure detailed working methodology for notching techniques with the stage	NPS EN-1 (Paragraph 5.9.17)

Table 12: Summary of Impacts – Arboriculture					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	open trench widths and notching practices for cable installation– subject to mitigating works practices.			specific LEMPs. In addition, a tabular schedule of the vegetation removal plans should also be required.	NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180
	Tree loss proposed within an area of trenchless crossing.	C	Negative	**Avoid**: Trees T609, T611, T613 & T617 are shown for removal within an area proposed as a trenchless crossing and their removal should be avoided unless adequately justified otherwise.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180).
	Uncertainty of the identification and retention of all hedgerows and treelines within the order limits.	C	Negative	**Change:** Ensure all hedgerows and tree lines within the order limits are identified and considered within the ES, including vegetation retention plans.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180)
	Uncertainty of appropriate assessment of access points with consideration of arboricultural features.	C	Negative	**Change:** Review access points to ensure all arboricultural features are assessed.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2) NPPF (Paragraphs 136 and 180)
	Permanent removal of hedgerow (646m for Oakendene substation).	O	Negative	**Compensation**: Secure enhancement and creation of hedgerows in the local area through the delivery of biodiversity net gain.	NPS EN-1 (Paragraph 5.9.17) NPS EN-3 (Paragraph 2.4.2)

Table 12: Summary of Impacts – Arboriculture					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
					NPPF (Paragraphs 136 and 180)
	Increased long-term tree, woodland and hedgerow population due to biodiversity net gain strategy.	O	Neutral		NPPF (Paragraph 136)
	Planting of trees considered to be locally invasive non-native trees.	O	Negative	**Change**: Remove all three oak trees from the species selection, specie mix C, within the replacement planting methodology found within the AIA.	NPS EN-1 (Paragraphs 5.9.8 and 5.9.17) NPS EN-3 (Paragraph 2.4.2)

Policy Context

National Policy Statements

Overarching National Policy Statement for Energy (EN-1) (July 2011)

12.6. Of key relevance to the proposals in arboricultural impact consideration are the following paragraphs.

12.7. Paragraph 5.3.14: "*Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The IPC should not grant development consent for any development that would result in its loss or deterioration unless the benefits (including need) of the development, in that location outweigh the loss of the woodland habitat. Aged or 'veteran' trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons why*."

12.8. Paragraph 5.8.5: "*The absence of designation for such heritage assets does not indicate lower significance. If the evidence before the IPC indicates to it that a non-designated heritage asset of the type described in 5.8.4 may be affected by the proposed development then the heritage asset should be considered subject to the same policy considerations as those that apply to designated heritage assets*."

12.9. Paragraph 5.9.8: "*Landscape effects depend on the existing character of the local landscape, its current quality, how highly it is valued and its capacity to accommodate change. All of these factors need to be considered in judging the impact of a project on landscape. Virtually all nationally significant energy infrastructure projects will have effects on the landscape. Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate*."

12.10. Paragraph 5.9.17: "*The IPC should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to minimise harm to the landscape, including by reasonable mitigation*."

12.11. Paragraph 5.9.22: "*Within a defined site, adverse landscape and visual effects may be minimised through appropriate siting of infrastructure within that site, design including colours and materials, and landscaping schemes, depending on the size and type of the proposed project. Materials and designs of buildings should always be given careful consideration*."

12.12. Paragraph 5.9.23: "*Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off site. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista*."

National Policy Statement for Renewable Energy Infrastructure (EN-3) (July 2011)

12.13. Of key relevance to the proposals in arboricultural impact consideration is Paragraph 2.4.2: *"Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity, and in the design of the project to mitigate impacts such as noise and effects on ecology*."

National Planning Policy Framework (NPPF), (December 2023)

12.14. The National Planning Policy Framework (NPPF) is an important and relevant consideration of for National Significant Infrastructure Projects (NSIPs). The NPPF does not contain specific policies for NSIPs.

12.15. Of key relevance to the proposals in arboricultural impact consideration are the following paragraphs.

12.16. Paragraph 136 which recognises the important contribution of trees to the character and quality of urban environments, as well as their help to mitigate and adapt to climate change. It also states that planning policies and decisions should ensure that opportunities are taken to incorporate trees elsewhere in developments, that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible.

12.17. Paragraph 180 *states that "planning policies and decisions should contribute to and enhance the natural and local environment by recognising the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland"*.

12.18. Paragraph 186 states that "*planning applications should be refused where development results in the loss or deterioration of irreplaceable habitats including ancient woodland and ancient or veteran trees unless there are wholly exceptional reasons and a suitable compensation strategy exists*".

12.19. Annex 2: The glossary defines ancient woodland, as well as ancient or veteran trees. The latter is defined as "*A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage*."

12.20. These definitions have been applied to irreplaceable habitat recognised within National Planning Statements mentioned above.

WSCC Policy

12.21. There are no WSCC policies relevant to the Project.

Cable Corridor, Oakendene Substation and compounds

Construction Phase - Impacts

Positive

12.22. It is not considered that there are positive impacts on trees, woodlands or hedgerows (hereby referred collectively as arboricultural features) during the construction phase. Construction works require the removal of many arboricultural features to accommodate the Project as stated below.

Neutral

12.23. Providing detailed design seeks to reduce the number of trees removed through micro-siting the cable route, as well as implementing environmental mitigation measures stated within the AIA, no unnecessary loss or adverse impacts are expected to facilitate the final design. This relies on the amendment of the Outline Landscape and Ecological Management Plan (OLEMP) and Outline Code of Construction Plan (OCoCP) to ensure arboricultural method statements and tree protection plans to be produced within the Landscape and Ecological Management Plans (LEMPs) in accordance with the AIA. Further, the close monitoring of construction activity will be required to ensure that such mitigating measures are adequately complied with; Commitment C-207 states an Ecological Clerk of Works (ECoW) will be employed with relating arboricultural methodology identified within the AIA.

12.24. In corelation with the above statement, no adverse impacts leading to the loss of veteran trees nor ancient woodland have been identified. Buffer zones with appropriate temporary protection measures are to be employed in accordance with statutory guidance to prevent adverse impacts; ancient woodland will be provided a buffer zone of 25m, 10m greater than the minimum recommended within statutory guidance.

12.25. No loss of Habitats of Principle Importance (HPI), including deciduous woodland and traditional orchards, has currently been identified to facilitate construction (note potential loss of a small area of deciduous woodland is possible due to incomplete surveys results).

12.26. Multiple Horizontal Directional Drilling (HDD) trenchless crossings have been proposed, which reduces the impact and loss of numerous arboricultural features, including veteran trees and ancient woodland. Where HDD crossings pass under the buffer zones of ancient woodland or veteran trees, the depth of transmission cables are committed to be maintained at a minimum depth of 6m to avoid adverse damage to their root systems.

12.27. The methodology applied within the AIA to identify a tree's 'veteran status' aims to reflect the definition of a veteran tree within the NPPF. Seven trees within the survey area have been identified as veteran and are to be retained and provided temporary protection from construction activity.

Negative

12.28. Construction activities are stated to require the removal of 1,440m of hedgerow, 0.1ha of woodland, 2.05ha of tree groups, and 63 individual trees at a worst case scenario. Despite a majority being recognised as a long-term but temporary loss due to the replacement planting strategies, the severity of the interim loss should not be downplayed with regard to the benefits these receptors provide that are not required to be assessed within the application (such as: natural capital, storm water alleviation, improved air quality, social connections, health and wellbeing (physical and neurological), carbon sequestration, and general provision of biodiversity). Following completion of construction, the loss of these benefits resulting from tree, hedge, and vegetation removal are likely to continue for decades (in some cases centuries) whilst new planting/seeding is established or any coppiced/lopped or notched trees/hedgerows recover.

12.29. The AIA categorises trees in line with BS5837: 2012, which is a policy requirement of most local plans and recognised within the industry nationwide.

12.30. Tree loss required within the Oakendene substation footprint includes 11 high value category A trees (73% of the total individual trees removed within this category, totalled at 15 within the entire Project). In addition, 11 moderate value category B trees also require removal (31% of the total individual trees removed within this category, totalled at 36 within the entire Project). These trees are important natural landscape features, both as hedgerow trees and as individual trees, with local plan policies supporting their retention. Some are recognised as historical features within the site due to their size and condition. Whilst not recognised as veteran trees within the ES, some are locally notable and have the potential to be of near veteran status, which would take centuries to replace. Further, it is not clear how the assessment of alternative sites considered tree values at a site level, to inform design layout and therefore site selection as recommended within BS5837:2012. Therefore, it is not apparent that trees have been considered appropriately when selecting the substation site.

12.31. Compensation for arboricultural loss is not possible within the Oakendene substation footprint, with the proposed landscape design principles being relatively limiting and predominantly focusing on replacing habitat and screening only. The proposed planting immediately surrounding the substation is of such close proximity to infrastructure that routine maintenance will likely be required. This potentially limits the ultimate size of the tree planting and therefore purpose of the planting where screening and habitat creation is required.

12.32. Oakendene substation requires the removal of trees ref. T280, T324, T325, T326, T327 & T328, which are shown for removal, though the reasoning is not apparent and has not been justified. Existing trees should be retained, wherever possible, in line with NPPF paragraph 136.

12.33. The Bolney National Grid substation extension requires the partial removal of trees within a woodland and tree group totalling 0.3ha. These features have not been surveyed in detail and have a high possibility of being deciduous

woodland, a HPI as recognised within the Natural Environment and Rural Communities Act, 2006. The general area of W67 is recognised as deciduous woodland within Natural England's priority habitats inventory.

12.34. The above stated tree removal will sever the remaining vegetative connectivity between W67 and nearby deciduous woodland south of Bob Lane (immediately south of the substation), some of which is also recognised as ancient woodland. This will lead to further fragmentation of W67 beyond what has already occurred to facilitate existing infrastructure within the substation.

12.35. Land designated as wood pasture and parkland (HPI) will be impacted through the partial removal of tree group G887 and hedgerows H281 and H282. A 30m open-cut corridor is required through G887 and will temporarily sever connections from the adjacent ancient woodland site, Olivers Copse, from the nearby woodland, Kitpease Copse. The justification for open cut trenching opposed to a trenchless crossing methodology has not been identified; trenchless crossing would significantly reduce impacts on the tree group, and consequently reducing negative impacts on landscape character and the visual amenity of users of the Public Right of Way (PRoW).

12.36. A number of embedded mitigation measures have been adopted to reduce impacts to receptors including arboricultural features. This includes reduced open cut corridor widths and various 'notching' techniques to facilitate the cable installation. Whilst this demonstrates good design principles by seeking to reduce or avoid maximum impacts notably at a local level, which is welcomed, these practices will not significantly reduce the overall impact to the various arboricultural features and remains a negative impact for this reasoning.

12.37. Trees T609, T611, T613 & T617 (including high and moderate quality trees) are identified for removal despite being within an area of trenchless crossing through HDD. As no justification for their loss has been identified, this tree loss is considered to be unnecessary and does not demonstrate that existing trees are retained wherever possible in line with NPPF paragraph 136. However, it is acknowledged that the errata proposed for amendment, within Appendix 3 of the Covering Letter (PEPD-001), states that these trees would be retained in all situations (subject to submission of amended documents through the examination process).

12.38. Thirty of the trees surveyed have been identified to be approaching 'veteran status' due to either their condition or size, which shows key characteristics of veteran trees. Many of them could be impacted by construction activity and therefore tree protection is proposed as mitigation; however, tree protection has been provided for the minimum root protection area (as recommended by BS5837:2012). A larger buffer zone similar to that of veteran trees has not been considered. Many of these trees' root systems are likely to be far larger and more sensitive to construction activities, such as excavation and soil compaction, than younger or smaller trees typically found in abundance. Therefore, the impact is likely to be greater to these trees than trees not displaying veteran characteristics and a larger area of protection would be of greater benefit.

12.39. Two trees, T1236 & T1273, are approaching 'veteran status' in the near future and are within the DCO Limits for certain aspects of the construction activities, which could require their removal. Whilst not considered irreplaceable habitat by definition of the AIA, replacement tree planting cannot re-create the centuries of natural processes required to develop such characteristic features (and notably not within the short 30 year project life-span). For this reasoning, their loss is considered an operation phase impact. This is also considered an operational phase impact due to the lifetime loss within the realm of the Project lifespan in comparison to the identified trees' lifespan.

12.40. Hedgerows and treelines have been identified within the order limits that have missed and not identified on vegetation retention plans presented within the OCoCP. For example, a hedgerow aligning the A272 north of the site compound west of Oakendene Manor, ref. H60 within the Arboricultural Constraints Plan, and treelines that align the north-east side of Kent Street. Further examples are presented in Appendix G.

12.41. The woodland retention plan (Figure 7.2.2h, OCoCP) shows a gap between W385 and W865, which is proposed to be used as a construction and operational access from Wineham Lane, Oakendene. This gap contains newly-planted trees planted in mitigation of effects from the original Rampion project; the cumulative effects of such changes has not been presented.

12.42. Construction access points identified within the CTMP are not considered to have been adequately assessed in consideration of existing trees and hedgerows. For example, access point A-33 is summarised within the CTMP to utilise an existing gated access which is outside of the order limit; however, relevant plans show this access to be crossing a prominent hedgerow that is not identified within hedgerow retention plans (within the OCoCP) nor other application documents. Further examples are presented in Appendix G.

12.43. Requirements 15 and 16 of the draft DCO regards highway accesses and requires them to meet design standards in accordance with the Department for Transport Design Manual for Roads and Bridges. As the CTMP, AIA and OCoCP has not taken full account of the impacts to arboricultural features as a result of required accesses, such as the example above, WSCC is concerned about the potential for further requests for hedgerow or tree removal, which should have been considered in the application. Further examples are presented in Appendix G.

Operational Phase - Impacts

Positive

12.44. It is not considered that there are positive impacts to arboricultural features during operational phase of the Project.

Neutral

12.45. Potential enhancements and increased canopy cover/area of arboricultural features may arise through the delivery of BNG. However, as this strategy cannot be committed to in full at this stage, it is not yet clear how this will be delivered and is unlikely to be of positive impact within the DCO Limits.

Further, the benefits of the arboricultural features delivered might not be provided within the lifespan of the Project and may not outweigh the current benefits of the current tree population as this differs entirely from biodiversity gain.

Negative

12.46. Important hedgerows have been surveyed for meeting the definition of the Hedgerow Regulations 1997. Fourteen hedgerows were identified within the survey area, none of which would be lost permanently. Those requiring temporary partial loss have reduced working corridor widths to minimise impacts as best possible with consideration of the construction activity required.

12.47. The permanent removal of 646m of hedgerow is required to facilitate the Oakendene substation. Not only will this be of local habitat and visual loss (due to the existing PRoW), some of the features proposed for removal are elements of the Oakendene Manor historic parkland, with historic mapping evidence indicating that they are of considerable age and likely to have been purposefully planted as part of successive parkland planting schemes during the 19th century. This includes trees ref. T247, T250, T253, T255, T262 & T265, which are clearly individually depicted on the 1875 Ordnance Survey (OS) presented within the Oakendene parkland: historic landscape assessment (APP-211). The tree data as stated within the Arboricultural Impact Assessment (APP-194), generally correlates their age/presence to the trees shown on the 1875 OS mapping due to their larger stem sizes.

12.48. T247 and T250 are likely to have been deliberately planted, potentially as feature trees within the informal or naturalistic style designed parkland landscape. With regard to trees T253, T255, T262 and T265, their general presence has been referred to within the historic landscape assessment as a hedgerow field boundary feature, which is their more recent use. No consideration has been given towards their original use as individual trees within the historic parkland; the consistency of species and spacing is indicative of deliberate planting along the existing boundary for aesthetic purposes, likely intended to be viewed within the parkland and from the manor. Their identifiable presence as mature trees on the 1875 OS mapping supports this. This potentially also includes trees ref. T258, T259, T261, though their stem size suggests they are of a younger age and are more likely to have been planted to as replacements or enhancements.

12.49. These trees are therefore part of the historic parkland setting of Grade II listed Oakendene Manor and can be considered to contribute to the heritage significance (and the ability to appreciate that significance) of this designated heritage asset.

Required Mitigation

12.50. Given the scale and nature of construction activities involved, avoidance of arboricultural loss or impacts is not entirely possible to achieve.

12.51. The embedded environmental measures set out in Table 1-1 of the commitments register are reflected within the AIA and OCoCP. These are

supported, in principle, as methods to reduce and mitigate arboricultural impacts. However, these need to be secured by the relevant control documents and requirements as identified in the paragraphs below.

Construction Phase

12.52. The OLEMP must state the requirement to submission of stage-specific LEMPs, which will adhere to the AIA submitted. This must include direct references to the provision of arboricultural methods statements, tree protection plans and landscaping plans. This is to ensure tree protection and essential tree replacement planting is as expected, adequate and enforceable. Landscape proposals for essential replacement tree, hedgerow or woodland compensation must be distinguishable from that required for biodiversity net gain (such as quantities or area of planting required for each).

12.53. In addition to the embedded environmental measures mentioned, WSCC recommends the following should also be considered.

12.54. The OLEMP should provide detailed landscape design principles providing replacement planting characteristic of existing species, which enhances connectivity to woodland ref W67 from G1075

12.55. Detailed design for the cable corridor should look to reduce tree loss or impacts currently identified as a worst-case scenario wherever design or construction change allows. This is to ensure no unnecessary tree removal or impact occurs, which must be reflected within the stage-specific LEMPs. In particular, there is a need to reduce tree loss within tree group G887 and to provide essential replacement planting characteristic of existing species, to provide connectivity of G887, H281 and H282.

12.56. The OCoCP needs to secure the production of method statements with working methodology and aftercare practices for 'notched' crossings, as well as a tabular schedule of the vegetation removal plans within the stage-specific LEMPs. Where trenchless crossings are proposed, detailed design must avoid or reduce the loss of arboricultural features, including trees T609, T611, T613 & T617.

12.57. With reference to changes to commitment C-115 within the OCoCP (PEPD-033), further clarification is needed to define what may be deemed 'appropriate' for the proposed temporary translocation of hedgerows.

12.58. The recently planted gap between W385 and W865, proposed to be used as a construction and operational access from Wineham Lane, Oakendene, must be adequately reinstated and should therefore not be used operationally. The temporary translocation of existing tree stock and its replacement following cease of temporary construction access should be considered.

12.59. Trees approaching near 'veteran status' are recommended to be provided greater root protection areas than the minimum recommended by BS5837:2012. Ideally, a 15m buffer would be provided similar to that recommended for Veteran Trees. This would help to ensure continuity of future veteran trees within the local landscape by reducing impacts to these trees as far as practically possible, rather than the minimum.

12.60. Paragraph 5.6.27 of the OCoCP (PEPD-033) identifies how additional loss of habitats will be addressed following detailed design. WSCC request this is amended to ensure that where the construction approach would result in additional losses over those stated in the VRP, such changes are clearly identified in a tabular format and shown on a revised VRP within the stage specific CoCP, which shall be submitted for approval by the relevant authorities prior to that stage of the works. Where appropriate, such changes are to be reflected within the Arboricultural Method Statement and Tree Protection Plan within the stage specific CoCP for that stage of works, and reinstatement requirements are reflected within the relevant stage specific LEMP.

12.61. Proposed Requirements and Outline Control documents need to provide greater certainty about the information that will be provided on the detailed duration, phasing, and sequencing of construction activities, and how this will be programmed to ensure reinstatement can be maximised as quickly as possible following each stage of the construction works. This is a considerable area of uncertainty.

12.62. Of key importance to compensating the arboricultural impacts of the cable corridor during the operational phase will be the success of reinstatement and replacement planting. As a result, the effectiveness of stage specific LEMPs (Draft DCO Requirements 12 and 13) is crucial. At present, it is considered that the outline LEMP provides very limited detail around the timing and specification of planting, or maintenance and monitoring provisions, which requires greater clarification and certainty.

12.63. It is imperative that the lessons learnt from Rampion 1 are considered with regard to delayed reinstatement and monitoring, which will need to be adequately addressed and secured. It is imperative that any proposed contractual arrangements for reinstatement planting ensure consistency of approach, regular monitoring, and adherence to maintenance requirements. Similarity, it is crucial that any LEMP secures monitoring and maintenance requirements, and an effective recording and handover mechanism, to ensure that once the cable asset is taken on by the OTFO that all required provisions of the LEMP are adhered to for a minimum of the 10-year reinstatement period.

Operational Phase

12.64. In liaison with stakeholders, detailed design of the Oakendene substation should, wherever possible, look to further reduce tree loss, notably those of higher quality (A and B category) and of historic interest. The design principles for the substation must consider the enhancement of retained trees or hedgerows early within the project timeline, as well as the creation of new ones (including outside of the current order limits if needed to accommodate this). In order to enhance the landscape surrounding Oakendene Manor, individual planting within the historic parkland should include specimen trees from 'specie mix c' as presented within the AIA.

12.65. Detailed design should look to avoid the loss of trees approaching 'veteran status' by micro-siting construction activity within areas designated as limits of

deviation; in particular, this applied to trees T1236 & T1273. In addition, trees approaching 'veteran status' should be provided a greater minimum area of tree root protection (barriers or ground protection), matching buffer zones of veteran trees where possible.

12.66. Replacement tree planting strategies are conflicting, with only native tree species planting stated within the OLEMP as opposed to a small selection of non-native trees specified within the more welcomed replacement planting strategy within the AIA (subject to the removal of the following from mix C due to their locally invasive naturalisation potentially negatively impacting open countryside: *Quercus cerris* – Turkey Oak, *Quercus ilex* – Holm Oak and *Quercus x turneri* 'Pseudoturneri' – Turners Oak). However, it is acknowledged that the errata proposed for amendment, within Appendix 3 of the Covering Letter (PEPD-001), states that the planting strategy of the AIA will be updated to remove the unwanted species (subject to submission of amended documents through the examination process).

12.67. Non-native specimen tree planting should be used sparingly and strategically, incorporating them only for ornate purposes to replace the character of tree loss with the context of the landscape.

Requirements and Obligations

12.68. During engagement with the Applicant, a request was made to submit all recorded veteran and notable trees on the Woodland Trusts, Ancient Tree Inventory to provide a record in time of their presence. This would be welcomed as a commitment, or alternatively secured and confirmed by other means.

12.69. Due to the varied mitigation requirements needed to ensure the preservation of such a high volume of retained trees, woodlands and hedgerows, alongside other landscaping elements including hedgerow transplantation and reinstatement, a Section 106 obligation should be provided to fund a Compliance and Monitoring Officer for the relevant planning authority/authorities. This will enable an efficient approach to the oversight and discharge of requirements relating to construction and landscaping activities. Further information of this request is detailed within Appendix B of this Local Impact Report.

12.70. Despite mitigation measures presented, residual impacts are expected on a wide range of arboricultural features (and the habitats that they provide), including hedgerows, trees of veteran and near veteran status, locally notable trees. A Section 106 obligation should provide a Landscape Enhancement fund for the surveying, identification and enhancement of hedgerows as well as ancient, veteran or notable trees within a set proximity to the Project. Further information of this request is detailed within Appendix B of this Local Impact Report.

13. Traffic and Transport (ES Chapter 23)

Summary

13.1. The construction works associated with the installation of the onshore cable route, substation, and other ancillary infrastructure are expected to have a negative impact on the local road network and the local communities the roads pass through. These negative impacts are a consequence of the anticipated increase in vehicular traffic arising from the workforce and material deliveries during the construction phase, and the resultant potential safety and amenity issues that may occur. Once the construction phase is complete, traffic generation would be limited to that required for inspection and maintenance purposes. The resultant movements during the operational phase are unlikely to be discernible from other traffic using the network. Once operational, the development would have neutral impact on the local highway network.

13.2. It is acknowledged that impacts during the construction phase will be temporary from a highway's perspective. The Applicant has proposed a number of mitigation measures during construction. These include an Outline Construction Workforce Travel Plan to encourage the use of sustainable transport options for construction workers. The benefits of this may be limited due to the unknown origins of individual workers and the potential lack of suitable alternative modes of transport to the site. Also, traffic management measures are proposed as part of Outline Construction Traffic Management Plan (OCTMP), with further stage specific management plans to be prepared as the Project is implemented.

13.3. Due to the length of the onshore cable route and the requirement to gain access to it, a significant number of construction access points have been proposed by the Applicant. Existing and proposed vehicular accesses are intended to provide construction and operational access. The final details of the accesses will need to be submitted and agreed with WSCC prior to use. WSCC has reviewed the presented access options – see Appendix C, Table 1a.

13.4. It is also expected that additional mitigation would be required to manage traffic movements at some of the proposed accesses, particularly those onto high speed and high trafficked roads. These additional measures would be required both for safety and traffic management purposes. These measures may in turn result in delays to non-development traffic.

13.5. There are locations where several accesses are shown in close proximity to another. Whilst WSCC accept a need for optionality within the proposals, the Applicant should seek to reduce the total number.

13.6. Once constructed and operational, permanent accesses will still be required onto the highway network. Again, in light of the length of the cable route, a large number of operational accesses are indicated. Vehicle movements associated with the cable route and substation during the operational phase are anticipated to be minimal although the submitted statements do not quote any actual figures.

13.7. A substantial new permanent access is also intended onto the A272 to serve the proposed substation at Oakendene. Given the importance of this

permanent, new access to serve the substation, the access design should be agreed at this stage with WSCC (i.e. prior to the DCO being approved) rather than being left as an agreement during the Discharge of Requirement stage. Any submissions for the access design should include a Stage One Road Safety Audit in accordance with current WSCC Policy.

13.8. WSCC acknowledges the revised documents submitted by the Applicant at the Procedural Deadline. It is noted that the OCTMP has been updated; this is now revision B (PEPD – 035a). The updated document addresses errors to speed limits on roads referenced as well as addressing cropping issues that resulted in incomplete plans within the original OCTMP (APP -228). These updates do not influence or alter the comments raised in this section of the LIR.

Table 13: Summary of Impacts – Traffic and Transport					
Ref No.	Description of Impact	Construction (C) /Operation (O) /Decommissioning (D)	Negative/ Neutral/Positive	Required mitigation and how to secure it (avoid/reduce/mitigate/compensate/enhance (and monitor))	Policy Context
13a	A significant number of existing and new vehicular accesses are to be used to enable the construction of the cable route and substation.	C	Negative	**Reduce**: The Applicant should seek to reduce the number of construction accesses **Mitigate**: • All accesses will need to be demonstrated as adequate taking account of current design standards and the anticipated traffic to ensure the proposals do not adversely impact on road safety; • Road Safety Audits (RSAs) will be required for some accesses. It is recommended that RSAs are provided for the more heavily trafficked accesses to compounds on Church Lane, A283 Washington, and for the substation access onto the A272 prior to approval of the DCO. Further RSAs will be required for accesses onto high speed classified rural roads as the detailed design for these progresses. The suggested accesses to be audited are indicated Appendix C, Table 1b; and • Additional temporary traffic management measures (e.g. traffic signals or 'Stop Go' boards) may be required for certain accesses to allow vehicles to safely egress the site onto the highway. This should be progressed through the stage specific construction management plans.	NPPF, (Paragraph 114b) NPS EN-1 (Paragraph 5.13.6).
13b	New and existing accesses are indicated	O	Neutral	**Mitigate**:	NPPF (Paragraph 114b).

Table 13: Summary of Impacts – Traffic and Transport					
Ref No.	Description of Impact	Construction (C) /Operation (O) /Decommissioning (D)	Negative/ Neutral/Positive	Required mitigation and how to secure it (avoid/reduce/mitigate/compensate/enhance (and monitor))	Policy Context
	as being required for the operational phase.			• All accesses will need to be demonstrated as complying with current design standards; and • A RSA will be required for the permanent access serving the proposed Oakendene substation, a design for which should be agreed with WSCC during the Examination stage.	
13c	The Project has the potential to result in significant increases in HGVs on the WSCC maintained highway network through local communities as well as past sensitive local receptors (primarily schools). Roads will be used that are not designed, constructed, and ordinarily do not accommodate HGVs. This may result in increased wear and damage to these roads.	C	Negative	**Mitigate:** As part of the OTCMP the following measures should be included, • The routing for HGVs as shown in the OTCMP will need be updated in light of comments made by WSCC within Appendix C, Table 1. This is to ensure suitable roads are used. • The number of HGVs should be limited during network peak times. • A means of reporting transport issues and incidents by the public relating to the Project should be set up by the Applicant; • At specific locations, vehicle movements should be restricted to avoid conflicts with peak movements associated with schools; • Pre-construction, during, and post highway condition surveys are to be undertaken at identified locations as agreed with WSCC through phase specific construction management plans; and	NPPF (Paragraph 114b) NPS EN-1 (Paragraphs 5.13.6, 5.13.8 and 5.13.11).

Table 13: Summary of Impacts – Traffic and Transport					
Ref No.	Description of Impact	Construction (C) /Operation (O) /Decommissioning (D)	Negative/ Neutral/Positive	Required mitigation and how to secure it (avoid/reduce/mitigate/compensate/enhance (and monitor))	Policy Context
				• Any damage to the highway (which shall include road surfaces, footways, and verges) that is attributed to Project construction traffic is to be made good by the Applicant and in agreement with WSCC.	
13d	The construction of the substation at Oakendene will result in abnormal loads using the highway network. These have the potential to delay traffic.	C	Neutral	**Mitigate**: • An Abnormal Indivisible Loads (AIL) Assessment should be submitted to and agreed with WSCC Highways. • This may make use of a pre-existing routing strategy from Shoreham Port to the existing National Grid substation at Bolney providing that Shoreham Port is used for the Project. This is set out within the submitted AIL Assessment; and • Movements should be timed to avoid network peak times. This should be specified within the OTCMP.	NPS EN-1 (Paragraphs 5.13.8 and 5.13.11).
13e	The Project will require construction traffic (including HGVs) to use rural roads to access parts of the cable route as well as the existing National Grid substation on Wineham Lane. These rural roads will continue to	C	Negative	**Mitigate**: Appropriate mitigation should be included in the OTCMP to manage these movements to ensure road safety is not unacceptably compromised by the increase in vehicle (specifically HGV) movements. Mitigation could include advisory temporary speed limits, warning signage, time restrictions where there are potential localised increased flows of pedestrians or cyclists (e.g. at school drop off or pick up times), or haul	NPPF (Paragraph 114b and 112a. NPS EN-1 (Paragraphs 5.13.8 and 5.13.11).

