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VIBEROPTIX GB

PROJECT DAFFODIL: GIGABIT PROJECT CUMBRIA

HABITATS REGULATIONS ASSESSMENT

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DRAWINGS	TITLE	SCALE
GM13161-OLT03-B-001	OLT03 Statutory Designated Sites	1:50,000@A3
GM13161-OLT09R-B-001	OLT09 Rural Statutory Designated Sites	1:100,000@A3
GM13161-OLT13-B-001	OLT13 Statutory Designated Sites	1:50,000@A3

1 INTRODUCTION

1.1 Background

1.1.1 Wardell Armstrong LLP (WA) were appointed by Viberoptix GB to produce a report to inform a Habitats Regulations Assessment (HRA) to consider a proposed upgrade of fibre optic cabling infrastructure within the county of Cumbria and Lake District, named 'Project Daffodil'. There are three sites currently assessed within this report (see paragraph 1.2) and are referred to as Optical Line Terminals (OLTs) (hereafter referred to as the 'Project(s)'). The sites will be assessed as the designs become available to WA and this report will be updated accordingly. The site reference and site names are detailed below in Section 1.2.

1.1.2 The project has been assessed both in isolation and in-combination with other plans and projects. The appropriate Local Plan, where each Project is located, have been used as the principal source of information for in-combination assessments, i.e. OLT03 site is located within the district of Westmorland and Furness Council (formerly Eden District), then the Eden Local Plan 2014 – 2032 (see Table 1 below).

1.1.3 The assessment is informed by the fibre optic infrastructure upgrade proposals in the form of GIS Shapefiles (Viberoptix GB, 2024), the Fibrus Working Specifications, Viberoptix GB Working Policies and high-level desktop assessments undertaken by Wardell Armstrong; GM13161 OLT03, GM13161 OLT09 Rural and GM13161 OLT13 (WA, 2024). Wardell Armstrong were also appointed to produce a detailed Ecological Management Plan (WA, 2024) that contains specific measures to protect features of ecological interest during the proposed fibre optic upgrade works, which should be read in conjunction with this HRA.

1.1.4 The Fibrus Working Specifications are listed below:

- ACC-SPC-C001 – Poling Work Specification Version 1.2
- ACC-SPC-C002 – Poling Stability Specification Version 1.2
- ACC-SPC-C006 - Network Build Ducting Specification V1.1
- CPL-PRO-O002 Fibrus Pole Data Capture Guidance
- Specification_For_Concrete_Box_Construction_A3Drawings_ACCSPCC004a
- Specification_for_Concrete_Joint_Box_Construction_ACCSPC004

- Specification_Modular_Box_ACCSPC005

1.1.5 The Viberoptix GB Working Policies are below:

- PRO_EN_001 Pole Handling and Storage
- PRO_EN_002 Waste Management and Duty of Care
- PRO_EN_003 Environmental Spillage
- PRO_EN_004 Tree Management
- PRO_EN_005 De-Watering and De-Silting Chambers
- Construction Materials Management Plan V.01 (2023)
- Environmental and Sustainability Policy
- Pollution Prevention Plan V.01 (2023)

1.2 Site Description & Context

1.2.1 The overall Project consist of numerous networks of overground and underground fibre optic cable infrastructure, and includes ducts, chambers and poles. The networks cover small to large areas around towns, villages and rural areas.

1.2.2 The works include installing cabling within existing infrastructure and upgrading infrastructure by installing new ducts, chambers and poles. The details of each Project are listed below in Table 1.

Table 1: Project Details			
OLT Name	OLT Number	Build Start Date	Relevant Local Plan
Appleby-in-Westmorland	OLT03	TBC	Eden Local Plan 2014 – 2032
Broughton-in-Furness Rural	OLT09 Rural	TBC	Lake District National Park Local Plan 2020 – 2035 Lake District National Park Management Plan 2020 – 2025 South Lakeland Local Plan 2010 – 2025
Cleator Moor	OLT13	TBC	Lake District National Park Local Plan 2020 – 2035 Lake District National Park Management Plan 2020 – 2025 Copeland Local Plan 2021 – 2038

1.3 Proximity to European Sites

1.3.1 There are a couple of locations where the works cross a European Site, but no works are located within any European Site. Other areas of the Projects are located outside but in close proximity or adjacent to European Sites. Some locations within the

Projects are located adjacent to or within habitats or cross over watercourses that are ecologically connected to a European Site.

1.3.2 The location of each Project relative to the European Sites are displayed on drawings GM13161-OLT03-B-001, GM13161-OLT09R-B-001 and GM13161-OLT13-B-001.

1.3.3 There are a number of Sites of Special Scientific Interest (SSSI) which lie within close proximity to the Projects however, these are not relevant to the HRA process and only European Sites (SPA, SAC and Ramsar) are considered within this assessment.

1.4 Purpose of this Report

1.4.1 This report has been produced for the purpose of providing the relevant Competent Authority with the information necessary to enable compliance with its duties under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 ('Habitat Regulations 2019'). This report describes the methods used to define the scope of a screening assessment and identify potential effects on European Sites associated with the proposed scheme individual, and in combination with other plans or projects.

1.4.2 This report sets out the methods used to define the scope of a screening assessment and identify potential effects on European Sites associated with the proposed scheme individually, and in combination with other plans or projects (Stage 1: Screening). Where a Likely Significant Effect (LSE) cannot be ruled out at the Screening stage the report will present a Stage 2: Appropriate Assessment.

1.5 Reason for HRA

1.5.1 The UK Government has published guidance (*Guidance on the use of Habitats Regulations Assessment*, July 2019) which sets out advice provided in the Planning Inspectorate's *Habitats Regulations Assessment relevant to Nationally Significant Infrastructure Projects (Advice Note 10)*¹.

1.5.2 The Competent Authority (in this case the Local Planning Authority) must comply with Regulation 63(1) of the Habitat Regulations 2017, as follows:

"63 (1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project which:

¹ Although the project to which this report related is not an NSIP, the published advice remains relevant.

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.

Must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives."

1.5.3 Advice Note 10 clarifies the process that should be followed:

- Stage 1 - Screening: Screening for LSEs. If no LSEs are identified [and LSEs can be excluded on the basis of objective information], then an appropriate assessment will not be required;
- Stage 2 - Appropriate Assessment: If Stage 1 identifies LSEs [or if LSEs cannot be excluded on the basis of objective information], it is necessary to determine if the project, either individually, or in combination with other plans or projects, will adversely affect any European sites (s), in view of the site(s)' conservation objectives;
- Stage 3 - Assessment of alternatives: A consideration of alternative solutions is required if it cannot be concluded that there will be no adverse effect on the integrity of the affected European site(s); and
- Stage 4 - Consideration of IROPI: If there are no alternative solutions, an Assessment of Imperative Reasons of Overriding Public Interest (IROPI) is required.

1.5.4 This report relates only to Stages 1 and 2 (where 2 is necessary), which is covered by Regulation 63 of the Habitat Regulations 2019.

2 ASSESSMENT METHODOLOGY

2.1 Methodology

2.1.1 HRA can be broken down into three discrete stages, each of which effectively culminates in a test. The stages are sequential, and it is only necessary to progress to the following stage if a test is failed. The stages are:

2.2 Stage 1 – Likely Significant Effect Test (Screening)

2.2.1 This is essentially a risk assessment, typically utilising existing data, records and specialist knowledge. The purpose of the test is to decide whether ‘full’ Appropriate Assessment is required. The essential question is:

“Is the Project, either alone or in combination with other relevant projects and plans, likely to result in a significant [adverse] effect upon European sites?”

