

Marina Village Residential Opportunity SPD Habitats Regulations Assessment

December 2024

Executive Summary

This Habitat Regulations Assessment (HRA) has been undertaken by Westmorland and Furness Council (WFC). This HRA is required to identify likely significant effects of implementing the Marina Village Residential Opportunity Supplementary Planning Document (MVRO) on the integrity of National Site Network sites and Ramsar sites of international importance (i.e. European sites), designated for their nature conservation value.

European Sites within the Zone of Influence (Zoi) for the development (determined as a 5.6km radius from the proposed Marina Village development site) have been considered in the assessment. The European Sites considered within the assessment comprise: Morecambe Bay and Duddon Estuary SPA, Morecambe Bay SAC, Morecambe Bay Ramsar and Duddon Estuary Ramsar.

With reference to Regulation 63 of the Conservation of Habitats and Species Regulations 2017, aspects of some guiding principles within the MVRO were considered (on a precautionary basis for screening purposes) to have the potential to drive likely significant effects (LSEs) on all four European Sites within 5.6km of the proposals, when considered in the absence of mitigation. For this reason, a Screening Assessment (Stage 1 of the HRA process) was undertaken. This was followed by an Appropriate Assessment (Stage 2 of the HRA process).

Potential LSEs upon the qualifying species/species groups and habitats of European Sites caused by the implementation of the guiding principles were identified during the Screening Assessment. In order to avoid or reduce the identified LSEs, a series of mitigation measures were applied through the Appropriate Assessment. The mitigation measures were then considered in respect of the potential for residual impacts after successful implementation of the mitigation.

The thirteen guiding principles provided within the MVRO were screened. Five guiding principles (MV1, MV5, MV8, MV11, MV12 and MV13) were screened out during the initial stage as they would not have any effect on European Sites.

One guiding principle (MV6) was identified as a principle that could have an effect but would not be likely to have a significant effect on a European site (alone or in-combination with other plans or projects) because the effects are trivial or 'de minimis'.

Four guiding principles (MV4, MV7, MV9, and MV10) were identified as guiding principles that steer a quantum or type of development with the potential to cause an indirect significant effect upon a European Site, the qualifying features of a European Site, or the conservation objectives of a European site, due to ecological connectivity.

Two guiding principles (MV2 and MV3) were identified as guiding principles that directly and/or indirectly and significantly affect a European Site, the qualifying features of a European Site, or the conservation objectives of a European Site e.g. because the principle provides for, or steers, a quantity or type of development that may be very close to it, or ecologically connected to it or it may increase disturbance as a result of factors such as recreational pressure.

The results of Stage 1 of the sHRA concludes that without mitigation, the guiding principles within the MVRO may drive LSEs on qualifying features during both the construction and operation phases of the proposed development. Impact pathways for LSEs include reductions in air and water quality, noise, vibration, visual disturbance, lighting, the spread of invasive species, and recreational activities.

The Appropriate Assessment has concluded that the following measures will mitigate potential effects on qualifying features:

- Guiding principles MV7, MV8, and MV9 include mitigation within the principles themselves
- Use of a CEMP (Construction Environment Management Plan) with a suite of supporting method statements including an Air Quality and Dust Management Plan (AQDMP), a Construction Surface Water Management Plan (CSWMP), Invasive Species Management Plan (ISMP) and Flood Risk and Water Management Strategy (FRWMS)
- Use of a site ECoW (Ecological Clerk of Works) for the purposes of compliance with ecological requirements as per the CEMP and supporting method statements
- Bird surveys and monitoring to be undertaken to inform a project level HRA, lighting strategy and method statements
- A strategic approach to the mitigation of recreational impacts on European Sites, inclusive of developer contributions.

Provided that the suggested mitigation measures are adopted and successfully implemented it can be concluded that there will be no residual impacts of the SPD and no adverse effects on the integrity of the European Sites within the zone of influence of the MVRO. It is highlighted that robust project-level HRA will be required for a planning application to develop the Marina Village site in accordance with the MVRO. The approach to baseline data gathering and mitigation development, with respect to the project level HRA, must be developed in close coordination with the LPA and Natural England. The project level HRA will need to outline robust and securable mitigation measures that build on the framework measures set out in this HRA.

As no residual impacts were identified for any of the guiding principles following the adoption and implementation of the suggested mitigation measures, it is not considered necessary to progress to Stage 3 of the HRA process 'Assessment of Alternative Solutions' for the MVRO SPD.



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Introduction

Background

- 1.1.1. In 2003, White Young Green were commissioned by Cumbria County Council to draw up a Masterplan to identify opportunities for economic and environmental regeneration for “Barrow Port”. In 2004, the finalised Barrow Port Masterplan progressed through to the development of the Barrow Port Area Action Plan Development Planning Document (the AAP) for the purposes of acquiring statutory planning status to preferred masterplan development ideas. Marina Village was identified within the Masterplan as an area allocated for mixed use development including housing, sport and leisure, tourism, specialist retail, open space and landscaping. Marina Village Housing was allocated in 2006 with 450 dwellings proposed. The AAP was adopted in 2010 and proposed an increased housing allocation for Marina Village Housing of 650 dwellings within Policy BP 18: Marina Village Housing. This was superseded by the housing allocation within the Barrow Borough Local Plan 2016-2031, which lists Marina Village as allocated housing for 650 dwellings.
- 1.1.2. An Habitats Regulations Assessment (HRA) was undertaken in 2007 to support the AAP, with a second HRA undertaken in March 2017 and updated in August 2018 to support the Barrow Borough Local Plan.
- 1.1.3. The Marina Village Residential Opportunity Supplementary Planning Document (the MVRO) has been drafted in order to provide further guidance specific to the site for the design, construction and operation of the Marina Village Housing project.
- 1.1.4. SPDs do not typically require an HRA as they build upon policies within the local plan, relying on HRAs undertaken previously; however, proposals for Marina Village Housing have been revised, including an increase in the number of dwellings from 650 to 800. Such revisions to the proposals are likely to significantly increase and/or change the previously assessed impacts on European sites, especially during the operational phase. As such, it was identified that the Barrow Borough Local Plan HRA required an update addendum to support the MVRO. At the time of the writing of this updated addendum to the Barrow Borough Local Plan HRA, the MVRO is at the draft stage.
- 1.1.5. The Draft MVRO has been prepared in accordance with the local development plan for the legacy Barrow Borough area, which now forms part of the new unitary local authority of Westmorland and Furness. Westmorland and Furness Council was formed in April 2023 and replaces Barrow Borough Council, Eden District Council, South Lakeland District Council and part of Cumbria County Council.
- 1.1.6. As such, the development plans of the former authorities still apply until replacement under a new Westmorland and Furness Local Plan. This addendum to the Barrow Borough Local Plan HRA refers to and should be read alongside the following documents:

- Marina Village Residential Opportunity Draft Supplementary Planning Document (August 2024)
- Barrow Borough Local Plan 2016-2031
- Biodiversity & Development Supplementary Planning Document (May 2018)
- Barrow Borough Local Plan: Habitats Regulations Assessment (March 2017)
- Barrow Borough Local Plan: Habitats Regulations Assessment (August 2018 update)
- Barrow Port Area Action Plan Development Plan Document (July 2010)
- Barrow Port Area Action Plan (Proposed Submission Document) Appropriate Assessment (April 2009)
- Report to Inform Habitats Regulations Assessment of Barrow Port Area Action Plan (August 2007)

Legislative Context & HRA Process

- 1.2.1. The need for an HRA is set out within the Conservation of Habitats & Species Regulations 2017 (as amended) and concerns the protection of European site integrity. European sites are defined as actual or proposed/candidate Special Areas of Conservation (SAC) or Special Protection Areas (SPA). It is also Government policy for sites designated under the Convention on Wetlands of International Importance (Ramsar sites) to be treated as having equivalent status to European sites¹. For the purposes of this document, the term “European sites” also includes Ramsar Sites.
- 1.2.2. The Conservation of Habitats & Species Regulations 2017 transpose the land and marine aspects of the EU-derived Habitats Directive and certain elements of the EU-derived Wild Birds Directive. The Habitats Regulations are domestic law and remain in place post-Brexit. Due to the EU-derived origin of this domestic law the Habitats Regulations must still be interpreted in line with pre-Brexit EU case law.
- 1.2.3. Before adoption of the Marina Village Residential Opportunity SPD, Westmorland and Furness Council must, as the Competent Authority, consider under the requirements of Regulation 63 of the Habitat Regulations whether the plan or project:
- is likely to have a significant effect on a European site (either alone or in combination with other plans or projects); and
 - is not directly connected with or necessary to the management of that site, and in such cases, they must make an appropriate assessment of the implications for that site in view of that site’s conservation objectives.
- 1.2.4. Where the potential for likely significant effects (LSEs) cannot be excluded and the plan is not connected with or necessary to the management of the site then a Competent Authority must make an ‘appropriate assessment’ of the implications for that site in view of its conservation objectives.

¹ National Planning Policy Framework (NPPF) para 187.

- 1.2.5. The Habitats Regulations promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the MVRO should aim to avoid any negative impacts on European sites by identifying possible impacts early in the plan-making process and writing the plan in order to avoid such impacts. Second, if effects remain, mitigation measures should be applied during the process to the point where no adverse impacts on the site(s) remain.
- 1.2.6. In the light of the conclusions of the assessment, the Competent Authority may agree to the plan or project only after having ascertained that the project will not, alone or in-combination with other plans and projects, adversely affect the integrity of the European site. Exceptions are outlined under Section 64 of the Habitats Regulations, where there are no alternatives and there are Imperative Reasons of Overriding Public Interest (IROPI) for development and compensatory measures have been secured.
- 1.2.7. The HRA process typically follows a four-stage approach as outlined below:
- *Stage 1: Screening* – Identification of potentially relevant European sites and of the likely impacts of a project or plan upon a European site, either alone or in combination with other projects or plans, may have. This process includes determining if any likely effects may be significant. Where a likely significant effect is identified, Stage 2 is commenced
 - *Stage 2: Appropriate Assessment* – This assessment considers the potential for likely significant effects of the project on the integrity of the site(s) identified in Stage 1, either alone or in combination with other projects or plans. This assessment is confined to the effects on the internationally important habitats and species for which the site has been designated. If likely significant effects are identified, an assessment of the potential mitigation measures must be undertaken, Stage 3 is commenced only if mitigation measures are not sufficient or cannot avoid likely significant effects.
 - *Stage 3: Assessment of Alternatives* – (If the mitigation measures outlined in Stage 2 are not sufficient to avoid likely significant effects on the integrity of a European site, alternative solutions to achieve the project/plan objective are considered in order to avoid likely significant effects acting upon the site.
 - *Stage 4: Assessment where no alternatives are available* – Where IROPI is cited as cause for a project to continue in the absence of alternative solutions, an assessment of compensatory measures required to maintain site integrity or overall coherence of the designated site network will take place during this stage
- 1.2.8. All four stages of the process are referred to collectively as the Habitats Regulations Assessment in order to clearly distinguish the whole process from the “Appropriate Assessment” stage (Stage 2).