Table 13: Summary of Impacts – Traffic and Transport					
Ref No.	Description of Impact	Construction (C) /Operation (O) /Decommissioning (D)	Negative/ Neutral/Positive	Required mitigation and how to secure it (avoid/reduce/mitigate/compensate/enhance (and monitor))	Policy Context
	be used by other road users, which could include pedestrians, cyclists, or equestrians, which could lead to conflicts and road safety concerns.			roads to avoid the use of the certain lengths of road. Where possible, the number of movements generated by the workforce could be reduced using measures within an OCWT.	
13f	The Project has the potential to result in increased vehicle flows on the A281 and A272 through Cowfold, as well as the A259, A283, and A24. All of these roads have existing traffic congestion issues at network peak times as recognised within the West Sussex Transport Plan.	C	Negative	**Mitigate**: • Measures should be incorporated to reduce (i.e. time restrictions) or re-route vehicles away from the network peak times; • Where possible specific routing should be agreed through the OTCMP for elements of the proposals. For example, although accepted that some HGVs associated with the cable route may need to pass through Cowfold, all HGV movements associated with the construction of the Oakendene substation could be required to route to and from the east of Cowfold unless materials are coming from local sources; • Develop and implement the Construction Workforce Travel Plan based upon the OCWTP Plan. Specific additional measures will be required within the OCWTP given the rural locations that are presenting limited options to use alternate transport modes. This could include shuttle buses from the main site compounds to more	NPPF (Paragraph 114b) NPS EN-1 (Paragraph 5.13.6, 5.13.8 and 5.13.11).

Table 13: Summary of Impacts – Traffic and Transport					
Ref No.	Description of Impact	Construction (C) /Operation (O) /Decommissioning (D)	Negative/ Neutral/Positive	Required mitigation and how to secure it (avoid/reduce/mitigate/compensate/enhance (and monitor))	Policy Context
				rural working locations to reduce single occupancy vehicle trips.	
13g	Impact on local residents through temporary cable installation works, namely the use of open cut trenches (e.g. on Michelgrove Lane).	C	Negative	**Avoid:** using open cut trenches on inappropriate routes (single track roads) **Mitigate:** through alternate trenching (i.e. trenchless drilling) techniques.	NPS EN-1 (Paragraph 5.13.6).
13h	Increase in vehicle movements during decommissioning of the Oakendene Substation.	D	Negative	**Mitigate**: Submit and agree suitable decommissioning traffic management plan, to include details of vehicle routing and traffic management measures at the site access.	NPPF (Paragraph 114b) NPS EN-1 (Paragraph 5.13.6, 5.13.8 and 5.13.11).
13i	Use of vehicle accesses during the operational phase	O	Neutral	Impacts from vehicular traffic during the operational phase are anticipated to be minimal. An OWTP is proposed to encourage and promote alternate means of access where feasible.	NPS EN-1 (Paragraph 5.13.6).

Policy Context

National Policy Statements

13.9. The Overarching NPS for Energy (EN-1) provides the policy and guidance on generic impacts that may arise. Section 5.13 covers 'Traffic and Transport'. Of relevance are as follows.

13.10. Paragraph 5.13.1: *"The transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks, for example through increased congestion. Impacts may include economic, social and environmental effects. Environmental impacts may result particularly from increases in noise and emissions from road transport. Disturbance caused by traffic and abnormal loads generated during the construction phase will depend on the scale and type of the proposal."*

13.11. Paragraph 5.13.2: *"The* consideration *and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development as set out in Section 2.2 of this NPS."*

13.12. Paragraph 5.13.6: *"A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the IPC should therefore ensure that the applicant has sought to mitigate these impacts, including during the construction phase of the development."*

13.13. The NPS provides additional guidance on mitigation:

Paragraph 5.13.8: *"Where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts."*

Paragraph 5.13.11: *"The IPC may attach requirements to a consent where there is likely to be substantial HGV traffic that:*

- *control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements,*
- *make sufficient provision for HGV parking, either on the site or at dedicated facilities elsewhere, to avoid 'overspill' parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and*
- *ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force."*

13.14. The NPS additionally requires any project that is likely to have significant transport implications provides a Transport Assessment (TA) as part of the Environmental Statement. The assessment and mitigation within the TA should be agreed through consultation with the Highway Authorities.

13.15. Where appropriate, a travel plan should also be included that contains measures to mitigate transport impacts. The Applicant should also provide details of measures to improve access by public transport, walking, and cycling, to reduce the need for parking associated with the proposals, and to mitigate transport impacts.

13.16. National Planning Policy Framework (NPPF, December 2023) provides the Government's planning polices for England. Whilst paragraph 5 of the NPPF (MHCLG, 2021) states that it does not contain specific policies for NSIPs, the NPPF itself may be considered by the SoS to be an "important and relevant" consideration to its decision in accordance with s104 of the Planning Act 2008. Of relevance are as follows.

13.17. Paragraph 114: "*In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*

a) Appropriate opportunities to promoted sustainable transport modes can be – or have been – taken up, given the type of development and its location.

b) Safe and suitable access to the site can be achieved for all users:

c) The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code, and

d) Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

13.18. Paragraph *116: "Within this context, applications for development should:*

a) Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use.

b) Address the needs of people with disabilities and reduced mobility in relation to all modes of transport,

c) Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards,

d) Allow for the efficient delivery of goods, and access by service and emergency vehicles, and

e) Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible, and convenient locations."

WSCC Policies

13.19. The Local Transport Plan, West Sussex Transport Plan (WSTP), covers the period 2022 to 2036. The WSTP is WSCC's main policy on transport and supports delivery of WSCC plans and priorities. The WSTP covers a range of

transport topics and includes objectives for transport related matters as well as Area Transport Strategies. Related to the Project and its potential highway impacts, the WSTP covers 'Freight' as well as potential existing locations of congestion.

13.20. The Lorry Route Network forms part of the WSTP. This provides guidance on the strategic and local roads recommended for use by lorries and heavy goods vehicles in West Sussex.

13.21. The WSCC Road Safety Audit (RSA) Policy applies to all relevant schemes that are proposing to make alterations to the adopted highway network. The principal objective of the RSA process is to identify where a potential collision might occur on the public highway because of the proposed or constructed highway works. The RSA Policy is required to give due consideration to the safety of all road users using the public highway particularly the more vulnerable including pedestrians, cyclists, equestrians, and motorcyclists.

13.22. The WSCC Permit Scheme have been introduced to enable the effective monitoring and management of all activities that need road space, such as road maintenance, utility street works, new developments, and public events. This has been introduced under the Traffic Management Act 2004. The Permit Scheme applies to all adopted roads within the County. The objectives of the Permit Scheme are to reduce disruption to the road network, improvements to the overall network management, a reduction in delay to the travelling public, a reduction in costs to businesses caused by delays, promotion of a safer environment, and reduced carbon emissions. The Permit Scheme is relevant due to the requirement for the proposals to undertake works within the public highway.

Construction Phase – Impacts

Positive

13.23. Project is not considered to offer any positive impacts to the local highway network during construction.

Neutral

13.24. The Project is not considered to offer any neutral impacts to the local highway network during construction.

Negative

13.25. A significant number of existing and temporary vehicular accesses are indicated to be required. The formation and use of these accesses have the potential to result in negative impacts on the highway network. The introduction of further accesses would result in potential road safety issues through vehicles manoeuvring into and out of these, as well as resulting in delays to other traffic again through vehicles turning into and out of these but also from any traffic management measures necessary to manage the operation of access points.

13.26. The Project will generate increased vehicle movements on the highway network during construction; this will include increased HGV activity. The increase in vehicle movements will add to existing congestion issues. Whilst impacts would be worse at network peak times, the Project will still result in a notable impact particularly on lightly trafficked rural roads throughout the proposed working day. These impacts may result in safety and/or other amenity issues.

13.27. Access will be required along rural roads that are not designed or constructed to accommodate HGVs, resulting in increased wear and damage to the local highway network. Given the anticipated vehicle movements, there is the potential for damage to result to certain roads. The use of these roads will need to be carefully managed with mechanisms included within any phase specific management plan to enable damage to be repaired.

13.28. The use of rural roads, which have no dedicated provisions for pedestrians, cyclists, or equestrians, may result in the increased potential for conflict between these user groups and construction traffic. There is a clear safety issue associated with increasing vehicle activity on roads that have no specific provision for non-motorised road users. Vehicular activity on these roads should be restricted, where possible, with specific mitigation otherwise provided as part of phase specific construction management plans.

13.29. The increase in vehicle movements may worsen highway congestion at peak network times on the A259, A24, A283, A281, and A272. These locations are identified within the WSTP. The main impacts will be increased journey times but also potential amenity impacts. Impacts at peak times should be limited where possible.

Operational Phase - Impacts

Positive

13.30. There are no operational phase impacts that will benefit users of the local highway network.

Neutral

13.31. During the operational phase, the Project is expected to generate some vehicle movements. Precise numbers are given only for the port-based activities located in Newhaven, East Sussex. Within the Traffic Generation Note, figures are not included for the operational accesses (including the proposed Oakendene substation) located within West Sussex. For the most part, it is anticipated that these movements are unlikely to be discernible from ordinary traffic flows and, as such, are considered neutral.

13.32. There is the limited potential for some negative impacts to arise if elements of the ancillary infrastructure requires replacing. Impacts could include short term increases in HGV activity and traffic management works within the highway network.

13.33. Operational vehicular accesses, including that serving the proposed substation at Oakendene, are proposed onto the local highway network. These are to be

designed in accordance with current design standards (namely Manual for Streets or Design Manual for Roads and Bridges) and guidance based upon the speed limit or recorded traffic speeds on the road in question and that may be agreed with WSCC Highways. Providing the accesses are built to an agreed standard, the formation and use of these would have a neutral highway impact. At present, WSCC has received no indicative layouts for any accesses associated with the proposals.

Negative

13.34. No negative impacts are anticipated during the operational phase.

Required Mitigation

13.35. The general approach taken by the Applicant to mitigation is appropriate. A review of the mitigation measures (i.e. the Outline Construction Traffic Management Plan, Outline Construction Workforce Travel Plan, Outline Operational Travel Plan) are outlined in Appendix C. In summary, WSCC would require a number of further mitigation measures and amendments to proposed measures to address the concerns identified. The provision of mitigation is considered a key aspect to avoid impacts on highway users. The mitigation measures once agreed will need to be secured through the DCO with further detailed measures (e.g. phase specific construction management plans) agreed as the works come forward.

Outline Construction Traffic Management Plan

13.36. Develop the OCTMP and thereafter implement phase or location-specific Construction Traffic Management Plans based on the Outline Plan. Detailed comments are made in Appendix C, Table 1.

13.37. In summary, the OCTMP should be updated to include restrictions on construction traffic movements during network peak times and at specific locations (i.e. in the vicinity of schools), as well as to include appropriate mitigation to manage construction movements on rural to ensure road safety is not unacceptably compromised. Changes or confirmation is also sought about a number of matters in the submitted OCTMP.

13.38. As part of the OCTMP, the Applicant should seek where possible to reduce the number of construction accesses, which are currently proposed as part of the Project. WSCC has highlighted in Appendix C, Table 1a where concerns are raised with regards to specific locations. All accesses (both permanent and temporary) will need to be demonstrated as adequate, taking account of current design standards and the anticipated traffic to ensure the proposals do not adversely impact on road safety. It is also necessary to undertake RSA for accesses as identified within Appendix C, Table 1b, which would need to be agreed with WSCC.

Construction Phase Travel Plan and an Operational Phase Travel Plan

13.39. The Applicant should Implement a Construction Phase Travel Plan (CPTP) and an Operational Phase Travel Plan. Further comments are made on the CPTP in Appendix C, Table 2. The CPTP would seek to reduce single vehicle occupancy

and promote alternate means of travel. Specific measures will be required within this given the rural locations presenting limited options for alternate transport modes.

Abnormal Indivisible Loads Assessment

13.40. The Applicant should develop and implement an Abnormal Indivisible Loads Assessment relevant to the port being used. If appropriate, this should seek to use the pre-existing abnormal loads routing strategy from Shoreham Port to the existing National Grid substation at Bolney for the purposes of accessing Oakendene.

Requirements and Obligations

13.41. WSCC has reviewed Part 3 (Streets), Schedule 1 (Part 3), and Schedule 2 and 3 of the Draft DCO (PEPD-010) and has identified a number of areas that will need to be resolved with the Applicant through the Examination phase. These include inconsistencies between the Draft DCO and the wording within other outline mitigation documents, the appropriateness of references to certain design guidance, and the requirement and need for deemed consents. Further detail is provided in Appendix B of the LIR.

14. Mineral Safeguarding (ES Chapter 24)

Summary

14.1. One of the key onshore elements of the Project is a buried cable route for a maximum length of up to 38.8km. Parts of the proposed cable route are underlain by minerals (building stone, brickmaking clay, and soft sand) that are safeguarded by the West Sussex Joint Minerals Local Plan (JMLP) (July 2018, Partial Review March 2021).

14.2. The NPS for Energy (EN-1), paragraph 5.11.28 states that "where development has an impact upon a Mineral Safeguarding Area (MSA), appropriate mitigation measures should be put in place…"

14.3. It is important, therefore, that consideration is given to ensuring that minerals are not needlessly sterilised. The Applicant seeks to address the issue of mineral safeguarding in Chapter 24 of the ES (APP-065), recognising the existence of the JMLP and associated safeguarding guidance. WSCC requested through its S42 consultation response and at Expert Topic Working Group meetings that a Mineral Resource Assessment (MRA) be produced that assesses the impact on safeguarded minerals or addresses the issue of severance of resources; however, one has not been provided by the Applicant.

14.4. To ensure that minerals will not be needlessly sterilised, a MRA should be undertaken and the Outline Code of Construction Practice (PEPD-033) should be updated to provide sufficient detail about mineral safeguarding.

Table 14: Summary of Impacts – Minerals Safeguarding					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
14a	Needless sterilisation of safeguarded minerals (building stone, clay and soft sand)	C / O	Negative	**Mitigate** - provide sufficient detail within the OCoCP (PEPD-032) about safeguarding minerals, the outcomes of a Mineral Resource Assessment (as required by WSCC), and the requirements of the associated Materials Management Plan, including, but not limited to: • Reference to mineral safeguarding, not limited to considering current demand levels. • The volumes and types of minerals expected. • Mechanisms to avoid needless sterilisation of minerals, including prior extraction and avoiding severance. • Evidence of discussion with local operators, who could process and manage any minerals.	NPS for Energy EN-1 (Paragraph 5.11.19 and 5.11.28). West Sussex JMLP: Policy M9: Safeguarding Minerals.

Policy Context

National Policy Statements

14.5. National Policy Statement EN-1, paragraph 5.11.19 states that "*Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.*"

14.6. Paragraph 5.11.28 of EN-1 states that "*Where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), the Secretary of State should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources.*"

WSCC Policy

14.7. The West Sussex Joint Minerals Local Plan (JMLP) (July 2018, Partial Review March 2021) sets out a Vision, Strategic Objectives, and a comprehensive set of policies for consideration of minerals development in the County.

14.8. Strategic Objective 5 seeks to safeguard potential economically viable mineral resources from sterilisation.

14.9. Policy M9(b), Safeguarding Minerals, sets out how consideration should be given to proposals for non-mineral development within Mineral Safeguarded Areas:

> *(b) Soft sand (including potential silica sand), sharp sand and gravel, brick-making clay, building stone resources and chalk reserves are safeguarded against sterilisation. Proposals for non-mineral development within the Minerals Safeguarded Areas (as shown on maps in Appendix E) will not be permitted unless:*
>
> (i) *Mineral sterilisation will not occur; or*
>
> (ii) *it is appropriate and practicable to extract the mineral prior to the development taking place, having regards to the other policies in this Plan; or*
>
> (iii) *the overriding need for the development outweighs the safeguarding of the mineral and it has been demonstrated that prior extraction is not practicable or environmentally feasible.*

14.10. Parts of the proposed cable route are underlain by minerals (building stone, brickmaking clay, and soft sand) that are safeguarded. Policy M9 requires developers to demonstrate that either no mineral sterilisation will occur, that prior extraction will take place, or that there is an overriding need for the development that outweighs the need for safeguarding minerals, where it is demonstrated that prior extraction is not practicable or environmentally feasible.

14.11. Paragraph 6.9.12 of the JMLP makes reference to safeguarding guidance. The West Sussex Minerals and Waste Safeguarding Guidance (March 2020)

provides information for applicants for development that may impact safeguarded resources. Chapter 2 is specific to safeguarding mineral resources and sets out how consideration should be given to safeguarding minerals, through the preparation of a MRA to address clauses (b)(ii) and (b)(iii) of Policy M9.

14.12. Paragraph 2.8 of WSCC's Safeguarding Guidance sets out what information should be included within an MRA in order to give proper consideration of mineral safeguarding. This includes:

- An assessment of the geological information about the site including quarrying history, Geological memoirs, mineral assessments, and market appraisals;
- Site investigations/borehole data (applicants may be required to carry out borehole testing if this information is not already available);
- Consideration of other locations for the development that are outside the MSA;
- Assessment of whether the proposal can be modified to avoid sterilisation;
- Assessment of the potential for the use of the mineral in the proposed development and whether it is feasible and viable to extract the mineral resource ahead of the development;
- An explanation of the viability of prior extraction and how it will be carried out (e.g. environmental impacts, timescales, availability of the market to deal with the increase in the mineral);
- Discussions with potential 'users' of the mineral;
- An explanation of how any voids will be 'backfilled' in preparation for development and/or incorporated into the design and layout of the development; and
- Building stone – an assessment of quarries (including active, inactive, and dormant), historic buildings using the stone, and alternative supplies of the stone.

14.13. The guidance also provides a number of maps that show the extent of the safeguarded minerals in West Sussex.

14.14. The West Sussex Monitoring Reports are prepared annually and provide information related to minerals and waste planning and activities in West Sussex. The reports provide information specific to each mineral type, including the locations of existing sites, the amounts extracted on an annual basis, demand levels, and general information related to the Joint Minerals Local Plan.

Construction Phase – Impacts

Positive

14.15. No positive impacts during the construction phase are identified.

Neutral

14.16. No neutral impacts during the construction phase are identified.

Negative

14.17. Chapter 24 of the ES (APP-065) seeks to address the issue of mineral safeguarding. It recognises that parts of the cable route are underlain by safeguarded building stone, clay, and soft sand. Figure 24.3 (Volume 3, Chapter 24 (figures)) shows the extent of safeguarded soft sand and clay; however, it does not show the building stone, which is identified at the northern end of the onshore DCO Limits (APP-065, para 24.9.36), east of Cowfold. Brick clay, building stone and soft sand are addressed in turn in the following paragraphs.

Brick Clay

14.18. Brick clay is a regionally important resource and brickmaking has a long-established history in the central and north eastern parts of the county. Brick clay is also used to produce tiles, pavers, and pipes. At present, there are four active clay quarries that provide clay for four brickworks (Pitsham, Warnham, Laybrook, and Freshfield), the details of which can be found in the above linked monitoring reports.

14.19. Brickworks, or manufacturers of clay products, are generally located on or near to the extraction sites that supply them, and therefore rely on their own sites for their resource. Brickworks sometimes require importation of materials for blending purposes, and there may be opportunities for these sites to take any materials extracted prior to development, to avoid needless sterilisation.

14.20. Paragraph 24.9.40 notes that three of the four sites in West Sussex have a landbank of less than 25 years of supply in their reserves, as required by NPPF paragraph 214c and Policy M5 of the JMLP. The West Hoathly Brickworks site has now ceased all operations, and therefore there are only three active brickworks, of which two have landbanks of more than 25 years.

14.21. The ES, at paragraph 24.9.41, states that the magnitude of effect would be negligible due to the fact that there is extensive resource available and relatively healthy landbanks, and therefore the impacts will be 'Not Significant' in EIA terms. However; this has been determined in the absence of a MRA to assess impacts on safeguarded brick clay.

14.22. The applicant's assessment for clay focuses on current demand and needs, and not the safeguarding of minerals for future generations as intended. No quantitative assessment has been provided or how much clay may be sterilised. Without these assessments, it is difficult to assess the significance of the impact for clay, and whether it has been underplayed.

Building Stone

14.23. Building stone extraction is generally a small-scale industry, which provides local stone of distinctive character, including Horsham Stone, Hythe

Sandstone, Ardingly Sandstone, and flint. Stone is important for the repair of historic buildings. There are four active stone quarries in West Sussex extracting stone for building on a small scale, the details of which can be found in the above linked monitoring reports.

14.24. Paragraph 24.9.36 sets out that the DCO Limits falls within the building stone Mineral Safeguarding Area, east of Cowfold. Paragraph 24.9.38 states that there are no quarries in close proximity to the onshore DCO Limits, and paragraph 24.9.39 concludes that the magnitude of effect is therefore 'low', and the effect of the Project would be 'Minor Negative', and 'Not Significant' in EIA terms.

14.25. However, no MRA for safeguarded building stone has been undertaken. The ES only gives recognition of the resources that exist within parts of the DCO Limits, and notes there are no sites in close proximity to the Project. No quantitative assessment has been provided, or indication of how much building stone may be sterilised. Without these assessments, it is difficult to assess the significance of the impact for building stone and whether it has been underplayed.

Soft Sand

14.26. Soft Sand is an important aggregate mineral that cannot be substituted by other minerals. It is used in construction activities and is extracted at a number of quarries in West Sussex, as identified in Figure 24.3 (Volume 3, Chapter 24 (figures)). The majority of the resource in West Sussex is within the South Downs National Park and, therefore, heavily constrained.

14.27. NPPF Paragraph 213e requires that Mineral Planning Authorities seek to maintain a landbank of at least seven years for aggregate minerals. Although safeguarding minerals is about future generations and not current demands, it is important to note that the current landbank for soft sand in West Sussex is now four years, based on an annual provision rate of 330,000 tonnes per annum (West Sussex LAA, January 2024), and for the South East in general, just above seven years (South East England Aggregate Working Party – Annual Report 2022 (December 2023)) . This indicates the growing scarcity of this resource and importance of avoiding needless sterilisation.

14.28. The ES assessment (at paragraphs 24.9.46–24.9.47) indicates that up to 2.9ha of land underlain by safeguarded mineral that may be sterilised by the Project, and based on historical records, up to 1.16 million m^3 of soft sand may be sterilised. Assuming a bulk density of 1.7 tonnes/m^3 for the Folkestone Formation, a total of 682,352 tonnes of soft sand may be sterilised, which equates to just over two years of supply based on the current annual provision rate for West Sussex. The ES (paragraph 24.9.47) states that the Applicant has not undertaken any assessment of economic viability of the resource.

14.29. The ES states that the sensitivity of the soft sand resource is 'medium' and during the construction phase, the magnitude of change is 'high' (para 24.9.47–24.9.50, APP-065), and that the Project will therefore lead to 'major negative' effect, considered to be 'significant' (para 24.10.11 and Table 24-24, APP-065). This is of concern must be taken into account in decision-making.

14.30. No MRA for safeguarded soft sand has been undertaken. The ES only gives a high-level assessment of the resource, with no detailed quantitative assessment provided, or any other considerations set out within the West Sussex safeguarding guidance. Without these assessments, it is difficult to assess the significance of the impact on the soft sand resource.

14.31. WSCC has previously requested that the Applicant considers the issue of severance, particularly for soft sand, as highlighted in Table 24-4 of the ES , at the meeting of 16 June 2023. No such assessment or consideration has been given. If the cable route results in severance of parcels of land underlain by the safeguarded resource, this could effectively sterilise the economic viability that would enable extraction.

Outline Code of Construction Practice and Materials Management Plan

14.32. The ES, at paragraph 24.9.48, states that the Applicant intends to mitigate against mineral sterilisation through the preparation of a MMP that will be produced prior to construction and to be secured through the OCoCP (PEPD-033). The OCoCP and the information contained within about the MMP is limited, with no reference to mineral safeguarding (particularly soft sand), prior extraction, local policies, or evidence of discussions with local mineral operators that have the required equipment to process any safeguarded minerals that are extracted. The potential volumes of material that could be recovered are unknown and there are no clear mechanisms in place to secure prior extraction or to demonstrate that prior extraction is not practicable or environmentally feasible.

14.33. Without a robust MRA, the Secretary of State, as the decision maker for the Project, would not be able to consider whether there is an overriding need for the Project that outweighs the safeguarding.

Operational Phase - Impacts

Positive

14.34. No positive impacts during the operational phase are identified.

Neutral

14.35. No neutral impacts during the operational phase are identified.

Negative

14.36. The issue of mineral safeguarding is covered above under Construction Phase. It is important to note that sterilisation of minerals would also occur through the operational phase, as identified in the ES (Paragraph 24.9.49). Furthermore, severance of any parcels of land would also result in sterilisation through the lifetime of the Project. To avoid the issue of duplication, the issues set out above apply.

Required Mitigation

14.37. The proposed mitigation measure is a commitment, secured though the OCoCP, for the Applicant to produce a MMP that is prepared prior to construction and which seeks to maximise reuse of excavated materials. At present, the submitted OCoCP is severely lacking.

14.38. Commitment ID-69 within the OCoCP states that: "*Construction strategies will be implemented that will seek to maximise the reuse of excavated clean materials from the onshore cable construction corridor where practicable and feasible. Prior to the stage of construction, an MMP will be developed which outlines where excavated non-waste materials will be reused in line with the CL:AIRE (2011) Definition of Waste Code of Practice (DoWCoP). The MMP will include a declaration by a Qualified Person that the MMP has been completed in accordance with the DoWCoP and that best practise is being followed.*"

14.39. Beyond Commitment ID-69, there is nothing else relevant to mineral safeguarding. The OCoCP and the information contained within is limited, with no reference to mineral safeguarding (particularly soft sand), relevant policies, prior extraction, or evidence of discussions with local mineral operators that have the required equipment to process any safeguarded minerals that are extracted. There is no reference to assessments of potential volumes of material that could be sterilised or recovered, and there are no clear mechanisms in place to secure prior extraction or to demonstrate that prior extraction is not practicable or environmentally feasible. The focus of the OCoCP is on excavated waste materials; however, any aggregates (soft sand) would not be a waste and should not be needlessly sterilised.

14.40. The Applicant should undertake a MRA that is consistent with the WSCC Safeguarding Guidance to evidence the impacts of the proposal on safeguarded minerals. This will enable understanding the potential volume of safeguarded minerals (building stone, clay, and soft sand) that may be sterilised, and the extent to which prior extraction could take place. The outcomes of this should then feed in to the OCoCP, which would be the mechanism through which prior extraction could be secured, where practicable and feasible.

14.41. Without any assessments undertaken, it will not be possible for the Secretary of State to ensure that appropriate mitigation measures have been put in place to safeguard mineral resources, as required by EN-1.

15. Historic Environment (ES Chapter 25)

Summary

15.1. The submitted ES chapter and supporting technical documents demonstrate that, even following mitigation, the Project would result in significant effects upon the historic environment during both construction and operation. Some of these effects are a consequence of the scale of the proposals in and of themselves, and the area of land affected. However, WSCC finds that the historic environment has not consistently been given sufficient weighing in decision making processes nor in consideration of alternative route options and substation locations. In a number of key areas, insufficient evidence has been submitted in support of the application for the significance of the affected heritage assets to be fully understood, as is required by the national policy statements. The ES has identified a number of significant residual effects to the historic environment. In several of these cases, WSCC finds that these effects are likely to constitute an unacceptably high magnitude of impact to the historic environment.

15.2. Construction works both offshore and onshore will introduce temporary negative change into the settings of a large number of onshore designated heritage assets during the construction phase. For a number of these assets, a degree of permanent harm will continue during operation of the WTGs and offshore substations. Whilst there might be limited options for further reducing harm via embedded mitigation, the scale of harm must nevertheless be accurately reflected in assessments, which is not consistently the case.

15.3. The Project would result in harm to the significance of Grade II listed Oakendene manor, arising though negative change within its setting during construction and operation of Oakendene substation and associated construction activities. The magnitude of harm during construction has been under-assessed. The Applicant identifies a major adverse residual effect (operation) but equates this to 'less than substantial harm'. WSCC finds that, partly due to the absence of appropriate VPs and visualisations, the precise magnitude of harm to Oakendene Manor cannot currently be assessed. Insufficient consideration has been afforded to the historic environment in consideration of substation location alternatives.

15.4. There will inevitably be significant negative impacts to known and potential archaeological remains, the majority of which will arise from permanent physical impacts during the onshore construction groundworks. Following mitigation, the ES identifies significant residual effects on potential Neolithic flint mining, mortuary and settlement remains (including where these may be related to the scheduled prehistoric flint mine on Harrow Hill), and on Bronze Age and early medieval archaeological remains where these may be of national importance, within Zone 2: South Downs. The EIA assessment process does not capture the full extent of the impacts to archaeological remains which would arise from the Project, which will entail the loss of significant quantities of archaeological features of regional and local significance.

15.5. The DCO Limits cross an area of prehistoric downland between Km 12 and 17 (formerly onshore cable route LACR-01d) of exceptionally high archaeological significance, potential and sensitivity; a multi-period prehistoric landscape characterised by nationally significant scheduled Early Neolithic flint mining and associated activity. This route option was flagged at consultations as posing an unacceptably high risk of the risk harm to the historic environment and WSCC feels that greater weight should have been afforded to avoiding this very significant historic environment constraint in consideration of the alternatives. Even following a comprehensive and bespoke programme of archaeological mitigation, as proposed by the Applicant within the Outline Onshore Written Scheme of Investigation (OOWSI; APP-231) and secured in the draft DCO requirements, it is not clear that mitigation can be guaranteed to reduce the magnitude of harm to acceptable levels.