2.2.2 If it can be demonstrated that significant effects are unlikely, no further assessment is required. As a result of the People over Wind C-323/17 (Court of Justice of European Union, 12 April 2018 (ECJ)) the ECJ have clarified that *...it is not appropriate at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.*

2.3 Stage 2 – Appropriate Assessment

2.3.1 If it cannot be satisfactorily demonstrated that significant effects are unlikely, an “Appropriate Assessment” will be required. This is focussed entirely upon the designated interest features of the European sites in question. The essential question here is:

“Will the Project, either alone or in combination with other relevant projects and plans, actually result in an adverse effect upon the integrity of any European sites, without mitigation?”

2.3.2 If it is concluded that adverse effects will occur, measures will be required to either avoid the impact in the first place, or to mitigate the ecological effect to such an extent that it is no longer significant. Note that, unlike standard Ecological Impact Assessment, compensation for adverse effects (i.e. creation of alternative habitat) is not permitted at the Appropriate Assessment stage.

2.4 Confirming Other Plans and Projects That May Act in Combination

2.4.1 It is a requirement of the Regulations that the impacts of any plans or projects being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question. In this case, the three relevant local plans (see Table 1) are considered as being the major point of information for the in-combination assessment. The individual HRA for each of the three local plans include details in-combination effects arising from local projects.

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3 STAGE 1 – SCREENING OF LIKELY SIGNIFICANT EFFECTS

3.1.1 The qualifying features of the internationally designated sites of relevance to these Projects are discussed in Table 2 below. It also identifies which Project is of relevance and the distance and direction from the European Site.

Table 2: European Sites within 5km of the Project			
European Designation	Reasons for designation	Relevant OLT	Distance/Direction from OLT
<p>River Eden SAC</p> <p>Objectives</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats and habitats of qualifying species. The structure and function (including typical species) of qualifying natural habitats. The structure and function of the habitats of qualifying species. The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely. The populations of qualifying species. The distribution of qualifying species 	<p>Qualifying habitats: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>). (Alder woodland on floodplains) (also a Priority Habitat) Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i>. (Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels) Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation. (Rivers with floating vegetation often dominated by water-crowfoot) <p>Qualifying species: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:</p> <ul style="list-style-type: none"> Atlantic salmon <i>Salmo salar</i> Brook lamprey <i>Lampetra planeri</i> Bullhead <i>Cottus gobio</i> Otter <i>Lutra lutra</i> River lamprey <i>Lampetra fluviatilis</i> Sea lamprey <i>Petromyzon marinus</i> White-clawed crayfish <i>Austropotamobius pallipes</i> 	OLT03	0.0km (Project crosses this designation)

Table 2: European Sites within 5km of the Project

European Designation	Reasons for designation	Relevant OLT	Distance/Direction from OLT
within the site.			
<p>Duddon Estuary Ramsar</p> <p>Objectives: There are no conservation objectives currently proposed for the Ramsar designation.</p>	<p>This designation qualifies under Ramsar criterion 2a, 2c, 3a, 3c of the Ramsar Convention:</p> <ul style="list-style-type: none"> • Criterion 2a – The site supports nationally important numbers of the rare natterjack toad <i>Bufo calamita</i> near the north-western edge of its range (an estimated 18-24% of the British population). Supports a rich assemblage of wetland plants and invertebrates – at least one nationally scarce plant and at least two British Red Data Book invertebrates. • Criterion 2c – The site supports nationally important numbers of waterfowl during spring and autumn passage. • Criterion 3a – Internationally important waterfowl assemblage (greater than 20,000 birds). • Criterion 3c – Over winter the site regularly supports internationally important populations of knot <i>Calidris canutus</i>, pintail <i>Anas acuta</i> and redshank <i>Tringa totanus</i>. 	OLT09R	35m
<p>Morecambe Bay and Duddon Estuary SPA</p> <p>Objectives: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying features. • The structure and function of qualifying features. • The supporting processes on which the habitats of the qualifying features rely. • The population of each of the 	<p>Qualifying species: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:</p> <ul style="list-style-type: none"> • Northern Pintail <i>Anas acuta</i> • Pink-footed goose <i>Anser brachyrhynchus</i> • Turnstone <i>Arenaria interpres</i> • Sanderling <i>Calidris alba</i> • Dunlin <i>Calidris alpina alpina</i> • Red knot <i>Calidris canutus</i> • Common ringed plover <i>Charadrius hiaticula</i> • Whooper swan <i>Cygnus cygnus</i> • Little egret <i>Egretta garzetta</i> • Oystercatcher <i>Haematopus ostralegus</i> • Herring gull <i>Larus argentatus</i> 	OLT09R	35m

Table 2: European Sites within 5km of the Project

European Designation	Reasons for designation	Relevant OLT	Distance/Direction from OLT
<p>qualifying features.</p> <ul style="list-style-type: none"> The distribution of the qualifying features within the site. 	<ul style="list-style-type: none"> Common gull <i>Larus canus</i> Lesser black-backed gull <i>Larus fuscus</i> Mediterranean gull <i>Larus melanocephalus</i> Bar-tailed godwit <i>Limosa lapponica</i> Eurasian curlew <i>Numenius arquata</i> Ruff <i>Philomachus pugnax</i> Golden plover <i>Pluvialis apricaria</i> Grey plover <i>Pluvialis squatarola</i> Little tern <i>Sterna albirfrons</i> Common tern <i>Sterna Hirundo</i> Sandwich tern <i>Sterna sandvicensis</i> Shelduck <i>Tadorna tadorna</i> Redshank <i>Tringa totanus</i> 		
<p>Morecambe Bay SAC</p> <p>Objectives:</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats and habitats of qualifying species. The structure and function (including typical species) of qualifying natural 	<p>Qualifying habitats: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> Estuaries Mudflats and sandflat not covered by seawater at low tide Large shallow inlets and bays Perennial vegetation of stony banks Salicornia and other annuals colonizing mud and sand Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) "Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")" "Fixed coastal dunes with herbaceous vegetation ("grey dunes")"* Priority feature Humid dune slacks 	OLT09R	35m

Table 2: European Sites within 5km of the Project

European Designation	Reasons for designation	Relevant OLT	Distance/Direction from OLT
<p>habitats.</p> <ul style="list-style-type: none"> The structure and function of the habitats of qualifying species. The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely. The populations of qualifying species. The distribution of qualifying species within the site. 	<p>The site also qualifies, but is not primary reason for selection, for the following habitat listed in Annex I:</p> <ul style="list-style-type: none"> Sandbanks which are slightly covered by sea water all the time Coastal lagoons * Priority feature Reefs Embryonic shifting dunes Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) * Priority feature Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) <p>Qualifying species: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: <i>Great crested newt Triturus cristatus</i></p>		
<p>Duddon Mosses SAC</p> <p>Objectives: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats. The structure and function (including typical species) of qualifying natural habitats. The supporting processes on which 	<p>Qualifying habitats: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> Active raised bogs * Priority feature Degraded raised bogs still capable of natural regeneration * Priority feature 	<p>OLT09R</p>	<p>0.0km (Project is located adjacent to this designation)</p>

Table 2: European Sites within 5km of the Project

European Designation	Reasons for designation	Relevant OLT	Distance/Direction from OLT
qualifying natural habitats rely.			
<p>Subberthwaite Blawith and Torver Low Commons SAC</p> <p>Objectives: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats. • The structure and function (including typical species) of qualifying natural habitats. • The supporting processes on which qualifying natural habitats rely 	<p>Qualifying habitats: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> • Transition mires and quaking bogs • Depressions on peat substrates of the Rhynchosporion 	OLT09R	50m east
<p>River Ehen SAC</p> <p>Objectives: Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of 	<p>Qualifying species: The site is designated under Article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:</p> <ul style="list-style-type: none"> • Freshwater pearl mussel <i>Margaritifera margaritifera</i> • Atlantic salmon 	OLT13	0.0km (Project crosses this designation)

Table 2: European Sites within 5km of the Project

European Designation	Reasons for designation	Relevant OLT	Distance/Direction from OLT
qualifying natural habitats and habitats of qualifying species. <ul style="list-style-type: none"> • The structure and function (including typical species) of qualifying natural habitats. • The structure and function of the habitats of qualifying species. • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely. • The populations of qualifying species. • The distribution of qualifying species within the site. 			