Document Purpose and Scope

- 1.3.1. The purpose of this addendum to the Barrow Borough Local Plan HRA is to determine if the proposals within the Marina Village Residential Opportunity SPD will give rise to any Likely Significant Effects (LSEs) on the integrity of European Sites.
- 1.3.2. This document comprises Stage 1 and Stage 2 of the HRA process and contributes to the fulfilment of WFC's statutory duty as regards Article 6(3) of the Conservation of Habitats and Species Regulations 2017 (as amended). Stage 1 of the HRA process (Screening) ascertains whether the proposals within the MVRO SPD would have a likely significant adverse effect on the integrity of European sites within the Zone of Influence (Zoi).
- 1.3.3. An Appropriate Assessment (AA) has been undertaken where the screening stage concludes that there is a likelihood that proposals within the Marina Village Residential Opportunity SPD will have significant adverse effects on European sites within the Zoi.

Limitations

- 1.4.1. Although this HRA has been supported by desk study data and biological records, no specific surveys have been undertaken at this stage. The precautionary principle has been applied throughout the Screening Assessment and Appropriate Assessment.

Description of the Marina Village Residential Opportunity Supplementary Planning Document

Introduction

- 2.1.1. The MVRO sets out Westmorland and Furness Council's development, design, and infrastructure requirements for the Marina Village Residential Opportunity site.

Vision, Objectives, and Principles

- 2.1.2. The MVRO sets out an over-arching vision along with development objectives and guiding principles to shape the special development framework for the site.

Vision

- 2.1.3. The vision for the site is for *"A high quality, well designed waterfront neighbourhood set along Barrow's active historic docks, it will offer a new, contemporary housing choice within walking distance of Barrow Town Centre. Set within a sustainable network of vibrant and natural spaces, which support well-being, active travel and a great quality of life, it will offer homes where you can set down roots. A place where heritage, nature, community and landscape connects to Barrow's industrial future, and thrives"*. – Page 21, MVRO

Objectives

- 2.1.4. The development objectives are briefly as follows:
- Delivery of high-quality homes providing housing diversity for Barrow Town Centre
 - Create built and natural environments supporting Barrow's wider growth ambitions
 - Integrate development and sustainable living with the waterfront and natural environment
 - Establish a mixed tenure community supportive of Barrow's vitality
 - Creation of a well-connected movement-framework supportive of active travel and access to nature, supportive of good health and well-being for residents
 - Creation of a new destination space along Buccleuch Dockside, increasing visitors and residents
 - Establishment of multi-functional green and blue spaces (inclusive of drainage, ecology, recreation and connectivity) as part of a sustainable neighbourhood with energy and water efficient homes
 - Respect and enhance heritage within St. George's Conservation Area
 - Create a residential community with integrated physical infrastructure across the site

- Provide additional social and environmental benefits, as well as improving skills and educational outcomes for residents as a result of the development whilst supporting the local economy

Guiding Principles

2.1.5. A full description of the guiding principles is provided within Appendix 1: Guiding Principles with Screening Appraisal. In brief, the guiding principles comprise the following:

- MV1: Compliance with the SPD
- MV2: Land Use
- MV3: Residential Development
- MV4: Public Open Space
- MV5: Access
- MV6: Utilities & Services
- MV7: Streets & Movement
- MV8: Landscape & Ecology
- MV9: Sustainable Drainage
- MV10: Density & Scale
- MV11: Development Sustainability
- MV12: Planning Application Requirements
- MV13: Infrastructure Requirements

Landscape and Ecology Principles

2.1.6. The MVRO also lists a set of “key landscape and ecology principles that the framework seeks to establish”. These key landscape and ecology principles are listed as follows:

- Create a 10% increase in Biological Net Gain associated with the development, including enhancement of the Nature Conservation Area.
- Retain existing tree planting along the northern extent of the site as far as possible.
- Create a dockside, destination public realm space, which is accessible by bike and foot, and that is capable of hosting events and activity that the town and its residents can enjoy and benefit from.
- Create a variety of landscaped public open spaces (in accordance with planning policy requirements), which are connected and accessible, safe, well defined and overlooked, for residents to use and which support active lifestyles and mental health.
- Development will need to respond to the ecological sensitivities of the statutory designated sites and establish a well-defined and managed landscape buffer / setback between development edges and areas of sensitive ecological habitat within the Nature Conservation Area.

- The ecological buffer spaces should function to control and guide pedestrian access through the Nature Conservation Area by limiting pedestrian movement to designated paths only. Further ecological survey and assessment will be required to determine the suitability of any future pedestrian links through the Nature Conservation Area.
- A Habitats Regulations Assessment informed by engagement with the Local Planning Authority and Natural England and based on contemporary ecological surveys will be required to assess the impacts of the project on statutory designated sites. Further ecological surveys are likely to include bird surveys, bird disturbance assessments, aquatic plant surveys, and invasive species survey, although this list is not exhaustive.
- Ensure that streets, pedestrian and cycle links are defined with landscape and SuDS features, such as street tree planting, pollinator friendly planting, swales and planted verges to help create an attractive streetscape that supports legibility and street hierarchy. Green walls and roofs, and vertical gardens on apartment blocks, are encouraged.
- Create a Buccleuch Dock Promenade public realm linkage that opens up the dock side for public use and which provides an active travel link between the town centre and the development site. The scale and width of the Promenade should be sufficient to comfortably support cycle routing, dwell time, pedestrian routing and soft landscape features as amenity for adjacent new residential development.
- Integrate Sustainable Urban Drainage solutions as part of the streetscape and landscape framework and in a manner which supports biodiversity. Providing swales, raingardens and water storage during heavy rainfall periods ensures responsibly managing surface water run off as part of a healthy water system.
- Creating outdoor informal and formal play areas and providing access to allotments and grow spaces which encourage healthier, more active lifestyles and opportunities to increase local food production.
- Using planting in a manner to help mitigate against local micro-climate conditions such as prevailing winds associated with the site's coastal environment and improving air quality.
- Implementing good lighting design to balance safety requirements and reduce impacts on nature.
- Ensure consideration of the priorities of the Cumbria Local Nature Recovery Strategy and associated local habitat map.

Identification of European Sites

Site Location & Context

- 3.1.1. The MVRO applies to the proposals to develop site *SHL001 Marina Village, Barrow*, as identified within the Barrow Borough Local Plan 2016-2031. Figure 2 Appendix 2 shows the edge red for the site.
- 3.1.2. The site lies to the southern edge of Barrow's Town Centre and comprises approximately 27ha. The southern boundary is formed by an existing railway line that serves Barrow Port as well as the northern dock walls of Cavendish Dock. The western and south-western boundaries lie adjacent to Buccleuch Dock and Ramsden Dock, with the northern boundary immediately adjacent to Salthouse Road (A5087). The existing live railway line that serves Barrow Station bounds the site to the east. The eastern boundary also follows properties along Vulcan Road and Vulcan Park.

Zone of Influence

- 3.2.1. Visitor access surveys undertaken by Footprint Ecology in 2015² of visitors to sites around Morecambe Bay indicated that visitors to protected sites around the bay typically travelled 3.95km, although some sites had a larger catchment area. Research undertaken by Footprint Ecology (2019)³ that found that the majority (75%) of visitors to protected sites travel from a straight-line distance averaging 5.6km. This figure is used as an approximation of catchment area in several management plans for designated sites across England, although it is acknowledged that without specific visitor surveys, the true catchment area for any given site may be above or below this figure. As such, taking the precautionary approach, and in line with the more recent research and current prevailing practice, the Zol has been determined to be a 5.6km buffer around the Marina Village Housing site. As such, Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and Ramsar sites within the Zol of the project are identified below:
- Morecambe Bay and Duddon Estuary SPA
 - Morecambe Bay SAC
 - Morecambe Bay Ramsar
 - Duddon Estuary Ramsar
- 3.2.2. This Zol is in agreement with the Barrow Borough Local Plan HRA (March 2017), which acknowledges potential impacts of the *SHL001 Marina Village* Housing allocation on the following Natura 2000 sites (European sites): Morecambe Bay SAC, Morecambe Bay SPA,

² Liley, D., Underhill-Day, J., Panter, C., Marsh, P. and Roberts, J. (2015) *Morecambe Bay Bird Disturbance and Access Management Report*. Unpublished report by Footprint Ecology for the Morecambe Bay Partnership.

³ Liley, D. (2019). *Impacts of urban development at Burnham Beeches SAC: update of evidence and potential housing growth*, 2019. Unpublished report by Footprint Ecology for Chiltern and South Bucks Councils



Morecambe Bay Ramsar, Duddon Estuary Ramsar and Duddon Estuary SPA. Note that in late 2017 Morecambe Bay SPA and Duddon Estuary SPA were combined to create Morecambe Bay and Duddon Estuary SPA.

3.2.3. Although not subject to the HRA process, it is also of note that additional SSSI (Sites of Special Scientific Interest) designations are present within the boundaries of each of the above sites. These comprise the following SSSIs:

- Morecambe Bay SSSI
- South Walney and Piel Channel Flats SSSI
- Duddon Estuary SSSI

3.2.4. The locations of the above SPA, SAC and Ramsar sites in relation to the site are shown in Figures 1 and 2 in Appendix 2.

European Sites

3.3.1. Table 3.1, below, provides the qualifying features and conservation objectives/identified site vulnerabilities as well as a description of each European Site within the 5.6km ZoI for the proposed development. The detailed information compiled for each European Site has been taken from PLACES.

Table 3.1: Qualifying Features of Morecambe Bay and Duddon Estuary SPA, Morecambe Bay Ramsar, Morecambe Bay SAC and Duddon Estuary Ramsar

Site	Distance from MVRO	Qualifying Features	Description	Conservation Objectives/ Site Vulnerability
Morecambe Bay and Duddon Estuary SPA (UK9020326)	0m: adjacent to south	<p>Non-breeding:</p> <ul style="list-style-type: none"> ▪ A026 <i>Egretta garzetta</i>; Little egret ▪ A038 <i>Cygnus cygnus</i>; Whooper swan ▪ A040 <i>Anser brachyrhynchus</i>; Pink-footed goose ▪ A048 <i>Tadorna tadorna</i>; Common shelduck ▪ A054 <i>Anas acuta</i>; Northern pintail ▪ A130 <i>Haematopus ostralegus</i>; Eurasian oystercatcher ▪ A137 <i>Charadrius hiaticula</i>; Ringed plover ▪ A140 <i>Pluvialis apricaria</i>; European golden plover ▪ A141 <i>Pluvialis squatarola</i>; Grey plover ▪ A143 <i>Calidris canutus</i>; Red knot ▪ A144 <i>Calidris alba</i>; Sanderling ▪ A149 <i>Calidris alpina alpina</i>; Dunlin ▪ A151 <i>Philomachus pugnax</i>; Ruff (Non-breeding) ▪ A156 <i>Limosa limosa islandica</i>; Black-tailed godwit ▪ A157 <i>Limosa lapponica</i>; Bar-tailed godwit ▪ A160 <i>Numenius arquata</i>; Eurasian curlew ▪ A162 <i>Tringa totanus</i>; Common redshank 	<ul style="list-style-type: none"> ▪ The UK's largest continuous intertidal mudflat and sandflat area ▪ Highly dynamic environment with shifting channels, creeks, and pools, changing over time ▪ Supports rich invertebrate life (worms, molluscs, crustaceans), crucial for bird diets ▪ Home to over 62,000 breeding seabirds and 210,000 winter waterfowl, with 27 protected features including two assemblages ▪ Supports >1% of GB population of three Annex I breeding species and six Annex I non-breeding species ▪ Hosts >1% of biogeographical populations of 16 migratory bird species ▪ Regularly attracts >20,000 seabirds and waterbirds, especially during severe weather due to mild climate and food availability ▪ Sheltered areas transition into extensive saltmarshes, serving as critical roosting habitat for birds at high tide 	<p>The site's conservation objectives apply to the site and the individual species and/or assemblage of species for which the site has been classified, i.e. qualifying features.</p> <p>The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> ▪ the extent and distribution of the habitats of the qualifying features ▪ the structure and function of the habitats of the qualifying features ▪ the supporting processes on which the habitats of the qualifying features rely ▪ the populations of each of the qualifying features ▪ the distribution of qualifying features within the site