15.6. Despite comprehensive non-intrusive survey and assessment work, insufficient field evaluation was undertaken to inform the DCO application, and none within LACR-01d. The significance of the affected heritage assets (buried archaeology and geoarchaeology) cannot therefore currently be fully understood on the basis of the available evidence, not the presence of nationally significant remains ruled out, especially within the most archaeologically sensitive area of the Order Limits. In the absence of this information, it is not possible for decision makers to fully and accurately assess the impacts of the Project upon the historic environment.

15.7. The proposed archaeological mitigation measures and control documents are welcomed but require some amendments. Given the likelihood of nationally significant archaeological remains, WSCC is concerned by the absence of a commitment to undertake field evaluation pre-consent within the identified area of exceptionally high archaeological potential in particular. There is a need for greater certainty over the feasibility of and methodology for the 'avoidance by micro siting' approach, which the Applicant proposes as mitigation in the event of previously undiscovered remains of high or national significance.

15.8. The extent to which embedded mitigation (design and landscaping) can guarantee/secure delivery of the predicted reductions in harm to designated assets is uncertain. The high-level design principles are welcomed but further certainty and detail is required to understand how these will translate into reduced harm to Oakendene manor.

15.9. Additional funds will be required to meet some of the mitigation obligations of the Project due to this size and scale, in particular in relation to archaeological archiving requirements and adequate delivery of public benefit and education programmes.

15.10. WSCC acknowledges the revised documents submitted at the Procedural Deadline, which are reflected in this section. The updated geophysical survey has identified four previously unknown groups of anomalies of probable archaeological origin which do not correspond to known heritage assets. One of these, undated possible enclosures or settlement identified within an agricultural field west of Poling, is assessed as suffering significant residual adverse effects arising from construction of the onshore cable corridor. Due to

the lack of prior field evaluation, its significance cannot be confirmed and may be higher (or lower) than assessed within the ES. In the event of high or nationally significant remains, design solutions to secure the preservation in situ of these remains would need to be explored. This additional harm to the historic environment should be considered in the decision-making process. the revised documents do not otherwise materially alter the content of this chapter.

15.11. Where applicable, detailed comments on individual heritage assets or groups of assets, as well as comments relating to the various supporting documents, are set out within Appendix D.

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
15a	Harm to or loss of known and potential archaeological remains (heritage assets with archaeological interest) located within the DCO Limits. Arising from groundworks associated with the construction of the onshore cable route and enabling works, trenchless crossings, access routes, grid connections and substations, and environmental mitigation works.	C	Neutral - There will be a neutral impact on archaeological features and deposits within the Order Limits which will not be physically impacted by construction works. Negative - Construction will physically remove or truncate any archaeological features located within the footprint of construction groundworks. Impacts will be permanent, resulting in the loss of archaeological interest. This will result in a total loss of significance for the majority of affected archaeological features. In the case of deposits of geoarchaeological interest, partial removal of deposits may result in loss of significance and/or the ability to retrieve valuable information which might contribute to understanding.	**Avoid –** Any archaeological remains of high significance identified within the Order Limits should be preserved in situ. The ability to deliver such mitigation by avoidance via 'micro-siting'/design changes should be secured. A clear methodology for preservation in situ must be set out to ensure the protection of any such heritage assets from construction impacts. An ongoing management plan is required to ensure their future protection. The methodology for preservation in situ should be included within the Outline Written Scheme of Investigation (OOWSI; APP-231), which would then ensure it is secured by DCO requirement (dDCO Requirement 19 (1)). A change to the wording of dDCO requirement 19 (6) is also recommended (see Appendix B). Further clarification is required regarding the ability of the Project to ensure preservation in situ can be delivered, even in the event of multiple, extensive or complex archaeological remains. **Mitigate**: Secure and implement an agreed scheme of archaeological mitigation to partially offset the loss of archaeological remains. Overarching mitigation measures should be: • secured via the Onshore Outline Written Scheme of Investigation provided by the applicant (OOWSI (APP-231);	NPS EN-1 (Paragraphs. 5.8.8, 5.8.9 and 5.8.10). NPS EN-3 (Paragraphs 2.6.145-146.) The NPPF 2023 Section 16, (Paragraphs 200, 201, 209, 210, 211 and 214). In the event that archaeological remains of national significance are present; The NPPF para. 206, footnote 72.

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				• approved by the WSCC County Archaeologist; and • secured within the Development Consent Order (APP-19), in line with Draft DCO (dDCO) Requirement 19 (1). The OOWSI must be supported by appropriate supplementary method statements at the appropriate stage in the programme (dDCO Requirement 19). The content of the OOWSI should be updated as set out below. **Mitigate**: In accordance with Commitment C-261 (APP-254), secured by dDCO requirement 19 (3), the results of the mitigation should be made available to the public and disseminated to a wide range of audiences, to secure public knowledge and education benefits from the mitigation. Additional funds (S106) may be required to deliver a programme proportionate with the scale of the Project. **Obligation**: Additional funds (S106) may be required to expand archive storage facilities, to ensure archiving obligations can be fulfilled given the likely size of the Project archive. The need for, scope and methodology of the programme of mitigation, and all associated documentation must be approved by the WSCC County Archaeologist.	

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
15b	Harm to historic landscapes which intersect with the DCO Limits	C (onshore cable corridor and landfall), O (Oakendene substation) Negative impacts to historic landscapes within the onshore cable corridor and compounds will occur during construction only. Impacts to historic parkland at Oakendene substation will be permanent.	Neutral - For those elements of historic landscapes which are not sensitive to change, and/or are assessed as of low heritage significance, it is likely that a neutral impact will arise from the Project. Negative - Where existing features of the historic landscape are crossed by the onshore parts of the Proposed Development, sections will be removed, altering the existing historic landscape character.	**Reduce:** Where the cable corridor crosses sensitive historic landscapes, such as Prehistoric Downland landscape between KM 12 and 17, every effort should be made to ensure that construction activities within this part of the cable corridor are of the shortest duration possible in accordance with Commitment C-19, in order to reduce the severity and duration of negative impacts. As per the comments in the LVIA section of this report, greater certainty should be provided on the duration, phasing, and sequencing of construction activities, and how this will be programmed to ensure reinstatement can be maximised/expedited. An amendment to dDCO requirement 22 is suggested. **Mitigate**: Reinstatement works should ensure that historic landscapes are restored to their original state, or as close as can practically be achieved, following completion of construction. This should be undertaken in accordance with C-81, 196, 199 and other relevant Commitments. As per the comments in the LVIA section of this report, greater certainty should be provided in the Outline Landscape and Ecology Management Plan (OLEMP; APP-232) to ensure these measures are adequately secured. **Mitigate**: Where permanent loss of historic landscapes will arise, recording should be undertaken prior to their loss as appropriate, in accordance with Commitment C-80.	NPS EN-1 (Paragraphs. 5.8.8, 5.8.9 and 5.8.10). NPS EN-3 (Paragraphs. 2.6.145-146). NPPF 2023 Section 16, paragraphs 200, 201, 209, 210, 211 and 214.

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
15c	Harm to the significance of onshore designated heritage assets arising from change within their settings due to construction and operation of offshore arrays	C, O Negative change to settings will arise during construction and continue during operation of offshore arrays	Neutral - For designated heritage assets where; - setting does not make a meaningful contribution to heritage significance, or - the degree of change to setting will not result in meaningful harm to the significance of the heritage asset, A neutral impact is identified. Negative - The construction and operation of the offshore Wind Turbine Generators (WTGs) and offshore substations will introduce negative change into the wider settings of a large number of onshore heritage assets. For those assets that derive significance from that aspect of their setting which includes the site of the proposed offshore arrays, construction and operation of the WTGs and offshore substations will reduce the contribution that setting makes to their significance. In many cases	**Reduce:** In line with the comments made within the SLVIA section of this report, a robust set of offshore design principles, including commitments to the layout and extent of WTGs and offshore substations, are required to reduce the adverse effects upon West Sussex heritage assets arising from changes within their wider settings.	NPS EN-1 (Paragraphs: 5.8.8, 5.8.9, 5.8.10, 5.8.14 and 5.8.15. NPS EN-3 (Paragraphs. 2.6.145-146). NPPF 2023 Section 16, (Paragraphs 200, 201, 205, 206, 207, 208, 210, 212, 213 and 214).

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
			this will amount to harm to the individual assets.		
15d	Harm to the significance of onshore designated heritage assets arising from change within their settings during construction of onshore cable corridor and enabling works	C	Neutral - For designated heritage assets where; - setting does not make a meaningful contribution to heritage significance, or - the degree of change to setting will not result in meaningful harm to the significance of the heritage asset, A neutral impact is identified. Negative - There will be temporary, negative changes to the settings of heritage assets during construction, including visual impacts, increases in noise levels, lighting, change in use, loss of access/amenity. These in some cases will result in temporary harm to the significance of onshore designated heritage assets.	**Reduce:** Where appropriate, measures to reduce harmful changes to settings of heritage assets arising from construction activities should be implemented, in accordance with the relevant Commitments, especially C-19-27 and C-81. Where construction works will occur in proximity to sensitive heritage assets, efforts must be made to limit the duration of time that the assets will suffer the adverse changes to the settings. As per the comments in the LVIA section of this report, greater certainty should be provided on the duration, phasing, and sequencing of construction activities, and how this will be programmed to ensure reinstatement can be maximised/expedited. An amendment to dDCO requirement 22 is suggested in order to secure C-19. In regard to C-26, commitments to reduce adverse effects arising from changes in noise levels should be secured via the OCoCP in line with comments made within the Noise section of this report. Embedded mitigation measures (Commitments C-82) reflect efforts to reduce harm via high-level design principles. As per the comments in the LVIA section of this report, further details and greater certainty should be provided regarding measures to deliver the design principles	NPS EN-1 (Paragraphs: 5.8.8, 5.8.9, 5.8.10, 5.8.14 and 5.8.15). NPS EN-3 (Paragraphs. 2.6.145-146). 2023 Section 16, (Paragraphs 200, 201, 205, 206, 207, 208, 210, 212, 213 and 214).

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				within the Design and Access Statement (DAS, AS-003).	
15e	Harm to Grade II Listed Oakendene Manor and historic parkland arising from construction and operation of onshore substation at Oakendene	C / O Harmful changes within the setting of Oakendene Manor will arise during the construction phase, including impacts arising from construction compounds. The change to the setting of the manor will be permanents and will continue during the operation of the substation.	Negative - Grade II listed Oakendene Manor (NHLE 1027074) has high heritage significance, to which its current historic parkland setting makes a substantial positive contribution. Construction of the substation within the historic parkland of Oakendene manor will constitute a permanent adverse change in setting (change in use/character), Construction works associated with Oakendene substation, and compounds will cause visual and auditory changes within the setting of the manor, as well as loss of tranquillity, during the construction phase. These adverse changes to the setting of Oakendene manor will amount to a significant degree of harm to the significance of the grade II listed manor house.	Harm to the significance of Oakendene Manor is to a large degree an inevitable consequence of the choice of this substation location and as such cannot be fully mitigated. Due to the proximity and nature of the structure, options for embedded mitigation by design are likely to be limited. **Reduce:** Embedded mitigations should be carried out in accordance with the Commitments Register and draft design principles. The high-level historic environment design principles set out within the DAS are welcomed. However, uncertainty remains over how these will be secured or delivered. In line with the LVIA section of this report, the design principles should be revised to provide further details and greater certainty should be provided regarding measures to secure a sympathetic layout, appearance, scale and design/finishes.	NPS EN-1 (Paragraphs: 5.8.8, 5.8.9, 5.8.10, 5.8.14 and 5.8.15). NPS EN-3 (Paragraphs. 2.6.145-146). NPPF 2023 Section 16, paragraphs 200, 201, 205, 206, 207, 208, 210, 212, 213 and 214.

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
			During operation, the changes which arise during construction would persist. The ES assesses a medium magnitude of change, following implementation of embedded mitigation measures. This is a significant adverse effect in ES terms. In light of the absence of appropriate suitable visualisations, a greater magnitude of change (potentially equivalent to substantial harm, as defined by the NPPF) cannot currently be ruled out. Insufficient consideration has been afforded to the historic environment in consideration of alternatives.		
15f	Risk of harm to heritage assets of high or national significance within areas of exceptionally high archaeological	C	Negative – High risk of harm to nationally significant heritage assets where the cable corridor intersects with an area of exceptionally high archaeological significance, potential and sensitivity;	**Avoid:** Consideration of alternative routes appears to give insufficient weighting to this significant historic environment constraint. The risk of harm to nationally significant heritage assets is to a certain degree an embedded risk arising from this route choice.	NPS EN-1 (Paragraphs. 5.8.8, 5.8.9 and 5.8.10). NPS EN-3 (Paragraphs. 2.6.145-146). NPPF 2023

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	potential and significance – Prehistoric Downland landscape between Km 12 and 17 (formerly route section LACR-01d).		a multi-period prehistoric landscape characterised by Early Neolithic flint mining features.	Any archaeological remains of high significance identified within the Order Limits should be preserved in situ. The ability to deliver such mitigation by avoidance via 'micro-siting'/design changes should be secured. A clear methodology for preservation in situ must be set out to ensure the protection of any such heritage assets from construction impacts. An ongoing management plan is required to ensure their future protection. The methodology for preservation in situ should be included within the Outline Written Scheme of Investigation (OOWSI; APP-231), which would then ensure it is secured by DCO requirement (dDCO Requirement 19 (1)). A change to the wording of dDCO requirement 19 (6) is also recommended (see Appendix B). Further clarification is required regarding the ability of the Project to ensure preservation in situ can be delivered, even in the event of multiple, extensive or complex archaeological remains. **Mitigate**: Secure an agreed scheme of archaeological mitigation to partially offset the loss of archaeological remains. Overarching mitigation measures should be secured via the OOWSI, to be approved by the WSCC County Archaeologist. The programme of mitigation must be secured within the Development Consent Order, as set out by dDCO Requirement 19.	Section 16, (Paragraphs 200, 201, 209, 210, 211 and 214). In the event that archaeological remains of national significance are present; NPPF para. 206, footnote 72

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				The OOWSI must be supported by stage-specific Written Schemes of Investigation (SSWSIs) at the appropriate stage in the programme (as per dDCO Requirement 19). The content of the OOWSI should be updated as set out below. The agreed measures should include provision for further investigation (in order to sufficiently understand the significance of the affected assets), assessment, mitigation, post excavation analysis, reporting, publication and archive deposition, as appropriate. In the case of prehistoric downland landscape between Km 12 and 17, additional investigative methodologies and mitigation will be required, proportionate to the significance of the affected heritage assets. The results of the archaeological mitigation should be made available to the public and disseminated to a wide range of audiences, to secure public knowledge and education benefits from the mitigation. This is secured via dDCO requirement 19 (3). The need for, scope and methodology of the programme of mitigation, and all associated documentation must be approved by the WSCC County Archaeologist. **Obligation**: Additional funds (S106) may be required to deliver additional non-intrusive field surveys outside of the immediate footprint of construction impacts, in order to enhance understanding and knowledge of	

Table 15: Summary of Impacts – Historic Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				this nationally significant prehistoric landscape. If appropriate, this work would be required in addition to the essential mitigation set out within the OOWSI order to further offset the potential harm to nationally significant heritage assets.	

Policy Context

National Policy Statements

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

15.12. NPS EN-1 for Energy sets out guidance and requirements for nationally significant energy infrastructure projects.

15.13. Paragraphs 5.8.8 and 5.8.9 require that "*the applicant should provide a description of the significance of the heritage assets affected by the proposed development and the contribution of their setting to that significance*". As per the NPPF, there is a requirement to have consulted the relevant Historic Environment Record (HER), and where appropriate to carry out desk-based assessment and further field evaluation.

15.14. Paragraph 5.8.10 states that the applicant must demonstrate that "*the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents*."

15.15. Paragraphs 5.8.14 and 5.8.15 outline a presumption in favour of the conservation of designated heritage assets. Where proposals "*will lead to substantial harm to or total loss of significance of a designated heritage asset*", consent should be refused, except where required in order to deliver substantial public benefits. These benefits must "*outweigh*" that loss or harm.

NPS EN-3 for Renewable Energy Infrastructure (EN-3)

15.16. NPS EN-3 for Renewable Energy sets out guidance and requirements for nationally significant energy infrastructure projects and covers the onshore and offshore impacts to the historic environment.

15.17. Paragraphs 2.6.145-146 of NPS EN-3 states that "*The avoidance of important heritage assets, including archaeological sites and historic wrecks, is the most effective form of protection*".

National Planning Policy Framework (December 2023)

15.18. The National Planning Policy Framework (NPPF) was published on 27 March 2012, and last updated in December 2023.

15.19. The ES and technical appendices were issued prior to this latest update and so paragraph references are now superseded, and this section should be updated to reflect the relevant changes.

15.20. Chapter 16 (paragraphs 200–214) of the NPPF address the conservation and enhancement of the historic environment; these set out the local planning authority's responsibilities when dealing with proposals which have the potential to impact on heritage assets.

15.21. Paragraph 200 states the requirement for an applicant to "*describe the significance of any heritage assets affected, including any contribution made*

by their setting. The level of detail should be proportionate to the assets' importance…".

15.22. Paragraph 200 also sets out the requirement for field evaluation; "*Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation*." This key requirement of paragraph 200 of the NPPF is missing from the summary in Table 25.2 of the ES chapter.

15.23. Paragraph 205 requires that when considering impacts to designated heritage assets, "*great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance*."

15.24. Paragraph 206 states that "*Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification*." It also states that substantial harm to or loss of grade II listed buildings registered parks or gardens should be "*exceptional*".

15.25. Footnote 72 outlines "*Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets*."

15.26. Paragraph 208 sets out that "*Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal*.".

15.27. Paragraph 209 states that the effect proposals upon the significance a non-designated heritage asset is a material consideration, and that "*a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset."*

15.28. Paragraph 211 outlines the requirement to "*record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact*". It also sets out the requirement to make this evidence and any associated archies publicly accessible. Paragraph 211 also enshrines the principle that preservation by record does not fully offset harm of loss, as "*the ability to record evidence of our past should not be a factor in deciding whether such loss should be permitted.*".

WSCC Policy

15.29. There are no WSCC policies relevant to the Project.

Construction Phase – Impacts

Positive

15.30. No positive impacts have been identified during the construction phase.

Neutral

Designated Heritage Assets

15.31. Construction of the WTGs, offshore substations, onshore cable route, landfall, construction compounds and substations will introduce change into the wider settings of a large number of onshore designated heritage assets. The ES assesses (APP-066) that for many of these assets, their settings do not make a meaningful contribution to their heritage significance, which may be derived primarily from their architectural value in the case of many listed buildings. For other assets, the degree of visual change within the wider setting will be so minor that it will not result in meaningful harm to the significance of the heritage asset. This will constitute a neutral impact on the local historic environment.

Archaeology

15.32. For those archaeological features and deposits within the DCO Limits that will not be physically impacted by construction works (those located outwith the footprint of construction and reinstatement groundworks), a neutral impact is identified.

Historic Landscapes

15.33. For those elements of historic landscapes that are not sensitive to change and/or are assessed as of low heritage significance, it is likely that a neutral impact will arise from the Project.

Negative

Designated Heritage Assets

15.34. The baseline settings assessment work, which includes the Settings Assessment Scoping Report (APP-213), Oakendene Parkland Historic Landscape Assessment (APP-211), and an Onshore Heritage Asset Baseline Report (APP-214), is generally comprehensive and compliant with best practice and industry standard methodology for heritage settings assessment. However, WSCC does not always concur with assessments of significance, harm and residual significance of effect within the ES chapter are not always accurate (see Appendix D for further detail).

15.35. Temporary harm to designated heritage assets, arising from change within their settings, will arise during construction for all aspects of the Project.

15.36. *WTGs and Offshore Substations* - Construction of the WTGs, offshore substations and offshore cable corridor will introduce negative change into the wider settings of a large number of onshore heritage assets. A substantial

number of assets derive some of their significance from that aspect of their setting, which includes the site of the proposed offshore arrays; in many cases, it includes panoramic coastal and sea views. Construction of the WTGs and offshore substations will introduce intrusive visual changes into the settings of these assets, which will reduce the contribution that setting makes to their significance. In many cases, this will amount to a non-negligible degree of harm to the individual assets.

15.37. WSCC finds that the ES does not always accurately reflect the scale of harm to the historic environment arising from the WTGs and offshore substations, due to the methodology by which residual effects to heritage assets within the moderate harm category are uniformly assessed as 'not significant' in EIA terms. WSCC is concerned that this methodology may, in some cases, serve to downplay the cumulative effects of WTGs and offshore substations on onshore designated heritage assets. Whilst there might be limited options for further reducing harm via embedded mitigation, the scale of harm must nevertheless be accurately reflected in order to allow decision makers to make informed judgements.

15.38. *Onshore Cable Route and Landfall* - There will be temporary harm to the significance of onshore designated heritage assets arising from negative change within their settings during construction of the onshore cable corridor and enabling works. The degree of harm is assessed as Low or Very Low in all cases. Whilst this may in some cases downplay the severity of harm, these effects will be temporary in duration. Nevertheless, impacts are assessed as Low (Moderate adverse residual significance of effect) for 33 assets during construction phase.

15.39. Whilst no physical harm to designated heritage assets is proposed, there is a high potential for as-yet undiscovered archaeological features that may demonstrably be a continuation of, and/or of equal significance to, nearby scheduled monuments within the prehistoric downland landscape between Km 12 and 17. Any such assets identified within the DCO Limits following field evaluation would be subject to the same policies as designated assets, in accordance with NPS-EN1 (paragraph. 5.9.6) and the NPPF (paragraph 200 Footnote 72). Any harm to such heritage assets would carry equivalent policy weighting to harm to scheduled monuments.

15.40. *Oakendene Substation* - The construction of Oakendene substation and construction compounds will result in temporary harm to the significance of Grade II listed Oakendene Manor (NHLE 1027074), arising from adverse changes within its setting.

15.41. Oakendene Manor has high heritage significance, derived primarily from its architectural and historic interest. The current setting of Oakendene Manor, largely comprising the surviving historic parkland of the manor, makes a substantial positive contribution to the asset's significance. Although assessed as of relatively low heritage significance in its own right, the parkland retains a number of surviving parkland features and boundaries, visible in long-range views from the manor, with anomalies identified from Lidar and geophysical survey potentially representing remains of additional, earlier phases of

parkland features. The setting of the manor is largely free from modern intrusion, especially within views south and south-east from the manor.

15.42. The significance of Oakendene Manor and the contribution made by setting are assessed within the Onshore Heritage Asset Baseline Report (APP-214) and Oakendene Parkland Historic Landscape Assessment (APP-211). It is the view of WSCC that the contribution of setting to the significance of the manor has been underassessed in the application. In particular, contributions made by long views of the historic parkland, changes in parkland design over time and changing desires for privacy versus open views, and the role of designed versus organic views, need further consideration.

15.43. There will be significant visual changes within the setting of the asset, and the LVIA section of the LIR (Section 9) finds that the visual impacts of the construction of Oakendene substation have been downplayed. The proximity means that the substation will inevitably be visible or partially visible in views from the manor house, including key long-distance and possibly designed views south-east across the historic parkland from the manor. The RVAA (APP-171) assessed significant visual impacts for Oakendene Manor, when assessed as a residential property. It is difficult to see how this does not also indicate a major adverse effect from a heritage settings perspective, given the acknowledged contribution of the historic parkland setting to the significance of the manor. There will also be significant visual intrusion within long-range views towards the manor from the PRoW to the south-east. These changes to the setting of Oakendene Manor will amount to harm to the significance of the asset, and the ability to understand and appreciate that significance.

15.44. Construction activities associated with Oakendene substation, including the construction compounds and trenchless crossing compounds, will cause temporary visual changes within the setting of the manor during the construction phase, above and beyond the permanent impacts caused by the substation structure itself. Construction of the substation and construction activities associated with TC-27/27a and TC-28 will likely result in highly intrusive changes within the setting of Oakendene Manor during this period. Construction compounds and accesses will likely result in the presence of plant and equipment including cranes, concrete batching plants, staff welfare facilities, stockpiles/storage of materials, vehicular parking, and will result in increased human and vehicular activity.

15.45. Although construction is predicted to last four years at this site, this duration is not currently secured within the dDCO Requirements.

15.46. The retention of a small number of individual parkland trees and the existing hedgerow along the eastern boundary of the substation, as indicated in the Indicative landscaping plan for the DAS, will afford some limited screening during the construction phase in views south-east from Oakendene Manor. However, the proposed new and enhanced planting as indicated on the Indicative Landscaping Plan, will not be present during construction phase to reduce impacts. Topography and temporary removal of hedgerows will mean visual changes in views north-west towards the manor from PRoW 1786 will suffer major adverse change.

15.47. Additional impacts during construction include loss of tranquillity and increases in noise level; an impact that WSCC finds has been underassessed within the ES (see Section 10 of the LIR). The noise and vibration assessment (APP-106, APP-178) predicts an increase above background levels of 4 or 5 decibels during construction; whilst the ES assesses this as not significant, WSCC is concerned that this change nevertheless constitutes a significant decrease in tranquillity. It seems likely to constitute a meaningful adverse change within the setting of Oakendene Manor during the period of construction, which is predicted to last four years.

15.48. As per previous consultation responses, WSCC remains concerned that heritage assets were not afforded sufficient consideration in the selection of viewpoint (VP) locations within the Landscape and Visual Impact Assessment (LVIA) chapter (APP-059). NPS EN-1 (paragraph 5.8.9) states that "*Where proposed development will affect the setting of a heritage asset, representative visualisations may be necessary to explain the impact*." Visualisation from VPs located in the general vicinity of a heritage asset are not always sufficient to assess the degree of change within its setting and may not capture key views.

15.49. Visualisations at Oakendene substation (APP-099, VP SA3, Figures 18.12a-e) are not representative of key views to and from the manor. In the viewpoint analysis (APP-168) for VP SA3, the only mention of Grade II listed Oakendene Manor is that "*The white buildings of Oakendene Manor are evident in the middle distance*" (Table 1.4). In the sensitivity description of Table 1.4, no mention is made of heritage or the manor. VP SA3 is located on a Public Right of Way between the upper slopes of Taintfield Wood and the Oakendene substation site. The visualisations show views north encompassing the manor house.

15.50. No other VPs are represented that reflect changes within the setting of Oakendene manor, in particular views south-east from the manor. Statements within the ES cannot always be corroborated as a result; for example, south-east facing views of the construction compounds from Oakendene Manor are described as 'heavily filtered' but WSCC cannot currently confirm this due to the lack of supporting visual evidence.

15.51. The ES assessed a low magnitude of change to Oakendene during construction, resulting in a moderate adverse residual effect which would be Not Significant. Given the above impacts, the magnitude of impact has been underassessed, apparently solely on the basis of the temporary duration of the construction phase. WSCC concludes that a medium magnitude of change (temporary) would be more appropriate. Even accepting that the temporary duration can reduce the magnitude of harm somewhat, an assessment of low does not appear to be in keeping with the scale of predicted changes within the setting of the manor during construction.

15.52. WSCC finds that construction effects on Oakendene Manor will constitute a significant negative impact to the local historic environment, albeit on a temporary basis.

Archaeology

15.53. There is the potential for harm to archaeological features within the entirety of the onshore DCO Limits, including the onshore cable route and landfall; Oakendene substation, extension to the National Grid substation and other associated construction and reinstatement works.

15.54. The archaeological potential and significance within the DCO Limits, as currently understood, is described within the ES Chapter and relevant technical appendices. A number of non-intrusive baseline surveys have been undertaken in support of the Project. These include archaeological desk-based assessment (APP-200-201), Lidar (APP-200-201), geophysical (magnetometry) survey (PEPD-031) and desk-based geoarchaeological and palaeoenvironmental assessment (APP-202). The ES assessment and supporting non-intrusive surveys are generally thorough, well-written and comprehensively assessed, making good use of the available information to draw logical inferences on likely archaeological potential and significance.

15.55. Geophysical survey has been undertaken, with the aim being to survey the entirely of the land within the DCO Limits. Whilst WSCC recognises the sustained efforts to achieve maximum survey coverage, the fact remains that due to a range of constraints, including land access and suitability/accessibility for survey, only approximately 71% coverage of the DCO Limits has been achieved to date (PEPD-031). This means that nearly a third of the DCO Limits has not been subject to geophysical survey. This makes the absence of subsequent trial trenching more problematic and reduces the confidence level of predictions of archaeological potential with unsurveyed areas of the DCO Limits.

15.56. To date, an extremely small amount of intrusive field evaluation (trial trenching) has been undertaken. Only two sites were selected by the Applicant for pre-application field evaluation, selected based on preliminary geophysical survey results that were potentially indicative of archaeological features of high significance. A total of only ten evaluation trenches have been excavated within the DCO Limits; at Brook Barn Farm (APP-212). A further 12 trenches excavated at Crossbush, targeted on the site of a Napoleonic barracks, no longer fall within the DCO Limits.

15.57. Despite the importance of early field evaluation having been raised by WSCC since the scoping stage, no other archaeological trial trenching has been undertaken. Not even the prehistoric downland landscape between Km 12 and 17, which passes through multiple Archaeological Notification Areas (ANAs) and is a known Neolithic flint mining landscape of national significance and exceptionally high archaeological potential, has been subject to trial trench evaluation to inform the understanding of archaeological potential and significance.