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4 IMPACT PATHWAYS

4.1 Identifying Potential Pathways of Impact

4.1.1 In carrying out an HRA, it is important to determine the various ways in which the Project in question can impact the European Sites by following the pathways along which development can be connected with those sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a development can lead to a likely significant effect upon a European Site.

4.1.2 Only credible and likely impact pathways have been considered within this assessment and are listed below.

European Designation	Disturbance	Direct habitat loss	Degradation of habitat	Impacts to Functionally linked land	Air pollution	Water pollution	Hydrology	Loss of qualifying species	To be scoped in this report
River Eden SAC	✓	✗	✓	✗	✗	✓	✗	✗	Yes
Duddon Estuary Ramsar	✓	✗	✓	✓	✓	✓	✗	✗	Yes
Morecambe Bay and Duddon Estuary SPA	✓	✗	✓	✓	✓	✓	✗	✗	Yes
Morecambe Bay SAC	✗	✗	✓	✗	✓	✓	✗	✗	Yes
Duddon Mosses SAC	✗	✗	✓	✗	✓	✓	✗	✗	Yes
Subberthwaite Blawith and Torver Low Commons SAC	✗	✗	✓	✗	✓	✓	✗	✗	Yes
River Ehen SAC	✓	✗	✓	✗	✗	✓	✗	✗	Yes

Table 4: Summary of Potential Impacts Within the Scope of this HRA

Potential Effect on European Site	Impact Type	
Disturbance to European site qualifying species (visual, vibrations or noise)	<p><u>OLT03</u> The works within this Project cross the River Eden SAC (the tributary River Lyvennet) at a single location where a bridge carries an unnamed road over the river in King’s Meaburn, Penrith (NGR: NY 61787 20722). The works on this bridge will result in a temporary increase in levels of noise through works such as tarmac and concrete cutting or use of machinery which may result in significant disturbance to otter, one of the qualifying species of the SAC.</p> <p><u>OLT09 Rural</u> The planned works within this Project are 35m at the closest point to Duddon Estuary Ramsar and Morecambe Bay and Duddon Estuary SPA. The works are located along the A595, along other existing infrastructure routes or within field edges adjacent to infrastructure routes. The works in these locations will result in a temporary increase in levels of noise, visual impacts and vibrations through works such as tarmac and concrete cutting or use of machinery which may result in likely significant adverse impacts upon the qualifying bird species of the designations.</p> <p><u>OLT13</u> The works within this Project are adjacent to the River Ehen SAC at the existing Hen Beck Bridge at NGR: NY 03170 14452 and through agricultural fields off an unnamed road at NGR: NY 04238 15353. The works on in these locations will result in a temporary increase in levels of noise and vibrations through works such as tarmac and concrete cutting or use of machinery which may result in likely significant adverse impacts upon the qualifying species of the SAC.</p>	Screened in for further assessment.
Direct loss of habitat within the boundary of a European site	None of the planned works within any of the Projects (03, 09 Rural or 13) are located within a European site and will not lead to direct loss of qualifying habitat within a European site or of habitat supporting qualifying species.	Screened out of further assessment.

Table 4: Summary of Potential Impacts Within the Scope of this HRA

Potential Effect on European Site	Impact Type	
Degradation to habitat within the boundary of a European site	<p><u>OLT03</u> As mentioned above, a minor section of work within this OLT crosses the River Eden SAC (the tributary River Lyvennet) at a single location where a bridge carries an unnamed road over the river in King’s Meaburn, Penrith. The minor and temporary works will likely produce dust pollution and potential run-off which may run into the River Eden, resulting in likely significant adverse impacts upon habitats supporting the qualifying species of the SAC designation.</p> <p><u>OLT09 Rural</u> There several areas of works are located close enough to a watercourse that may flow or does flow into a European Site, NGRs: SD 26284 92151, SD 24792 88976 or SD 21439 85355, close enough to where dust pollution may occur and travel into a European Site (Morecambe Bay SAC) and works located along the unnamed road that is directly adjacent to Otter Pool drain and Duddon Mosses SAC. Although the works are minor and temporary, they will likely produce pollution and run-off which may run into the connected watercourse and flow downstream, resulting in likely significant adverse impacts upon habitats of the designations or by works adjacent causing accidental damage during the works or pollution (such as dust).</p> <p><u>OLT13</u> As detailed above, a two minor section of works occur adjacent to the boundary of a European site in Cleator Moor. The works will not result in permanent habitat loss but may result in degradation to the supporting habitats of the qualifying species through accidental damage during the works or pollution (such as dust). The works at these two sections within OLT13 may result in likely significant adverse effects upon the River Ehen SAC.</p>	Screened in for further assessment.

Table 4: Summary of Potential Impacts Within the Scope of this HRA

Potential Effect on European Site	Impact Type	
Loss or degradation of functionally linked land	<p><u>OLT03</u> None of the planned works within this Project are located on land that could be considered as functionally linked to a European site. All works are located within existing infrastructure or highways.</p> <p><u>OLT09 Rural</u> The works located outside of the Boundary of Duddon Estuary Ramsar and Morecambe Bay and Duddon Estuary SPA are primarily located along current infrastructure such as road, pavements, access tracks or roadside verges. Though there are works located in several locations within 2km of the Ramsar/SPA, such as livestock pasture, arable farmland or silage (NGRs: SD 18938 87088, SD 20733 86690, SD 21570 87166 and SD 22428 86893). Therefore, the Project may adversely impact upon habitats that could be considered to be functionally linked land to the Ramsar and SPA.</p> <p><u>OLT13</u> None of the planned works within this Project are located on land that could be considered as functionally linked to a European site. All works are located within existing infrastructure or highways.</p>	Screened in for further assessment.
Risk of air pollution through increased nitrogen deposition	<p>No traffic or air quality assessment has been undertaken in relation to the Projects being assessed within this report. It is not currently clear if or where road closures, diversions or traffic management are required to facilitate any of the works.</p> <p>As the works are minor and temporary, if any road closures, diversions or traffic management are required, this is not anticipated to create significant increases in nitrogen deposition than there currently is produced from traffic levels. The additional traffic movements associated with the works within each Project will be minimal and restricted to a very low number of construction vehicles operating for short periods.</p>	Screened out from further assessment.

Table 4: Summary of Potential Impacts Within the Scope of this HRA

Potential Effect on European Site	Impact Type	
<p>Risk of air pollution through increased levels of dust</p>	<p>No air quality assessment has been undertaken in relation to the Projects being assessed within this report.</p> <p>The works, such as saw cutting tarmac or concrete or excavation activities for ducts, chambers and poles, will temporarily produce a minor amount of dust during the activity which could be carried by air into habitats within a designation.</p> <p><u>OLT03</u> The planned works within this OLT cross the River Eden SAC via an existing bridge at a single location, as detailed above. The works will temporarily produce a minor amount of dust during the proposed works which could be dispersed into habitats within the SAC designation. This may result in likely significant adverse impacts to supporting habitats of qualifying species of the designation.</p> <p><u>OLT09 Rural</u> The works within this Project may result in increased levels of dust or air pollution to Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC, Duddon Mosses SAC and Subberthwaite Blawith and Torver Low Commons SAC. These designations are all within 50m of the planned works at their closest points with Duddon Mosses SAC located adjacent to works (within 5m). The works will temporarily produce a minor amount of dust during the activity which could be dispersed into habitats within a designation, particularly where works are within a European site, or such habitats lie within 50m.</p> <p><u>OLT13</u> Planned works within this OLT are located adjacent to the River Ehen SAC (NGR: NY 03170 14452 and NY 04238 15353). The works will temporarily produce a minor amount of dust during the activity which could</p>	<p>Screened in for further assessment.</p>