Site	Distance from MVRO	Qualifying Features	Description	Conservation Objectives/ Site Vulnerability
		<ul style="list-style-type: none"> ▪ A169 <i>Arenaria interpres</i>; Ruddy turnstone ▪ A176 <i>Larus melanocephalus</i>; Mediterranean gull ▪ A183 <i>Larus fuscus</i>; Lesser black-backed gull <p>Breeding:</p> <ul style="list-style-type: none"> ▪ A183 <i>Larus fuscus</i>; Lesser black-backed gull ▪ A184 <i>Larus argentatus</i>; Herring gull ▪ A191 <i>Sterna sandvicensis</i>; Sandwich tern ▪ A193 <i>Sterna hirundo</i>; Common tern ▪ A195 <i>Sterna albifrons</i>; Little tern <p>Waterbird Assemblage Seabird Assemblage</p>		
Morecambe Bay Ramsar	0m: adjacent to south	<p>Ramsar Criterion 4: The site is a staging area for migratory waterfowl including internationally important numbers of passage <i>Charadrius hiaticula</i> common ringed plover</p> <p>Ramsar criterion 5: Internationally important waterfowl assemblage (greater than 20,000 birds)</p> <p>Ramsar criterion 6: Over winter the site regularly supports internationally important populations of: Bar-tailed Godwit <i>Limosa lapponica</i>, Curlew <i>Numenius arquata</i>, Dunlin <i>Calidris alpina alpina</i>, Grey</p>	<ul style="list-style-type: none"> ▪ The UK's largest continuous intertidal area in Britain ▪ The bay includes the estuaries of five rivers and mudflats behind Walney Island ▪ Morecambe bay features intertidal mud and sandflats, salt marshes, shingle beaches and various coastal habitats ▪ Morecambe Bay is a component in the chain of west coast estuaries of outstanding importance for passage and overwintering waterfowl (supporting the third largest number of wintering waterfowl in Britain), and breeding waterfowl, gulls and 	<p>The site is subjected to a wide range of pressures such as reclamation for agriculture, over-grazing, dredging, over-fishing, industrial uses and unspecified pollution.</p> <p>The site is relatively robust; many of those pressures have slight to local effects and are being addressed through Management Plans.</p> <p>The breeding tern interest is very vulnerable and the colony has recently moved to the adjacent Duddon Estuary.</p>

Site	Distance from MVRO	Qualifying Features	Description	Conservation Objectives/ Site Vulnerability
		<p>Plover <i>Pluvialis squatarola</i>, Knot <i>Calidris canutus</i>, Oystercatcher <i>Haematopus ostralegus</i>, Pink-footed Goose <i>Anser brachyrhynchus</i>, Pintail <i>Anas acuta</i>, Redshank <i>Tringa totanus</i>, Shelduck <i>Tadorna tadorna</i>, Turnstone <i>Arenaria interpres</i></p> <p>Species occurring at levels of international importance (as identified at designation): As per Ramsar criterion 6, with the addition of common ringed plover <i>Charadrius hiaticula</i></p> <p>Species occurring at levels of national importance (Breeding season): Herring gull <i>Larus argentatus</i>, Lesser black-backed gull <i>Larus fuscus</i>, Sandwich tern <i>Sterna sandvicensis</i>.</p> <p>Species occurring at levels of national importance (passage): <i>Sanderling Calidris alba</i></p> <p>Species occurring at levels of national importance (wintering): Cormorant <i>Phalacrocorax carbo</i>, Eider <i>Somateria mollissima</i>, Goldeneye <i>Bucephala clangula</i>, Golden Plover <i>Pluvialis apricaria</i>, Great Crested Grebe <i>Podiceps cristatus</i>, Lapwing <i>Vanellus vanellus</i>, Red-breasted Merganser <i>Mergus serrator</i>, and Wigeon <i>Anas penelope</i></p>	terns	
Morecambe Bay SAC (UK0013027)	660m south	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:	<ul style="list-style-type: none"> Morecambe Bay is large, shallow, and predominantly sandy, formed by the confluence of four estuaries: Leven, Kent, Lune, and Wyre. The 	With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to

Site	Distance from MVRO	Qualifying Features	Description	Conservation Objectives/ Site Vulnerability
		<ul style="list-style-type: none"> ▪ H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks ▪ H1130. Estuaries ▪ H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats ▪ H1150. Coastal lagoons* ▪ H1160. Large shallow inlets and bays ▪ H1170. Reefs ▪ H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves ▪ H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand ▪ H1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) ▪ H2110. Embryonic shifting dunes ▪ H2120. Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"); Shifting dunes with marram ▪ H2130. Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland* ▪ H2150. Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>); Coastal dune heathland* ▪ H2170. Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>); Dunes with creeping willow ▪ H2190. Humid dune slacks ▪ S1166. <i>Triturus cristatus</i>; Great 	<p>Duddon Estuary is connected to the bay via Walney Channel.</p> <ul style="list-style-type: none"> ▪ Low tide exposes extensive intertidal sandflats, with some mudflats in the upper reaches of the estuaries. ▪ Mobile sediments support various community types from open coast sands to low-salinity sands and muds. ▪ Large beds of mussels <i>Mytilus edulis</i> on boulder and cobble scars; reefs with furoid algal communities. ▪ A rich community of sponges and associated fauna is found on tide-swept pebbles and cobbles at the southern end of Walney Channel.. ▪ Walney Island is a barrier island with shingle and sand, featuring two areas of exposed vegetated shingle. ▪ The southern area of Walney Island has been modified by eutrophication from a gull colony, resulting in diverse pioneer shingle vegetation. ▪ Notable plant species on the shingle include perennial rye-grass <i>Lolium perenne</i>, common chickweed <i>Stellaria media</i>, biting stonecrop <i>Sedum acre</i>, and dove's-foot crane's-bill <i>Geranium molle</i> ▪ Shifting dune vegetation prevalent at the entrance to Morecambe Bay on Walney Island and the Duddon Estuary. ▪ Sandscale Haws supports a mosaic of shifting dune communities and transitions to embryonic shifting dunes. ▪ Sandscale contains the largest area 	<p>natural change;</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 within the site

Site	Distance from MVRO	Qualifying Features	Description	Conservation Objectives/ Site Vulnerability
		<p>crested newt</p> <p>Annex I priority habitats are denoted by an asterisk (*)</p> <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"> Great crested newt <i>Triturus cristatus</i> 	<p>of calcareous fixed dunes in Cumbria, contrasting with acidic dunes at North End Haws.</p> <ul style="list-style-type: none"> Sandscale features both permanent and ephemeral water bodies, supporting breeding colonies of great crested newts <i>Triturus cristatus</i>, which forage over the foreshore, dunes, dune-heath, and scrub. 	
Duddon Estuary Ramsar	1.17km west	<p>Ramsar criterion 2a:</p> <ul style="list-style-type: none"> 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. <p>Ramsar criterion 2c:</p> <ul style="list-style-type: none"> Supports nationally important numbers of waterfowl during spring and autumn passage <p>Ramsar criterion 3a:</p> <ul style="list-style-type: none"> Internationally important waterfowl assemblage (greater than 20.000 birds) <p>Ramsar criterion 3c</p> <ul style="list-style-type: none"> Over winter the site regularly supports internationally important populations of: Knot <i>Calidris canutus</i>, Pintail <i>Anas acuta</i>, and Redshank <i>Tringa toranus</i> 	<ul style="list-style-type: none"> Formed by the River Duddon and Kirkby Pool opening into the Irish Sea in south-western Cumbria Primarily consists of intertidal sand and mudflats; important for large numbers of wintering and passage waterfowl Grazed and ungrazed saltmarsh habitats occur around the edge of the estuary, especially in the sheltered inner section. The Duddon Estuary Ramsar is the most important in Cumbria for sand-dune communities, featuring large areas of calcareous dunes at Sandscale and Haverigg Haws, as well as contrasting acid dunes on North Walney. Extensive areas of saltmarsh occur around the outer edge of the site, especially in the more sheltered inner third of the estuary and around North Walney. Saltmarsh communities are considerably variable depending on grazing intensity and degree of saltwater inundation Strandline communities at North 	<ul style="list-style-type: none"> The Duddon Estuary is a diverse estuarine system that relies on natural physical processes, making habitats vulnerable to environmental changes The intertidal zone faces threats from coastal squeeze due to land claim, coastal defence works, sea level rise, and storm surges Many of the saltmarshes are grazed by agricultural stock, sometimes at a high level Vulnerability of waterfowl wintering on the estuary is linked to loss of feeding areas from disturbance, land claim, and development Recreational pressures and bait digging are also threats for this site

Site	Distance from MVRO	Qualifying Features	Description	Conservation Objectives/ Site Vulnerability
		<p>Species occurring at levels of international importance (as identified at designation):</p> <p>Overwinter: Knot <i>Calidris canutus</i>, Pintail <i>Anas acuta</i>, Redshank <i>Tringa tetanus</i></p> <p>Species currently occurring at levels of national importance (Breeding): Sandwich tern <i>Sterna sandvicensis</i></p> <p>Species currently occurring at levels of national importance (Passage): Dunlin <i>Calidris alpina alpina</i>, ringed plover <i>Charadrius hiaticula</i>, sanderling <i>Calidris alba</i></p> <p>Species currently occurring at levels of national importance (Wintering): Curlew <i>Numenius arquata</i>, Dunlin <i>Calidris alpina alpina</i>, Oystercatcher <i>Haematopus ostralegus</i>, Red-breasted Merganser <i>Mergus serrator</i>, Sanderling <i>Calidris alba</i>, Shelduck <i>Tadorna tadorna</i></p> <p>Nationally important species occurring on the site: Otter <i>Lutra lutra</i>, natterjack toad <i>Bufo calamita</i>, spring mining bee <i>Colletes cunicularius</i>, Digger wasp <i>Mimumesa littoralis</i>, <i>Hypocaccus rugiceps</i>.</p>	<p>Walnev and Haverigg Haws support nationally rare shingle vegetation</p> <ul style="list-style-type: none"> ▪ There are a variety of artificial habitats within the site including slab banks at Askam Pier and Borwick Rails, which have developed a calcareous flora and are used by breeding tern. ▪ Artificial habitats include slag banks and a flooded mine working known as Hodbarrow Lagoon, which is the largest coastal lagoon in northwest England. 	

Morecambe Bay SIP

3.4.1. SIPs (Site Improvement Plans) were developed in 2015 for European sites in England to provide a high level overview of the issues affecting the condition of qualifying features on European sites. SIPs do not, however, include ongoing management activities or remedial actions in place at the time of the creation of the SIP. However, SIPs provide useful indications of ongoing pressures and threats to sites. As such, an extract from the Morecambe Bay SIP applicable threats and pressures to Morecambe Bay European sites is provided in Table 3.2, below. Note that the Morecambe Bay SIP was written for Morecambe Bay SAC, Morecambe Bay SPA, and Duddon Estuary SPA. These SPAs have since combined to become Morecambe Bay and Duddon Estuary SPA. The threats and pressures presented within the SIP are still valid.