15.58. The NPS EN-1 (paragraphs. 5.8.8–5.8.10) and the NPPF (paragraph 200, Footnote 72) require that developers must be able to describe the significance of the affected heritage assets. Due to the absence of field investigations, the significance of the affected heritage assets (buried archaeology and geoarchaeology) cannot be fully understood on the basis of the available

evidence, even having adopted a 'worst-case scenario' approach as the ES has attempted to do.

15.59. Field evaluation within the DCO Limits, proposed by the Applicant to take place post-consent, is highly likely to identify additional archaeological remains. The presence of nationally significant archaeological remains within any areas of the DCO Limits cannot currently be ruled out.

15.60. In the absence of this information, it is not possible for statutory consultees to provide fully informed responses nor for decision makers to accurately assess the impacts of the Project upon the historic environment.

15.61. The scale of the Project and the area of land affected means that there will inevitably be significant negative impacts upon known and potential archaeological remains.

15.62. Most of the harm to archaeological remains will arise during construction of the onshore cable route and construction works associated with landfall, trenchless crossings, haul roads, access roads and construction compounds. There is also potential for impacts to archaeology via habitat reinstatement, hedgerow notching, tree planting and landscaping, and other enabling and mitigation works.

15.63. Most of the negative impacts will arise from direct physical removal or disturbance of buried archaeology during topsoil stripping, sub-surface excavations and other intrusive groundworks.

15.64. Although trenchless crossings may reduce overall impacts on archaeology when compared with open trenched construction methods, there remains the potential for direct physical impacts depending upon the drilling profile, which maybe shallower for some crossings, as well as on geoarchaeological deposits buried at depth. Entry and exit pit groundworks will result in direct physical impacts (although relatively limited in spatial extent). Indirect impacts may also arise from changes to water tables. There is the potential for bentonite outbreaks to result in harm to below-ground archaeology, which could occur without the ability to detect or assess the harm.

15.65. These impacts will be permanent and will reduce or remove the possibility that these heritage assets can be further interpreted in the future, resulting in loss of archaeological interest. This will result in a total or partial loss of significance for the majority of archaeological features located within the footprint of these groundworks.

15.66. In the case of deposits of geoarchaeological interest, partial removal of deposits may result in localised loss of significance and/or loss of the ability to retrieve valuable information, which might contribute to understanding. There is also the potential for direct physical removal of Pleistocene or Palaeolithic archaeological finds, sites or features, if present.

15.67. Following mitigation (embedded and secured), the ES identifies significant residual effects during the construction phase on:

- Potential Neolithic flint mining, mortuary and settlement remains (including where these may be related to the scheduled prehistoric flint mine on Harrow Hill),
- Bronze Age and early medieval archaeological remains, which may be of national importance, within Zone 2: South Downs, and
- Potential remains of undated enclosures or settlement identified via geophysical survey within an agricultural field west of Poling.

15.68. However, due to the nature of the EIA framework, its focus on significant residual effects and the degree to which prior mitigation is used to reduce the residual magnitude of impact, the full extent of the impacts to archaeological remains which will arise from the Project are not necessarily effectively captured.

15.69. In the event that field evaluation of these or other known and possible archaeological features within the onshore cable corridor identifies their significance as high, their total or partial loss may constitute an unacceptably high magnitude of harm.

15.70. Prehistoric Downland Landscape between Km 12 and 17 - In addition to the above archaeological impacts, which apply to onshore cable corridor and all areas of the DCO Limits where there will be construction impacts, one area has the potential for major adverse impacts to archaeological remains. Onshore cable route option LACR-01d, which was taken forward as the chosen option into the DCO Limits, crosses an area of the South Downs National Park that comprises a rich and complex prehistoric landscape, containing multi-period archaeology characterised by Early Neolithic flint mining. The approximate area lies between Kms 12 and 17, and is shown on Figure 4 of the OOWSI (APP-231).

15.71. The landscape and individual heritage assets should be considered to be of national significance and high sensitivity to change. This cable route option was highlighted at pre-application consultation in February 2023 as posing an unacceptably high risk of harm to the historic environment due to its exceptionally high known heritage significance and archaeological potential. There is an identified risk of harm or substantial harm to potentially nationally significant archaeological remains within this section of the cable route.

15.72. Any such assets identified within the DCO Limits following field evaluation would be subject to the same policies as designated assets, in accordance with NPS-EN1 (paragraph. 5.9.6) and the NPPF (Footnote 68). Any harm to such heritage assets would carry equivalent weighting to harm to scheduled monuments.

15.73. Assessment of the significance of this prehistoric downland landscape within the ES does not always sufficiently reflect the exceptional rarity and potential research value. Although the individual significance of the heritage assets is assessed within the ES chapter and Appendix 25.8 (APP-214), their group value as components of a prehistoric landscape scale is not captured. The assigned ES values for significance and degree of harm are generally broadly correct (within the limitations of ES assessment methodology), and the overall residual significance of effect is therefore calculated as substantial (adverse).

However, the accompanying narrative assessment of significance, which allows for a more qualitative and holistically evidenced assessment, is vital for understanding the significance of the affected heritage assets. Ensuring that this assessment accurately and fully captures all aspects of heritage significance is vital to allow decision makers to properly weigh any harm to heritage assets against the benefits of the Project.

15.74. The archaeological significance of this prehistoric downland landscape is evidenced further in the response by the Sussex Archaeological Society to the consultation on this route option (see Appendix D).

15.75. No archaeological field evaluation has been undertaken for this section of the cable route by the Applicant, as requested through the consultation and Evidence Plan Process (EPP). Assessments are informed solely by geophysical survey, lidar survey and desk-based study. Whilst these provide valuable information on archaeological context, potential and likely significance, they have inherent limitations. In the absence of 'ground-truthing' by field evaluation, archaeological potential has not been confirmed or characterised, and the significance of the affected heritage assets cannot by fully understood on the basis of the available evidence.

15.76. The geophysical survey has identified multiple dispersed pit-type anomalies or areas of enhanced magnetism with unclear origins within the vicinity of known Neolithic flint mining sites. Although none have been assessed as of definite or probable archaeological origin within the report, WSCC has concerns regarding the methodology used to interpret the survey data (see Appendix D for further detail).

15.77. The archaeological potential of the area indicates that the types of features that might be present potentially include (but are not limited to) previously unidentified Early Neolithic flint mining shafts or associated remains, evidence of on-site flint processing and associated activities, flint working floors, surfaces or hollows, hearths and trace evidence of Neolithic structures. Given the ephemeral nature of certain of these feature types, standard archaeological evaluation techniques are unlikely to be sufficient to reliably identify and characterise the archaeological features in this area.

15.78. This is reflected within the OOWSI, which proposed a programme of fieldwalking and test pit evaluation prior to standard trial trenching (see Mitigation section for further detail). However, the results of such a programme of investigation are not currently available to aid understanding of significance. It is the understanding of WSCC that further field evaluation is proposed until post-consent, which WSCC finds unacceptable and is contrary to the requirements of paragraphs 5.8.8-5.8.10 of NPS-EN1 and paragraph 200 of the NPPF (with regard to the need to describe the significance of any affected heritage assets, and where necessary undertake field evaluation).

15.79. The OOWSI sets out a robust suite of bespoke investigation and mitigation measures for this area (see Mitigation section for further detail). In the event that archaeological remains of high or national significance are identified within the cable corridor, WSCC is not satisfied that it will be possible to appropriately mitigate, as archaeological excavation is unlikely to reduce the

potential harm to acceptable levels in the case of nationally significant archaeological features. In the event that Neolithic flint mining shafts are present within the cable corridor, excavation of a feature of this size, scale and complexity would present a myriad of logistical, health and safety and financial challenges.

15.80. Commitment C-225 states; "*Where previously unknown archaeological remains of high heritage significance are identified through surveys along the cable route, and where these locations have not been possible to avoid during earlier design stage, consideration will be made for engineering solutions (e.g. narrowing of the construction corridor) to minimise direct impacts. Where impacts are not avoidable, an appropriate programme of mitigation will be undertaken to ensure preservation by record*." Whilst this commitment states an aim to ensure preservation by record, it does not sufficiently demonstrate that harm to high or nationally significant remains can be avoided, nor preservation *in situ* secured by DCO requirement.

15.81. It is the position of WSCC that greater weight should have been afforded to avoiding this very significant historic environment constraint. Consideration of alternative route options within Chapter 3 appears to give insufficient weighting to the risk of harm to nationally significant heritage assets when weighed against other constraints. Route LACR-01d was selected on the basis of '*engineering, environmental, cost and land acquisition factors*' (APP-044 para. 3.4.67), despite it being acknowledged that '*Multiple responses to the third Statutory Consultation exercise raised concern over the remains of high heritage significance*' (APP-044 para. 3.4.66). Options LACR-01c and LACR01d appear to have been weighted equally in terms of harm to the historic environment on the basis that both have '*high potential for archaeological remains of high significance and both would be required to be subject to detailed evaluation and mitigation*' (APP-044 paragraph 3.4.67).

15.82. This argument misses the increased risk with LACR-01d (although still a possibility with LACR-01c) of encountering archaeological remains of equivalent significance to the nearby Scheduled Monuments (Prehistoric flint mine and part of a round barrow cemetery at Blackpatch 1015880; Itford Hill style settlement on Cock Hill 1015881; 1017446; Prehistoric flint mine and a Martin Down style enclosure on Harrow hill 1015239). The NPPF (paragraph 206, footnote 72) states that "*Non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets*.". It is not clear that this has been sufficiently considered within the route selection process.

15.83. Given it has been identified as an area of exceptionally high archaeological potential and significance, WSCC finds the lack of field evaluation for this section of the cable corridor in particular wholly unacceptable. In the absence of this information, it is not currently possible to describe the significance of the affected heritage assets. WSCC takes that view that LACR-01d, in particular, poses the probability of an unacceptably high magnitude of harm to the historic environment as a result of the Project.

Historic Landscape Character

15.84. Construction activities will result in changes to historic landscapes. Where existing features of the historic landscape are crossed by the onshore parts of the Project, sections will be removed, altering the existing Historic Landscape Character (HLC).

15.85. In general, these landscapes are assessed as low value. However, some parts of Zone 2 – South Downs are assessed as medium value, comprising surviving areas of unenclosed downland with steep scarp slopes, rich in prehistoric earthworks. The magnitude of change on these historic landscapes is likely to be low when assessed on a landscape scale, and the effects will not be permanent. Nonetheless, this will constitute a negative impact to the local historic environment.

15.86. Construction of the substation and compounds at Oakendene Substation will result in negative impacts to the HLC of the area, specifically Oakendene historic parkland. This will arise largely though physical loss of a large part of the surviving parkland through construction of the substation and removal of historic landscape features. During the construction phase, temporary changes to the landscape and parkland will arise through construction of the two compounds, and adverse visual and noise impacts due to construction works. These temporary construction impacts are predicted to last for four years; a significant time duration.

15.87. The parkland is assessed as of low heritage significance in its own right, although some historic parkland features are present. However, it forms the historic parkland setting of Oakendene Manor and its significance is enhanced by its historic relationship with the manor house. It is the view of WSCC that the significance of the parkland may have been underassessed within the Oakendene parkland historic landscape assessment (APP-211). In particular, the contribution of individual trees which, whilst arguably falling slightly short of the criteria for Veteran Trees (see Arboricultural section of the LIR), nevertheless can be individually identified on the 1st edition OS mapping of 1875 and are likely to have formed part of deliberate planting within the historic parkland. There may also be conflation of informal naturalistic-style parkland, which nevertheless is considered a designed parkscape, with 'informal' parkland, which may have organically evolved as a result of field boundary changes.

15.88. The possible earlier origins of the parkland should be further considered, as potentially indicated Lidar features are identified within the parkland and historic earthwork banks are surviving within Taintfield Wood.

Operational Phase - Impacts

Positive

15.89. No positive impacts have been identified during the operational phase.

Neutral

Designated Heritage Assets

15.90. Following reinstatement, negative changes within the settings of heritage assets arising within from the onshore cable route and landfall will not persist. Therefore, there will be a neutral impact upon these designated heritage assets during operation.

15.91. Some minor changes to settings might arise during operation, due to maintenance and repair activities, and use of operational accesses. However, these are not likely to translate to meaningful changes to the significance of any identified heritage assets.

Archaeology

15.92. Additional negative impacts to archaeological remains are not anticipated during the operational phase for the majority of receptors.

Historic Landscape Character

15.93. Following reinstatement, it is not anticipated that negative impacts to historic landscape character will be ongoing within the onshore cable route and landfall.

Negative

Designated Heritage Assets

15.94. *WTGs and Offshore Substations* - Harm to the significance of onshore designated heritage assets due to negative changes within their settings is anticipated to arise due to the presence of the WTGs and offshore substations. This negative impact will be ongoing and will continue during the operational phase of the Project.

15.95. *Onshore Cable Route and Landfall* - For the onshore cable route and landfall, there should be no ongoing or permanent negative impacts to designated heritage assets arising from change within their settings. However, prior to completion of reinstatement works, including full growth and maturation of planting schemes, negative impacts arising during construction may persist into the initial stages of the operation of the Project. Visualisations for VP SA3 indicate the differences between year 1 and year 15. This is likely to be even more marked in views south-east from Oakendene Manor, as the new 'specimen' tree planting will take over 15 years to mature.

15.96. *Oakendene Substation* – As discussed above, construction of the substation at Oakendene will cause negative change within the setting of Grade II Listed Oakendene Manor (NHLE 1027074), amounting to harm to its significance. Significant residual effects are identified for Oakendene Manor during the operation of the Project.

15.97. During operation, some of the negative changes that arise during construction, in particular changes due to construction traffic and noise levels, would be

removed. However, the majority of the negative impact will be permanent, and harm will be ongoing during the operational phase, even following the implementation of embedded environmental measures.

15.98. The substation design as proposed through the DCO application, is a visually intrusive industrial structure, entirely at odds with the current rural parkland setting. In and of itself, the permanent change in use and character of the part of the historic parkland that will be occupied by the substation, will reduce historic interest by fragmenting the parkland and weakening the relationship between the manor and its historic landholdings.

15.99. The ES chapter assesses a medium magnitude of change for this heritage asset following embedded mitigation measures, resulting in a major adverse residual effect (significant in EIA terms).

15.100. The ES methodology equates this effect to less than substantial harm; however, see Appendix D for further comment on methodology. 'Less than substantial harm, at the upper end of the scale' may be a more appropriate assessment. As discussed above, due to the absence of visualisations from the key location described above, it is not possible to accurately assess the precise degree of visual change within the asset's setting, and thus the precise magnitude of harm cannot be calculated.

15.101. It is not clear that this harm has been afforded sufficient consideration within the Alternatives chapter (APP-044), which assessed that overall environmental effects were equal for both Oakendene and Wineham Lane North substation site options. However, the historic environment effects are significantly higher for the Oakendene site. Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 Act requires that "*special regard be given to the preservation of listed buildings or their settings, and that any harm should require clear and convincing justification"*. This requirement, as well those of NPS-EN1 and the NPPF in relation to harm to listed buildings, appear not to have been afforded sufficient consideration in the Oakendene substation site selection process.

15.102. The proposed planting of new trees, woodland and scrub, as indicated in the Indicative landscaping plan for the Design and Access Statement (DAS, AS-003), will mature during the operational phase and this embedded mitigation will eventually help somewhat screen the substation. The negative and stark visual intrusion of the substation will, in theory, be somewhat reduced and softened in key views to and from the manor. However, as above, the lack of appropriate VPs and visualisations mean that the precise degree of change to the setting of Oakendene Manor during the operational phase remains unknown. Visualisations from VP SA-3 indicate that a major change within long-distance views south-east from Oakendene Manor is likely, even once the proposed planting has fully matured. The maximum effect of the planting will not be achieved until the trees are matured. This may take in the region of 20 years (see Arboricultural section of the LIR), which is towards the end of the likely lifetime of the Project.

15.103. Regardless of the effects of planting and screening, the presence and operational activities of the substation within the historic parkland setting of

Oakendene Manor will constitute a permanent adverse change in setting, and the majority of the identified harm to significance will derive from this impact.

Archaeology

15.104. Additional negative impacts to archaeological remains are not anticipated during the operational phase for the majority of receptors, as these will have occurred during the construction phase. The possible exception to this might be in the event that archaeological remains of high significance are identified that require preservation *in situ*. In this case, measures would need to be in place to ensure no negative impacts occur during operation.

Historic Landscape Character

15.105. Following completion of reinstatement works, including maturation of planting, there should be no ongoing or permanent negative impacts to historic landscapes within the footprint of the cable corridor, compound and enabling works.

15.106. Until this point, including prior to full growth of planting schemes, negative impacts arising during construction may persist into the initial stages of the operation of the Project.

15.107. Reinstatement must be undertaken to an exceptionally high standard within sensitive historic landscapes, in particular the prehistoric downland landscape between Km 12 and 17, to avoid ongoing or permanent negative impacts during operation.

15.108. Impacts to the historic parkland at the Oakendene substation site will be permanent, constituting loss of the park of the historic parkland of the manor following construction of the substation.

15.109. The Outline Project Environmental Management Plan (OLEMP; APP-232) indicates that embedded mitigation in the form of landscaping and planting will be in keeping with the historic parkland. Although this will help reduce harm to the historic parkland during the operational phase once it has matured, there will nevertheless be a permanent negative impact to the historic landscape during operation of the Oakendene Substation.

Required Mitigation

15.110. The Project will result in harm to the historic environment. The ES proposes a suite of mitigation measures (embedded and essential) in order to reduce and partially offset this harm. These are set out within the ES, the Commitments Register, the OOWSI and dDCO.

15.111. WSCC welcomes the mitigation measures put forward by the Applicant through the DCO application documents. The Applicant must refine and develop the OOWSI to ensure that an appropriate and proportionate scheme of mitigation can be secured and delivered in order to partially offset the predicted harm to the historic environment. As per dDCO Requirement 19 (1), the OOWSI must be supplemented by appropriate Stage and/or Site-specific method statement documentation (SSWSIs).

15.112. Required mitigation measures, as well as areas that need further consideration, are outlined below.

Designated Heritage Assets

WTGs and Offshore Substations

15.113. In line with the comments made within the SLVIA section of this report, a robust set of offshore design principles, including commitments to the layout and extent of WTGs and offshore substations, are required to reduce the adverse effects upon West Sussex heritage assets arising from changes within their wider settings.

Oakendene Substation

15.114. The identified harm is to a large degree an inevitable consequence of the choice of this substation location and, as such, cannot be fully mitigated. The ability of landscaping to mitigate the harm is limited due to the proximity of the substation to Oakendene Manor. Due to the nature of the structure, options for embedded mitigation by design are likely to be limited by the required functionality and equipment.

15.115. The ES chapter assesses a medium magnitude of change for this heritage asset, following mitigation measures. In order to ensure the predicted reduction in harm, the proposed embedded mitigation measures set out in the Commitments Register must be secured by DCO Requirement; their delivery is not currently sufficiently secured.

15.116. As per the LVIA section of this report, the design, layout, and provision of landscaping at the substation will be crucial to minimising and mitigating harm to Oakendene Manor and historic parkland. The high-level design principles set out in the DAS for the onshore substation and for the historic environment are welcomed and will generally aid in minimising the impacts of the Project upon Oakendene Manor. Incorporation of elements of the historic landscape into design and planting proposals are welcomed. The wording of Requirement 8 (2), which specifically states that the detailed design for the onshore substation must take account of the effect on heritage assets, is acknowledged.

15.117. However, the design principles lack certainty, with wording such as 'seek to' failing to provide sufficient commitment. In the absence of an Architectural Strategy, it is unclear how and to what extent these design principles will be delivered via the detailed design. As per the comments in the LVIA section of this report, the design principles within the DAS should be revised to provide further details and greater certainty regarding measures to secure a sympathetic layout, appearance, scale and design/finishes.

Archaeology

Field Investigations

15.118. The NPPF (paragraph 200) and NPS EN-1 (paragraphs 5.8.8-5.8.10) require that developers must be able to describe the significance of the affected

heritage assets. Despite comprehensive non-intrusive survey and assessment work, as discussed above, insufficient field evaluation was undertaken to inform the DCO application. The significance of the affected heritage assets (buried archaeology and geoarchaeology) cannot currently be fully understood on the basis of the available evidence, even having adopted a 'worst-case scenario' approach as the ES has attempted to do. In the absence of this information, it is not possible for decision makers to fully and accurately assess the impacts of the Project upon the historic environment.

15.119. A comprehensive staged programme of archaeological and geoarchaeological field investigations is therefore required to:

- advance understanding of significance;
- understand the impacts of the Project upon that significance; and
- identify the need for and scope of any further archaeological mitigation required.

Timing of Archaeological and Geoarchaeological Investigations

15.120. WSCC advised during the pre-application phase that trial trench evaluation and geotechnical investigations and monitoring should be undertaken for the entirety of the onshore construction footprint prior to DCO application, with the results used to inform the ES assessment. This remains the position of WSCC.

15.121. The OOWSI proposes to undertake trial trench evaluation within the DCO Limits following DCO consent. The decision by the Applicant not to undertake evaluation pre-submission means that the accuracy of the geophysical survey results has not yet been 'ground truthed', and so it is currently not possible to conclusively rule out the presence of nationally significant remains anywhere within the DCO Limits (with the exception of the Brook Barn Farm site, where significance has already been partially characterised by limited initial field evaluation).

15.122. The Applicant's chosen approach therefore hinges on the ability to secure the preservation in-situ of any archaeological remains of sufficiently high significance identified post-consent via design changes ('micro-siting'). See Appendix B (DCO requirements) for further details.

15.123. However, the assessment has identified an especially high likelihood of nationally significant remains being present within the prehistoric downland landscape between Km 12 and 17. The absence of prior intrusive field evaluation for this section of the cable corridor, in particular, is wholly unacceptable. The potential is sufficiently high that post-consent field evaluation is not acceptable.

15.124. WSCC recommends that a programme of field investigations should be undertaken within the prehistoric downland landscape between Km 12 and 17 commencing immediately in order to assess the potential for nationally significant archaeology to be present and to characterise significance during the Examination.

15.125. The programme of field evaluation should be in line with the methodologies set out within the OOWSI for this area and proportionate to the likely exceptionally high significance of the affected assets (see below for further detail).

15.126. Archaeological monitoring of geotechnical works should also be undertaken at the earlies opportunity, if applicable.

15.127. The ES assessment should be updated to include the results of these field investigations, including undated assessments of significance of the affected heritage assets, magnitude of harm, and accurate calculation of residual effects post-mitigation.

15.128. If the results of field investigations within the prehistoric downland landscape between Km 12 and 17 were to be delivered during Examination and were incorporated into the ES assessment, this would provide an understanding whether or not the Project is likely to result in harm or substantial harm to nationally significant archaeology. This in turn would allow statutory consultees to provide fully informed responses. It would also allow the decision maker to make an informed judgement about whether the degree of harm to the historic environment is acceptable when weighed against the benefits of the Project.

Scope of Archaeological Investigations

15.129. Geophysical survey has been carried out, with c.71% coverage achieved. In line with Commitment C-97, survey coverage of the outstanding areas must be achieved where reasonably practicable in accordance with the existing WSI prepared for the Preliminary Environmental Information Report (PEIR) in 2021, then extended to include the current DCO Limits. The outstanding geophysical survey should be undertaken in accordance with paragraph 4.5.2 of the OOWSI.

15.130. Evaluation trenching should be undertaken within areas that will be subject to construction impacts. The areas subject to evaluation must be approved by the WSCC County Archaeologist. The OOWSI sets out a proposed survey area (APP-231, Figure 3: Potential areas of proposed archaeological trial trenching). The proposed area excludes land based on criteria including absence of construction impacts, adverse ground conditions, and demonstrable negligible archaeological survival; WSCC agrees in principle with these criteria. Further engagement will however be required before the precise survey extents can be agreed.

15.131. WSCC agrees with the high-level methodology for evaluation trenching as set out within the OOWSI, with detailed methodologies to be set out within the Stage-Specific WSIs (SSWSIs). As set out in Requirement 19 of the draft DCO, the SSWSI for each stage of the Project must be submitted and approved. The SSWSIs must accord with the OOWSI.

15.132. Given the lack of prior field evaluation, the expectation will be that, with the exception of areas of demonstrable prior impact or low potential, sampling strategies will reflect the need to comprehensively characterise archaeological potential and significance.

15.133. To date, no geotechnical field investigations or geotechnical monitoring has been undertaken and, as such, the assessments of potential set out within the Onshore desk-based geoarchaeological and palaeoenvironmental assessment (APP-202) must be 'ground-truthed' as a matter of urgency. A programme of geoarchaeological investigations must be undertaken in order to confirm the extent, nature and significance of any surviving deposits with geoarchaeological potential (Palaeolithic, post-Palaeolithic or palaeoenvironmental) in areas where there may be developmental impact.

15.134. The OOWSI sets out high-level proposals of monitoring of non-archaeological geotechnical works as well as geoarchaeological investigations. The detailed scope of geotechnical monitoring and geoarchaeological investigations must be set out within the SSWSI for each works stage.

15.135. As discussed above, the prehistoric downland landscape between Km 12 and 17 (formerly LACR-01d) is a known Neolithic flint mining site and prehistoric landscape of national significance and exceptionally high archaeological potential. No evaluation trenching has been undertaken to inform understanding of archaeological potential and significance.

15.136. There is a high potential for archaeological features associated with Neolithic flint mining to be present within the prehistoric downland landscape between Km 12 and 17, and some of these feature types may be especially delicate or ephemeral. These include lithic scatters, evidence of on-site lithic processing and associated activities; flint working floors, surfaces or hollows; hearths; trace evidence of Neolithic structures etc. Such evidence, which may be located in the immediate vicinity of flint mining shafts, might potentially be of exceptional rarity and significance.

15.137. Standard evaluation trenching is unlikely to be able to reliably identify and characterise the archaeological features in this area. Mechanical removal of overburden is likely to remove surviving trace evidence of flint scatters, which might, due to ploughing activity, survive only within the plough soil or at the interface with the chalk bedrock. There are likely to be considerable logistical barriers to effective trial trench evaluation, due to difficulties excavating trenches in the desired locations and in machining to the correct levels on steep hillslopes.

15.138. This has been discussed during pre-applications consultation and is reflected within the OOWSI (referred to therein as 'non-standard evaluation methods'). The OOWSI proposes additional investigation methods, comprising field walking survey and test-pitting, which will be required within this area prior to standard evaluation trenching.

15.139. The OOSWI sets out a proposed area within which these additional evaluation techniques might be applied (APP-231, Figure 4: Potential areas of fieldwalking and test pitting). WSCC broadly agrees with this area. However, it may be necessary to extent the investigations in the event that the initial results of these investigations indicate a continuation of these feature types beyond the limits depicted on Figure 4. In the event that a similar potential for ephemeral early prehistoric features and/or lithic scatters is identified

elsewhere, these additional methodologies will also need to be used, if appropriate, and the scope set out within the appropriate SSWSI.

15.140. In addition to the above, evaluation of this area must allow for the presence of deeply stratified colluvial deposits and the associated potential for earlier archaeological features and deposits. There is a need to investigate the archaeological and palaeoenvironmental potential of dry valleys or other areas where a considerable depth of overburden is likely. This might include, as required, mechanically excavated trenched transects, borehole survey or auger survey. The OOWSI should be amended to include provision for the following additional 'non-standard evaluation methods'.

15.141. Detailed methodologies for the 'non-standard evaluation methods' will be set out within the SSWSIs. Where appropriate, specialist input should be sought when developing the detailed sampling strategies and methodologies for the 'non-standard evaluation methods' within the SSWSIs. Sampling strategies for test pitting should involve an iterative approach as opposed to set sampling percentages to allow proportionate and targeted assessment.

Mitigation by Avoidance ('preservation in situ')

15.142. A clear and robust methodology for the preservation in situ of nationally significant remains (if present) must be set out by the Applicant and secured within the DCO Requirements, to ensure this form of mitigation can be delivered as per Commitment C-225. This is required to demonstrate to a sufficient degree of confidence that harm to nationally significant remains can be avoided, in the event they are identified during the post-consent evaluation fieldwork.

15.143. Embedded mitigation measure C-225 states, "*Where previously unknown archaeological remains of high heritage significance are identified through surveys along the cable route… consideration will be made for engineering solutions (e.g. narrowing of the construction corridor) to minimise direct impacts. Where impacts are not avoidable, an appropriate programme of mitigation will be undertaken to ensure preservation by record*".

15.144. Whilst the OOWSI makes brief reference to the option of '*avoidance by micrositing'* or '*mitigation through design'* (e.g. APP-231 paragraph 4.4.7), no details of the methodology for achieving this are provided. Commitment C-225 is not currently sufficiently secured.

15.145. A clear methodology and/or pathway for preservation in situ should be included within the OOWSI. This should include provision for prior field evaluation to understand the significance of the heritage assets and ensure that preservation is appropriate and proportionate. It should also include reference to a management plan to ensure their ongoing protection.

15.146. Draft DCO Requirement 19 (6) secures the long-term preservation and management of "*archaeological remains…left in situ on any site*" via a site-specific archaeological management plan. However, it makes no specific reference to how mitigation by avoidance might be secured from a design perspective, and it is not otherwise secured in the draft DCO Requirements. The preservation in-situ of nationally significant remains, including their prior

field evaluation and necessity of a management plan, should be secured via changes to the wording of DCO Requirement 19 (6).

15.147. Design solutions and micro-siting are referenced in the application documents and OOWSI as a means for securing preservation in situ of nationally significant heritage assets. However, the engineering and design feasibility of avoidance by micro-siting is not currently clear or guaranteed, especially in the event of the discovery multiple, extensive or complex archaeological remains. WSCC requires further clarification to demonstrate that the Applicant can ensure successful delivery of mitigation by avoidance, even in the event of Neolithic flint mining shafts being identified.