Table 4: Summary of Potential Impacts Within the Scope of this HRA

Potential Effect on European Site	Impact Type	
	<p>be dispersed into the River Ehen, located underneath the existing Hen Beck Bridge and within 15m from proposed works of the river in the agricultural field. This dust pollution may have likely significant adverse impacts upon supporting habitats of the qualifying species of the SAC designation.</p>	
<p>Water pollution through surface water run-off</p>	<p><u>OLT03</u> The works within OLT03 cross the River Eden SAC at one location (NGR: NY 61787 20722). If any pollution run-off occurs during construction works, then this could flow directly into the SAC or downstream via a connected watercourse to the SAC and have adverse impacts upon the qualifying species or the habitats they depend on.</p> <p><u>OLT09 Rural</u> Works within this Project are located close to watercourses that are upstream from a European Site (Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC or Subberthwaite Blawith and Torver Low Commons SAC) (NGRs: SD 26284 92151, SD 24792 88976, SD 21737 85097 and SD 21439 85355) and are adjacent (within 5m) to Duddon Mosses SAC. If any pollution occurs and runs off site into a watercourse or into a European Site, then this is likely to have an adverse impact upon the qualifying habitats or habitats that support qualifying species.</p> <p><u>OLT13</u> The works within OLT13 are adjacent to the River Ehen SAC at two locations, are close to two watercourses connected upstream from the SAC: Hole Beck (NGR: NY 03473 14997) and Mere Beck (NGR: NY 04012 14446) and close to other smaller watercourses that are upstream of the SAC. If any pollution run-off occurs during construction works, then this could flow directly into the SAC or downstream via a connected watercourse to the SAC and have adverse impacts upon the qualifying species or the habitats they depend on.</p>	<p>Screened in for further assessment.</p>

Table 4: Summary of Potential Impacts Within the Scope of this HRA

Potential Effect on European Site	Impact Type	
Change in hydrology	The works within OLT03, OLT09 Rural, and OLT13 are located close to various watercourses at numerous locations and located adjacent to a European designated watercourse. However, works do not cross directly through the European designated watercourse and are not located within the channel of a watercourse and are not anticipated to cause changes in hydrology.	Screened out from further assessment.
Loss of qualifying species due to changes in species distribution, accidental spread of disease or invasive species	<p><u>OLT03</u> While the works within OLT03 cross the River Eden SAC (the tributary River Lyvennet) at a single location where a bridge carries an unnamed road over the river in King’s Meaburn, Penrith (NGR: NY 61787 20722). The works on this bridge will result in a minor, temporary increase in levels of noise which may temporarily disturb the qualifying species of the SAC.</p> <p><u>OLT09 Rural</u> All works within OLT09 Rural are located outside of the boundary of a European Site and a suitable distance away to not contribute to the loss of a qualifying species or through spread of disease and invasive species. The only exception is the works located adjacent to Duddon Moss SAC, as mentioned above, where if invasive species are present or tools and equipment are contaminated, there is the risk of spreading invasive species or disease which may have a significant adverse impact upon the designation.</p> <p><u>OLT13</u> The work adjacent to the River Ehen SAC at the two locations detailed above are close enough to the designation that, if present or if tools and equipment are contaminated, there is the risk of spreading invasive species or disease. This may result in likely significant impacts to the qualifying species of the SAC designation.</p>	Screened in for further assessment.

5 STAGE 2 APPROPRIATE ASSESSMENT

5.1 Impacts Screened In

5.1.1 The Stage 1 assessment process has identified the following Likely Significant Effects, in the absence of mitigation:

- Disturbance to qualifying species associated with River Eden SAC, Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC, River Ehen SAC;
- Degradation to habitat within the boundary of a European site;
- Loss or degradation of functionally linked land;
- Risk of air pollution through increased levels of dust;
- Water pollution through surface water run-off; and
- Loss of qualifying species due to changes in species distribution, accidental spread of disease or invasive species

5.1.2 Each of these LSE's is considered in turn below. Mitigation is separately considered in summary with details provided within the associated Ecological Management Plan.

5.2 Disturbance to European site qualifying species (visual, vibrations or noise)

5.2.1 There are works within OLT03 that cross the River Eden SAC via an existing bridge that carries an unnamed road over the river in King's Meaburn, Penrith (NGR: NY 61787 20722). There are works within OLT09 Rural located within 35m of Duddon Estuary Ramsar and Morecambe Bay and Duddon Estuary SPA, along the A595 road and other infrastructure, at the closest point and are located within the road itself, the road verge or inside the field edge adjacent to the A595 road. There are two locations of work within OLT13 which are adjacent to River Ehen SAC at the existing Hen Beck Bridge at NGR: NY 03170 14452 and through agricultural fields off an unnamed road at NGR: NY 04238 15353.

5.2.2 The works are temporary, resulting in minor increases of noise, vibration and minor visual impacts during the course of works. These minor increases are unlikely to result in significant disturbance over the current background noise and visual impacts that arise vehicle access along the unnamed road in King's Meaburn, from the farming activities in fields around the works in Cleator Moor or from the traffic along the A595 and farming within the adjacent fields and surrounding Foxfield. It is anticipated that

the qualifying species to the River Eden SAC (OLT03), River Ehen SAC (OLT13), Duddon Estuary Ramsar (OLT09 Rural), Morecambe Bay and Duddon Estuary SPA (OLT09 Rural), or Morecambe Bay SAC (OLT09 Rural), if present in this area, are likely accustomed to the levels of noise that temporarily arise from the area surrounding the works.

- 5.2.3 **Mitigation:** Proposed mitigation has been recommended (such as no nighttime working, timing of the works and pollution prevention methods) through an Ecological Management Plan. There are also sensitive working measures detailed within Viberoptix GB and Fibrus working policies. With these in place, and the nature of the works being temporary, the qualifying species of these European Sites are not anticipated to be significant adversely impacted by noise or vibration caused by the works, or the visual impacts of the works.

5.3 Degradation to Habitat within the boundary of a European Site

- 5.3.1 As mentioned above a minor section of works within OLT03 cross the River Eden SAC via an existing bridge, works within OLT09 Rural are close to watercourses connected to European Sites and adjacent to Duddon Mosses SAC and works within OLT13 are located adjacent to River Ehen SAC in two locations. These proposed works may cause degradation to habitats of a European site through any pollution from the works, or within OLT09 Rural, accidental damage or incorrect storage of materials impacting habitats of Duddon Mosses SAC.

- 5.3.2 **Mitigation:** The works will follow the Fibrus Working Specifications (Fibrus, 2023), Viberoptix Working Policies (Viberoptix GB, 2023) and specific measures included within the Ecological Management Plan (WA, 2024). It is considered there is no risk of degradation to qualifying habitats of a European Site.

5.4 Loss or Degradation of Functionally Linked Land

- 5.4.1 Some of the works in several locations within Project OLT09 Rural are located within habitats that could be considered as functionally linked land to Duddon Estuary Ramsar or Morecambe Bay and Duddon Estuary SPA. These include fields that appear to be livestock pasture, arable farmland and silage fields. These habitats may be utilised by the qualifying species of the designation (wintering and migratory birds).
- 5.4.2 The works will be temporary and will only affect a very minor amount of potentially functionally linked land, with abundant other potentially functionally linked land

available in the surrounding area. There will only be a very minor loss of habitat where the planned poles are located and any land that may be degraded will be left to naturally return to its original state or be manually returned to its original state by the landowner/tenant (i.e. grazing pasture, silage fields and arable farmland).