Table 3.2 Morecambe Bay Site Improvement Plan Priorities

Priority & Issue	Description	Affected Features
1 Public Access & Disturbance	Recreational disturbance impacting all features from various activities from individuals (e.g. dog walkers) to organised groups. Some activities are increasing. Previous attempts at developing "codes of conduct" and good practice have not been successful. New access points are being created and old tracks widened, etc, along with long term/historical issues. Activities require regulation to ensure birds are not disturbed and habitats are not damaged.	All
2 Air pollution: Risk of atmospheric nitrogen deposition	Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection; harmful effects are therefore a risk.	All except H2110 Shifting dunes, H2120 shifting dunes with marram, H2130 Dune grassland, H2150 Coastal dune heathland, H2170 Dunes with creeping willow, S1166 Great crested newt, seabird assemblage
3 Water pollution	Diffuse pollution and/or uncontrolled release of pollutants from terrestrial sources could alter or damage the habitats and species found within the estuary	All qualifying features except great crested newt
4 Inappropriate pest control	Predation of nesting birds: Potential adverse effect on the SPA integrity, particularly near breeding sites where breeding success has been adversely affected by foxes, badgers and rats. Implementation of successful prevention measures.	Common eider, lesser black-backed gull, Herring gull, sandwich tern, common tern, little tern
5 Invasive Species (terrestrial)	Schedule 9 non-native invasive species such as <i>Rosa rugosa</i> encroaching upon sand dunes around Barrow-in-Furness. Clearance programmes require funding.	H2110 Shifting dunes, H2120 Shifting dunes with marram, H2130 Dune grassland, H2150 Coastal dune heathland, H2170 Dunes with creeping willow, H2190 Humid dune slacks

Priority & Issue	Description	Affected Features
8 Biological resource use	Unregulated grazing; scrub encroachment on SAC habitat features. Identify appropriate grazing regime and mechanism to implement.	H1220 Coastal shingle vegetation outside the reach of waves, H2120 Shifting dunes with marram, H2130 Dune grassland, H2150 Coastal dune heathland, H2170 Dunes with creeping willow, H2190 Humid dune slacks
10 Hydrological changes	Roosecoate power station reached the end of its operational lifetime and has shut down. This has resulted in a lowering of temperature within Cavendish Dock, impacting the growth of <i>Ruppia</i> . Salinity changes due to frequency of dock opening.	H1150 Coastal lagoons
11 Invasive species (Marine)	Pacific oyster has been found within Walney Channel (non-farmed). Reported sightings of Chinese mitten crab within Duddon Estuary. Limited biosecurity measures which require improvement.	All qualifying features
15 Changes in species distributions	Several qualifying bird features are declining; exact causes unknown. Decline in SPA gulls within Morecambe Bay whilst urban gull numbers increasing, leading to an increase in the use of unregulated general licences.	Pink-footed goose (NB), Common shelduck (NB), Pintail (NB), Common eider (B), Eurasian oystercatcher (NB), Ringed plover (NB), Golden plover (NB), Grey plover (NB), Red knot (NB), Sanderling (NB), Dunlin (NB), Bar-tailed godwit (NB), Curlew (NB), Common redshank (NB), Turnstone (NB), Lesser Black-backed gull (B), Herring gull (B), Sandwich tern (B), Common tern (B), Little tern (B)
16 Direct impact from 3rd party	Taking of bird eggs by collectors and other individuals from breeding sites, particularly Hodbarrow and South Walney for ground nesting seabirds. Requires effective measures to prevent taking of eggs by humans.	Common eider, lesser black backed gull, herring gull, sandwich tern, common tern, little tern



Screening Methodology

Screening Process

- 4.1.1. The screening process identifies the likely impacts of a proposal upon a European site, either alone or in-combination with other proposals, and considers whether these impacts may have a significant effect on the integrity of the site's qualifying habitats and/or species.
- 4.1.2. The burden of evidence is to show, on the basis of objective information, that no significant impacts to European sites occur due to the adoption and use of the Marina Village Residential Opportunity SPD. It should be noted that as per the case of *People Over Wind, Peter Sweetman v Coillte Teoranta (C-323/17)*, proposed mitigation measures cannot be taken into account during the screening process within an HRA. If an effect may be significant, or is not known, the second stage of the HRA Process (Appropriate Assessment) is triggered. Under European Court of Justice case law, unless the likelihood of a significant effect can be ruled out on the basis of objective information, and adopting the precautionary principle, then an Appropriate Assessment must be made.
- 4.1.3. A standard methodology has been used to screen principles and proposals within the MVRO. This standard methodology has been adapted from the methodology set out in Section 5 of the Barrow Borough Local Plan HRA (March 2017). The March 2017 document also identifies the legislative background (Section 2).
- 4.1.4. The MVRO includes 13 guiding principles for the design, implementation, construction, and operation of the Marina Village Residential Opportunity. As part of the Screening process, each of the guiding principles within the MVRO have been assessed to determine whether they lead to a likely significant effect on the identified European sites.

Screening Assessment

- 4.2.1. Screening of the guiding principles has been completed in the form of a matrix. Details of the screening are provided within *Appendix 1: Guiding Principles with Screening Appraisal*. The traffic light assessment criteria through which policies are screened and colour-coded in the screening matrices is detailed within Table 4.1.

Table 4.1 Criteria for Screening Principles within the MVRO

Criteria Category	Rationale
Category O: Unknown Effect	
O	Further details required
Category A: No Likely Significant Effects on European Sites	
A1	Principles that will not themselves lead to development, e.g., because they are not a land use principle.
A2	Principles solely for the conservation or enhancement of the natural environment, including biodiversity where conservation/enhancement measures will not be likely to cause any likely significant effects to a European site, the qualifying features of a European site, or the conservation objectives of a European site.
A3	Principles solely for the conservation or enhancement the built or historic environment, where enhancement measures will not be likely to cause likely significant effects to a European site, the qualifying features of a European site, or the conservation objectives of a European site.
A4	Principles that would have no effect because the principle itself does not make provisions for development, with provisions for development made through other principles that are more specific and therefore more appropriate to assess for their effects on European Sites, the qualifying features of a European site, or the conservation objectives of a European site.
A5	Principles that make provisions but which could have no foreseeable direct or indirect effect on a European site, the qualifying features of a European site, or the conservation objectives of a European site, due of one of the following reasons: <ul style="list-style-type: none"> • The type of the development • The quantum of the development • The proposed location of development and the fact there is no link or pathway between them and the qualifying interests • The principle contains criteria to prevent likely adverse impacts on European sites, the qualifying features of a European site, and/or the conservation objectives of a European site.
A6	Principles that positively steer development away from European sites and associated sensitive areas.
Category B: No Likely Significant Effects on European Sites	
B1	Principles that could have an effect but would not be likely to have a significant effect on a European site (alone or in-combination with other plans or projects) because the effects are trivial or 'de minimis'.
B2	Principles that could have an effect but would not be likely to have a significant effect on a European site in isolation because the effects are trivial or 'de minimis'.
Category C: Likely Significant Effects on a European Site	
C1	Principles that steer a quantum or type of development with the potential to cause a direct significant effect upon a European site, the qualifying features of a European site, or the conservation objectives of a European site, although the effect would be dependent upon implementation in the future e.g. location and scale of development.
C2	Principles that steer a quantum or type of development with the potential to cause

	an indirect significant effect upon a European site, the qualifying features of a European site, or the conservation objectives of a European site, due to ecological or hydrological links to a European site.
Category D: Adverse Effects on a European Site	
D1	The policy/principle directly and significantly affects a European site, the qualifying features of a European site, or the conservation objectives of a European site because it provides for, or steers, a quantity or type of development onto a European site, or adjacent to it.
D2	The policy/principle indirectly and significantly affects a European site, the qualifying features of a European site, or the conservation objectives of a European e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of recreational pressure.

Analysing the Screening Results

- 4.3.1. Section 5 presents the results of the screening assessment for the guiding principles contained within the MVRO.
- 4.3.2. Note that in order for impacts to be considered as being likely to have a significant effect on a European Site, then a clear pathway must exist between the impact source and the European Site. As such, any European Sites identified as having no known pathways along which impacts may travel have been ruled out from any further assessment. Potential pathways are listed within the analysis of Screening Results. Each of the guiding principles was also considered in context against the characteristics and vulnerabilities of the European Sites for Likely Significant Effects.

Category A Principles

- 4.3.3. All principles that are assigned category 'A' and highlighted in green as part of the screening assessment have been screened out from any further assessment, as they are deemed as having no significant effects on the network of European sites.

Category B Principles

- 4.3.4. For principles that are assigned 'category B' and highlighted yellow, these are deemed as having no significant effects on the network of European sites.

Category C Principles

- 4.3.5. Principles highlighted in orange are identified as having the potential to result in likely significant effects. For these principles, a further assessment has been undertaken to determine the nature of the impact and identify the potential pathways for such impacts to travel to the European sites.

Category D Principles



- 4.3.6. Any principles highlighted in red have been identified as being likely to generate significant adverse effects on European sites. These principles have been subject to the same further assessment as the category C policies, as detailed in table 4.3. Any principles assigned to this category trigger the need to undertake an Appropriate Assessment.

In-Combination Effects of Principles

- 4.3.7. Principles within Categories B, C, and D have been assessed against one another in the form of a matrix to determine whether the likely significant effects are greater when considered in combination with other principles of the MVRO.
- 4.3.8. The assessment of the in-combination effects has been undertaken in the form of a matrix, allowing for the principles along the vertical axis to be assessed in combination with the principles along the horizontal axis.
- 4.3.9. For each of the possible policy combinations, a category has been assigned as detailed in Table 4.5. This exercise has enabled an understanding of whether the principle’s likely impact on the European sites would be greater, if implemented in combination with the principles along the horizontal axis.

Table 4.3: Assessing the In-Combination Effects

Category	Rationale
○	The effect of the principle in combination with other principles within the MVRO will not increase the overall impact of the principle.
-	The effect of the principle in combination with other policies within the MVRO will increase the overall impact of the principle slightly
--	The effect of the principle in combination with other principles within the MVRO will increase the overall impact of the principle significantly.

Screening Assessment

Introduction

- 5.1.1. The screening results for housing sites allocated under Policy H3: Allocation of Sites for Housing Development within Section 6.4 of the Barrow Borough Local Plan HRA (March 2017) identifies *SHL001 Marina Village* as falling into potential effects category D2 as follows:

The policy could indirectly affect a European site e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of recreational pressure.

- 5.1.2. This section of the reports presents the results of the screening assessment for the MVRO guiding principles.

Background

- 5.2.1. The guiding principles within the MVRO have been reviewed and assessed against the criteria detailed within Table 4.2. The detailed results of the assessment are presented in *Appendix 1: Guiding Principles Screening Appraisal*, with a summary of the results presented in Table 5.1 below.

Table 5.1: Summary of Screening Assessment Results

Potential Effects Category	Guiding Principle
A1	MV1: Compliance with the SPD MV12: Planning Application Requirements MV13: Infrastructure Requirements
A2	MV8: Landscape & Ecology
A5	MV5: Access MV11: Development sustainability
B2	MV6: Utilities and Services
C2	MV4: Public Open Space MV7: Streets and Movement MV9: Sustainable Drainage MV10: Density and Scale
D1/D2	MV2: Land Use MV3: Residential Development

Guiding Principles with No Negative Effects (Category A)

- 5.3.1. Guiding principles that meet the criteria for Category A are screened out of further assessment as they are not considered likely to have any effect on European sites either in isolation or in combination with other plans.