Further Mitigation

15.148. The results of the field evaluation stages will inform the need for and scope of further mitigation. The purpose of the mitigation phase will be to partially offset the loss of any archaeological remains identified within the onshore construction footprint, in accordance with Commitments C-79 and C-80. The type and scope of this mitigation will be proportionate to the significance of the features in question.

15.149. The OOWSI proposes a range of archaeological mitigation methods, which, in general, will allow for appropriate and proportionate mitigation to be secured via the delivery of SSWSIs. The methods comprise:

- further geoarchaeological monitoring and investigation;
- excavation;
- strip, map, and sample excavation; and
- archaeological monitoring.

15.150. The types of mitigation proposed, and the high-level methodologies set out within the OOWSI, are broadly acceptable. The OOWSI states that detailed methodologies for mitigation will be set out within SSWSIs.

15.151. The agreed measures include, as appropriate, provision for assessment, mitigation, post-excavation analysis, reporting, publication, and archive deposition.

Archiving, Publication, Outreach and Public Dissemination

15.152. In accordance with Commitment C-261, to secure public knowledge and education benefits from the mitigation, the results of the archaeological mitigation should be made available to the public and disseminated to a wide range of audiences. Requirement 19 (3) of the dDCO will secure this obligation.

15.153. Additional funds (via Section 106 agreement) will be required to deliver some of these obligations; see below.

15.154. The OOWSI should be updated to include further details of archiving and outreach proposals.

Historic Landscape Character

15.155. Where the cable corridor crosses sensitive historic landscapes, such as the prehistoric downland landscape between Km 12 and 17, every effort should be made to ensure that construction activities within this part of the cable corridor are of the shortest duration possible, in accordance with Commitments C-19, 20 and 22. As per the comments in the LVIA section of this report, greater certainty should be provided on the duration, phasing, and sequencing of construction activities, and how this will be programmed to ensure reinstatement can be maximised/expedited. An amendment to dDCO Requirement 22 is suggested (see Appendix B).

15.156. Embedded environmental measures and design principles will help to reduce the impacts of the construction of Oakendene substation upon the historic parkland. These include retention of the 19th century extent of parkland, as well as retention of some key trees and hedgerows, features, and boundaries, in accordance with C-81, 196, 199. As per the comments in the LVIA section of this report, greater certainty should be provided in the Outline Landscape and Ecology Management Plan (OLEMP; APP-232) to ensure these measures are adequately secured. The DAS states that new planting will reflect and be in keeping with historic parkland features. Selection of new parkland tree species should strike a balance between remaining in keeping with existing planted species and ensuring the visual impacts and screening effects within views from Oakendene Manor are maximised. Consideration of using non-native species should potentially be given if they would better strike this balance.

Requirements and Obligations

15.157. In order to secure the preservation in situ of nationally significant remains (if present within the Order Limits), an amendment to the wording of Requirement 19, sub-paragraph (6) is recommended. The suggested amendments to the wording of the DCO requirements is set out in Appendix B.

15.158. In order comply with Requirement 19 (3), relevant NPS-EN1 and NPPF policies and the scope of the OOWSI, there will be a need to ensure adequate provision for suitable long-term storage of the archaeological archive generated from the Project. Due to the scale of the Project, the anticipated size of the resulting archive will likely be above and beyond the standard rates of collection for local museums. Worthing Museum is the only collecting facility that might be able to accommodate the Project archive; however, the existing facilities do not have sufficient capacity. There is a need for provision of additional storage facilities in order to comply with the archiving requirements.

15.159. In addition to ensuring sufficient funds are ringfenced for the archive deposition fees, additional funds should be made available through a S106 agreement for the expansion of existing storage capacity (additional shelving units) at Worthing Museum. Further details are provided in Appendix F.

15.160. Given the scale of the Project and the anticipated size of the resulting archive, the current staff capacity of Worthing Museum will not be able to accommodate accession and documentation of the Project archive. There will

be a requirement for provision of a dedicated Documentation Officer for the time required to document the Project archive, to ensure the archiving obligations of the project can be met. Additional funds should be made available through a S106 agreement for this post (see Appendix F).

15.161. There is potential for the discovery of treasure as part of the archaeological mitigation requirements. A budget should be made available for treasure acquisition by Worthing Museum in the event of treasure being discovered. This will ensure objects can be held in a recognised public repository and, therefore, available for ongoing exhibition and research as part of the wider project archive.

15.162. There is a need to partially offset the anticipated degree of harm to the historic environment with a bespoke and comprehensive public benefit, interpretation, and outreach programme. A bespoke education and package is also required. The outreach programme and education and schools package must be able to meet the anticipated demand given the scale and high profile of the Project. WSCC proposes that this be designed by, or in conjunction with, Worthing Museum to ensure a coordinated approach that aligns with the archive storage proposals. Additional funds via a S106 agreement may be required (see Appendix F).

15.163. There may be a need to offset the potential harm to a nationally significant and highly sensitive Neolithic and prehistoric landscape (prehistoric downland between Km 12 and 17). The OOWSI sets out the non-standard evaluation methodologies and mitigation measures proposed for this area. However, additional surveys outside of the immediate footprint of construction impacts should be considered, in order to enhance understanding and knowledge of this landscape. Additional funds may be required via a S106 agreement for surveys and assessments of the Neolithic mining landscape to enhance knowledge and understanding on a landscape scale. Options might include enhanced-resolution Lidar survey, AP survey, targeted measured survey, and enhanced geophysical survey (e.g. ground penetrating radar) of some of the nearby scheduled monuments and areas of the highest significance. These non-intrusive surveys should be designed to fill gaps in existing knowledge and answer specific research questions. They should be considered within and, potentially, outside, the DCO boundary. An eventual outcome should be integrated interpretation with the results of the archaeological fieldwork undertaken.

16. Water Environment (ES Chapter 26)

Summary

16.1. Any temporary or permanent drainage details should be submitted to WSCC, as Lead Local Flood Authority (LLFA), to evidence that suitable drainage solutions can be delivered during both construction and operation. WSCC understands Requirements 17, 18 and 22 respectively provides securement for these aspects through the DCO.

16.2. WSCC is not the responsible authority for flood risk resulting from coastal or fluvial flooding and so, WSCC defers to other stakeholders, including the Environment Agency, on these matters. However, all aspects of flood risk are important to the communities of West Sussex; therefore, this section of the LIR gives an overview on all sources of flooding.

16.3. Concern has been raised by WSCC, Parish Councils and residents about the lack of appropriate assessment and mitigation regarding the risk of surface water flooding at the Oakendene substation location.

16.4. WSCC expects any proposals to have appropriate surface water drainage infrastructure that prioritises the use of Sustainable Drainage Systems (SuDS) and does not increase existing surface water flood risk elsewhere.

16.5. All works, apart from permanent infrastructure, will be temporary in nature. The onshore cable route will be reinstated and, therefore, impacts on surface water run-off and flooding would be temporary in nature.

16.6. More detail is required regarding the exact location of each individual watercourse crossings, with tailored, site-specific methodologies, plans and drawings; again; this understood to be secured through DCO.

16.7. Further, the timing of the works would need to be considered fully so that localised flood risk is not increased and to ensure that habitat is not lost, or pollution increased. Although the works are temporary, flow rates can change considerably depending on the time of the year, flood risk can increase, and ground conditions can vary significantly.

16.8. The area between Poling and Hammerpot (in Arun District) is an area of permanent winter floodplain and prone to winter ground water flooding. Special consideration may be required for the construction methods and timing for the works in the Poling and Hammerpot area.

16.9. Construction compounds should be located to avoid areas identified as being at risk of flooding, and appropriate drainage should be provided to ensure that silting of watercourses does not occur. WSCC raises concerns that the assessment of alternative locations for construction compounds is missing and should be provided to stakeholders, to ensure the least impactful locations have been chosen.

Table 16: Summary of Impacts – Water Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
16a	Impact upon watercourses due to crossing of the cable route.	C	Negative	**Reduce:** reduce the number of watercourse crossings, if possible, during detailed design. **Mitigate**: Liaison with WSCC (as the LLFA) at an early stage will be essential as both the detailed design and then construction work progresses. The removal of any temporary crossings installed within existing ditch lines will be needed at the end of the construction period and reinstatement back to original condition will be required.	NPS EN-1 (Paragraph 5.7) NPPF (Section 14)
16b	Potential changes in local flood risk due to construction activities.	C	Negative	**Avoid**: Measures should be put in place to avoid working in known floodplain areas and in areas at risk of surface water flooding during periods of extended wet weather and during heavy rainfall. **Mitigate**: As set out in the Outline Code of Construction Practice (OCoCP) (APP-224), ensure working methods includes the use of silt trap, or similar, where necessary.	NPPF (Section 14) NPS EN-1 (Paragraph 5.7) NPS EN-5 (Paragraph 2.3).
16c	Potential for increased surface water and ground water flooding in the	C/O	Negative	Concern has been raised that the current FRA and proposals for the Oakendene substation do not truly reflect the winter flooding that occurs at this location. This may be because local groundwater conditions have not been considered.	NPPF (Section 14) NPS EN-1 (Paragraph 5.7). NPS EN-5 (Paragraph 2.3).

Table 16: Summary of Impacts – Water Environment					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	Oakendene area.			**Avoid**: Work in known areas of flood risk should be avoided. **Mitigate**: Provide more robust assessment for surface water and groundwater flooding, and provide any detailed mitigation.	
16d	Risk of surface water flooding due to incorrectly constructed haul roads.	C	Negative	**Mitigate**: Temporary haul roads and accesses could, if not constructed correctly, cut off surface water flow paths. Ensure detailed design considers surface water flow routes and that temporary haul roads and accesses are constructed as designed.	NPPF Section 14 NPS EN-1 (Paragraph 5.7).
16e	Potential impact to surface water flow routes from stockpiling of any material	C	Negative	**Avoid:** Placing stockpiles of excavated material and any site materials within known surface water flow routes. **Mitigate:** Ensure design considers surface water flow routes and that stockpiles of excavated material and any site materials are stored outside of known surface water flow routes; this should be secured through the OCoCP.	NPPF Section 14. NPS EN-1 (Paragraph 5.7).

Policy Context

National Policy Statements

16.10. Flood risk and climate change is addressed as a generic impact in Section 5.7 of NPS EN-1 and Section 2.3 of NPS EN-5. They note that while flooding is a natural process, its effects and severity can be increased both as a consequence of decisions about the location, design, and nature of settlement and land use, and as a potential consequence of future climate change. While flooding cannot be wholly prevented, its adverse impacts can be avoided or reduced through good planning and management. They explain that climate change may lead to increased flood risks.

16.11. Paragraph 5.7.3 of NPS EN-1 notes that "*where new energy infrastructure is, exceptionally, necessary in such areas, policy aims to make it safe without increasing flood risk elsewhere and, where possible, by reducing flood risk overall"*.

16.12. Paragraph 2.3.2 of NPS EN-5 notes "*as climate change is likely to increase risks to the resilience of some of this infrastructure, from flooding for example, or in situations where it is located near the coast or an estuary or is underground, applicants should in particular set out to what extent the proposed development is expected to be vulnerable, and, as appropriate, how it has been designed to be resilient to flooding, particularly for substations that are vital to the network; and especially in light of changes to groundwater levels resulting from climate change".*

National Planning Policy Framework (December 2023)

16.13. NPPF Section 14 notes that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

WSCC Policy

16.14. The requirement of the West Sussex LLFA Policy for the Management of Surface Water and the West Sussex LLFA Culvert Policy should be noted during the design process.

16.15. The Policy for the Management of Surface Water sets out WSCC's requirements for drainage strategies and surface water management provisions associated with any application for development.

16.16. For all developments, WSCC would expect the principles of the policy and drainage strategy to be considered. For all major developments, WSCC would expect adherence to the full scope of the policy. The drainage strategy should consider the topics set out in the tables and be consistent with the SuDS policies in Sections 5 and 6.

16.17. The Culvert Policy is an explanation of agreed WSCC and District and Borough Council policy regarding the culverting of ordinary watercourses. It is also a guide to good practice and design principles.

16.18. Culverting of a watercourse, or the alteration of an existing ordinary watercourse, requires land drainage consent under Section 23 of the Land Drainage Act 1991 (and as amended). Most District and Borough Councils in West Sussex are currently responsible for processing ordinary watercourse consent applications; however, granting of consent rests with WSCC.

Construction Phase – Impacts

Positive

16.19. No positive impacts on the water environment have been identified during the construction phase.

Neutral

16.20. No neutral impacts on the water environment have been identified during the construction phase.

Negative

16.21. The incorrect design, construction and monitoring of temporary culverting of watercourses, temporary haul roads and placement of material stockpiles, could adversely affect the environment and temporarily increase local flood risk. The availability of land should not be considered as justification for not prioritising the use of SuDS during construction. The land required for SuDS during construction, alongside other site requirements, should have been adequately considered when establishing the Projects DCO Limits.

Operational Phase – Impacts

Positive

16.22. No positive impacts on the water environment have been identified during the operational phase.

Neutral

16.23. No neutral impacts on the water environment have been identified during the operational phase.

Negative

16.24. Concern has been raised that the submitted Flood Risk Assessment (APP-216) and proposals for the Oakendene substation, do not truly reflect the winter flooding that occurs at this location. This may be because local groundwater conditions have not been considered. Therefore, there is the potential for increased surface water and ground water flooding in the Oakendene area due to the Project.

Required Mitigation

16.25. Any works in, under, over or within eight metres of any ordinary watercourse, which is not a main river, will require consent from WSCC as LLFA. Any permanent or temporary culverting works will need to be carried out in accordance with the requirements of the Land Drainage Act 1991 and WSCC's Culvert Policy.

16.26. Temporary culverting of watercourses must be monitored during the life of the Project and removed as soon as is practically possible once construction is complete. The Applicant must ensure the decommissioning of all temporary construction elements has been properly considered during the detailed design stage.

16.27. Given the local topography of the central portion of the cable route, surface water flood risk should be considered within any emergency response plan for this area. Therefore, long lengths of open cable route trenching, which could become a flow route for surface water during periods of heavy rainfall, should be avoided.

16.28. WSCC requires the Applicant to ensure known overland surface water flow routes are marked on construction phase plans so that site supervision staff are aware of possible risk. Temporary haul roads and accesses should be constructed so as not to cut-off existing overland surface water flow paths as this could increase surface water flood risk off-site.

16.29. Winter monitoring of groundwater levels at Oakendene substation should be carried out. For clarity, the existing watercourses around the site should be added to the Indicative SuDS Plan.

17. Emergency Services (ES Chapter 27)

Summary

17.1. West Sussex Fire and Rescue Service (WSFRS) has provided commentary regarding the onshore elements of the Project only, as it is not legally bound to offer emergency response services for offshore incidents. Therefore, the Applicant should consider this in their emergency planning for foreseeable events and emergencies that may arise offshore involving operational staff and equipment. For instance, a wind turbine fire or incidents where an engineer becomes trapped or injured during the construction or operational phases.

17.2. West Sussex Fire Authority was constituted under section 4 of the Fire and Rescue Services Act 2004. It is responsible for making sure that the West Sussex Fire & Rescue Service (WSFRS) performs efficiently and in the best interest of the public and community it serves.

17.3. To date, the Applicant has not provided specific information within the DCO application with regards to concerns raised by WSFRS through the pre-application consultation. Although this element does not form a Principal Area of Disagreement, WSFRS does wish to highlight the potential local impacts of the Project and requires the dDCO to secure consultation with WSFRS during detailed design, the pre-construction phase, and as part of the planning for the operations and management plan. This will ensure that control measures are put in place to mitigate the risks and uncertainties raised.

17.4. These risks include potential impact to emergency response times during the construction phase (due to construction activities impacting both public or private road network), as well as an operational phase risk of the presence of the onshore substation and enabling works at Bolney National Grid Substation.

17.5. WSFRS acknowledges the revised documents submitted by the Applicant at the Procedural Deadline, including the dDCO (PEPD-010) and OCoCP (PEPD-033), which are reflected within this section of the LIR.

Table 17: Summary of Impacts – West Sussex Fire and Rescue					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
17a	Potential for extended response times for WSFRS' attendance at incidents due to road closures and access restrictions.	C	Negative	**Mitigate**: The Applicant must provide a schedule of works and regular updates to WSFRS when it is expected that road closures and restricted access routes will be implemented during the construction phase. Ideally this should be provided well in advance of the construction period.	WSFRS Community Risk Management Plan (CRMP) The Fire and Rescue National Framework for England
17b	Potential impact to the safety of responding firefighters	O	Negative	**Mitigate** -The Applicant must share and engagement with WSFRS during the development of emergency plans associated with Oakendene substation and Bolney substation extension and associated works. **Mitigate** - WSFRS will require information on the intended access to the substation, the alternative access if the layout requirements require, and the supply of water for firefighting.	WSFRS Community Risk Management Plan (CRMP) The Fire and Rescue National Framework for England

Policy Context

National Policy Statements

17.6. No reference is made to these aspects within the relevant National Policy Statements.

The Fire and Rescue National Framework for England

17.7. Fire and rescue authorities in England have a duty to have regard to the Fire and Rescue National Framework for England, which sets priorities and objectives in connection with the discharge of their functions. It imposes four key responsibilities on Fire and Rescue Services which are: community fire safety; fighting fires; dealing with road traffic accidents; and responding to other emergencies. Every fire and rescue authority must have regard to the Framework in carrying out their functions. The priorities in this Framework are for fire and rescue authorities to:

- Make appropriate provision for fire prevention and protection activities and response to fire and rescue related incidents;
- Identify and assess the full range of foreseeable fire and rescue related risks their areas face;
- Collaborate with emergency services and other local and national partners to increase the efficiency and effectiveness of the service they provide; and
- Be accountable to communities for the service they provide and develop and maintain a workforce that is professional, resilient, skilled, flexible and diverse.

WSFRS Community Risk Management Plan

17.8. This is a statutory requirement for all fire and rescue services to produce a Community Risk Management Plan (CRMP), which identifies and assesses all foreseeable fire and rescue related risks in its communities and ensures that arrangements are put in place to prevent and respond to these risks.

Construction Phase – Impacts

Positive

17.9. No positive impacts have been identified for the construction phase.

Neutral

17.10. No neutral impacts have been identified for the construction phase.

Negative

17.11. Due to the significant geographical coverage of the Project and the number of road crossings to facilitate the cable route approximately 39km across the County, it is foreseeable that public and private access routes will be disrupted. Therefore, this creates the potential for extended response times

for WSFRS' attendance at incidents during the construction phase due to these road closures and access restrictions. At all times, WSFRS will require emergency access to property and infrastructure.

Operational Phase - Impacts

Positive

17.12. No positive impacts have been identified for the operational phase.

Neutral

17.13. No neutral impacts have been identified for the operational phase.

Negative

17.14. Failing to provide WSFRS with Emergency Planning procedures and details for the Oakendene and Bolney sites could endanger the safety of responding firefighters in the event of an incident. This failure will also impact WSFRS' effectiveness to manage and resolve an incident.

Required Mitigation

17.15. Better understanding of the implications upon potential extended response times for emergency service attendance at incidents during the construction phase must be explored with WSFRS during the pre-construction phase (if consent is granted). Emergency access to property and infrastructure is required by WSFRS at all times. It is acknowledged that the revised OCoCP (PEPD-033) makes additional reference to maintaining emergency access to properties at all time during construction works, via the use of road plating.

17.16. Whilst understanding the allowance for flexibility in the proposals at this stage, clarification of whether Gas Insulated Switchgear or Air Insulated Switchgear technology will be taken forward and the requirement for fire detection for enclosed environments, must be further discussed with WSFRS through detailed design (if consent is granted). As with previous responses on the Project, the design must adequately account for fire service vehicles and equipment to access all areas whilst considering minimum safe approach distances for fires involving electrical installations. Emergency water supplies must also be provided. It is acknowledged that the revised dDCO makes allowance for consultation with WSFRS on detailed design elements for the substation through Requirement 8 (detailed design approval onshore substation).

17.17. Emergency access must be maintained to ensure the safety of the Bolney National Grid Substation Site during construction and operation of the enabling works.

18. Public Rights of Way (ES Chapter 28)

Summary

18.1. Due to the large scale of this Project and the linear nature of the proposals, the scale of the impact on Public Rights of Way (PRoW) is very high. With just under 60 individual interventions across the PRoW network crossed by the Project, this highlights the impact on users both exercising their legal rights for utility or recreational purposes. Whilst mitigation is proposed, the impact is negative due to the interruption for users and also the alternative route options proposed are predominantly a further distance than the existing legal routes available.

18.2. The Applicant has proposed measures to mitigate these effects, through the Outline Public Rights of Way Management Plan (OPRoWMP), which is secured through a Requirement in the DCO. Although it does set out clear mitigation for the network, this will negatively impact lawful path users within the County due to the large extent of temporary closures and diversions. To reduce disruption to lawful users as much as possible, WSCC would need to see a strong commitment to a phased construction programme and its securement through the DCO.

18.3. Due care needs to be taken when considering different status of PRoW impacted by the Project. Different status allows different types of users and each of those users should be accommodated when implementing any temporary routes.

18.4. With regard to proposed diversions, these must be suitable for lawful users and managed by the landowner/contractor to make sure they remain safe and accessible for the duration of the temporary closure.

18.5. Compensation will be required to mitigate against the identified impacts on the users of the PRoW network in both the short, medium, and long term. These funds will allow improvements to be undertaken on the network, improving access and availability. This should be focussed on future PRoW improvements within a 5km buffer zone of the landfall, cable route and onshore substations (including extension to the National Grid substation). There should also be a commitment for any temporary gates, where appropriate, used for site safety and managing temporary diversions to be offered to WSCC, as the Local Highway Authority, for future structure improvement across the PRoW network (replacing stiles with gates) to improve public access.

18.6. These benefits brought about by the S.106 contributions will help WSCC meet the seven clear objectives of the Rights of Way Management Plan (2018-2028).

Table 18: Summary of Impacts – Public Rights of Way					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
18a	Impact on lawful users to exercise their public rights of access across the PRoW Network	C	Negative	**Avoid**: Permanent closure of any PRoW and long-term closures with no alternatives **Reduce**: Temporary closure duration where possible and neighbouring path closure to reduce impact on users **Mitigate**: Implementation of the OPRoWMP and where paths are to be closed with no alternative routes (28 PRoWs), alternative routes sought and secured where possible to avoid complete severance **Compensate**: Through the S.106 secure funds for PRoW improvements within a 5km buffer zone of landfall, cable route and substation.	NPS EN-1 (Paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028
18b	Impact on amenity of the PRoW network for duration of works	C	Negative	**Avoid**: Permanent closure of any PRoW and any long-term closures without alternative routes being available to lawful users **Reduce**: Temporary closure duration where possible and implement phasing of works to reduce impacts at locations where multiple paths within certain localities require temporary closure **Mitigate**: Implementation of the OPRoWMP and avoid complete severance of network by providing alternative routes where possible (28 PRoW currently have no alternative which should be aimed to be reduced where feasible)	NPS EN-1 (Paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028

Table 18: Summary of Impacts – Public Rights of Way					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				Compensate: Under S106 provision of temporary gates, where suitable, no longer needed are provided to the Local Highway Authority to be used to replace stiles across network improving access and amenity for the future use of the PRoW. Also S106 contribution toward PRoW improvements within 5km buffer zone of landfall, cable route and substation.	
18c	Impact on users of PRoW proposed to be temporarily diverted	C	Negative	**Avoid**: Any alternative routes not being suitable for all lawful users of the route **Reduce**: The length of the PRoW temporary diversion to make alternative as commodious as possible **Mitigation**: Implement of the OPRoWMP and seek the most convenient alternative route possible for lawful users **Compensate**: Under S106 provision of temporary gates, where suitable, no longer needed are provided to Local Highway Authority to be used to replace stiles across network improving access and amenity for the future use of the PRoW. Also S106 contribution toward PRoW improvements within 5km buffer zone of landfall and cable route.	NPS EN-1 (Paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028
18d	Impact upon PRoW proposed to be	C	Negative	**Avoid**: All 28 paths referenced as temporarily closed with no alternative **Reduce:** Number of paths severed for the duration of the works should be reduced	NPS EN-1 (Paragraph 5.13)

Table 18: Summary of Impacts – Public Rights of Way					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
	temporarily diverted with no alternative route			where possible to reduce severance of network **Mitigate**: Seek alternative routes suitable for lawful users with landowners where possible for the 28 PRoW **Compensate**: PRoW surface improvements after construction works are completed, to improve the amenity and public user experience. Condition surveys will be necessary and photographic proof provided to clearly show the standard of paths prior to works taking place.	WSCC Rights of Way Management Plan 2018-2028
18e	Impact on coastal access for duration of the construction works (forms part of King Charles III England Coast Path National Trail)	C	Negative	**Avoid**: Complete closure of coastal PRoWs at once as will sever access to beach and along it. This is particularly important as the coastal route forms part of the King Charles III England Coast Path which is a National Trail and should be protected as such. **Reduce**: Impact on users of the PRoW network by avoiding closures where possible **Mitigate**: Avoiding closures and alternative routes to reduce impact and access and amenity for users of the coastal routes **Compensate**: Suitable alternative routes where necessary and S106 toward PRoW improvements within 5km buffer zone of landfall and cable route	NPS EN-1 (Paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028

Table 18: Summary of Impacts – Public Rights of Way					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
18f	Impact to the South Downs Way (forms part of the National Trail)	C	Negative	**Avoid**: Complete severance of SDW and feeder routes. This is particularly important as the South Downs Way is a National Trail and should be protected as such. **Reduce**: Impact for users of the SDW by not severing access completely and phasing works **Mitigation**: Implementation of principles of PRoWMP and having suitable alternative routes in place for all lawful users **Compensate**: Provision of funds through S.106 for PRoW improvements within 5km buffer zone and also temporary gates from project to help improve future access to and along this National Trail	NPS EN-1 (Paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028
18g	Impact to the Downs Link (DL)	C	Negative	**Avoid**: Complete severance of access to and along DL for duration of construction works. The Downs Link is a route available to multiple modes of public access from Shoreham, north to Rudgwick and continues into Surrey. This route is a key public access route for utility and recreational purposes and severance and interruption of it will have considerable negative impacts on regular users and visitors to the County. **Reduce:** Impact on utility and recreational users of the DL	NPS EN-1 (paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028

Table 18: Summary of Impacts – Public Rights of Way					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
				Mitigation: Implementation of the PRoWMP and providing suitable alternative routes for all lawful users **Compensation**: Provision of funds through S.106 for PRoW improvements within 5km buffer zone and also temporary gates from the Project to help improve future access to this promoted route and wider network	
18h	Visual impact for PRoW users at the substation and National Grid substation extension	C/O	Negative	**Avoid**: Where possible negative visual impact for users **Reduce**: Visibility of new infrastructure from the PRoW network where possible **Mitigation**: Visual screening where possible to reduce the impact on users of the local network **Compensation**: Provision of funds through S.106 for PRoW improvements within 5km buffer zone and also temporary gates from project to help improve future access to this promoted route and wider network	NPS EN-1 (Paragraph 5.13) WSCC Rights of Way Management Plan 2018-2028

Policy Context

National Policy Statements

18.7. The Overarching NPS for Energy, EN-1 includes guidance on the socioeconomic and tourism matters that need to be considered (Section 5.13), which include:

- The effects on tourism;
- The effects of the proposed project on maintaining coastal recreation sites and features;
- Cumulative effects.

18.8. In addition, EN-1 indicates that the assessment should describe the existing conditions in the areas surrounding the Project.

WSCC Policy

Rights of Way Management Plan 2018-2028

18.9. The West Sussex Rights of Way Management Plan outlines ways in which improvements, such as provision of new routes and major works, could be achieved over and above routine maintenance.

18.10. The purpose of the plan is to demonstrate how WSCC, working alongside key partners, will manage the PRoW network to provide a framework through which local interest and community groups can contribute to the management and development of the PRoW network.

18.11. The WSCC Vision for PRoW in West Sussex is:

- To enable people to enjoy the countryside on foot, by horse and by bicycle, for health, recreation and to access services, while recognising the need to balance this with the interests of those who live and work in the countryside and the management of special landscapes; and
- Working in partnership with volunteers and key organisations, the Objectives of the Plan are to:
  - Manage the existing PRoW network efficiently and maintain to an appropriate standard for use.
  - Improve path links to provide circular routes and links between communities.
  - Improve the PRoW network to create safe routes for both leisure and utility journeys, by minimising the need to use and cross busy roads.
  - Provide a PRoW network that enables appropriate access with minimal barriers for as many people as possible.
  - Promote countryside access to all sections of the community enabling people to confidently and responsibly use and enjoy the countryside.
  - Support the rural economy.
  - Support health and wellbeing.

Construction Phase – Impacts

Positive

18.12. The Project is not considered to offer any positive impacts to the local PRoW network during construction.

Neutral

18.13. The Project is not considered to offer any neutral impacts to the local PRoW network during construction.

Negative

Impact on accessibility and amenity of PRoW network

18.14. A significant number (58) of individual interventions on the PRoW network proposed as part of the Project will negatively impact accessibility and amenity of the lawful user.

18.15. Users will be impacted by way of complete severance of key routes, such as the South Downs Way and the Downs Link, together with many other less high-profile PRoW. Furthermore, there will be additional distances for users to follow in cases where temporary alternative routes are being proposed. Further details are given on the routes which are of concern.

18.16. 17 PRoW (listed below along with their Access Point reference) are proposed to be used as vehicular access to the work site; this will adversely impact users. Whilst private vehicular access must always give way to lawful public users on the sections that would not be closed, there must be a commitment as part of the DCO submission for this to be confirmed and suitable mitigation of potential conflict by way of signage relevant to all users.

18.17. Further to this, vehicular use may cause damage to the surface of any PRoW being used; therefore, condition surveys will be required prior to access being undertaken and any damage done must be reinstated to the same or better standard than before access was undertaken.