- 5.4.3 It is anticipated the very minor temporary loss of potentially functionally linked land, and the minor amount of degraded land will not result in a likely significant impact to the qualifying species of the SPA designation. While the works are not anticipated to result in likely significant effects, it is still recommended that works are undertaken outside of the wintering period to avoid all impacts (September to February inclusive) and avoid working at times of high tide.

5.5 Risk of Air Pollution Through Increased Levels of Dust

- 5.5.1 The works within all Projects involve specific works that will temporarily produce a minor amount of dust (i.e. through saw cutting tarmac or excavation of ground for new ducting) which may be carried by the air and deposited within the habitats of a European site.

Mitigation: Measures will be put in place to reduce or avoid any dust production and should follow Pollution Prevention Guidelines² and will be implemented through Fibrus Working Specifications (Fibrus, 2023) and Viberoptix GB Working Policies (Viberoptix GB, 2023).

- 5.5.2 Once the above mitigation measures are taken into account, the risk of air pollution through increased dust will be avoided or minimised to a level that will not cause significant adverse impacts upon the qualifying habitats of a European site.

5.6 Water Pollution Through Surface Water Run-Off

- 5.6.1 Proposed works within all Projects have the potential to lead to increased water pollution through surface water run-off where works are located within 25m of a watercourse that is connected to a European site, or where works are within 25m of the European site itself.

- 5.6.2 **Mitigation:** Measures have been recommended to reduce or avoid any run-off and works should follow Pollution Prevention Guidelines, Control of Water Pollution from Construction Sites (Masters-Williams et al., 2001) and internal Viberoptix GB policies

² <https://assets.publishing.service.gov.uk/media/5a758f5aed915d6faf2b3eed/pmho1107bnkg-e-e.pdf>

listed in Section 1.1. Implementing pollution prevention measures during any proposed works within 25m of a watercourse or water body will reduce or avoid the risk of pollution run-off to a level which would avoid adverse impacts upon the qualifying features of River Eden SAC (OLT03), River Ehen SAC (OLT13), Duddon Estuary Ramsar (OLT09 Rural), Morecambe Bay and Duddon Estuary SPA (OLT09 Rural), Morecambe Bay SAC (OLT09 Rural), Duddon Mosses SAC (OLT09 Rural) or Subberthwaite Blawith and Torver Low Commons SAC (OLT09 Rural).

5.7 Loss of qualifying species due to changes in species distribution, accidental spread of disease or invasive species

5.7.1 A small stretch of works within OLT03 crosses the River Lyvennet, a tributary of the River Eden SAC, via an existing bridge. There is a stretch of proposed works within OLT09 Rural (approximately 210m in total length) that is located within 5m of the boundary of the Duddon Mosses SAC. The works are located within existing infrastructure of the road and road verge, on the opposite side of the road from the SAC. Proposed works within OLT13 are located adjacent to the River Ehen SAC at two locations detailed above with works occurring on both banks of the river.

5.7.2 At the above-mentioned locations, no records of invasive species were identified within the desk study records.

5.7.3 Any impacts resulting from the minor and temporary increase in noise are not anticipated to result in the likely significant impact of loss of qualifying species due to changing distribution.

5.7.4 **Mitigation:** Measures have been recommended to avoid the accidental spread of disease or invasive species within an Ecological Management Plan. Additional measures are recommended within the internal Viberoptix GB policies listed in Section 1.1. Implementing these measures, such as cleaning of equipment and machinery before arriving on site, will avoid or minimise the risk of accidental spread of disease or invasive species.

5.8 In-combination Likely Significant Effects

5.8.1 The proposed works within each Project have been assessed in combination with the supporting HRA of the associated local plan and the potential likely significant effects considered above.

- Eden Local Plan 2020 – 2029 (OLT03)

- Lake District National Park Local Plan 2020 – 2035, Lake District National Park Management Plan 2020 – 2025 and South Lakeland Local Plan 2010 – 2025 (OLT09 Rural)
- Lake District National Park Local Plan 2020 – 2035, Lake District National Park Management Plan 2020 – 2025 and Copeland Local Plan 2021 – 2029 (OLT13)

5.8.2 In general terms the contribution of the Project activities to any wider in-combination effect is minimal due to the small scale of the proposed Project activities. Each site is considered in turn below.

In-combination Impacts from OLT03

5.8.3 Once the works within OLT03 are considered in combination with the Eden local policies screened in within the supporting HRA (Eden District Council, 2014) and the in-combination assessment of other relevant plans and projects within Section 8 of the supporting HRA, it is considered there are no likely significant effects arising from OLT03. The supporting HRA did not consider any significant effects would arise from Local Policy DEV4 Infrastructure and Implementation. The potential LSEs within Section 7 of the supporting HRA that are related to this Project are discussed in Table 5 below:

Table 5: Assessment of in-combination effects within OLT03 Rural on European sites.		
Effects considered within the Local Plan HRA	Assessment of in-combination effects	Potential Cumulative Effects
Disturbance, displacement and loss of habitat for qualifying bird species of the SPA and Ramsar sites (functionally linked land)	No impacts identified within Stage 1. No works to occur on functionally linked land.	No effects
Changing water quality (run-off into River Eden SAC or watercourses linked River Eden SAC)	Potential adverse effects to River Eden SAC through surface water run-off or accidental pollution directly into the river or into connected watercourses has been identified. Through mitigation detailed above, no such effects are expected to occur to River Eden SAC via directly or through connected watercourses.	No effect

Hydrological change	No impacts identified within Stage 1 of this assessment.	No effect
Air quality effects from increase in vehicles and potential employment/industrial emissions	The Project will only result in a very minor increase in vehicles related to the construction works. It will not result in increased vehicle emissions through other means (recreation, new employment or new industry).	No effect

5.8.4 When considered in combination with recent planning applications within Eden District (now Westmorland and Furness) that are within the surrounding area to OLT03, no in-combination impacts are anticipated as the vast majority of recent applications that are related to small residential developments, building conversions or extensions, minor farming developments or other minor industrial/business related developments.

In-combination Impacts from OLT09 Rural

5.8.5 Once the planned works within this Project are considered in combination with the local policies and projects detailed in Section 7 of the supporting HRA for South Lakeland (Trewick Environmental Consultants, 2009) and Section 4 of the supporting HRA for Lake District (Lake District National Park Partnership, 2021), it is considered there are no likely significant effects arising from this Project. Relevant potential significant effects identified within each supporting HRA are considered below in Table 6:

Table 6: Assessment of in-combination effects within OLT09 Rural on European sites.			
Effects considered within the Local Plan HRA	Assessment of in-combination effects	In-combination Effects – South Lakeland	In-combination Effects – Lake District
Disturbance, displacement and loss of habitat for qualifying bird species of an SPA and Ramsar sites on functionally linked land (Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA)	Minor temporary disturbance effect (noise or visual) during works but not anticipated to be significant. No potential for adverse effects to qualifying bird species on functionally linked land screened in within Stage 2. All habitat where work in this project occurs is not	No effects	No effects

	considered functionally linked land to the SPA/Ramsar. There is an abundance of functionally linked land in the surrounding area.		
Changing water quality (run-off into watercourses linked to a European Site or directly into a European Site) (Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA and Morecambe Bay SAC specifically mentioned in the Local Plan HRA)	Potential for minor adverse effects to Duddon Mosses SAC/Duddon Estuary Ramsar/Morecambe Bay and Duddon Estuary SPA/Morecambe Bay SAC through surface water run-off or accidental pollution into the European Site or connected watercourses during construction was identified. Through mitigation measures, no such effect is anticipated to the either SAC. The works will not result in long term discharges into the designations.	No effect	No effects
Introduction of invasive non-native species (Morecambe Bay SAC/SPA/Ramsar and Duddon Mosses SAC.	Potential adverse effects to qualifying habitats of Duddon Mosses SAC through accidental spread of invasive plant species such as Himalayan balsam. Through mitigation measures during construction works, no significant effects are anticipated qualifying habitats.	No effect	No effects
Recreational pressures	Not an LSE within this Assessment and the Project will not result in any increases of recreational pressures.	No effects	No effects
Hydrological change	No impacts identified within Stage 1 of this assessment.	No effect	No effects
Air quality effects from increase in vehicles and potential employment/industrial emissions	The Project will only result in a very minor increase in vehicles related to the construction works. It will not result in increased vehicle emissions	No effect	No effects

	through other means (recreation, new employment or new industry).		
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5.8.6 When considered in combination with recent planning applications within Lake District National Park and South Lakeland district that are within the surrounding area to OLT09 Rural, no in-combination impacts are anticipated as the vast majority of recent applications are related to small residential developments, building conversions or extensions, minor farming developments or other minor industrial/business related developments.