Guiding Principles with No Significant Effects (Category B)

- 5.4.1. No guiding principles met the criteria for Category B1. Guiding principles that meet the criteria for Category B2 (MV6: Utilities and Services) are unlikely to have a likely significant



effect in isolation but have the potential to have a likely significant effect in combination with other principles.

Guiding Principles with Possible Adverse Effects (Category C)

- 5.5.1. Guiding principles that meet the criteria for Category C1 and C2 (MV4, MV7, MV9, and MV10) have potential to result in significant effect(s) on European sites and are further assessed in Table 5.2 to determine likely impacts and likely impact pathways of these guiding principles on European sites, their qualifying features, and/or conservation objectives. Note that individual bird species are grouped as per their breeding/non-breeding/passage/migratory designations for clarity.

Guiding Principles with Adverse Effects (Category D)

- 5.6.1. Guiding principles that meet the criteria for Category D (MV2 and MV3) have been assessed as having significant adverse effects on European sites, their qualifying species and/or their conservation objectives. These policies have been further assessed in Table 5.3 to determine impacts and impact pathways of these guiding principles on European sites, their qualifying features, and/or conservation objectives.

Table 5.2: Potential impacts and impact potentials of Category C guiding principles

Principle	Potential Pathways	Qualifying Features Potentially Affected	Potential Impacts and Likely Significant Effects (LSEs) to Qualifying Features
MV4: Public Open Space	<p>During construction:</p> <ul style="list-style-type: none"> Impacts to functionally linked and supporting habitat Habitat Fragmentation Visual disturbance Noise/Vibration disturbance Dust Lighting disturbance Water pollution Mortality <p>During operation:</p> <ul style="list-style-type: none"> Water pollution Impacts to functionally linked and supporting habitat Visual disturbance Noise/Vibration disturbance Lighting disturbance Recreational disturbance to qualifying species 	<p>Morecambe Bay and Duddon Estuary SPA:</p> <ul style="list-style-type: none"> Breeding bird species Non-breeding bird species Waterbird Assemblage Seabird Assemblage <p>Morecambe Bay Ramsar:</p> <ul style="list-style-type: none"> Migratory waterfowl (including internationally important numbers of common ringed plover <i>Charadrius hiaticula</i>) Waterfowl assemblage Over-wintering bird species Breeding bird species <p>Morecambe Bay SAC: Annex I habitats including:</p> <ul style="list-style-type: none"> H1110. Subtidal sandbanks H1130. Estuaries H1140. Intertidal mudflats and sandflats H1150. Coastal lagoons H1160. Large shallow inlets and bays H1170. Reefs H1310. Glasswort and other annuals colonising mud and sand H1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 	<p>Promotes new open spaces, including spaces adjacent to the waterfront. Potential to result in:</p> <p><i>During construction</i> Pollution to water (including litter) and nutrient enrichment causing reductions to water quality may alter or damage qualifying habitats due to hydrological linkages to the European sites via Buccleuch and Ramsden Dock. Buccleuch and Ramsden Dock, which may provide functionally linked habitat, may also be similarly affected. Reductions in water quality, and alterations/damage to qualifying habitats and habitats supporting qualifying species may directly reduce habitat condition and/or lower health and reduce foraging success of qualifying species and may change or reduce species movements and density. Pollution and nutrient enrichment may also lower habitat condition and/or lead to a reduction in species density due to mortality.</p> <p><i>During construction:</i> Disturbance pressures such as noise, vibration, and visual disturbance may cause flight abandonment of qualifying bird species using habitats within Buccleuch Dock. Likely significant effects include displacement, reduced foraging success and reduced species movement and density.</p> <p><i>During operation:</i> Recreational pressure on qualifying bird species during operation may cause disruption and disturbance to qualifying species. This disruption and disturbance may cause flight abandonment of qualifying bird species using habitats within Buccleuch Dock. Likely significant effects include long term displacement, reduced foraging success and reduced species movement and density.</p> <p>Additionally, the creation of a Buccleuch Dockside event space</p>

Principle	Potential Pathways	Qualifying Features Potentially Affected	Potential Impacts and Likely Significant Effects (LSEs) to Qualifying Features
		Duddon Estuary Ramsar: <ul style="list-style-type: none"> • Waterfowl assemblage • Spring and autumn waterfowl passage species • Over-wintering bird species • Breeding bird species • Migratory/passage bird species 	may cause impacts to qualifying bird features of European sites depending on their use of Buccleuch Dock and the nature of the type of events being held within the event space.
MV9: Sustainable Drainage	During construction: <ul style="list-style-type: none"> • Impacts to functionally linked and supporting habitat • Habitat fragmentation • Visual disturbance • Noise/Vibration disturbance • Dust • Lighting disturbance • Water pollution • Mortality • Spread of INNS During operation: <ul style="list-style-type: none"> • Impacts to functionally linked and supporting habitat • Water pollution • Mortality • Spread of INNS 	Morecambe Bay and Duddon Estuary SPA: <ul style="list-style-type: none"> • Breeding bird species • Non-breeding bird species • Waterbird Assemblage • Seabird Assemblage Morecambe Bay Ramsar: <ul style="list-style-type: none"> • Migratory waterfowl (including internationally important numbers of common ringed plover <i>Charadrius hiticola</i>) • Waterfowl assemblage • Over-wintering bird species • Breeding bird species Morecambe Bay SAC: Annex I habitats including: <ul style="list-style-type: none"> • H1110. Subtidal sandbanks • H1130. Estuaries • H1140. Intertidal mudflats and sandflats • H1150. Coastal lagoons • H1160. Large shallow inlets and bays • H1170. Reefs • H1310. Glasswort and other annuals colonising mud and 	Surface water discharge into Buccleuch Dock has the potential to enter Morecambe Bay SAC and Morecambe Bay & Duddon Estuary SPA as the dock system is linked to Morecambe Bay. <i>During construction and operation:</i> Reductions of air quality (dust during construction; atmospheric nitrogen deposition during operation); pollution to water and nutrient enrichment causing reductions to water quality may alter or damage qualifying habitats. Reductions in water quality, and alterations/damage to qualifying habitats and habitats supporting qualifying species may directly lower health and reduce foraging success of qualifying species and may change or reduce species movements and density. Pollution and nutrient enrichment may also lead to a reduction in species density due to mortality. Invasive species are present within the site. Without mitigation, these species could be caused to spread to terrestrial habitats within more distant areas of the European sites via the marine environment during construction. During operation inappropriate management may cause further spread. LSEs include damage and/or alteration of qualifying habitats as well as potential loss of habitat for foraging, roosting, and breeding qualifying bird species. Disturbance pressures such as noise, vibration, and visual disturbance may cause flight abandonment of qualifying bird species using habitats within Buccleuch Dock during construction. Likely significant effects include displacement, reduced foraging

Principle	Potential Pathways	Qualifying Features Potentially Affected	Potential Impacts and Likely Significant Effects (LSEs) to Qualifying Features
		<p>sand</p> <ul style="list-style-type: none"> H1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) <p>Duddon Estuary Ramsar:</p> <ul style="list-style-type: none"> Waterfowl assemblage Spring and autumn waterfowl passage species Over-wintering bird species Breeding bird species Migratory/passage bird species 	<p>success and reduced species movement and density.</p>
<p>MV10: Density and Scale</p>	<p>During construction:</p> <ul style="list-style-type: none"> Impacts to functionally linked and supporting habitat Habitat fragmentation Visual disturbance Noise/Vibration disturbance Air quality Dust Lighting disturbance Water pollution Mortality <p>During operation:</p> <ul style="list-style-type: none"> Impacts to functionally linked and supporting habitat Habitat fragmentation Water pollution Air quality Lighting disturbance 	<p>Morecambe Bay and Duddon Estuary SPA:</p> <ul style="list-style-type: none"> Breeding bird species Non-breeding bird species Waterbird Assemblage Seabird Assemblage <p>Morecambe Bay Ramsar:</p> <ul style="list-style-type: none"> Migratory waterfowl (including internationally important numbers of common ringed plover <i>Charadrius hiaticula</i>) Waterfowl assemblage Over-wintering bird species Breeding bird species <p>Morecambe Bay SAC: Annex I habitats including:</p> <ul style="list-style-type: none"> H1110. Subtidal sandbanks H1130. Estuaries H1140. Intertidal mudflats and sandflats H1150. Coastal lagoons 	<p>An increased density of dwellings along Buccleuch Dockside may cause impacts to qualifying features of European sites, as follows:</p> <p><i>During construction and operation:</i> Reductions of air quality (dust during construction; atmospheric nitrogen deposition during operation); pollution to water and nutrient enrichment causing reductions to water quality may alter or damage qualifying habitats due to hydrological linkages to the European sites via Buccleuch and Ramsden Dock. Reductions in water quality, and alterations/damage to qualifying habitats and habitats supporting qualifying species may directly lower health and reduce foraging success of qualifying species and may change or reduce species movements and density. Pollution and nutrient enrichment may also lead to a reduction in species density due to mortality.</p> <p><i>During construction:</i> Disturbance pressures such as noise, vibration, and visual disturbance may cause flight abandonment of qualifying bird species using habitats within Buccleuch Dock. Likely significant effects include displacement, reduced foraging success and reduced species movement and density.</p> <p><i>During operation:</i></p>

Principle	Potential Pathways	Qualifying Features Potentially Affected	Potential Impacts and Likely Significant Effects (LSEs) to Qualifying Features
	<ul style="list-style-type: none"> Recreational damage to habitats Recreational disturbance to qualifying species Mortality 	<ul style="list-style-type: none"> H1160. Large shallow inlets and bays H1170. Reefs H1310. Glasswort and other annuals colonising mud and sand H1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) <p>Duddon Estuary Ramsar:</p> <ul style="list-style-type: none"> Waterfowl assemblage Spring and autumn waterfowl passage species Over-wintering bird species Breeding bird species Migratory/passage bird species 	<p>Recreational pressure on qualifying bird species during operation may cause disruption and disturbance. Disturbance may cause flight abandonment of qualifying bird species using habitats within Buccleuch Dock. Likely significant effects include displacement, reduced foraging success and reduced species movement and density.</p>

Table 5.3: Potential impacts and impact potentials of Category D guiding principles