- A14 - BW2163
- A25 - BW2211
- A27 - BW2091
- A26 - BW2174 & FP2263
- A27 - BW2173
- A28 - RB2092
- A43-b - BW2711
- A44 - FP2514
- A45 - BW2594
- A46 - BW2589/1
- A49 - FP2519
- A50 - FP2372
- A51 - BW2372/2
- A56 - BW1774
- A58 - BW1730
- A60 - BW1730

Impact on coastal access throughout duration of the construction works

18.18. At the point of landfall and the surrounding area impacted by the cable route, there will be considerable interruption to lawful users' ability to access the coast. This is a well-used amenity and the local PRoW network is key for many to gain access to this popular and important environment.

Impact on accessibility to and along South Downs Way

18.19. The South Downs Way is a National Trail and a nationally recognised multi-user route. Severance of this and feeder routes during construction will negatively impact people's ability to travel between communities and exercise their recreational rights of access.

18.20. The proposed temporary closures offering temporary alternative routes will also negatively impact users by increasing the distance users will have to travel to get to their destinations.

Impact on accessibility to and along the Downs Link

18.21. As a key multi-user route in West Sussex, the Downs Link provides access for walkers, horse riders and cyclists for both utility and recreational use.

18.22. Temporary severance and temporary alternative routes impacting the Downs Link itself and feeder routes will adversely impact lawful users' ability to exercise their legal rights and access between communities and services.

Visual impact along whole network whilst works are taking place

18.23. During the construction phase, there will be a negative impact on lawful users of the PRoW due to the considerable construction works proposed to take place.

18.24. This will vary in distance from the PRoW network but will negatively impact the amenity of the routes for users and their enjoyment of what is usually, in most cases, a rural environment.

18.25. These comments relate to the compounds along the proposed route and also the substation site at the northern end of the Project. The existence of the compounds during construction will adversely impact the environment for walkers visually through the construction phase as will the substation sites, which will continue to adversely impact visual enjoyment of the local area through the operational phase as well.

Operational Phase - Impacts

Positive

18.26. The Project is not considered to offer any positive impacts to the local PRoW network during operation.

Neutral

18.27. The Project is not considered to offer any neutral impacts to the local PRoW network during operation.

Negative

Continued visual impact of PRoW local to the substation site

18.28. During the operational phase, the visual impact of the new infrastructure at the substation and national grid extension sites on the lawful users will continue. This will be a negative impact on what was previously a rural environment. The paths that appear to be most impacted are as follows: FP1T, FP36Bo, FP8T, FP34Bo, FP1790, FP1791, FP1792, and FP2380.

Required Mitigation

18.29. The OPRoWMP sets out mitigation to reduce the impact on lawful path users. It is considered that whilst some mitigation is offered, there should be a strong commitment to seek temporary alternative routes, where possible, to prevent complete severance of the network, particularly with regard to the South Downs Way (National Trail) and the Downs Link (which is a WSCC promoted route).

18.30. There are 18 routes that are referred to as requiring temporary closure with no temporary alternative routes. These are all small-scale closures of the routes but have a large impact on accessibility. The routes are listed below and a commitment should be made to provide an alternative route in these cases to mitigate the impact on users.

- FP2202/1 - 08a - 08b
- FP2199 - 10a - 10b
- FP2198 - 11a - 11b
- FP2176 - 12a - 12b
- FP2190 - 13a - 13b
- FP2174/1 - 16a - 16b
- BW2208/1 - 17a - 17b
- FP2260/1 - 18a - 18b
- FP2262 - 19a - 19b
- BW2103 - 26a - 26b
- BW2107 - 27a - 27b
- BW2109 - 29a - 29b
- FP2520 - 41a - 41b
- FP1781 - 46a - 46b
- FP1776/1 - 47a - 47b
- FP1782 - 48a - 48b
- FP1783 - 49a - 49b
- BW1730 - 50a - 50b

18.31. In terms of long-term visual impacts, with particular reference to the above ground infrastructure of the onshore substation and National Grid substation extension, a commitment should be made to mitigate this as much as possible by offering relevance landscaping to restrict visibility of infrastructure by lawful users of the PRoW network.

18.32. In terms of compensation, a S106 principles offer has been made with regard to the PRoW network for improvements within a 5km buffer zone of the onshore works. This is welcomed and will allow improvements to be made to the local PRoW network impacted by the Project in the long-term. Acknowledgement through this fund of the impacts to the amenity value of PRoW users, should also be included to ensure long-term enjoyment of the local network. Further to this, a commitment should be made to allow WSCC PRoW Team to utilise any temporary gates, where appropriate, to help improve access across the PRoW network by replacing existing stiles with gates, where possible. This would meet objectives set out in the West Sussex Rights of Way Management Plan (2018-2028) and would help to offset the adverse effects of the Project.

19. Public Health (ES Chapter 28)

Summary

19.1. The focus of this LIR section is on the potential health impacts on communities affected by the Project during the construction and operational phases.

19.2. The conclusions on these impacts have been drawn primarily from the nature of activities described in the ES and existing evidence on their potential to influence health outcomes. WSCC notes that in many aspects of the Population and Human Health chapter (APP-069), the interpretation of effects may have been enhanced if there was a more consistent description of the proximity between receptors and the Projects construction and operational elements.

19.3. It is essential to ensure that key design and construction decisions do not result in unacceptable or adverse impacts on residents within West Sussex over the four-year onshore construction period. Given the duration of the onshore construction programme, there is a lack of construction phasing information, which should be presented more clearly to enable local communities and WSCC to understand if the impacts have been appropriately addressed and mitigated through the outline control documents. The proposed Construction and Communications Plan (CCP) as part of the Outline Code of Construction Practice (OCoCP) (APP-224), as very broadly outlined, is welcomed, and should build upon similar arrangements adopted for Rampion 1 (and experience gained and lessons learnt).

19.4. Operational impacts are considered across the wider route to be lesser potential impacts to human health; however, the above ground infrastructure at the substation and substation extension site must be better documented in terms of engagement with the affected communities and how the outcome of those engagements have influenced the Applicant's assumptions, chosen locations for these infrastructure elements, and on the proposed mitigation measures to reduce these impacts.

19.5. Relevant technical sections of this LIR should be referred to for feedback on supplementary mitigations required to minimise the harm to receptors who will be affected by the Project.

Table 19: Summary of Impacts – Public Health					
Ref No.	Description of Impact	Construction (C) /Operation (O)	Negative/Neutral/Positive	Required mitigation and how to secure it (Avoid, Reduce, Mitigate, Compensate)	Policy Context
19a	Potential impacts to local communities during the construction of the Project	C	Negative	Please refer to the relevant technical sections of this LIR for recommendations on additional mitigations.	The Overarching NPS for Energy (EN-1) (Paragraph 4.4) The Noise Policy Statement for England (March 2010) (Paragraph 1.7, 1.8, 2.22-2.25.) Creating healthy and sustainable places (framework for West Sussex).
19b	Potential impacts to local communities during the operational phase of the Project	O	Negative (above ground infrastructure only)		
19c	Potential exposure to EMF from the operation of the onshore cables	O	Neutral		

Policy Context

National Policy Statements

19.6. The Overarching National Policy Statement for Energy (EN-1), section 4.4, outlines the potential effects of construction and operation of energy infrastructure on health and well-being. It encourages that whilst evaluating the health effects of these projects on the wider population, consideration is also given to how they might impact differentially on vulnerable populations.

19.7. The Noise Policy Statement for England (2010) addresses noise in relation to health/quality of life and requires that noise management decisions, whilst taking into account the fundamental principles of sustainable development, aim for avoidance of significant adverse impacts from noise on health, and where possible, positive contributions to public health objectives.

WSCC Policy

19.8. Creating healthy and sustainable places: A public health and sustainability framework for West Sussex. This framework provides public health guidance to decision makers about creating healthy and sustainable places and communities in West Sussex. It includes a toolkit that aims to provide background evidence, signposting to information and tools to assist users to achieve healthier places across West Sussex.

19.9. West Sussex Joint Strategic Health assessment (JSNA): sets out the health and wellbeing need of the population of West Sussex. It encompasses a range of work, including detailed needs assessments relating to specific subjects or communities, evaluations of new programmes or activities, local surveys, and a range of briefings and ad hoc analyses.

Construction Phase – Impacts

Positive

19.10. No positive impacts have been identified during the construction phase.

Neutral

19.11. No neutral impacts have been identified during the construction phase.

Negative

19.12. It is essential to ensure that key design and construction decisions do not result in unacceptable or adverse impacts on residents within West Sussex over the four-year onshore construction period.

19.13. In periods of overnight drilling, nearby receptors will be impacted, which could impede on the residents' quality of sleep, affecting health and wellbeing. Stage-specific Construction Method Statements (CMS) and the OCoCP need to satisfy these concerns regarding noise, vibration and lighting at the construction compounds and cable drilling sites. Impacts must be kept to a

minimum through secured mitigation, including detailed plans on phasing of the onshore works to ensure construction timescales are minimised.

19.14. The exact duration of noise, vibration, light, air quality exposure and visual disturbance to the environment and impacts on PRoW resulting from construction activities and the measures that will be taken to address exceedances is unclear. Despite claims that the projected adverse impacts will be limited to relatively short periods of time, WSCC cannot dismiss the need for additional measures to mitigate affected parties. It is crucial to have these in place as precautionary measures.

19.15. WSCC is also concerned that there is a potential for what has been defined as temporary exceedances to noise thresholds to have undesirable effects particularly on more susceptible receptors. There is evidence suggesting associations between acute exposure to excessive night-time noise and an increased risk of adverse cardiovascular events.

19.16. Construction traffic, namely Heavy Good Vehicles (HGV) movements, should where possible, avoid routes through the Cowfold and Storrington Air Quality Management Areas (AQMA). For the occasions where this cannot be avoided, WSCC seeks assurance that all mitigation has been taken to reduce impacts on air quality and disruption to residents.

Operational Phase – Impacts

Positive

19.17. No positive impacts have been identified during the operational phase.

Neutral

19.18. WSCC welcome the acknowledgement of electromagnetic fields (EMFs) associated with the onshore cabling and potential impacts on the public's health from potential exposure for both 275 kV and 400 kV infrastructure. WSCC expects the Applicant to maintain the EMF levels below the recommendations for both transient and residential exposure as appropriate, as embedded environmental measures within the design (and outlined in Table 28-13 of Chapter 28 of the ES).

Negative

19.19. The built and natural environment are recognised as major determinants of health and wellbeing; they are a key aspect and can unlock many opportunities to create healthy and sustainable places to live, work and play. Developments must consider the health and wellbeing of residents and communities of West Sussex whilst developing project design. It is accepted that the scale and nature of the utilitarian built infrastructure involved, is such that avoidance of landscape and visual impacts to the communities surrounding the Project is difficult to achieve. In this regard, proposed embedded mitigation measures are, in principle, welcomed as generally well-considered measures to reduce and mitigate landscape and visual impacts. However, WSCC is concerned that visual impacts of the Oakendene substation may have been underestimated (see Section 9 of the LIR for further details).

19.20. During operation, the key potential for noise impacts arises from the proposed Oakendene substation and siting of large electrical plant, which would inevitably result in permanent elevated localised noise levels in a rural area where background noise levels are relatively low.

19.21. WSCC is concerned that operational noise impacts of the substation have been underestimated and that a number of residential properties in close proximity to the site, may experience adverse noise impacts, in particular during the night-time. Concerns are also raised that there has been no assessment of potential noise impacts on the amenities of neighbouring Public Rights of Way (PRoW), see Section 10 of the LIR for further details).

Required Mitigation

19.22. WSCC seeks assurances that the emergency response plans, secured through the dDCO, will include timely actions that are taken in the event of damage to utilities, which is a potential risk due to trenching a large swathe through the County. Owing to the potential for, and significant issues associate with, utility outages, delays in the mobilisation of support to the communities affected, especially to those who are vulnerable in the communities, needs to be planned and mitigated for.

19.23. The Application does not evidence engagement with the affected communities and how the outcome of those engagements have influenced the Applicant's assumptions used as a basis for the assessment findings and decisions on mitigation measures to reduce these impacts. Specifically, impacts on communities near the proposed site of the onshore substation and the temporary construction compound sites.

19.24. WSCC requests that additional mitigations are considered to address any exceedances and to ensure the public is protected if these exposures occur for longer than is currently anticipated. Considering the nature of noise effects, co-designing mitigations with affected communities may be beneficial.

19.25. As part of the DCO process, WSCC wishes to engage proactively with the Applicant to reduce the areas of concern and seek to achieve the best possible outcomes for the local communities and other sensitive receptors that would be most affected by the construction and long-term operational impacts of the Project.

19.26. Please refer to other sections of the LIR to identify mitigation of identified adverse effects, namely Section 9 (LVIA), Section 20 (Noise and Vibration) and Section 13 (Traffic and Transport).

Appendix A – Pen Portraits

Table 1: Local Impact Report Lead Authors Pen Portraits

Name	Examination Role	Job Title	Expertise
Michael Elkington BA (Hons), DipTP, DipSM, MRTPI	WSCC Core Team	Head of Planning Services, WSCC	A Chartered Town Planner and Full Member of the Royal Town Planning Institute, with 35 years of experience in land-use planning, primarily in planning policy and development management. Mike has worked in local government at district and county level, joining WSCC in 2000. He has been WSCC's head of service for planning since 2008. In relation to WSCC's role as a host authority for Rampion 2 Offshore Wind Farm, Mike is the Senior Responsible Officer (SRO) for WSCC, which includes overseeing the Authority's engagement in the DCO process as a statutory consultee, briefing senior members and officers, and recommending sign-off for key documents. He was previously the SRO for WSCC in relation to the Rampion 1 OWF, which included signing-off the discharge of DCO Requirements.
Amy Harrower BSc (Hons), MSC, MIEMA CEnv	WSCC Core Team	Rampion 2 DCO Project Officer for WSCC	Chartered Environmental Consultant and Full Member of the Institute of Environmental Management and Assessment (IEMA), with 15 years of experience in EIA and 10 years in NSIPs and the DCO process. Contracted by WSCC to provide specialist input into the NSIPs that WSCC are host authority for, including Gatwick Norther Runway Project (NRP), Rampion 2 OFW and A27 Arundel Bypass. Amy is lead officer for the Rampion 2 Project, managing and collating WSCC officer responses to the Project through the DCO process. Before her contract to WSCC in 2020, Amy worked for an environmental consultancy specialising in EIA and onshore consenting for NSIPs.
Rupy Sandhu	WSCC Core Team	Principal Planner, WSCC	Principal Planner with 14 years of experience in Planning Policy, having worked at WSCC since 2012. Rupy forms part of the Core Team, as well as specialising in minerals and waste planning matters related to the Project.
Nicholas Scott	WSCC Core Team	Principal Rights of Way Officer, WSCC	Subject matter expert having worked in the field of Public Rights of Way for just under 20 years.

Name	Examination Role	Job Title	Expertise
Ian Gledhill BSc MCIHT	WSCC Core Team	Principal Planner, County Highways team, WSCC	Principal Planner in the County Highways team at WSCC. 17 years of experience across various roles of development related transport planning and highway design. Ian has represented WSCC at planning appeals and planning committees. Ian is reviewing the highways and transport related implications of the Project.
Kevin Macknay IEng MICE ACIWEM	WSCC Core Team	Drainage and Flood Lead Professional, WSCC	Incorporated Engineer, a Member of the Institution of Civil Engineers (ICE) and Associate Member of the Chartered Institution of Water and Environmental Management, with over 40 years of experience in highway and drainage design. Until recently Kevin led the Flood Risk Management Team with WSCC for the last 12 years, prior to that he was Drainage Asset Manager and Engineering Manager based at one of WSCC`s three Area Offices.
Graham Roberts BSc (Hons), MSc, MCIEEM	WSCC Core Team	County Ecologist, Environment and Heritage Team, WSCC	County Ecologist and Full Member of the Chartered Institute of Ecology and Environmental Management (IEEM), with 36 years' experience as a local government ecologist. Graham has held the post of County Ecologist at WSCC for the past 21 years.
Jordan Walker MArborA	WSCC Core Team	County Arboriculturist, Environment and Heritage Team, WSCC	Subject matter expert for arboriculture with 13 years of industry experience, six of which relevant to planning and arboriculture. Jordan joined WSCC in 2022.
James Neave	WSCC Core Team	Principal Planner, County Planning, WSCC	Principal Planner with 18 years of experience in Development Management, working within West Sussex since 2005. James has represented WSCC at planning appeals and planning committees and was the lead officer that dealt with the discharge of DCO Requirements for Rampion 1.
Carolyn Carr	WSCC Core Team	Economic Development Strategic Lead, WSCC	Subject matter expert on socio-economics, including supply chain, employment and skills, and the visitor economy, and responsible for County Council Economy Plan with than 15 years' experience.
Chloe Hunnisett BA, MA, MCIfA	WSCC Core Team	County Archaeologist, WSCC	Subject matter expert for archaeology and historic environment. Archaeologist and heritage professional with 17 years' experience in the sector. Chloe has a background in

Name	Examination Role	Job Title	Expertise
			archaeological fieldwork and worked as a Heritage Consultant and project manager for 10 years. Chloe specialises in archaeological mitigation and the settings of heritage assets. Member of the Chartered Institute for Archaeologists.
Dave Widger	AECOM (external consultants)	Director of Economic Development - AECOM	Subject matter expert for socio-economics with 23 years in the sector. Worked on several major DCO and Hybrid Bill applications including A303 Stonehenge, High Speed 2, and Luton Airport.
Jon Howells	AECOM (external consultants)	Regional Director, Economic Development - AECOM	Subject matter expert for socio-economics with 15 years in the sector. Jon has acted as discipline lead for socio-economics on several renewable energy NSIPs including Longfield Solar Farm, Sunnica Energy Farm, Gate Burton Energy Park and the Viking CCS Pipeline. He also has extensive experience in representing Local Authorities at Local Plan examination on economy and employment matters, and is currently working with the neighbouring Brighton & Hove City Council and Lewes District Council on economic evidence base studies.
Tanneth Melhuish	WSCC Core Team	Chartered Legal Executive, Environment Legal Team, WSCC	Chartered Legal Executive and Full Member of the Chartered institute of Legal Executives and has worked within the Environment Legal Team at WSCC for 19 years. Legal expertise extends to rights of way, common land & village greens, highways, planning, minerals and waste sites, CPO's and DCO's.
Barry Newell. RGN, DipHEP, DipN, PgD MH&SC, PgCert IPC, NEBOSH, Level 7 Health Protection.	WSCC Core Team		Head of Public Health EPRR & Health Protection Nurse. Over 40 years Nursing and 18 years Public Health/ Health Protection in NHS and Local Government.
James Mcgrath	West Sussex Fire and Rescue Service (WSFRS)	Station Manager - Risk & Improvement	James has 20 years' experience with WSFRS. His current role is to understand organisational and operational risk to WSFRS. His previous role for WSFRS was a Gatwick Liaison Officer.

Appendix B – draft Development Consent Order Comments

Table 1: Review of the draft Development Consent Order [Revision B] dated January 2024 and accompanying Explanatory Memorandum

It builds upon the commentary in the LIR topic specific impacts table.

Provision	Comment
General page numbering	It would be very useful if the contents page could have page numbering for each relevant section, this would make it much easier to navigate.
Part 3, article 11 and article 13 (2)	The works are indicated to have deemed consent if the Planning Authority does not respond within the stated timeframe. However, the wording within 13(b) requires the Planning Authority to consult with the Highway Authority. In the situation that the Planning Authority does not respond and the works are consented, this places the Highway Authority in an unreasonable position of having to take forward works it has not had an opportunity to review. If this requirement is to remain, the requirement for deemed consent should be removed or further justification provided by the Applicant for this. If deemed consent is to be retained, a longer time frame (suggested 45 days) should be included given the multi-authority consultation. WSCC, as Local Highway Authority (LHA), would require full cost recovery through a legal agreement to undertake the role of consultee for this, due to the amount of work required to fulfil this role.
Part 3, article 15 (5)	WSCC does not consider there to be a pressing need for deemed consents to be included. If deemed consents are to be included, the Applicant would need to provide further justification.
Schedule 1 Part 3 Requirements	
Requirement 1- Time limits	Please set out and define what constitutes practical completion. This is important with regard to triggering the start of the aftercare period for hedgerows, trees, habitat creation, etc. (When does Year 1 of the Monitoring & Management Protocol commence?).
Requirement 7 – onshore design parameters	Add *detailed* to the title. Add '*The onshore works must not exceed the parameters assessed in the environmental statement and detailed below'.* Where are other relevant onshore cable design parameters – working widths, haul route maximum width detailed? All should be developed in accordance with a design principles document and construction method statements. No mention of any time limits for removal of construction compounds and site restoration.
Requirement 10 – programme of Works	This Requirement should include: *The term 'commence' as used in paragraph (1) above includes any site preparation work, ecological mitigation and temporary hardstanding*.

Provision	Comment
Requirement 12 – provision of landscaping	This Requirement should list the scope of the Plan that need to be included, as a minimum, location, number, species, size and planting density of any proposed planting including any trees; and implementation timetables for all landscaping works.
Requirement 13 – implementation and maintenance of landscaping	A detailed landscape and ecology maintenance, management and monitoring protocol (MMMP) should be secured under Requirement 13 (Implementation and maintenance of landscaping).
Requirement 14 Biodiversity Net Gain	This Requirement needs to explain the purpose and content of the proposed BNG strategy, and the mechanism to approve the delivery of both off-site and on-site BNG. Although it is proposed that significant elements of BNG will be delivered prior to the commencement of construction, plus more during the early stages of construction, the approval process for this BNG is not clear.
Requirement 15 – highway accesses outside of the SDNP	The wording within this appears contradictory to that within Part 3, 13, where the access details are submitted to the Planning Authority who then consult with the highway authority. Schedule 1, Part 3, requires only that the details are submitted to the highway authority. This specifies WSCC as approving this Requirement. However, as with any other non-NSIP energy-related development, this should state approval by the relevant planning authority, in consultation with WSCC as LHA. Furthermore, WSCC would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement, due to the amount of work required to fulfil this role.
Requirement 15 (2)	After the wording '*to Department for Transport Design Manual for Roads and Bridges design standards...*' it's suggested that the additional wording '*or as otherwise agreed with the highway authority*' is included. This then affords some flexibility in the design given that the DMRB is not always appropriate. An additional paragraph is required covering the removal of any temporary works, including the reinstatement of any temporary vehicular access. This needs to tie in with the OCoCP vegetation retention plans.
Requirement 16 – highway accesses in the SDNP	This specifies WSCC as approving this Requirement. However, as with any other non-NSIP energy-related development, this should state approval by the relevant planning authority, in consultation with WSCC as LHA. Furthermore, WSCC would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement, due to the amount of work required to fulfil this role.
Requirement 16 (b)	As per the comments above, it is recommended that after the wording '*to Department for Transport Design Manual for Roads and Bridges design standards...*' that the additional wording '*or as otherwise agreed with the highway authority'* is included. This then affords some flexibility in the design given that the DMRB is not always appropriate.

Provision	Comment
	An additional paragraph is required covering the removal of any temporary works. This needs to tie in with the OCoCP vegetation retention plans.
Requirement 17 and 18 Surface and foul water drainage	The title of this Requirement should make it clear that it also relates to the operational phase. This specifies Lead Local Flood Authority (LLFA), i.e. WSCC, approving this Requirement. However, as with any other non-NSIP energy-related development, this should state approval by the relevant planning authority, in consultation with the LLFA. WSCC, as LLFA, would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement, due to the amount of work required to fulfil this role.
Requirement 19 – onshore archaeology Sub-paragraph (6)	This specifies being approved in writing by the relevant planning authority in consultation with WSCC. As stated in Section 6.11 of the LIR, WSCC would only wish to be a consultee on DCO Requirements that are a statutory function (LLFA or LHA) and, therefore, WSCC should not be named as having a role in this Requirement. There is a need to avoid harm to any nationally significant archaeological remains identified post-consent within the DCO Limits. The preservation in situ of any such archaeological remains must be achieved via design changes/micrositing where required, and a robust methodology for this micro-siting process must be secured via DCO requirements to ensure it is viable. WSCC require the addition of the wording: "*In the event of the discovery of nationally significant archaeological remains within the onshore Order limits, their preservation in situ must be secured in accordance with the methodology set out within the outline onshore written scheme of investigation. The significance of any such archaeological remains and their suitability for preservation in situ must first be assessed via field evaluation. Should archaeological remains be left in situ on any site, a site-specific archaeological management plan must be submitted to and approved in writing by the relevant planning authority. Any further works, including removal and reinstatement, must be carried out in accordance with the approved site-specific archaeological management plan, unless otherwise approved by the relevant planning authority.*"
Requirement 20 – Public Rights of Way	This specifies WSCC (as LHA) as approving this Requirement, in consultation with the relevant planning authority. However, as with any other non-NSIP energy-related development, this should state approval by the relevant planning authority, in consultation with WSCC as LHA. Furthermore, WSCC would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement, due to the amount of work required to fulfil this role.
Requirement 22 – Code of Construction practice	This Requirement needs to also secure: • construction sequencing/phasing to secure C-19 • community engagement plan

Provision	Comment
	• construction hours should specifically be included in this requirement • need for an outline NVMP document (see Noise section of the LIR which provides details on what this outline should include). WSCC, as LHA and LLFA, would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement.
Requirement 23 – onshore construction method statement	Method statements needed for all crossings and must clarify the methodologies to demonstrate that detailed trenchless HDD proposals would result in '*no new or materially different environmental effects arising compared to those assessed in the ES'*
Requirement 24 CTMP - (2)(a)	Reference should be included to traffic avoiding the Storrington AQMA. This specifies WSCC (as LHA) as approving this Requirement, in consultation with the relevant planning authority. However, as with any other non-NSIP energy-related development, this should state approval by the relevant planning authority, in consultation with WSCC as LHA. Furthermore, WSCC would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement, due to the amount of work required to fulfil this role.
Requirement 32 – Operational travel plan	The Requirement should include reference to the Operational Travel Plan being agreed in consultation with WSCC as LHA. WSCC would require full cost recovery through a legal agreement to undertake the role of consultee for this requirement.
Schedule 2, Streets Subject to Works	It is not exactly clear why some accesses/roads are included and others are not. It is appreciated that some of the accesses are existing (i.e. those on Ferry Road and the A283) but are included anyway. It would be beneficial to understand on what basis certain accesses have been included and others have not. At a number of those existing but excluded accesses, works will still be required to form visibility splays or to temporarily widen to accommodate construction traffic.
Schedule 2, Streets Subject to Works	Access A-46 onto Spithandle Lane is indicated as a new access but no works are indicated within this schedule as being associated with it.
Schedule 3, Streets to be Temporarily Closed	The proposed closure of the B2116 Shermanbury Road contradicts that included in table 7-1 of the Outline Construction Traffic Management Plan. The entry for this location in the table implies the road would remain upon but would require traffic management; the road would therefore remain open.

Provision	Comment
Schedule 4, Public Rights of Way	See Table 2 below regarding PRoW comments in this Schedule.
Schedule 13 Hedgerows	This may require amending subject to the submission of documents suggested to correct the errata highlighted by WSCC to the Applicant and further hedgerow anomalies stated.
Schedule 14 – procedure for discharge of certain approvals (2) Further information	• 15 business days for further information is not long enough, given the need for consultation with other parties. Further clarification on process of consultation with other parties should be included and the provision of information by consultees. • Does not make clear if requirement schemes will be expected to be in accordance with any '*measures for success'* or 'objective standards' and whether this will form part of the ES/DCO application. Please see attachment regarding the '*measures for success'* as developed for Rampion 1.

Table 2: Schedule 4, Public Rights of Way Comments

PRoW No.	Identifier References	Comments	Reasoning
Schedule 4 Part 1			
FP174	01a – 01b	Needs full closure between junction with 173 to junction of 829	Paths must be closed highway to highway so as not to create dead end routes
FP173	02a – 02b	Needs full closure between junction with FP174 and Ferry Road	Paths must be closed highway to highway so as not to create dead end routes
FP168	03a – 03b and 04a – 04b	Needs full closure of FP168 between Church Lane and FP206	Paths must be closed highway to highway so as not to create dead end routes
FP2163/1	06a – 06b	Needs full closure of FP2163/1 between each end of the routes junctions with Lyminster Road	Paths must be closed highway to highway so as not to create dead end routes
FP2202/1	08a – 08b	Needs full closure between junction with BW2163 and Lyminster Road.	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.