In-combination Impacts from OLT13

5.8.7 When the works within this Project are considered in combination with the local policies and projects detailed in Section 4 of the supporting HRA for Copeland and Section 4 of the supporting HRA for Lake District, it is considered there are no likely significant effects arising from OLT13. The LSE's within the supporting HRA that are related to this Project are discussed in Table 7 below.

5.8.8 The potential LSE's within Section 7 of the supporting HRA that are related to this Project are discussed in Table 7 below:

Table 7: Assessment of in-combination effects within OLT13 on European sites.			
Effects considered within the Local Plan HRA	Assessment of in-combination effects	In-combination Effects – Copeland	In-combination Effects – Lake District
Recreational pressures	Not a LSE within this Assessment and the Project will not result in any increases of recreational pressures.	No effects	No effects
Changing water quality (run-off into watercourses linked to a European Site) (Wast Water SAC and Lake District High Fells SAC are specifically mentioned in the Local Plan HRA)	Potential adverse effects to either SAC through surface water run-off or accidental pollution into connected watercourses during construction was identified within this assessment. Though the supporting HRA does not identify any impacts through this pathway upon either SAC.	No effect	No effects

Loss of or disturbance to off-site supporting habitats	No impacts identified within Stage 1 of this assessment. Additionally, within the supporting Local Plan HRA, all SAC designations were screened out.	No effect	No effects
Air quality – nitrogen emissions	The Project will only result in a very minor increase in vehicles related to the construction works. It will not result in increased vehicle emissions through other means (recreation, new employment or new industry). The Copeland HRA identifies potential LSE of increased nitrogen emissions, but only for policies that relate to housing and employment policies.	No effect	No effects

5.8.9 When considered in combination with recent planning applications within Lake District National Park and Copeland district that are close to OLT13, no in-combination impacts are anticipated as the vast majority of recent applications are related to small residential developments, building conversions or extensions, minor farming developments or other minor industrial/business related developments

5.8.10 Overall, it is considered that there are no likely significant effects, either alone or in combination to adjacent or nearby developments.

6 CONCLUSIONS

6.1.1 This HRA assessment considers the proposed fibre optic infrastructure upgrade works at 3 sites as part of 'Project Daffodil', upon the following European sites: River Eden SAC, Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC, Duddon Mosses SAC, Subberthwaite Blawith and Torver Low Commons SAC and River Ehen SAC.

6.1.2 The following potential impacts were screened out:

- Direct loss of habitat within the boundary of a European site;
- Risk of air pollution through increased nitrogen deposition; and
- Change in hydrology.

6.1.3 The following impacts were screened in for Stage 2 assessment:

- Disturbance to qualifying species associated with River Eden SAC, Duddon Estuary Ramsar, Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC, River Ehen SAC;
- Degradation to habitat within the boundary of a European site;
- Loss or degradation of functionally linked land;
- Risk of air pollution through increased levels of dust;
- Water pollution through surface water run-off; and
- Loss of qualifying species due to changes in species distribution, accidental spread of disease or invasive species

6.1.4 Appropriate and deliverable mitigation measures have been identified to avoid or minimise the risk of impacts and that there will be no adverse effect upon the integrity of any European site. These will be implemented by the client and contractors with ongoing support from an Ecological Clerk of Works (ECoW) to ensure all mitigation is adhered to.

7 REFERENCES

Copeland Borough Council (2022) Local Plan 2021-2038: Publication Draft
<https://www.copeland.gov.uk/content/copeland-local-plan>

David Archer Associates (on behalf of Copeland Borough Council) (2022) Report to Inform a Habitats Regulations Assessment.
<http://www.copeland.gov.uk/attachment/habitats-regulations-assessment>

Eden District Council (2014) Eden District Council Local Plan 2014-32 Habitats Regulations Assessment Proposed Submission Draft.
<https://www.eden.gov.uk/media/1932/sd-habitats-regulation-assessment-submission-draft.pdf>

Eden District Council (2014) Eden Local Plan 2014 – 2032.
<https://www.eden.gov.uk/planning-and-building/planning-policy/adopted-eden-local-plan/eden-local-plan-adoption/>

Lake District National Park Authority (2020) Lake District Local Plan 2020 – 35.
<https://www.lakedistrict.gov.uk/planning/planningpolicies/local-plan#vision>

Lake District National Park Partnership (2021) Lake District National Park Partnership's Plan Habitat Regulations Assessment. <https://www.lakedistrict.gov.uk/caringfor/lake-district-national-park-partnership/management-plan/supporting-assessments>

Lake District National Park Partnership (2021) Lake District National Park Partnership's Plan Management Plan 2020 – 2025. <https://www.lakedistrict.gov.uk/caringfor/lake-district-national-park-partnership/management-plan/supporting-assessments>

Masters-Williams, H, Heap, A, Kitts, H, Greenshaw, L, Davis, S, Fisher, P, Hendrie, M, Owens. (2001) Control of water pollution from construction sites. Guidance for consultants and contractors. CIRIA

South Lakeland District Council (2010) South Lakeland Local Plan 2010 – 2025.
<https://www.southlakeland.gov.uk/planning-and-building/local-plan/local-plan-core-strategy/>

Treweek Environmental Consultants (on behalf of South Lakeland District Council) (2009) Core Strategy Appropriate Assessment Report.
<https://www.southlakeland.gov.uk/planning-and-building/local-plan/local-plan-core-strategy/>

Wardell Armstrong (2024) Ecological Management Plan.

Wardell Armstrong (2024) GM13161 OLT03 Desk Study Technical Note Issue.