Principle(s)	Potential Pathways	Qualifying Features Potentially Affected	Potential Impacts and Likely Significant Effects (LSEs) to Qualifying Features
<p>MV2: Land Use</p> <p>MV3: Residential Development</p>	<p>During construction:</p> <ul style="list-style-type: none"> • Impacts to functionally linked and supporting habitat • Habitat fragmentation • Visual disturbance • Noise/Vibration disturbance • Dust • Lighting disturbance • Water pollution • Mortality • Spread of INNS <p>During operation:</p> <ul style="list-style-type: none"> • Impacts to functionally linked and supporting habitat • Habitat fragmentation • Water pollution • Air quality • Lighting disturbance • Recreational damage to habitats • Recreational disturbance to qualifying species • Mortality • Spread of INNS 	<p>Morecambe Bay and Duddon Estuary SPA:</p> <ul style="list-style-type: none"> • Breeding bird species • Non-breeding bird species • Waterbird Assemblage • Seabird Assemblage <p>Morecambe Bay Ramsar:</p> <ul style="list-style-type: none"> • Migratory waterfowl (including internationally important numbers of common ringed plover <i>Charadrius hiaticula</i>) • Waterfowl assemblage • Over-wintering bird species • Breeding bird species <p>Morecambe Bay SAC: Annex I habitats including:</p> <ul style="list-style-type: none"> • H1110. Subtidal sandbanks • H1130. Estuaries • H1140. Intertidal mudflats and sandflats • H1150. Coastal lagoons • H1160. Large shallow inlets and bays • H1170. Reefs • H1310. Glasswort and other annuals colonising mud and sand • H1330. Atlantic salt meadows (<i>Glauco-</i> 	<p><i>During construction and operation:</i></p> <p>Increases in vehicular traffic may impact air quality and increase atmospheric nitrogen deposition. Increased nitrogen deposition may alter or damage qualifying habitat features by changing the nutrient balance, causing species composition to change. Qualifying bird species may be impacted by changes to the species composition of qualifying habitats and other supporting habitats. LSEs include reduced foraging success and changes or reductions of species movements and density.</p> <p>Increases to surface water run-off, pollution to water (including litter) and nutrient enrichment causing reductions to water quality may alter or damage qualifying habitats within the European sites and functionally linked areas. Reductions in water quality, and alterations/damage to qualifying habitats and habitats supporting qualifying species may directly lower health and reduce foraging success of qualifying species and may change or reduce species movements and density. Pollution and nutrient enrichment may also lead to a reduction in species density due to mortality.</p> <p>Disturbance pressures such as noise, vibration, and visual disturbance may cause flight abandonment of qualifying bird species using habitats within Buccleuch Dock and Cavendish Dock. Likely significant effects include displacement, reduced foraging success and reduced species movement and density.</p> <p>Invasive species are present within the site. Without mitigation, these species could be caused to spread into surrounding sites during construction. During operation inappropriate management may cause spread via several vectors including hydrologically, lack of biocontamination control measures, spillage, etc. LSEs include damage and/or alteration of qualifying habitats as well as</p>

Principle(s)	Potential Pathways	Qualifying Features Potentially Affected	Potential Impacts and Likely Significant Effects (LSEs) to Qualifying Features
		<p><i>Puccinellietalia maritima</i>) H2110.</p> <ul style="list-style-type: none"> • Embryonic shifting dunes • H2120. Shifting dunes with marram • H2130. Dune grassland • H2150. Coastal dune heathland • H2170. Dunes with creeping willow • H2190. Humid dune slacks • Great crested newt <i>Triturus cristatus</i> <p>Duddon Estuary Ramsar:</p> <ul style="list-style-type: none"> • Waterfowl assemblage • Spring and autumn waterfowl passage species • Over-wintering bird species • Breeding bird species • Migratory/passage bird species 	<p>potential loss of habitat for foraging, roosting, and breeding qualifying bird species.</p> <p><i>During operation:</i> The increase of around 800 residential properties will boost the local population by approximately 1500. Many new residents will have dogs. The increase in human and canine populations living locally will cause additional recreational pressure to the European sites.</p> <p>Disturbance caused by the presence of walkers and dogs, swimming, drone use, increased water craft use noise, and light are likely to disturb birds using habitats within European sites and functionally linked habitats. Over-wintering birds may be displaced from suitable feeding/roosting habitat, reducing foraging success and increasing energy expenditure. Direct mortality of birds may also result from encounters with dogs. Breeding birds may abandon nest sites and/or their supporting habitats. Nesting, rearing, feeding and/or roosting may be reduced which may lead to further reductions in suitable habitat as birds are displaced and their distribution contracts.</p> <p>There may be direct impacts to qualifying and supporting habitats within European sites through trampling and nutrient enrichment resulting in deterioration in habitat condition and/or extent and reduced foraging success by qualifying species.</p> <p>In addition to disturbance as outlined above, the use of water craft has the potential to spread INNS. The effects of disturbance to birds are as above. The LSEs for INNS introduction includes damage and/or alteration of qualifying and supporting habitats as well as potential loss of habitat for foraging, roosting, and breeding qualifying bird species. Additionally, forage species may be reduced.</p>

In-Combination Effects of Guiding Principles

5.7.1. The in-combination effects of Category B, C, and D guiding principles have also been assessed. This exercise has been undertaken to determine if the impacts of the above guiding principles are more significant in combination with other guiding principles. This information is presented in Table 5.4 and the conclusions derived from this assessment are discussed in Section 5.8.

Table 5.4: In-combination effects of guiding principles

MVRO Principles (Categories B, C and D)	MV2: Land Use	MV3: Residential Development	MV4: Public Open Space	MV6: Utilities and Services	MV7: Streets and Movement	MV9: Sustainable Drainage	MV10: Density and Scale
MV2: Land Use	○	○	○	○	○	○	○
MV3: Residential Development	○	○	○	○	○	○	○
MV4: Public Open Space	○	○	○	○	○	○	○
MV6: Utilities and Services	○	○	○	○	○	○	○
MV7: Streets and Movement	○	○	○	○	○	○	○
MV9: Sustainable Drainage	○	○	○	○	○	○	○
MV10: Density and Scale	○	○	○	○	○	○	○
Category	Rationale						
○	The effect of the principle in combination with other principles within the MVRO will not increase the overall impact of the principle.						
-	The effect of the principle in combination with other policies within the MVRO will increase the overall impact of the principle slightly						
--	The effect of the principle in combination with other principles within the MVRO will increase the overall impact of the principle significantly.						



- 5.7.2. Guiding principles MV2: Land use and MV3: Residential Development remain classed within Category D: Guiding Principles with Adverse Effects. Likely significant effects are not increased by interaction with these two principles as they are causative by their nature and the foundation of all other principles; as such the in-combination effect of these principles is inherently assessed within all other guiding principles meeting the criteria for categories B, C and D prior to the in-combination effects assessment within the individual guiding principle assessment.
- 5.7.3. Guiding principle MV4: Public Open Space does not increase LSEs when considered in combination with other guiding principles.
- 5.7.4. Guiding principle MV6: Utilities and services does not increase LSEs when considered in combination with other guiding principles. MV6 has been classed within Category B1 (Principles that could have an effect but would not be likely to have a significant effect on a European site [alone or in-combination with other plans or projects] because the effects are trivial or 'de minimis'). The majority of the guiding principle points are not in respect of land use; point 2 requires that the future development confirms required easements to existing utility infrastructure, with agreement on approach to be agreed with any undertaker. Confirmation of easements may require minor works to ground truth the location of utilities on site. As these works are likely to be minor and will not cause additional LSEs, they are considered to be de minimis.
- 5.7.5. Guiding principles MV7: Streets and Movement, MV9: Sustainable Drainage and MV10: Density and Scale do not increase LSEs when considered in combination with other guiding principles.

Summary of Likely Potential Impacts of Guiding Principles

- 5.8.1. As concluded within Section 5, as the impacts of the guiding principles in Tables 5.5 and 5.6 are considered to have the potential to cause *significant* effects, including the potential to result in direct and indirect adverse effects on the European Sites, it is recommended that the impacts of these policies are fully considered through the stage of Appropriate Assessment.



APPROPRIATE ASSESSMENT METHODOLOGY

Appropriate Assessment

- 6.1.1. The Appropriate Assessment provides a detailed consideration of potential impacts on the integrity of the Natura 2000 sites with respect to the site's conservation objectives and its structure and function.
- 6.1.2. Within the screening assessment, each of the guiding principles was considered in context against the characteristics and vulnerabilities of the European Sites for Likely Significant Effects. Potential pathways along which LSEs may reach European sites were also identified. The Appropriate Assessment considers LSEs in further detail and identifies measures to prevent, reduce or offset Likely Significant Effects.
- 6.1.3. The analysis is grouped by Impact and LSE on European Sites due to significant overlap in identified LSEs and mitigation, between guiding principles. The potential for any residual effects of the guiding principle has been considered following the adoption of suggested mitigation.
- 6.1.4. If residual effects are likely at this stage, then it will be necessary to progress to Stage 3 of the HRA process – Assessment of Alternative Solutions.

APPROPRIATE ASSESSMENT

Guiding Principles to be Assessed

- 7.1.1. Guiding principles as presented in Table 7.1, have been taken forward to the Appropriate Assessment.

Table 7.1: Guiding Principles subject to Appropriate Assessment

Potential Effects Category	Guiding Principle
C2	MV4: Public Open Space MV7: Streets and Movement MV9: Sustainable Drainage MV10: Density and Scale
D1/D2	MV2: Land Use MV3: Residential Development

- 7.1.2. As the above guiding principles will result in likely significant effects, mitigation measures are required to avoid or reduce any likely significant effects upon the European Sites. Table 7.2 provides an analysis of the LSEs resulting from the MVRO, proposes mitigation and assesses the residual effects on the European Sites.