PRoW No.	Identifier References	Comments	Reasoning
FP2199	10a – 10b	Needs full closure between junction with FP2200 to the junction of FP2201	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP2198	11a – 11b	Needs full closure between junction with FP2199 and the A27	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP2176	12a – 12b	Needs full closure between junction withFP2198 and the A27	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP2190	13a – 13b	Needs full closure between junction with BW2208 and the A27	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP2174/1	16a – 16b	Needs full closure between junction with FP2188/1 and junction with BW2208	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
BW2208/1	17a – 17b	Needs full closure between junction with BW2209 and junction with BW2264	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP2260/1	18a – 18b	Needs full closure between junction with BW2209 and junction with FP2262	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a

PRoW No.	Identifier References	Comments	Reasoning
			commitment to explore alternative routes further to reduce impact on users.
FP2262	19a – 19b	Needs full closure between junction with BW2209 and junction with FP2260/1	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
BOAT2092	25a – 25b	Needs full closure between junction with RB2693 and junction with FP2104. Also this route is not a BOAT it is a Restricted Byway (RB)	Paths must be closed highway to highway so as not to create dead end routes
BW2103	26a – 26b	Needs full closure between junction with RB2092 and junction with BW2106	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
BW2107	27a – 27b	Needs full closure between junction with RB2902 and junction with BW2106	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
BW2018	28a – 28b	Needs full closure between junction with RB2902 and junction with BW2106	Paths must be closed highway to highway so as not to create dead end routes
BW2109	29a – 29b	Needs full closure between junction with RB2902 and junction with BW2106	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
BW2711	36c – 36d	Needs full closure between junction with Washington Road and junction with Spithandle Road (THIS ALSO RELATES TO BW2711 - 36a - 36b)	Paths must be closed highway to highway so as not to create dead end routes

PRoW No.	Identifier References	Comments	Reasoning
FP2520	41a – 41b	Needs full closure between B2135 to its junction with FP2519	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP1841	45a – 45b	Needs full closure between its junction with A281 and junction with FP2808	Paths must be closed highway to highway so as not to create dead end routes
BW1774	45c – 45d	Needs full closure between its junction with A281 and junction with BW2800	Paths must be closed highway to highway so as not to create dead end routes
FP1781	46a – 46b	Needs full closure between its junctions with FP1776/1 at its north and southern ends	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP1776/1	47a – 47b	Needs full closure between junction with FP1781 and junction with FP1782	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP1782	48a – 48b	Needs full closure between its junction with BW1730 and junction with FP1784	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
FP1783	49a – 49b	Needs full closure between its junction with BW1730 and junction with FP1784	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a commitment to explore alternative routes further to reduce impact on users.
BW1730	50a – 50b	Needs full closure between its junction with FP1787 and junction with Kent Street Lane	Paths must be closed highway to highway so as not to create dead end routes. However, due to small closure having big impact, WSCC would expect a

PRoW No.	Identifier References	Comments	Reasoning
			commitment to explore alternative routes further to reduce impact on users.
Schedule 4 Part 2			
BW2711	36a – 36b	If this is to be closed at same time as the same path referenced in Part 1 then this alternative route will be ineffective as the whole length including this will need to be closed to retain public continuity.	Paths must be closed highway to highway so as not to create dead end routes
Schedule 4 Part 3			
BW3514	43a – 43b	An alternative appears to be shown on the sheet (28) numbered T21	Clarification required whether this is the alternative or this is yet to be agreed

Appendix C – Traffic and Transport Comments

Table 1: Outline Construction Traffic Management Plan, revision A, dated August 2023 (APP-228)

Reference	Issue	Recommended Action
1.2.5	The three bullet points refer to matters to be agreed as part of Stage Specific Construction Traffic Management Plans. However, the subjects covered are matters that are included within and are understood to be agreed as part of the Outline Construction Traffic Management Plan.	Confirm where the matters covered within the three bullet points are to be agreed. If these matters are not being agreed as part of the OCTMP, this must be made quite clear within these documents.
3.6.1 and 3.6.3	The 4-year construction programme quoted is contradicted within 3.6.3, which implies 4.5 years with further references to these being minimum durations.	Identify the duration of the construction programme.
3.6.4	There are locations where restrictions will be required on the timing of deliveries made by HGVs to prevent these coinciding with other traffic movements.	The need to restrict deliveries/HGV movements at agreed locations must be referenced within the OCTMP. The precise details can form part of Stage Specific CTMPs.
4.1.2	The final sentence of this paragraph concerning vehicle movements is noted. It is not apparent how this will be controlled, as once the construction access is in place, the presumption is that it will be used for all required purposes.	Intended use of individual construction accesses should be detailed as part of Stage Specific CTMPs. This requirement should be referenced in the OCTMP.
4.1.4	The intended use of the 'Light Construction Accesses' is noted. It should be clearly set out in the OCTMP that these accesses are not being used by HGVs. The design should not accommodate HGVs.	The OCTMP should include a restriction on the vehicles intended to use the 'Light Construction Accesses'.
4.2.1	The large number of accesses are noted. The details contained within figures 7.6.4 in Appendix B of the OCTMP are reviewed in detail within Table 1a below.	Actions are included within Table 1a below.
4.2.2	A key concern highlighted by WSCC is the significant number of accesses indicated as being required. The Applicant would be requested to revisit and where possible reduce the number of construction accesses particularly those onto high-speed rural roads.	The Applicant should review the construction access options and reduce the number of accesses where possible.
4.4.1	The application of DMRB standards (intended for trunk roads) is not always	The wording within this point should be altered to allow for flexibility in

Reference	Issue	Recommended Action
	necessary or desirable. Manual for Streets may be more appropriate in certain lower speed locations.	terms of the design standards to be applied.
4.6.1	Those light construction accesses covered within the first bullet point will need to be identified as such, otherwise suitable visibility splays will be required. From 4.6.3, it is known which accesses will fall within this category.	The OCTMP and Stage Specific CTMPs are to identify those accesses that are to be used infrequently for the purposes of checking the progress of trenchless crossings.
4.8.2	As noted within 4.4.1, it is not always necessary or desirable to comply with the DMRB especially on lightly trafficked, low speed roads. Some flexibility should be included to enable other design standards to be applied in agreement with WSCC.	Additional wording is to be included to enable alternate design standards to be used in agreement with WSCC.
4.8.4	There are locations where it's questioned whether the necessary standard of visibility can be achieved due to constraints imposed by the existing road layout. The accesses have been further reviewed in Table 1a below.	The Applicant is to review visibility splays at all accesses and identify those locations where the required visibility splays cannot be achieved. If the necessary visibility splay standard cannot be met, the applicant will need to identify suitable alternate measures to safely manage traffic entering and exiting the access.
4.8.5	Incorrect speed limits are quoted within Table 4-3. For A-15 and A-16 the speed limit on the Lyminster Bypass is indicated as 30mph. The planning drawings for the proposed road however indicate the speed limit will be 50mph in the indicative access locations. For A-42, the speed limit is 60mph rather than 50mph. For A-44. A-45, A-46 and A-47 the speed limit is 60mph rather than 40mph. For A-25, A-27, A-43 the speed limit is also 60mph rather than 30mph.	The Applicant is to review the speed limits and consequently the visibility splay requirements quoted within Table 4-3 and update accordingly.
4.9.1, Table 4-4	Whilst the list of vehicle types and its classification is noted, ordinarily the definition of an HGV is a vehicle with a gross weight of 3.5 tons or more; the Table implies an HGV is 7.5 tons or more. For the purposes of the Table, the standard definition of an HGV should be included.	The Table is to be updated to refer to HGVs as those vehicles with a gross weight of 3.5 tons or more.
5.4.4, first and second bullet points	The commitment to avoid major settlements where possible is welcomed. However, routing plans still show HGVs using the A272 through	OCTMP to be updated to indicate appropriate use of routes by HGVs for given scenarios.

Reference	Issue	Recommended Action
	Cowfold and the A281 through Henfield. It is accepted that these are A roads and therefore should be used over other road classifications and that it would be necessary for some HGVs to use these routes. It would be appropriate for the OCTMP to identify the scenarios (i.e. where materials are coming in from local sources or to access specific cable route accesses) in which HGVs are permitted to use routes particularly through Cowfold and Henfield, and situations where HGVs should not approach or leave via these routes (e.g. HGVs associated with the Oakendene substation).	
5.4.4, 6th bullet	It is not always necessary or desirable to comply with the DMRB especially on lightly trafficked, low speed roads. Some flexibility should be included to enable other design standards to be applied in agreement with WSCC.	Additional wording to be included to enable alternate design standards to be used in agreement with WSCC.
5.5.1, Table 5.2, number 1.	Reference is made to HGVs avoiding key settlements including the Cowfold AQMA. It is unclear what this means as the routing plans still indicate these routes being used without any controls or restriction. It is accepted in principle that some HGVs may need to use these routes given the lack of suitable alternatives.	Include more specific controls in terms of routing.
6.5.8 and Table 6-2	6.5.8 refers to the movements in Table 6-2 as being for the entire construction programme rather than a peak week or year. Table 6.2 however does not say this. The Table references only that the movements quoted are 2-way totals per week. As such the Table could be taken as misleading. For the purposes of understanding the proposals, it would be more useful to have peak week 2-way vehicle movements referenced rather than movements for the project as a whole. This could replace Table 6-2 or a new Table be provided.	Update Table 6-2 to reflect the text in 6.5.8 and/or provide an additional Table with peak week traffic.
Table 6-2	No vehicle movements are indicated against some of the proposed construction accesses. Given this Table indicates construction accesses and	Table 6.2 should be updated and vehicle movements indicated against all construction accesses.

Reference	Issue	Recommended Action
	vehicle movements, this is clearly incorrect and requires updating.	
7.2.5, Table 7-1	It is unclear why an open cut trench is proposed for Michelgrove Lane, a single track road. On all other adopted (i.e. public highway) single track roads (e.g. Kent Street and Spithandle Lane), trenchless methods are proposed.	Include trenchless crossing for Michelgrove Lane.
8.2.1, 8.2.2, 8.2.3	These sections refer to Michelgrove Lane and the open cut crossing. Again, whilst references are made to traffic management measures, none seem to reflect the actual location or the fact that there is no suitable alternate route.	Include trenchless crossing for Michelgrove Lane or demonstrate how traffic is to be managed whilst the cable route is being installed.
8.2.6	The B2116 is indicated to be subject to traffic management whilst the cable is being installed. The draft DCO indicates the B2116 will be the subject of a road closure. The OCTMP and draft DCO contradict each other.	Update the OCTMP and/or draft DCO to be consistent.
8.4.7	The core hours are noted. Mention should be made of the need to restrict deliveries/HGV activity in and around sensitive locations such as schools. This specifically applies to A37 (Washington village).	Update the OCTMP to restrict HGV activity around school drop off and collection times at sensitive sites, especially in relation to A37. In the event other locations are identified, restrictions and controls can be included as part of phase specific construction traffic management plans.
8.4.21	The wording seems to imply that the highway condition survey would apply only to the access point. The extent of the condition survey may need to cover a length of highway used to provide local access from a classified road through to a development access. The scope, extent and requirement for any survey should be agreed with WSCC. These requirements may vary from location to location.	The wording should be clearer to reflect that the scope and extent of any condition survey would need to be agreed with WSCC prior to works commencing.
8.4.23	Again, similar to 8.4.22, the extent of the restoration/making good would need to be agreed on a site-by-site basis. There may be further works to reinstate within the highway beyond just temporary accesses.	The wording should be updated to reflect that additional works other than the restoration of temporary accesses may be required once works are complete.

Table 1a: Construction and Operational Accesses

Reference	Issue	Recommended Action
Appendix B, Figure 7.6.4a – Temporary Construction and Operational Accesses	Proximity and need of accesses A01, A02, A03, and A04 – These four accesses are located in close proximity of each other. It is unclear why four accesses (three of which are indicated for construction purposes) are required.	Whilst the need to retain access options is recognised, a commitment should be included to avoid the use of all the accesses indicated. It is accepted that accesses would be required on the north (A03) and south (A01) side of Ferry Road but A02 appears unnecessary.
Appendix B, Figure 7.6.4a – Temporary Construction and Operational Accesses	Whilst there are no in principle issues with A05, there is the potential for exiting HGVs to depart towards the A27 via Arundel. There is however advisory signage on Ford Road in Arundel saying that the road is unsuitable for HGVs.	Measures (either through the design preventing right turns or through signage) should be implemented as part of A08 to restrict HGVs from turning northwards on Church Lane. Routing plans should be updated to ensure Ford Road through Arundel is not indicated as an HGV route. Given the importance of this access in serving the compound, the design of the access should be submitted and agreed prior to the DCO being approved.
Appendix B, Figure 7.6.4a – Temporary Construction and Operational Accesses	Proximity and need of accesses A08, A09, and A10 – These accesses are located in proximity of each other. It's unclear why three accesses (two of which are indicated solely for construction purposes (A08 and A09) with A09 and A10 are operational) are required.	Whilst the need to retain access options is recognised, a commitment should be included to avoid the use of all the accesses indicated. There seems no reason why two accesses would be required for construction or operational reasons. Given the high speed nature of the A259, accesses A08 and A09 should operate as left in, left out only accesses with the roundabouts to the east and west used for u-turning movements.
Appendix B, Figure 7.6.4a – Temporary Construction and Operational Accesses	Accesses A14 (light construction and operational) and A15 (construction and operational) seem to serve the same purpose. There seems no reason why both accesses are needed.	Whilst the need to retain access options is recognised, a commitment should be included to avoid the use of both the accesses indicated. There seems no reason why both accesses are required; a single access for construction and operational purposes could be provided.
Appendix B, Figure 7.6.4a – Temporary Construction	A25 (light construction and operational) is located on Blakehurst Lane quite a distance from the main cable route. Whilst the cable route	Whilst the need to retain access options is recognised, the need for this access both for construction and operational purposes appears

Reference	Issue	Recommended Action
and Operational Accesses	can be accessed from A25 via private tracks within Angmering Park, other accesses would provide a more direct route. Blakehurst Lane is also a single-track road with there being concerns as to how traffic could be managed during construction.	unnecessary given other available and more direct options.
Appendix B, Figure 7.6.4b – Temporary Construction and Operational Accesses	Access A24 (light construction and operational) is located on Swillage Lane, a single-track road. There are concerns with the ability to manage construction traffic.	There are no concerns with A24 being retained for operational purposes, but it would be desirable if all construction traffic uses A22 and A23.
Appendix B, Figure 7.6.4b – Temporary Construction and Operational Accesses	A26 (construction and operational) makes use of Michelgrove Lane, a single-track road. There are concerns in terms of how construction traffic would be managed along this route. The design of the Michelgrove Lane/A280 junction is limited and not suited to HGV movements. Concerns include the restricted visibility to both the north and south in light of the posted speed limit and the restricted kerb radii on the northern side, making it likely that exiting HGVs would over-run the centreline when exiting to the north.	If this access is required, additional mitigation would be required to Michelgrove Lane. This could include HGVs laying up with drivers phoning ahead to ensure they will encounter no Rampion 2 vehicles exiting or arriving, or physical works to create passing places on Michelgrove Lane. Temporary traffic management measures would be required at the Michelgrove Lane/A280 junction to enable vehicles to safely exit. It is suggested that HGVs only turn left in and left out to minimise the impact of delivery traffic on A280 traffic flows.
Appendix B, Figure 7.6.4c – Temporary Construction and Operational Accesses	A33 and A35 (both construction) are onto the A283. The design and management of the accesses should be mindful of traffic flows on the A283 and the existing AQMA in Storrington.	Traffic (particularly HGVs) should be restricted to arrive and depart to the west (to the A24) only.
Appendix B, Figure 7.6.4c – Temporary Construction and Operational Accesses	A37 is indicated for light construction use. Traffic using this access would use School Lane, which is narrow and has on-street parking. There is also a primary school in close vicinity and accessed from School Lane. Traffic could seemingly use A38, which is does not have the same access constraints.	If this access is required, management measures would be required to avoid conflicts with school related traffic. A38 should be used as an alternative if possible.
Appendix B, Figure 7.6.4c – Temporary Construction and	A39 is to provide access into the Washington construction compound. The access is indicated to be on the inside of a bend restricting visibility for exiting vehicles. Forward visibility	Appropriate visibility splays would be required. Additional migration will be required in light of the number of movements into and out

Reference	Issue	Recommended Action
Operational Accesses	for vehicles turning right into the access is also restricted.	of the compound given the high flows and speeds on the A283. Given the importance of this access in serving the compound, the design of the access should be submitted and agreed prior to the conclusion of the DCO examination.
Appendix B, Figure 7.6.4c – Temporary Construction and Operational Accesses	A43 and A43a are indicated as providing construction access onto the A283. Visibility to the east appears restricted by the road alignment. Specific measures would be required to control and restrict vehicle movements. The track leading northwards from the access is single-track.	Appropriate visibility splays would need to be demonstrated. Ideally traffic would arrive from the west and depart to the east thereby avoiding right turning traffic obstructing flows on the A383. Specific traffic management measures may be required if vehicles (HGVs) will be required to turn right. The existing access track would need to be widened.
Appendix B, Figure 7.6.4c – Temporary Construction and Operational Accesses	A46 (light construction and operational) is onto Spithandle Lane, a single-track road.	Measures will be required to manage, and ideally minimise, traffic using the single-track road.
Appendix B, Figure 7.6.4c – Temporary Construction and Operational Accesses	The access tracks leading from the B2135 at A48 and A50 (construction and operational), A49 (light construction and operational), A50a (construction) are narrow. This could cause vehicles to queue back onto the highway.	Passing places should be provided on the access tracks to enable two vehicles to pass. Alternately traffic management measures may be required to avoid conflicting movements.
Appendix B, Figure 7.6.4d – Temporary Construction and Operational Accesses	There is the potential for HGV traffic arriving and exiting A53 (construction) to and from the west through Partridge Green.	The access should be designed to restrict vehicle movements and encourage vehicles to turn left towards the A281. Routing arrangements should be implemented to ensure vehicles arrive and depart to the east.
Appendix B, Figure 7.6.4d Temporary Construction and Operational Accesses	The access tracks leading from the B2135 at A56 and A57 (construction and operational) are narrow. This could cause vehicles to queue back onto the highway.	Passing places should be provided on the access tracks to enable two vehicles to pass. Alternately traffic management measures may be required to avoid conflicting movements.
Appendix B, Figure 7.6.4d Temporary	A62 is indicated to be used for construction purposes with this understood to provide access to the	Additional measures should be included to assist exiting HGVs. Signage may also be required to

Reference	Issue	Recommended Action
Construction and Operational Accesses	Oakendene west compound. Whilst the access is existing, the level of use is anticipated (particularly by HGVs) to significantly increase temporarily during construction. The increase in slow moving HGVs exiting onto the busy A272 is a concern.	alert drivers on the A272 to the presence of exiting/turning HGVs. HGV movements should be timed to avoid the network peak hours where possible. Given the importance of this access in serving the compound, it is recommended that this is the subject of a Stage One RSA prior to the conclusion of the DCO examination.
Appendix B, Figure 7.6.4d Temporary Construction and Operational Accesses	A63 is indicated to be used for construction purposes associated with the new substation (Oakendene substation compound). The new access is anticipated to be used by a significant number of HGVs during construction. The increase in slow moving HGVs exiting onto the busy A272 is a concern.	Additional measures should be included to assist exiting HGVs. Signage may also be required to alert drivers on the A272 to the presence of exiting/turning HGVs. HGV movements should be timed to avoid the network peak hours where possible. Given the importance of this access in serving the compound, the design of the access should be submitted and agreed prior to the conclusion of the DCO examination. This should include submission of a Stage One RSA.
Appendix B, Figure 7.6.4d Temporary Construction and Operational Accesses	A61 and A64 (construction and operational) use existing accesses onto Kent Street. Kent Street is single track and not designed to accommodate any substantial increase in traffic movements. Kent Street exits to the north onto the A272. Again, measures should be sought to assist HGVs exiting onto the A272.	Measures will be required to control and avoid conflicting vehicle movements along Kent Street. Passing places should also be provided within the existing public highway. Additional measures should be included to assist exiting HGVs. Signage may also be required to alert drivers on the A272 to the presence of exiting/turning HGVs. HGV movements should be timed to avoid the network peak hours where possible.
Appendix B, Figure 7.6.4d Temporary Construction and Operational Accesses	A67 (construction and operational) and A68 (construction) are both existing. There are no concerns with the accesses themselves, but measures will be required along Wineham Lane to mitigate the additional construction traffic. This may also require measures at the A272 Wineham Lane junction.	Measures will be required to control and avoid conflicting vehicle movements along Wineham Lane Additional measures should be included to assist exiting HGVs both at the Wineham Lane accesses but also at the A272 Wineham Lane junction. Signage may also be required to alert

Reference	Issue	Recommended Action
		drivers on the A272 to the presence of exiting/turning HGVs. HGV movements should be timed to avoid the network peak hours where possible.
Appendix B, Figure 7.6.6a Local Access Route	The plan indicates HGVs routing from the A27 southwards along Ford Road. There is advisory signage at the Arundel end of Ford Road advising that the road is unsuitable for HGVs.	The plan should be amended with Ford Road removed as a potential HGV route; HGVs should arrive and depart via the A259 to the south only.
Appendix B, Figure 7.6.6c	The plan indicates HGV routing along the A272 through Cowfold from the west and using the A281 to the south. Some HGV activity through Cowfold is considered acceptable but in light of the Air Quality Management Area and existing traffic congestion, movements should be restricted. The majority of HGVs should arrive from the A23 to the east.	The plan should be updated to indicate HGV routing through Cowfold only where strictly necessary.

Table 1b: Road Safety Audit Requirements

Access Reference	RSA Required	Reason	Trigger
A05, A39, A62, A63, A64	Yes	Permanent access and/or temporary construction access into a fundamental element of the proposals (i.e. a site compound or substation).	Prior to the conclusion of the DCO examination.
A01, A09, A12, A13, A15, A16, A28, A33, A35, A40, A41, A42, A43, A47, A48, A50, A53, A56, A57, A67, A68	Yes	These all involve temporary construction access onto classified roads, some of which are rural in nature and high speed. It may be possible to reduce this list as designs are agreed through subsequent stage specific construction management plans.	As part of the detailed design for the accesses and as part of the stage specific construction management plans.
A37, A38, A43a, A61, A64	No	These all involve temporary construction access onto unclassified roads or roads subject to a 30mph speed limit. It is generally considered that any safety related aspects can be resolved through the detailed design and stage specific construction management plans. Should site specific issues arise through the detailed design, WSCC	N/A

Access Reference	RSA Required	Reason	Trigger
		reserves the right to request an RSA if appropriate.	
A02, A03, A04, A06, A08, A10, A11, A14, A17, A18, A20, A23, A24, A25, A27, A29, A30, A31, A32, A34, A36, A37, A38, A43b, A44, A45, A46, A49, A50a, A50b, A51, A53, A54, A55, A58, A59, A60, A65, A66, A69	No	All of these accesses are indicated as light construction, operational, or a combination of both light construction and operational. These accesses are indicated to be very lightly trafficked. The design of these accesses would mitigate their impact on the local highway network.	N/A
A20, A21, A22, A23	TBD	These accesses use side road onto the strategic road network. The need for an RSA should be determined by National Highways.	N/A

Table 2: Outline Construction Workforce Travel Plan (OCWTP) (APP-229)

Reference	Issue	Recommended Action
4.2.3	Given the indicated targets in Table 5-1, the Transport Review Group and the number of members seems disproportionate. It is recommended that the TRG better reflects the limited nature of the targets.	Review the scale and extent of the TRG.
Table 5-1	The rural location of most of the construction sites is appreciated. It is still considered that the targets could be more challenging especially for car passengers and bus/multi-occupancy vehicles. With the bus, the Applicant is indicating the possibility of a more significant service from Haywards Heath railway station but equally important is the provision of multi-occupancy vehicles as included in 6.7 of the OCWTP.	Revised the targets.
5.4.10	It is suggested that the surveys could be every 6 rather than 3 months. 3 months seems very frequent.	Update the survey frequency.
5.6.1, Table 5-2	It is suggested that the Action Plan includes an action to advise those driving to the site of recommended routes to avoid the use of narrow unclassified rural roads, where	Include additional Action in Table 5-2.

Reference	Issue	Recommended Action
	possible. This is more a measure to reduce impacts on rural communities.	
5.6.2	As per 5.5.10, the timing should be adjusted to 6 monthly.	Update timing of monitoring report.
7.2.10	The monitoring data should be submitted every 6 months rather than quarterly.	Update the timing of the monitoring report.
7.2.12	WSCC are unlikely to be able to host the meeting minutes. There seems no reason why these could not be stored on a website operated by the Applicant.	Remove reference to WSCC website and replace with another location.

Table 3: Outline Operational Travel Plan (OOTP) (APP-227)

Reference	Issue	Recommended Action
WSCC have no comments regarding the OOTP. For the purposes of the project, those elements (namely the Oakendene substation) within WSCC are in rural locations that have very limited transport opportunities but will also attract a limited number of vehicle movements. WSCC have no comments regarding the OOTP in relation to the port-based activities.		

Table 4: ES Volume 2, Chapter 23 Transport, revision A (APP-064)

Reference	Issue	Recommended Action
23.4.34	There are a number of sections within this document as well as others that assume that Newhaven will be the port base for maintenance activities associated with the offshore elements. The comment within this point identifies that this has not yet been determined, and it's unclear when this decision would be made. As such, the assumptions and assessment relating to Newhaven will potentially have to be revisited, along with other port locations being assessed prior to the examination concluding.	Applicant to provide certainty that Newhaven will be used or identify and assess other potential operational ports that could be used instead.

Table 5: ES Volume 4, Appendix 23.2: Traffic Generation Technical Note (APP-197)

Reference	Issue	Recommended Action
3.2	Study Area 2 is located outside of West Sussex. No comments will be offered on Study Area 2.	None required.

Reference	Issue	Recommended Action
3.2.32	The exclusion of the Lyminster Bypass is unacceptable. The bypass will be operational prior to Rampion 2 commencing construction. It will therefore provide a usable route. In simple terms, it would only result in the localised redistribution of vehicle movements away from the existing A284 to the new bypass. Construction access is also shown off the bypass so this will need to be suitably assessed.	Include the Lyminster Bypass within the appropriate assessments.
5.1.4	The actual means by which traffic generation has been calculated is unclear. Beyond the first sentence of this paragraph, there is no supporting information detailing the assumptions applied or the resultant number of vehicle movements.	Additional details must be provided in terms of the assumptions applied for construction traffic generation.
5.1.6	Similar to 5.1.4, it would be helpful if the Note could be more transparent in terms of vehicle traffic generation.	Additional details must be provided in terms of the assumptions applied for construction traffic generation.
5.8.10	The use of a peak week for the purposes of vehicle movements has been previously agreed. It would be helpful if some indication could be made as to the duration of the peak week levels of traffic (it is not certain that a peak traffic will occur over a single week) as well as average traffic movements.	Clarify the duration of 'peak week traffic', provide details of average traffic flows away from the peak.

Table 6: ES Volume 4, Appendix 23.1, Abnormal Indivisible Loads Assessment (APP-196)

Reference	Issue	Recommended Action
2.2.4	The AIL assessment assumes that Shoreham Port would be used as the starting point for AILs. However, the AIL Assessment indicates only that Shoreham is anticipated to be used; it doesn't state that it will be used.	An AIL Assessment relevant for the port to be used should be secured and the existing Assessment updated.

Appendix D – Historic Environment comments

Table 1: Detailed comments on Chapter 25, Historic Environment and chapter appendices

Reference	Issue	Recommended Action
ES Volume 2, Chapter 25: Historic environment (APP-066)		
25.8.15	**The ES may not always accurately reflect the scale of harm to the historic environment arising from the WTGs and offshore substations.** The degree of harm to onshore designated heritage assets is assessed as minor adverse for 32 assets and moderate adverse for 13. WSCC requests clarity on the methodology by which residual effects to all heritage assets within the moderate harm category are uniformly assessed as 'not significant' in EIA terms. The ES methodology states that professional judgement is applied to determine whether a residual effect assessed as Medium ('potentially significant') is in fact 'significant'. WSCC is concerned that this methodology lacks transparency and may downplay the cumulative effects of WTGs and offshore substations on onshore designated heritage assets.	Provide clarity on the process by which residual effects to designated heritage assets within the moderate harm category are uniformly assessed as 'not significant' in EIA terms.
	Assessment of substantial vs less than substantial harm to designated heritage assets. The ES methodology for equating residual effects to either substantial or less than substantial harm in NPPF terms lacks nuance. The methodology simply equates a major magnitude of adverse change to substantial harm; adverse change below this level would be uniformly assessed as less than substantial. In the case of designated assets where the degree of harm is not clearly identifiable as low (for example Oakendene Manor), a more nuanced assessment of harm is required. Assessment should consider and describe how and to what degree the Project will affect the special qualities and significance of the asset and the ability to appreciate that significance.	Review and provide clarity to stakeholders on the methodology for assessing substantial/less than substantial harm. Where appropriate, consider providing statements which utilise a more graduated scale of harm, such as stating whether harm is at the upper or lower end of substantial/less than substantial harm. Ensure these statements can be evidenced by appropriate visualisations
	Assessment of magnitude of change post-mitigation and calculation of residual significance of effect WSCC disagrees with the degree to which proposed mitigation in the form of archaeological excavation ('preservation by	Amend the ES assessment. Agreed/essential archaeological mitigation, preservation by record, should be assessed as reducing the magnitude of adverse change by only one

Reference	Issue	Recommended Action
	record') will reduce the residual significance of effect on heritage assets. Archaeological mitigation in the form of preservation by record can partially offset the harm caused by construction effects. The need to reflect the effects of mitigation (by a reduction in the calculated magnitude of harm) within the ES assessment framework is acknowledged. But the harm has still occurred in the form of the permanent (partial or total) loss of irreplaceable archaeological remains; this principle is enshrined within the NPPF and supported by NPS-EN1 (para 5.9.16). The current ES assessment methodology does not reflect this position. Archaeological remains located within the construction corridor which will suffer direct physical impacts (total or partial removal and associated loss of significance) will suffer a high magnitude of adverse change in the absence of mitigation. The assertion that prior recording will reduce the magnitude of negative change from high to low is strongly contested.	level (e.g. from high to medium) in the case of total or majority loss of (substantial harm to) archaeological remains arising from direct physical construction impacts. Any archaeological feature which will be completely removed during construction cannot be assessed as a low magnitude of adverse change following mitigation, as this does not reflect the position that archaeology is an irreplaceable resource.
25.8.13	**Assessment of harm during construction phase** When calculating magnitude of change within the settings of designated heritage assets during the construction phase, the ES factors in the temporary duration of these changes. WSCC accepts the principle that the temporary duration can reduce the magnitude of harm somewhat. However, this needs to be assessed on a case-by-case basis, especially in locations where construction will persist for longer durations, such as landfall, haul roads, construction compounds and substation and grid connection locations. WSCC considers the magnitude of construction impact is sometimes underassessed on the basis of the temporary duration of construction works.	Review assessments of magnitude of change during construction. Where appropriate for certain assets and longer duration impacts, amend to ensure the assessment accurately reflects the severity of adverse change which will be experienced during the construction phase.
Onshore desk-based geoarchaeological and palaeoenvironmental assessment report (Volume 4, Appendix 25.3, APP-202)		
General comment	The desk-based geoarchaeological and palaeoenvironmental assessment report provides a good overview of the geology and sedimentology of the onshore Order Limits. It also provides a good summary of the potential for archaeological and palaeo-environmental remains	N/A

Reference	Issue	Recommended Action
3.2.12	The Palaeolithic archaeological potential of specific areas/features of Subzone 2a may be underassessed. Whilst overall the potential is low for the majority of this subzone, the Palaeolithic potential of clay-with-flints deposits (mapped for an area of the order Limits in Zone 2), and of potential chalk solution features, is discussed in the report. However, these deposits are assessed as low potential for Palaeolithic archaeology within Table 5.1.	Further assessment of the Palaeolithic archaeological potential of the area of the order limits that overlies superficial deposits mapped as Clay-with-flints. Utilise results of geotechnical investigations and geoarchaeological investigations to refine understanding of the extent and potential of CWF deposits, and the presence of/potential for chalk solution features. Consider extending the proposed area of test-pitting (OOWSI, Figure 4) to the south of the woodland of Michelgrove Park, to cover the mapped CWF deposits, if proportionate. Assess potential for in situ Palaeolithic archaeology. Consider assessment methodology in the event that solution features are identified which might have high potential for Palaeolithic archaeology.
Figures 1-7, 11	Distance scales on figures are incorrect	Amend figures
Onshore geophysical survey report (Volume 4, Appendix 25.4, APP-PEPD-031)		
3.2.23	Categorisation for interpreting geophysical anomalies does not give sufficient confidence ratings to anomalies with likely archaeological origins. The methodology restricts the category of Definite or probable Archaeology to anomalies where "Interpretation is supported by the presence of known archaeological remains or by other forms of evidence such as HER records, LiDAR data or cropmarks identified through aerial photography". This is not standard practise, and means that any anomalies not correlated with other sources of evidence are classified only as Possible Archaeology, regardless of the strength of response, form or possible function. E.g. an anomaly within Field 004 is described as a 'trapezoidal enclosure', 30m by 28m with a well-defined entrance and clear internal pit-like anomaly. It is nonetheless categorised as Possible Archaeology.	Revise categories for geophysical anomaly interpretation. Reserve the Definite category for geophysical anomalies which correlate with HER entries. Assign geophysical anomalies which are likely to have an archaeological origin (even if not yet ground-truthed) as Probable Archaeology

Reference	Issue	Recommended Action
	However, it is noted that anomalies in Field 005 are categorised as Definite/Probable Archaeology in the recently updated. A key function of geophysical survey is archaeological prospection within previously-uninvestigated areas; therefore, the absence of prior recorded evidence should not be a factor in the degree of confidence assigned to geophysical anomalies.	
4.6.5 – 4.6.6	As stated in the report, results from fields 024, 026, 028, 031, 036, 039, 040, 042, 078, 082 to 084, 132, 137, 192, and 204 to 212, 234, 248 to 249, 267, 300-302, 304, 305, 318, 330, 332, 333, 337, part of 339, 345 to 347 should not be relied upon to indicate low archaeological potential due to known high levels of background response (landfill and green waste spreading) which may affect the survey data.	None
4.6	Any adverse ground conditions which may been encountered during survey in some fields, such as waterlogging, vegetation, debris or other issues, are not recorded. This may have affected the accuracy of the survey data and in turn affect reliability and interpretive value of some results.	Record any fields where adverse ground conditions might have affected survey data.