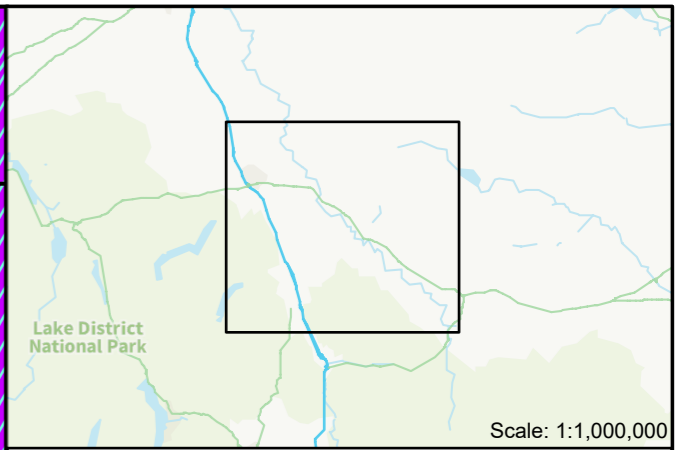
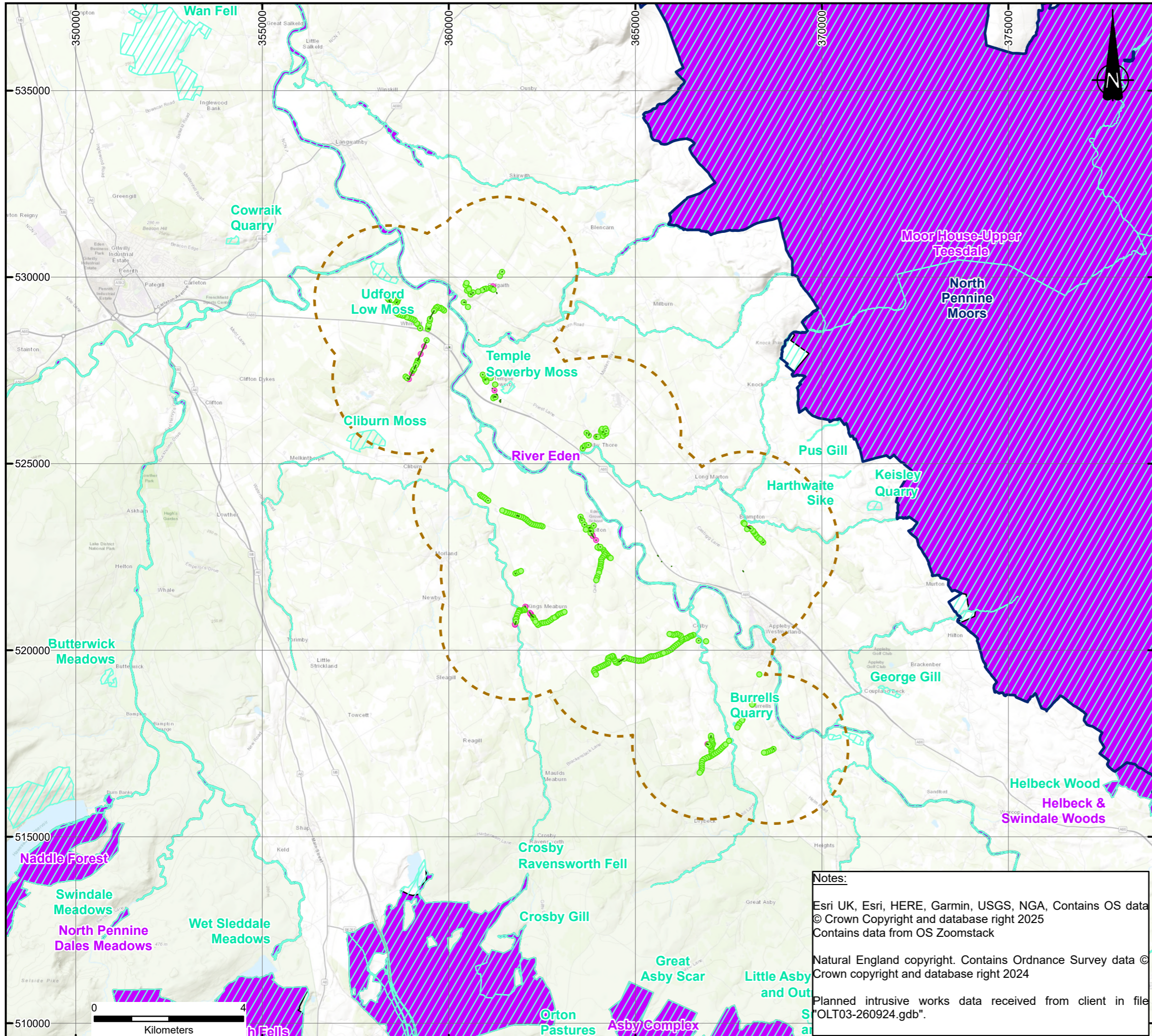
Wardell Armstrong (2024) GM13161 OLT09 Rural Desk Study Technical Note Issue.

Wardell Armstrong (2024) GM13161 OLT13 Desk Study Technical Note Issue.

DRAFT

DRAFT

DRAWINGS



KEY

- Special Protection Area
- Special Area of Conservation
- Site of Special Scientific Interest
- OLT03 2km Buffer
- Planned Duct
- Planned Poles
- Planned Chambers

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD

CLIENT

VIBEROPTIX GB

PROJECT

CUMBRIA FIBRE OPTIC CABLE ROUTE
ECOLOGY WORKS

DRAWING TITLE

OLT03 STATUTORY DESIGNATED SITES

DRG No.	GM13161-OLT03-B-001	REV	A	SUIT CODE	---
DRG SIZE	A3	SCALE	1:100,000	DATE	24/01/2025
DRAWN BY	CT	CHECKED BY	JS	APPROVED BY	TA

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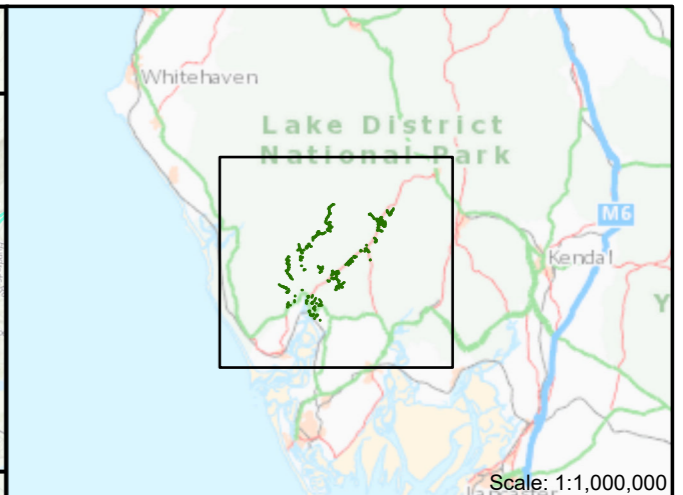
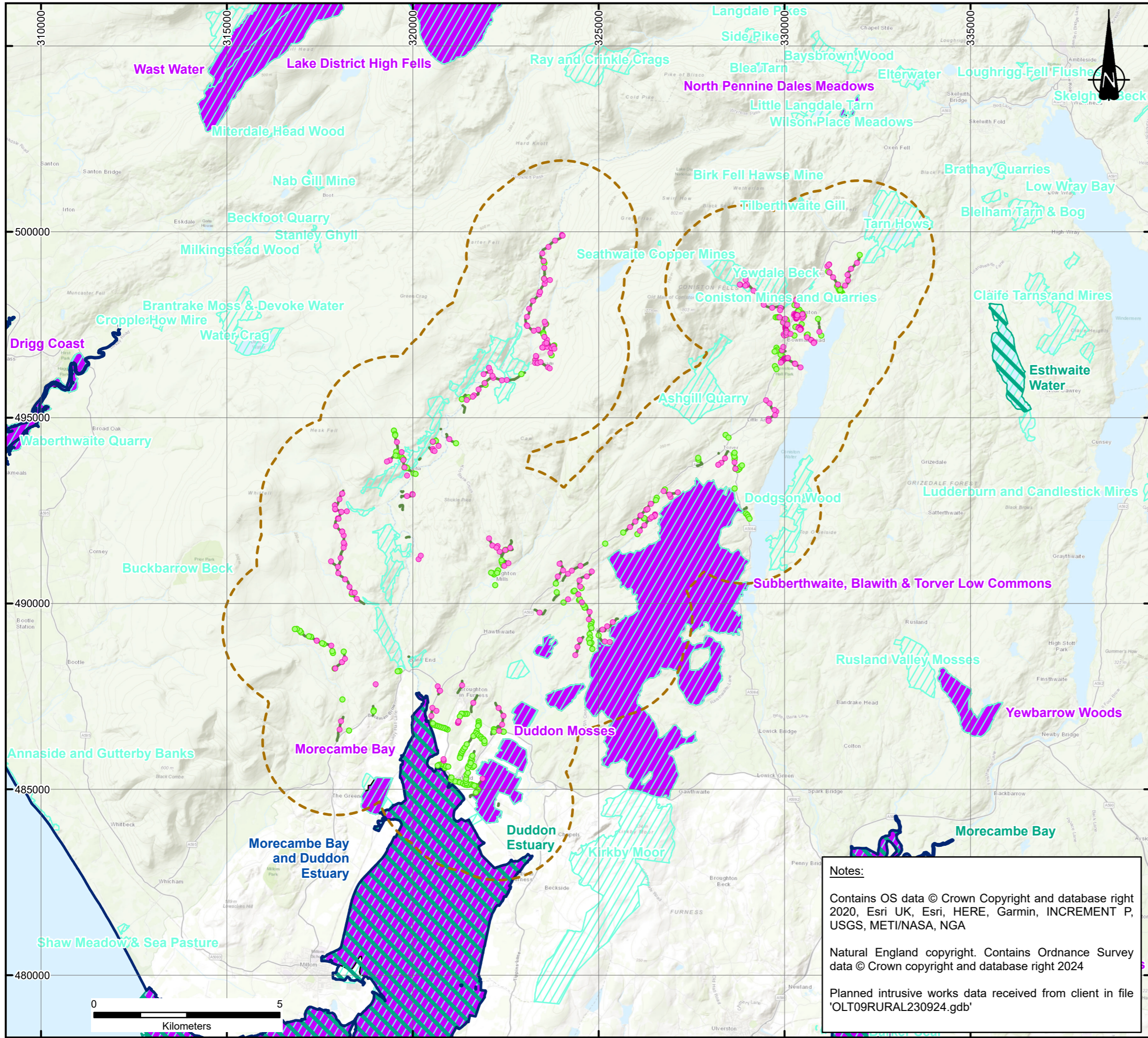
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PART OF **SLR**