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<p>During Construction & Operation Mitigation applicable to both stages: Prior to the commencement of works, a site/project level HRA will be required to assess impacts and LSEs to the European Sites and their qualifying features. An Ecological Impact Assessment will also be required at a minimum. The site/project level HRA will be informed by the resulting documents.</p>			
<p>During Construction Overarching mitigation applicable to construction: During the construction phase, a site-specific CEMP (Construction Environment Management Plan) will ensure mitigation is in place and adhered to for the protection of European sites. The CEMP will include any additional mitigation measures required as a result of the project level HRA and will conform to the recommendations of relevant approved documents. Each impact/LSE during construction will require management via the CEMP. Additional details to be included within the CEMP are discussed separately below in addition to any other suggested mitigation. The CEMP will likely incorporate additional documents such as method statements and management plans.</p> <p>An independent Environmental Clerk of Works (ECoW) will be appointed for the duration of the construction programme to monitor the implementation of the measures identified within the CEMP to protect European Sites.</p>			
<p>Dust caused by construction works may be carried by wind and deposited on adjacent habitats causing damage to qualifying habitats. Dust may contain contaminants. The condition of qualifying and supporting habitats may be reduced due to deposition of dust (note: Siltation due to dust entering waterbodies is addressed under pollution to water, below).</p> <p>Ingestion and inhalation of dust and contaminants may increase mortality and harm risk to qualifying species.</p>	<p>The condition securing the CEMP will require an Air Quality and Dust Management Plan (AQDMP), which will include dust abatement measures. Additional management plans such as a Soil Management Plan and a Construction Traffic Management Plan will also likely contribute to the reduction of impacts caused due to dust and contaminant spread and manage reductions to air quality.</p>	<p>Successful implementation of suitable air quality and dust abatement measures reduce residual impacts to negligible. The overarching requirement for an ECoW provides an appropriate level certainty this measure can be delivered.</p>	<p>MV2: Land use MV3: Residential development MV4: Public Open Space MV9: Sustainable drainage MV10: Density and scale</p>
<p>Pollution to water (inclusive of siltation/suspended solids, chemical contaminants, nutrient enrichment and reduced dissolved oxygen) causing reductions to water quality, which may alter or damage qualifying habitats/supporting habitats.</p> <p>Increased run-off during construction activities</p>	<p>The condition securing the CEMP will require a Construction Surface Water Management Plan (CSWMP) or similar. The CSWMP will include appropriate plans detailing surface water management proposals, temporary drainage systems, measures for managing pollution/water quality and protecting controlled waters and watercourses, as well as measures for managing any on or offsite</p>	<p>Successful implementation of a suitable Construction Surface Water Management Plan will reduce residual impacts to negligible. The overarching requirement for an ECoW provides an appropriate level certainty this measure can be</p>	<p>MV2: Land use MV3: Residential development MV4: Public Open Space MV9: Sustainable drainage MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<p>may lead to siltation of habitats and higher levels of turbidity, causing damage to intertidal vegetative communities and coastal lagoons within the European Sites.</p> <p>Reductions in water quality, and alterations/damage to qualifying habitats, functionally linked habitats and supporting qualifying species may increase mortality and harm risk to qualifying species, leading to displacement/disruption in species movements and density. Foraging success for qualifying species may also be reduced due to reductions in the abundance of prey species caused by poor water quality. Qualifying species may also ingest toxins within water and within prey species, increasing mortality and harm risk.</p>	<p>flood risk associated with construction.</p> <p>Guiding principle MV9 requires that water quality within Buccleuch Dock will not be negatively impacted by surface water discharge. Guiding principle MV9 also states that Surface Water Discharge into Cavendish Dock is unlikely to be acceptable unless it can be robustly demonstrated that there will be no negative impacts to European Sites. Therefore, any planning application must demonstrate that temporary drainage systems discharging into Cavendish Dock would have a neutral effect on water quality. If discharges into Cavendish Dock or Buccleuch Dock cannot be avoided, the CSWMP will include preventative measures to protect against reductions of water quality and monitoring will be required.</p>	<p>delivered.</p>	
<p>Disturbance and displacement of qualifying avian features due to noise, vibration, visual disturbance, and lighting during construction. Over-wintering birds may be displaced from areas of suitable feeding/roosting habitat, reducing foraging success and increased energy expenditure.</p> <p>Breeding birds may abandon previously suitable nest sites and/or their supporting habitats. Nesting, rearing, and young feeding success may be reduced causing a reduction in populations of qualifying bird species. Reductions in nesting, breeding, feeding and/or roosting may lead to further reductions in</p>	<p>Bird surveys will be required at project level. Their scope and coverage will be decided through consultation with the LPA and Natural England. The scope of the surveys will include establishing whether bird habitats adjacent to the Marina Village site, but outside of the European Sites (e.g. Buccleuch and Ramsden Dock) are functionally linked to the SPA and Ramsar site. Noise and vibration surveys will also include receptors allowing analysis of noise and vibration disturbance on birds within the European sites, allowing the combination of these surveys to inform site-specific mitigation requirements and method</p>	<p>Successful implementation of suitable noise, visual disturbance and vibration reduction measures as well as lighting restrictions, all based on up-to-date bird survey data reduce residual impacts to negligible. The overarching requirement for an ECoW provides an appropriate level certainty this measure can be delivered.</p>	<p>MV2: Land use MV3: Residential development MV4: Public Open Space MV9: Sustainable drainage MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<p>suitable habitat as qualifying species distribution contracts due to displacement.</p> <p>All European Sites are considered likely to be affected due to impacts to bird species. Whilst bird species are not qualifying features for Morecambe Bay SAC, habitats within the SAC are potentially influenced by the bird populations which use them for foraging.</p>	<p>statements.</p> <p>The CEMP shall include best practice measures to minimise the risk of disturbance to SPA and Ramsar qualifying bird features. The CEMP will include method statements that conform to <i>BS 5228-1:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites</i> or the prevailing British Standard. Additional mitigation methods typically employed include timed restriction of works, restrictions for lighting (e.g. times artificial lighting may be used and direction of lighting during works), monitoring of birds during works likely to cause displacement and/or flight abandonment (e.g. piling) and use of noise and visual barriers.</p>		
<p>Invasive species are present within the site. Without mitigation, these species could be caused to spread into terrestrial habitats within the European sites through several vectors hydrologically, by wind, animal and/or via a lack of biocontamination controls leading to terrestrial spread via spills, vehicular and personnel movements, groundworks, etc.</p>	<p>A condition will be used to secure an Invasive Species Management Plan (ISMP) whereby no development will take place, inclusive of site clearance or ground works, until an updated and final ISMP has been submitted to and approved of in writing by the LPA. Method statements for all invasive species at the site, inclusive of eradication and future control and monitoring will be included, with mitigation measures implemented in accordance with the approved details prior to completion of landscaping works for any given phase of the development. The ISMP will be underpinned</p>	<p>Use and successful implementation of an ISMP will reduce residual impacts to negligible. The overarching requirement for an ECoW provides an appropriate level certainty this measure can be delivered.</p>	<p>MV2: Land use MV3: Residential development MV9: Sustainable drainage</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
	by an invasive species survey prior to the start of works on site.		
During Operation			
<p>Reduction in air quality due to the increased emissions of vehicular traffic caused by an increase of approximately 1500 residents. Increases in residents are also likely to cause increased vehicular emissions due to increased visitor numbers.</p> <p>Increases in vehicular emissions may reduce air quality and increase atmospheric nitrogen deposition. Increased nitrogen deposition has the capacity to alter or damage qualifying habitat features by changing the nutrient balance, causing changes to species composition and reductions in biodiversity. Increases to atmospheric nitrogen deposition may degrade water quality, increase algal blooms, and degrade or destroy sensitive habitats such as intertidal vegetative habitats like sea grass (a qualifying habitat).</p> <p>Reductions in air quality may also cause damage to functionally linked habitats and</p>	<p>Guiding principle MV7 addresses streets and movement. The SPD seeks to establish a “movement network where the mode of choice for most people on a daily basis is to walk, to cycle or use public transport”. The guiding principle also makes provision for green routes, cycle infrastructure, e-bike charging and cycle hire with active travel as a design priority. Provision of EV charging is also included. As such, reduction of vehicular emissions is incorporated into the design.</p>	<p>The implementation of the design principles within MV7 will reduce vehicular emission, especially in respect of local journeys. As such, residual impacts are considered to be negligible.</p>	<p>MV2: Land use MV3: Residential development MV9: Sustainable drainage MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<p>habitats supporting qualifying species due to the deposition of atmospheric nitrogen, especially in water. Foraging success for qualifying species may also be reduced due to reductions in the abundance of prey species caused by poor water quality. Qualifying species may also ingest toxins within water such as that caused by algal blooms and as present within prey species, increasing mortality and harm risk, resulting in reductions of species density and changes to movements.</p>			
<p>Pollution to water (inclusive of siltation/suspended solids, nutrient enrichment, and reduced dissolved oxygen) causing reductions to water quality, which may alter or damage qualifying or supporting habitats including within areas functionally linked to the European sites.</p> <p>Increased surface water run-off may lead to siltation of habitats and higher levels of turbidity, causing damage to intertidal vegetation communities and coastal lagoons within the European Sites.</p> <p>Pollution to water has the capacity to alter or damage qualifying habitat features by changing the nutrient balance, causing changes to species composition and degradation of condition or destruction of sensitive habitats such as intertidal vegetative habitats like sea grass beds (a feature of qualifying habitats H1110: Sandbanks which are slightly covered by sea water all the time; H1140: Mudflats and sandflats</p>	<p>Guiding principle MV9 includes the provision of a variety of Sustainable Drainage Systems (SuDS) which will comprise features such as swales, raingardens, wetlands, ponds and attenuation basins in consultation with relevant statutory bodies. Below ground drainage features are also considered within the MVRO. SuDS will be designed and managed as per the prevailing industry best practice and guidance. At the time of the writing this includes the following technical documents published by Construction Industry Research Information Association (CIRIA): <i>The SuDS Manual (C753)</i>, <i>Guidance on the construction of SuDS (C768)</i>, and <i>The Site Handbook for the Construction of SuDS (C698)</i>.</p> <p>A planning condition will be used to secure a Flood Risk and Water Management Strategy (FRWMS). The FRWMS will include ground investigations confirming infiltration rates and suitability of soakaways. Silt management,</p>	<p>The successful implementation of a suitable FRWMS in combination with the implementation of the design principles within MV9 will manage atmospheric deposition of nitrogen. As such, residual impacts are considered to be negligible.</p>	<p>MV2: Land use MV3: Residential development MV9: Sustainable drainage MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<p>not covered by seawater at low tide; Intertidal mudflats and sandflats; and 1160 Large shallow inlets and bays). The potential for algal blooms also may increase.</p> <p>Reductions in water quality, and alterations/damage to qualifying habitats and habitats supporting qualifying species may increase mortality and harm risk to qualifying species, leading to displacement/disruption in species movements and density. Foraging success for qualifying species and may also be reduced due to reductions in the abundance of prey species caused by poor water quality. Qualifying species may also ingest toxins within water and within prey species, increasing mortality and harm risk.</p>	<p>management of pollutants, and a monitoring plan should also be included within the FRWMS.</p>		
<p>Artificial lighting at night has the potential to visually disturb and displace qualifying avian features from the European Sites and functionally linked land. Several qualifying migratory bird species migrate and feed at night, as qualifying bird species may become disorientated due to excessive lighting. The foraging success of qualifying species may be reduced due to changes to invertebrate and fish behaviour caused by artificial lighting.</p>	<p>A planning condition will be used to secure a lighting design. The lighting strategy will show how and where external lighting will be installed, provide appropriate lighting contour plans and technical specifications, and demonstrate that areas to be lit will not disturb or prevent qualifying species from using territory or having access to breeding sites, resting places, and important foraging sites.</p> <p>Landscape plans will also include light screening to minimise light spill outside of the site. Timing restrictions for high impact lighting, such as flood lighting, will also be identified as required.</p>	<p>Bird monitoring, inclusive of nocturnal surveys, will inform the lighting design strategy. Successful implementation of lighting design strategy, along with screening will reduce residual impacts to qualifying bird species to negligible.</p>	<p>MV2: Land use MV3: Residential development MV4: Public Open Space MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
	<p>Lighting will conform to current good practice guidance. At the time of the writing this includes <i>Good Lighting Technical Advice Note: Designing out light pollution in Cumbria, the Yorkshire Dales National Park and the Arnside and Silverdale AONB (2023)</i> and the Institution of Lighting Professionals Guidance Note 08/23 <i>Bats and Artificial Lighting at Night (2023)</i>. Whilst the latter relates predominantly to bats, the Guidance Note provides a number of light reduction and management techniques and designs of benefit to other species.</p>		
<p>Invasive species may spread during the operational phase due to poor implementation of the ISMP or inclusion and planting of invasive species within landscaping plans. Invasive species may also spread through recreational activities such as watercraft use.</p> <p>LSEs caused by the spread of invasive species include damage and/or deterioration in condition of qualifying habitats (e.g. changes in species composition or successional and structural changes). Introduction of invasive species may also cause the following to all qualifying species:</p> <ul style="list-style-type: none"> • Reduction of foraging success as invertebrates lose supportive habitats • Competition for supportive habitats, breeding resources and places of rest • Increased risk of predation and spread of disease 	<p>A validation report confirming the agreed remediation treatment has been carried out under the ISMP and that the site has been made free of invasive species will be secured along with an operational ISMP. This report will be submitted to and approved of in writing by the LPA before the site is brought into public use. The Biodiversity Net Gain Plan/Habitat Management and Monitoring Plan for the site will also include monitoring for invasive species; in order to reach target habitat conditions, any invasive species found during monitoring will be managed appropriately until they are eradicated.</p> <p>Landscaping plans will include locally appropriate native species, as specified by guiding principle MV8: Ecology and Landscape.</p>	<p>The validation report will confirm that the site is clear of invasive species. Successful monitoring will identify invasive species in need of control, and the management of invasives will be required for the Biodiversity Net Gain measures to be compliant. Spread of invasive species (and species likely to become invasive species due to climate change) will be avoided through appropriate planting plans. Education of site visitors will reduce spread of invasive species. Control of invasive species within European sites will provide more suitable habitat for qualifying species to retreat to when more regular sites are disturbed. As such, residual impacts are considered to be</p>	<p>MV2: Land use MV3: Residential development MV4: Public Open Space MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<ul style="list-style-type: none"> Increased mortality/harm risk due to the above points 	<p>Developer contributions allowing for strategic signage and public information displays in respect of the spread of invasive species at locations frequently used for watercraft and bathing may be required to mitigate against spread via this vector.</p>	<p>negligible.</p>	
<p>The increase of around 800 residential properties will boost the local population by approximately 1500 people. Many new residents will have dogs. The increase in human and canine populations living locally will cause additional recreational pressure to the European sites.</p> <p>Disturbance caused by walkers with and without dogs, swimming, trampling, drone use, noise, and light is likely to disturb and displace birds using habitats within European sites and functionally linked habitat. Over-wintering birds may be displaced from suitable feeding/roosting habitat, reducing foraging success and increasing energy expenditure. Direct mortality of birds may also result from encounters with dogs.</p> <p>Breeding birds may abandon nest sites and/or their supporting habitats. Nesting, rearing, feeding and/or roosting may be reduced which may lead to further reductions in suitable habitat as birds are displaced and their distribution contracts.</p> <p>Accidental destruction/damage to nests by members of the public and/or their dogs may</p>	<p>A strategic approach to mitigation of recreation impacts on European Sites in and around Morecambe Bay is in the early stages of development. The approach to mitigation with respect to the MVRO will be informed by this emerging strategic approach but will require very early engagement by the developer with the LPA and Natural England to establish the scope of baseline evidence required to support a planning application. It will also require ongoing consultation with the same stakeholders throughout the baseline data gathering and mitigation development stages to ensure an acceptable approach to mitigation is taken.</p> <p>Baseline data gathering is likely to include:</p> <ul style="list-style-type: none"> Detailed bird surveys with appropriate coverage to establish the size, composition and distribution of the European Site bird populations that could be affected by the development including within functionally linked areas. Surveys will need to take place year round and may include nocturnal surveys. 	<p>Residual impacts will be avoided if an appropriate mitigation scheme can be agreed between key project stakeholders. The exact details of the scheme of mitigation will need to be assessed in a project level HRA.</p>	<p>MV2: Land use MV3: Residential development MV4: Public Open Space MV7: Streets and movement MV10: Density and scale</p>