Response by Professor Martin Bell BSc, PhD, FSA, FBA (Sussex Archaeological Society) to Third Statutory Consultation exercise (2023): PEIR FSIR

Rampion 2 Windfarm Land route alternative route LACR-1d

The alternative LACR-1d Rampion dryland cable route between Patching and Sullington Hill is of very great concern from an archaeological perspective. It passes through the middle of the most dense concentration of Neolithic and Bronze Age archaeology on the South Downs. In this area are many sites of national and international significance. Of particular archaeological sensitivity are both alternative routes on the west side of Blackpatch Hill and between here and Harrow Hill. 750m west of the route is the major complex of well-preserved Neolithic flint mines on Harrow Hill, where there is also a hillfort enclosure of the first millennium BC. Immediately to the east of the route are another major group of early Neolithic flint mines at Blackpatch, where at least 93 flint mine shafts are known. Eight of these were excavated by the pioneering archaeologist John Pull whose work is reflected in a special exhibition in Worthing Museum. The Blackpatch mines are some of the earliest monuments of the first farmers in Britain; a recent project has dated them to 3991-3797 cal BC. The flint mines were levelled by bulldozer in the 1950s and the only plan is drawn from a transcription of earlier air photographs. Lidar images indicate that the mines extend to within 150-200m of the eastern proposed cable corridor. Pull also excavated some burials in the area and reported possible traces of settlement. In 2005 Time Team did an excavation as part of a Channel 4 programme. They did not confirm evidence of a Neolithic settlement but did find ancient tree throw features, suggesting some of those excavated by Pull may have association with ritual deposition. Pull also identified burial mounds in the area and excavation of one of these by Time Team showed that it was Beaker / early Bronze Age; this site lies c 150m east of the proposed cable line. The close proximity of these sites to the cable line highlights the density of archaeological evidence in the area.

Of equal significance is a major complex of middle and later Bronze Age settlements. Three have been partly excavated; New Barn Down (Curwen, *SAC* 63, 75) and Cock Hill (Ratcliffe-Densham *SAC* 91) are Scheduled Ancient Monuments and lie west of the proposed corridor. The partly excavated Cock Hill settlement lies on the west edge of the proposed cable route. However, the field associated with this settlement are bound to be within the cable corridor and traces of lynchet field boundaries are visible on Lidar, as are marl pits within the corridor which are thought to be associated with the settlement.

Of greatest concern is Blackpatch Bronze Age settlement which lies in the middle of the eastern of the two possible cable routes (at TQ09200515). It was partly excavated in the 1950s (Ratcliffe-Densham SAC 91). Since then the site has been heavily ploughed but the earthworks are still clearly visible on Lidar images as are some of the pits and hollows which were thought to be contemporary with the settlement, perhaps ponds. Much of this settlement and field system evidence has been impacted by subsequent agriculture but important evidence is bound to remain below ground. The excavation of these three settlement sites took place between the 1930s and 1950s; they were pioneering, but small scale, and focused on the core of the settlement area. There is bound to be much more archaeology in the surrounding unexcavated areas, particularly as regards associated Bronze Age fields.

Examination of air photographs and Lidar images of the proposed cable corridor show that throughout the area there are extensive traces of Celtic field systems which are present at least as far north as TQ 092109. The traces of ancient fields in this area have been transcribed from air photographs and Lidar by Historic England as part of the Changing Chalk HLF project led by the National Trust in partnership with Historic England and the National Park. The results of that analysis are not yet publicly available but should be consulted because they will provide significant additional evidence of the exact position of ancient field traces and other earthworks within the cable corridor.

The key point is that the ancient field traces are directly linked by banks to the three excavated middle Bronze Age settlements; they form a key part of that settlement landscape. Sites in this area formed case studies in pioneering research on prehistoric farming by the Curwens. The fields are likely to have originated by 1600 cal BC and a scatter of Iron Age and Roman pottery on the excavated sites suggests they remained in use until the fourth century AD. 'Half an hundred weight' of Iron Age pottery is reported by Ratcliffe-Densham (SAC 99, p 94) at TQ0996 1015 at the constriction point where the proposed cable corridor is just 150m wide. That must surely indicate a significant, but little understood, Iron Age and Romano-British site at this point. 1km south of the proposed corridor the discovery of Bronze Age metalwork (including Sussex Loops) and Iron Age coins at Patching Pumping Station suggests a probable site of later prehistoric ritual deposition on the floor of the now dry valley which leads south of the cable route.

At the north end of the proposed cable route on Sullington Hill attention should be drawn to the prominent cross dyke on the north escarpment; this is probably of Bronze Age date and may relate to the regulation of pastoral activity. There are barrows on the escarpment crest at Chantry Post but there may be other unrecorded barrows. The Lidar imagery shows at least two possible examples. It also shows feint traces of multiple pits on the east side of the crest of Sullington Hill. They might be for flint or marl digging but require further investigation.

Work on the cable trench will affect a corridor 50m wide within the wider corridor on which consultation is taking place. Whilst the flint mines and some of the Bronze Age settlement sites lie just outside the corridor on which consultation is taking place, the Bronze Age settlement and fields at Blackpatch will be significantly impacted as will the immediate surroundings of the Cock Hill settlement.

The key point is that the settlement and field system archaeology of this corridor area, and the immediately surrounding area, is so dense and significant that further, presently undetected, archaeological sites are bound to be present within the corridor. Any impact needs to be carefully assessed in advance of disturbance. The known settlement and field system evidence is particularly on the down spur crests and slopes, with less known evidence in the dry valley bottoms. However, a key lesson from excavations in advance of the Brighton Bypass and other excavations on the South Downs by M. Bell and M.J. Allen is that sediment sequences which accumulate in dry valleys provide some of the best evidence for buried field system traces, valley bottom settlement and evidence of the ecological history of the chalk downland. We do not, for instance, know where the people who excavated the internationally significant flint mines lived. A chance outcome of the New Barn Down Bronze Age settlement excavation was the discovery of a large and artefact-rich early Neolithic pit contemporary with the flint mines. This highlights the potential which this landscape

has to reveal important and unexpected discoveries which could be very costly to investigate adequately, especially, for instance, if traces of Neolithic flint mining were found to extend into the affected area. The Sussex Archaeological Society's 2022 conference on flint mines served to highlight the exceptional significance of these sites but also showed how limited is our knowledge of the Neolithic ecology of the surrounding areas. This is relevant to active debate concerning the extent to which the chalk downland in early prehistory was forested or included more open grassland areas and that is relevant to current debates about nature conservation and rewilding. The dry sediments in the assessment corridor will contain important evidence of the prehistoric environment and are likely to have some of the best preserved and buried evidence for field systems associated with the known concentration of Bronze Age settlement.

The Sussex Archaeological Society is supportive of plans for green energy generation, especially in an offshore context and where it does not impact on heritage or wildlife. The dryland cable routes do involve significant ground disturbance over a 50m wide corridor. It is to be regretted that the alternative route proposed through this consultation passes through such an archaeologically significant landscape and we hope that serious consideration will be given to a more westerly route originally proposed, if that can avoid areas of such significant archaeology. If the proposed alternative route is to be adopted then the very highest priority should be given to the thorough assessment of heritage assets within the corridor. In our view extensive excavations would be required and investigations should include sediment accumulations in dry valley fills and all evidence of early field systems within the affected area.

References to SAC are to the relevant number of *Sussex Archaeological Collections*

Response prepared by Professor Martin Bell BSc, PhD, FSA, FBA

President Sussex Archaeological Society

20.3.23

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Appendix E – Socio-economics Comments

Table 1: ES Chapter 17 Socio-economics (APP-058)

Reference	Issue	Recommended Action
17.2.7	The West Sussex Transport Plan, which informed the assessment (para 17.2.7), spans 2011-2026. However, new plan, West Sussex Transport Plan 2022-2036 should have been taken into account.	Undertake a review of the latest Transport Plan and confirm whether there are implications for the assessment findings.
Sections 17.5 and 17.9	More clarity is requested on aspects of the assessment methodology. For collecting population estimates, it is unclear if the year (2020) is the date of publication of estimates or the date of collection. Also clarify why recent data has not been used, especially if 2020 data represents during the COVID19 pandemic, which is also not clarified. There is some uncertainty on the implications of data limitations set out at 17.5.4, and 17.5.5 of Chapter. Data limitations in respect of people seeking work and GVA data by sector are stated but the implications of these for the assessment are not set out, they are merely stated as limitations. The Applicant should confirm the implications of these limitations for the assessment and any impacts of them, so this is clearly understood when the assessment is interpreted. There is also a lack of clarity regarding stated issues relating to tourism employment, at 17.5.12. A cross reference is made to issues relating to another data limitation(s) but it is not clear which are being referred to. The Applicant should confirm what the issues referenced are and confirm the implication of this limitation for the assessment and any impacts on findings.	Provide clarifications in respect of these aspects of the assessment methodology so that these are clearly understood when the assessment is interpreted. In respect of induced impacts, an assessment of these should be provided.
Section 17.6	There is extensive reference within this section of the chapter specific features of the Project. This is inconsistent with the section being a review of the baseline without the Project, whereby only the location of its boundaries should be included to provide orientation. In some instances of this (for example, 17.6.65), an impact is described and/or construction methods that influence impact. Based on these considerations, it is difficult to	Refer to impacts and construction methods used in relation to resources and receptors within the Assessment of Effects.

Reference	Issue	Recommended Action
	distinguish baseline conditions from potential impacts wherever this occurs.	

Appendix F – Collated WSCC S106 Asks

WSCC recognises and welcomes the draft Section 106 principles document submitted by the Applicant in late 2023; however, this LIR presents other areas of concern and adverse impacts that would need addressing through a Section 106 agreement with WSCC. WSCC looks forward to further discussions with the Applicant in due course on these matters.

Table 1: WSCC S106 Asks (collated from all LIR topic specific sections)

Topic	Impact	Area for discussion with the Applicant
Funding for an Environmental and Heritage Compliance Officer for duration of Project	A significant number of sensitive environmental and heritage receptors are impacted within the DCO Limits. Mitigation and reinstatement measures are proposed by the Applicant requiring detailed compliance monitoring by the relevant planning authority. This requires a minimum involvement of 14 years, from construction, operations through to aftercare monitoring of reinstated landscapes and habitats. Lessons learnt from Rampion 1 identified the need for an individual compliance officer to oversee the entirety of the project for continuity, and to develop working relations with the Applicant and contractors who have the overall responsibility in ensuring timescales and work requirements are met. This is vital should multiple local authorities be required to discharge requirements alongside consulting with other statutory bodies and other authorities.	S106 funding for an Environmental & Heritage Compliance Officer for the duration of the Project, from construction pre-commencement to ten years post construction completion (or independent establishment of new landscape features and habitats). A Compliance Officer would enable a single point of contact between relevant authorities and contractors, faster communications between parties, dedicated knowledge of the Project, and compliance with the various control documents to be approved. In addition to monitoring compliance with approved control documents, the Compliance Officer would monitor and notify the relevant authorities as appropriate regarding but not limited to: • Any on-site changes to agreed construction methodologies which have the potential to result to harm to the ecological, arboricultural or archaeological resource. Including but not limited to: changes in onshore construction works and methodologies (locations and extents of TC; drilling depths; entry/exit pits; transition joint bay locations and groundworks; angle of drilling); changes to locations or methodologies of groundworks and enabling works; changes affecting historic buildings or monuments; changes affecting habitats (including hedgerows, trees and woodlands); • Environmental incidents or near misses which have the potential to result to harm to the ecological, arboricultural or archaeological resource (such as bentonite outbreaks during TC construction); and

Topic	Impact	Area for discussion with the Applicant
		• Monitor and approve (in principle) remedial works, such as re-seeding of wildflower grassland or re-planting of trees.
Landscape and Ecology Enhancement Fund	West Sussex has a great diversity of landscapes and habitats associated with its rich geological diversity. The onshore cable route will directly impact a range of landscapes and habitats, most notably hedgerows and notable trees. Indirect impacts to the setting of habitats and landscape features such as veteran trees and hedgerows is also expected. Whilst some reinstatement works for trees, hedgerows and other habitats are proposed, alongside a biodiversity gain strategy, no enhancement measures are secured or guaranteed within or in immediate proximity of the DCO limits which is considered as essential requirements.	S106 funding for an enhancement fund to: • Fund measures to improve habitat connectivity across the landscape within 5km of the DCO Limits (such as tree planting and hedgerow restoration or creation). • Fund habitat restoration and creation within 5km of the DCO Limits (such as chalk grassland restoration through scrub control, enhanced management of riparian habitats, and habitat creation, including meadows, chalk grassland, conservation headlands, ponds and dew ponds). • Fund restoration and enhancement projects to improve the quality of ancient, veteran and notable trees within 5km of DCO Limits. • Fund workshops and officer time to promote and encourage the uptake of the above funding projects. This will include onsite visits, as well as in person/online workshops.
Socio-economics	For tourism, the impact of both construction and operation of the Project is considered by WSCC to be potentially negative. Visitors may be deterred from undertaking visits, such as to coastal resorts, recreational routes, for water sports and to beaches. This would occur either due to the setting of these being changed by visual impacts from onshore and offshore works during construction, the visual presence of offshore infrastructure during operation, or from changes to the general perception of the area as a visitor location. This could result in loss of income and the jobs this supports.	The Applicant must provide more robust evidence of how it plans to mitigate negative impacts on the visitor economy, both in terms of recreational activities and tourism, and enhance local economic benefit. This should include additional mitigation to address visual impacts on users and businesses, and financial mitigation which provides compensation for adverse impact and to support the sector more generally. WSCC is seeking to secure funding from the Applicant to support local visitor economy initiatives to mitigate impact. The Applicant's proposals for funding could be set out within a funding proposal and potentially a tourism strategy and action plan to be discussed and agreed with WSCC and relevant partners.

Topic	Impact	Area for discussion with the Applicant
Public Rights of Way	Due to the large scale of this Project and the linear nature of the proposals, the scale of the impact on Public Rights of Way (PRoW) is very high. With just under 60 individual interventions across the PRoW network crossed by the Project, this highlights the impact on users both exercising their legal rights for utility or recreational purposes	Compensation will be required to mitigate against the identified impacts on the users of the PRoW network in both the short, medium, and long term. These funds will allow improvements to be undertaken on the network, improving access and availability. This should be focussed on future PRoW improvements within a 5km buffer zone of the landfall, cable route and onshore substations (including extension to the National Grid substation). Acknowledgement through this fund of the impacts to the amenity value of PRoW users, should also be included to ensure long-term enjoyment of the local network. There should also be a commitment for any temporary gates, where appropriate, used for site safety and managing temporary diversions to be offered to WSCC, as the Local Highway Authority, for future structure improvement across the PRoW network (replacing stiles with gates) to improve public access.
Additional archaeological surveys	The potential for harm to a nationally significant and highly sensitive Neolithic and prehistoric landscape. The need to offset this harm with wider opportunities to enhance understanding of this nationally significant landscape. Due to the highest sensitivity of the landscape and archaeological features in question, industry-standard mitigation practices may not sufficiently offset the harm. The submitted Outline Onshore Written Scheme of Investigation (OOWSI; APP-231) sets out non-standard evaluation methodologies for this area. However, additional surveys outside of the immediate footprint of construction impacts should be considered, in order to enhance understanding and knowledge of this landscape.	Surveys and assessments of Neolithic mining landscape to enhance knowledge and understanding on a landscape scale. Tied to specific outreach and public benefit deliverables. Options might include enhanced-resolution Lidar survey, AP survey, targeted measured survey, and enhanced geophysical survey (e.g. GPR) of some of the nearby scheduled monuments and areas of the highest significance. These non-intrusive surveys should be designed to fill gaps in existing knowledge and answer specific research questions. They should be considered within and, potentially, outside, the DCO boundary. An eventual outcome should be integrated interpretation with the results of the archaeological fieldwork undertaken.

Topic	Impact	Area for discussion with the Applicant
Archive deposition	The need to ensure adequate provision and suitable long-term storage for the archaeological archive generated from the Applicants' programme of archaeological works.	Sufficient financial provision for archive deposition fees. These should be restricted funds to ensure the deposition of the project archive is safeguarded and ringfenced.
Archive provision and storage enhancement	Given the scale of the Project and the anticipated size of the resulting archive, which will likely be above and beyond the standard rates of collection for the museum collections, the existing facilities do not have sufficient capacity to accommodate the Rampion 2 archive. There is a need for provision of additional storage facilities in order to comply with requirements for archiving. Provision for the infrastructure to accommodate the archive is required.	Expansion of the existing archive facilities at Worthing Museum, to ensure the Rampion Archive can be stored long-term, in suitable and stable conditions, as a unified archive (including Rampion 1 project archive). Storage capacity at Worthing Museum will require investment to accommodate estimated size of potential archive. Additional shelving units should be installed, to hold the archives in an area of the store that can be assigned for archive storage and access.
Archive Documentation	Given the scale of the Project and the anticipated size of the resulting archive, the current capacity of Worthing Museum will not be able to accommodate documentation of the Rampion 2 Archive. There will be a requirement for dedicated archive documentation provision, to ensure the archiving obligations of the Project can be met.	Provision of a dedicated Documentation Officer for the time required to document the Rampion archive. A breakdown of grade/salary calculations and estimated time requirements based on modelled cataloguing and data entry rates is being prepared by Worthing Museum in conjunction with SDNPA and WSCC.
Treasure acquisition budget	There is potential for the discovery of treasure as part of the archaeological mitigation requirements. Under the Treasure Act 1996 there is a legal obligation to report all finds of Treasure. Treasure belongs to the Crown, until it is disclaimed or acquired by a museum. On confirmation an item is Treasure, it is valued by the Treasure Valuation Committee,	A budget should be made available for treasure acquisition by Worthing Museum in the event of treasure being discovered. This will ensure objects can be held in a recognised public repository, and therefore available for ongoing exhibition and research as part of the wider project archive.

Topic	Impact	Area for discussion with the Applicant
	with the valuation being the amount comprising the reward for finders/landowners. This is the amount a museum must fundraise in order to acquire an object valued as Treasure. Finders/landowners can only be encouraged to gift the object to a museum, but are not required to. The vast majority of museums in England have little to no acquisition budget and must instead fundraise to acquire objects identified as Treasure. Fieldwork at the potential scale of Rampion 2 given the geographic area has the potential to result in treasure finds.	
Outreach, interpretation and public benefit package	The need to partially offset the anticipated degree of harm to the historic environment with a bespoke public benefit, interpretation and outreach programme. Proposals must be proportionate to the scale of the scheme, likely beyond those outlined within the Onshore Outline Written Scheme of Investigation, and thus may require resources. The need to ensure that the outreach programme is fit for purpose and will be able to meet the anticipated demand, given the high profile of the scheme.	Design and secure funds for a comprehensive and innovative outreach package. Ensure knowledge gained through the destructive process of archaeological excavation and recording is maximised and disseminated to as wide a range of audiences as possible. WSCC proposes that the outreach package be led and designed by Worthing Museum, to ensure a coordinated approach which aligns with the archive storage proposals. A detailed breakdown of the proposed package, including costs and timescales, is being prepared by Worthing Museum in conjunction with SDNPA and WSCC.
Education and schools package	The need to partially offset the anticipated degree of harm to the historic environment with a bespoke education and schools package. The need to ensure that the education offering to schools is fit for purpose and will be able to meet the anticipated demand.	WSCC proposes that the schools and education package be led and designed by Worthing Museum, to ensure a coordinated approach which aligns with the archive storage and wider outreach proposals. A detailed breakdown of the proposed package, including costs and timescales, is being prepared by Worthing Museum in conjunction with SDNPA and WSCC.

Appendix G – Arboriculture Comments

Table 1: Arboriculture comments regarding application documents

Reference	Issue	Application document and reference
1.	Access A-05. Significant pruning or felling expected to meet DMRB standards for highway accesses.	Construction Traffic Management Plan (PEPD-035a)
2.	Access A-33. Existing gated access is not within Order Limits. Access on figures within various application documents are suggestive to cross existing hedgerows that are not shown within the OCoCP vegetation retention plans (ref. H 328 and H335 with AIA).	Construction Traffic Management Plan (PEPD-035a)
3.	Access A-39. W489 is shown as retained within the OCoCP vegetation retention plans. Visibility splays will likely require significant pruning and felling and it is not clear that retaining this woodland feature without impact is possible.	Construction Traffic Management Plan (PEPD-035a)
4.	Access- A-50 (a or b, plans are not clear). H309 is shown as retained within the OCoCP vegetation retention plans. The only access into the field to south is outside of the order limits (when viewed on GIS with aerial imagery); H307 shown as retained and it's not clear how construction access will be facilitated.	Construction Traffic Management Plan (PEPD-035a)
5.	A tree line between H284 and H277 is not shown/presented on vegetation retention plans.	Outline Code of Construction Practice (PEPD-033)
6.	A single hedgerow and single treeline between H284 and H294 are not shown/presented on vegetation retention plans.	Outline Code of Construction Practice (PEPD-033)
7.	H295 and H302 both include various sections of hedgerows which are grouped under one reference name. Both hedgerows are proposed for 'notched 14m' including many sections which do not appear to require notching. These hedgerow sections should be sensibly split to show what shall be retained or notched.	Outline Code of Construction Practice (PEPD-033)

Reference	Issue	Application document and reference
8.	It is not clear why both H312 and H317 require notching to 6m when H308 is proposed to be notched to 14m. This impact is not presented within the AIA.	Outline Code of Construction Practice (PEPD-033)
9.	Five treelines appear to be present, though missing from vegetation retention plans. These are in the locations of HS558 HS1383, HS1389 (duplicated reference feature, both relevant to this comment) & HS5804 as identified from the scrub retention plans.	Outline Code of Construction Practice (PEPD-033)
10.	A treeline is between H424 and H433 is not shown/presented on vegetation retention plans.	Outline Code of Construction Practice (PEPD-033)
11.	Multiple hedgerows and treelines missing adjacent Kent Street.	Outline Code of Construction Practice (PEPD-033)
12.	A hedgerow is missing adjacent the temporary construction compound, west of Oakendene estate (aligning with and screening the A272). It is not clear how access A-62 displayed within the CTMP can facilitate construction vehicles without impact to this hedgerow and adjacent trees.	Outline Code of Construction Practice (PEPD-033)
13.	W3713, shown for retention within vegetation retention plans, is suggested to be impacted within the AIA (conflicting statements).	Outline Code of Construction Practice (PEPD-033)
14.	Vegetation retention plans do not show/present a hedgerow referred to H54 within the AIA.	Outline Code of Construction Practice (PEPD-033)

Rampion 2 Offshore Wind Farm (Project Reference: EN010117)

Deadline 1 Submission (28 February 2024)

West Sussex County Council (IP Reference 200445228)

1 Overview

1.1 This document provides a response at Deadline 1 (28 February 2024) from WSCC on the following matters, as requested by the Examining Authority (ExA) in the Rule 8 letter (7 February 2024). These are:

- Content and Scope of the WSCC Local Impact Report (LIR);
- Comments on the Applicant's draft Statement of Commonality of Statements of Common Ground; and
- Responses to the ExA's request for a statement on the new National Policy Statements for Energy.

2 Content and scope of the LIR

2.1 The WSCC LIR, submitted at Deadline 1, has been prepared in accordance with section 60(3) of the Planning Act 2008 (as amended) and has regard to the guidance in the Planning Inspectorate's Advice Note. Accordingly, it seeks to assist the ExA by presenting WSCC's assessment of the likely impacts of the Project based on local information, expert judgement, and evidence.

2.2 The LIR also appraises the impacts likely to result from the Project and identifies whether the impacts are considered to be negative, positive or neutral, taking into account proposed mitigation measures. It also considers whether further work should be undertaken, including mitigation, to address negative issues identified, and raises any missed opportunities for enhancement measures.

2.3 It should be noted by the ExA that it also appraises the DCO documents submitted by the Applicant at the submission stage, as well as those at the Procedural Deadline (16 January 2024). It also provides additional commentary on the points raised by WSCC during the Issue Specific Hearing (ISH 1) on 7 and 8 February 2024.

2.4 Due to the scope of the LIR described above, WSCC has not submitted a separate Written Representation at Deadline 1.

3 Statement of Commonality (SoC) of Statements of Common Ground (SoCG)

3.1 It should be noted that the SoC, as submitted at the Procedural Deadline, was not consulted upon with WSCC nor had any detailed engagement on the SoCG been undertaken at that stage. Therefore, WSCC has the following comments to make on the SoC:

- The range of colour codes to define the status of discussions between the Applicant and WSCC are confusing and open to interpretation. Whilst it is acknowledged that the Applicant has had to reflect and condense a lot of information in a summarised form to aid the ExA and other Interested Parties, it is suggested that simpler coding to match the SoCG status definitions, along with some short narrative, might be more appropriate; and
- For Landscape and Visual Impact Assessment, Noise, and Historic Environment topics, all have been defined by the Applicant as (lighter) yellow, meaning '*All matters under discussion'*. WSCC would suggest these topics are more represented by the amber category, i.e., '*some matters under discussion/some matters not agreed'*.

3.2 WSCC wishes to engage proactively with the Applicant to reduce the areas of concern and seek to achieve the best possible outcomes for the local communities and other sensitive receptors that would be most affected by the construction and long-term operational impacts of the Project.

4 Statement on the new National Policy Statement for Energy

4.1 The ExA has invited the Applicant and Interested Parties (Procedural Decision number 8, Annex D of the Rule 6 letter) to submit a written statement at Deadline 1 on the implications for the Project of the 2023 National Policy Statements (NPS).

4.2 As stated in Section 1.6 of EN-1 (DESNZ, 2023), for the purposes of transitional provisions following the designation, "*The Secretary of State has decided that for any application accepted for examination before designation of the 2023 amendments, the 2011 suite of NPSs should have effect in accordance with the terms of those NPS".*

4.3 Therefore, WSCC understands the position of the ExA is that the suite of 2011 versions of the NPSs for Energy will be used to examine the Project.

4.4 It should be noted that because of the transitional arrangements outlined above, and the timing of the submission of the DCO application ahead of the designation of the 2023 NPSs, WSCC has referred to the 2011 NPSs within the LIR submitted at Deadline 1. Accordingly, no commentary has been made in the LIR on the implications of the 2023 NPSs.

Rampion 2 Offshore Wind Farm (Project Reference: EN010117)
Submission at Deadline 1
West Sussex County Council (IP 200445228)
Submitted on 28 February 2024