KEY

- OLT09 Rural 2km Buffer
- Special Protection Areas
- Ramsar
- Special Area of Conservation
- Site of Special Scientific Interest
- Planned Ducts
- Planned Chambers
- Planned Poles

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD

CLIENT
VIBEROPTIX GB

PROJECT
**CUMBRIA FIBRE OPTIC CABLE ROUTE
ECOLOGICAL WORKS**

DRAWING TITLE
OLT09 RURAL STATUTORY DESIGNATED SITES

DRG No.	GM13161-OLT09R-B-001	REV	A	SUIT CODE	---
DRG SIZE	A3	SCALE	1:100,000	DATE	17/01/2025
DRAWN BY	CT	CHECKED BY	JS	APPROVED BY	TA

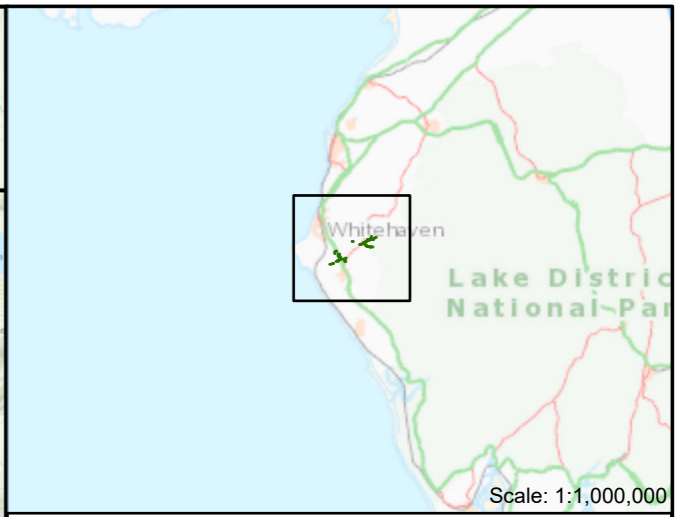
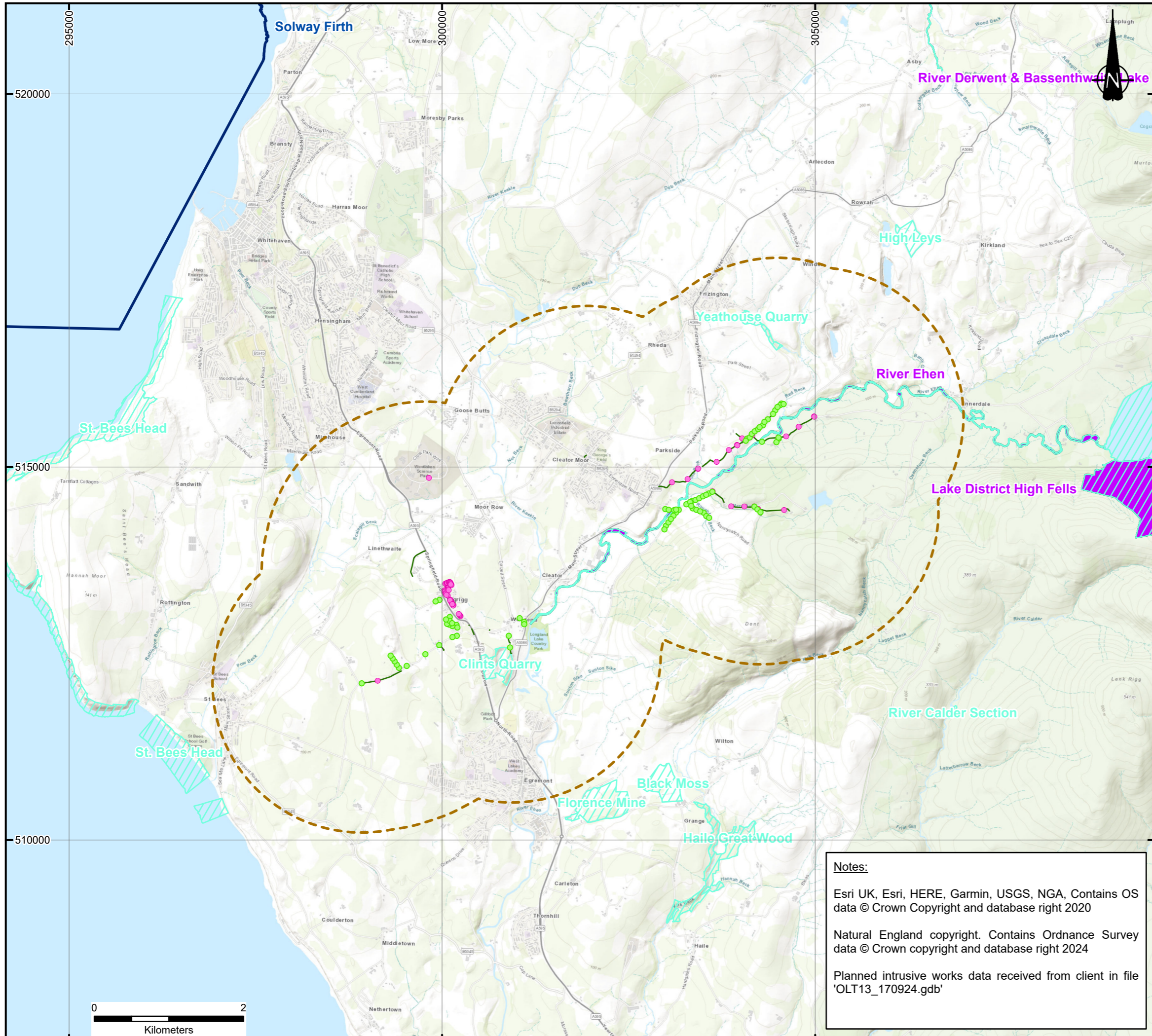
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KEY

- OLT13 2km Buffer
- Special Protection Areas
- Special Area of Conservation
- Site of Special Scientific Interest
- Planned Duct
- Planned Poles
- Planned Chambers

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD

CLIENT	VIBEROPTIX GB
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PROJECT	CUMBRIA FIBRE OPTIC CABLE ROUTE ECOLOGICAL WORKS
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DRAWING TITLE	OLT13 STATUTORY DESIGNATED SITES
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DRG No.	GM13161-OLT13-B-001	REV	A	SUIT CODE	---
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