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
<p>also reduce breeding outcomes. Intentional damage to nests, such as egg collecting, and activities such as wild fowling are considered to be pressures on the European Sites which reduce population size and changes distributions. Bait digging also reduces foraging success of qualifying species and may cause damage to qualifying, functionally linked and supportive habitats.</p> <p>There may be direct impacts to qualifying and supporting habitats within European sites through trampling and nutrient enrichment resulting in deterioration in habitat condition and/or extent and reduced foraging success by qualifying species.</p> <p>Recreational activities causing the introduction of invasive species is addressed above.</p>	<ul style="list-style-type: none"> • Detailed assessments of current levels of recreational disturbance at critical locations within a suitable zone of influence around the development. • Modelling of the likely additional impact of the increased local human and canine population on the bird populations. <p>A bespoke and carefully considered mitigation package will be agreed between the developer, the LPA and Natural England through pro-active consultation during all stages of the process and will be secured for the lifetime of the development. The approach to mitigation may change throughout due to emerging strategic considerations but is likely to include developer contributions to rangers, access management, interpretation, bird monitoring and recreational disturbance monitoring within the zone of influence of the development.</p> <p>In addition, provision of public open space within the proposed development and nearby will assist in spreading recreational disturbance to other sites with lower sensitivity. Provision of public open space and access to other sites within the area are both key parts of guiding principles MV4 and MV7.</p> <p>MV7 also requires the enhancement of amenity of the England Coastal Path through</p>		

Impact & Likely Significant Effect	Proposed Mitigation	Residual Impacts	Guiding Principle Responsible for LSE
	<p>the site. Educational signage and interactive information posts along the England Coastal path through the site, along with public use guidelines for the path and surrounding European Sites will also be used to inform the public and influence public behaviour. Developer contributions allowing for strategic signage, interactive information posts and public information displays within European sites at locations frequently used for recreational purposes are also advised to mitigate against disturbance.</p>		
<p>The Buccleuch Dockside event space may be used in a variety of ways, which at the current time are not fully understood.</p> <p>Use of the Buccleuch Dockside event space may cause impacts to qualifying bird features of European sites depending on their use of Buccleuch Dock and the nature of the type of events being held within the event space. For example, regular use of fireworks or flood lighting would result in likely significant effects to qualifying bird species.</p>	<p>A project/site level HRA should be undertaken for the Buccleuch Dockside event space once use of this space has been fully established to assess for likely significant effects to qualifying features caused by different event types.</p> <p>Any mitigation measures will be based on detailed bird surveys and agreed with key project stakeholders. Depending on intended use of the space, measures may include restrictions on the seasonality of use and/or the timing and duration of events.</p>	<p>Residual impacts will be avoided if an appropriate mitigation scheme can be agreed between key project stakeholders. The exact details of the scheme of mitigation will need to be assessed in a project level HRA.</p>	<p>MV4: Public Open Space</p>

Conclusions

Screening

- 8.1.1. This report presents the results of the Screening Assessment and Appropriate Assessment stages of the Habitats Regulations Assessment (HRA) process for the Marina Village Residential Opportunity Supplementary Planning Document (MVRO).
- 8.1.2. The thirteen guiding principles provided within the MVRO were screened. Five guiding principles (MV1, MV5, MV8, MV11, MV12 and MV13) were screened out during the initial stage as they would not have any effect on European Sites based on the following reasons:
- The guiding principle would not in itself lead to development, e.g., because it was not a land use principle.
 - The guiding principle is solely for the conservation or enhancement of the natural environment, including biodiversity where conservation/enhancement measures will not be likely to cause any likely significant effects to a European site, the qualifying features of a European site, or the conservation objectives of a European site.
 - The guiding principle positively steers development away from European sites and associated sensitive areas.
- 8.1.3. One guiding principle (MV6) was identified as a principle that could have an effect but would not be likely to have a significant effect on a European site (alone or in-combination with other plans or projects) because the effects are trivial or 'de minimis'.
- 8.1.4. Four guiding principles (MV4, MV7, MV9, and MV10) were identified as guiding principles that steer a quantum or type of development with the potential to cause an indirect significant effect upon a European Site, the qualifying features of a European Site, or the conservation objectives of a European site, due to ecological connectivity. Two guiding principles (MV2 and MV3) were identified as guiding principles that directly and/or indirectly and significantly affect a European Site, the qualifying features of a European Site, or the conservation objectives of a European Site e.g. because the principle provides for, or steers, a quantity or type of development that may be very close to it, or ecologically connected to it or it may increase disturbance as a result of factors such as recreational pressure.
- 8.1.5. For the principles that would lead to likely significant effects (MV2, MV3, MV4, MV7, MV9, and MV10), the impact pathways, qualifying features, impacts and effects were identified. The conclusion of the screening assessment was that an Appropriate Assessment was required for all of the above principles.

Appropriate Assessment

- 8.2.1. In order to avoid or reduce the identified likely significant effects, a series of mitigation measures were applied through the appropriate assessment. As a result of these measures being adopted and implemented by the Council, a judgement was then made to determine whether there were likely to be any residual impacts. Provided that the suggested mitigation measures are adopted and successfully implemented it can be concluded that there will be no residual impacts of the SPD and no adverse effects on the integrity of the European Sites within the zone of influence of the MVRO. It is highlighted that robust project-level HRA will be required for a planning application to develop the Marina Village site in accordance with the MVRO. The approach to baseline data gathering and mitigation development, with respect to the project level HRA, must be developed in close coordination with the LPA and Natural England. The project level HRA will need to outline robust and securable mitigation measures that build on the framework measures set out in this HRA.
- 8.2.2. As no residual impacts were identified for any of the guiding principles following the adoption and implementation of the suggested mitigation measures, it is not considered necessary to progress to Stage 3 of the HRA process 'Assessment of Alternative Solutions' for the MVRO SPD.

References

CIEEM, 2017. *Guidelines on Ecological Report Writing*, Winchester: Chartered Institute of Ecology and Environmental Management.



Appendix 1: Guiding Principles Screening Appraisal

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
MV1: Compliance with the SPD	<p>This SPD sets out a clear framework and principles of what is expected from the development at the site-wide level, with flexibility to ensure detailed approaches are established through the planning application process.</p> <p>Alongside other policies and guidance, it is a material consideration when determining planning applications on this site. The SPD will be subject to regular review with key partners to ensure the detailed guidance remains relevant as planning applications are submitted associated with the development.</p> <p>New residential development is expected to comply with the guidance set out in this document when preparing planning applications for the site, and where a proposal does not, justification should be provided.</p> <p>Justification for exception should be in the interests of producing equally or better high quality, innovative and best practice approaches than described in the SPD, ensuring that they align with the SPD vision, support its objectives and comply with relevant planning policy.</p>	A1: Principles that will not themselves lead to development, e.g. because they are not a land use principle	Guiding principle MV1 is not a land use principle.
MV2: Land Use	<p>Development will be planned and delivered in accordance with the uses and quanta set out below:</p> <p>Land Use Residential Quantum Approx 800 homes</p> <p>Final development capacity will be defined by a variety of densities. The SPD envisages a suitable range of between 30-90 dph. Depending upon residential typologies brought forward and market demand, higher density development (assuming 90dph or above) may be appropriate and could be implemented, if justified and in accordance with the spatial principles within the SPD. See section 6 Placemaking Parameters for further explanation related to the principles on density profiles across the site.</p> <p>Land Use Public Open Space Quantum Provision to be agreed at planning application</p> <p>Based on a potential residential development capacity of c.800 dwellings and following Fields In Trust guidance for Outdoor Sport and Play 2020, a provisional assumption has been made that the following typologies of space could be required to support residential development:</p> <ul style="list-style-type: none"> Natural / semi natural Designated Play Areas (LEAP & NEAP) 	<p>D1 and D2: Classification dependent on European site, qualifying feature, or conservation objective.</p> <p>D1: The policy/principle directly and significantly affects a European site, the qualifying features of a European site, or the conservation objectives of a European site because it provides for, or steers, a quantity or type of development onto a European site, or</p>	<p>Page 8 of the SPD includes the provision of 800 new homes, which creates the potential for over 1,500 new residents in this area. It is likely a significant proportion of residents will own dogs.</p> <p>Increases in use of the European sites are anticipated, with impacts to sites adjacent to or including Cavendish Dock considered likely to be higher.</p> <p>Both direct and indirect damage/disturbance to the European sites and their</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<ul style="list-style-type: none"> • Allotments • Amenity Greenspace • Parks & Gardens <p>A coordinated and connected network of public open space typologies should combine to support sustainable, social and well overlooked environments that support the objectives of the SPD and the spatial principles in the following chapter.</p> <p>Land Use Ecology Quantum 10% Biodiversity Net Gain</p> <p>Future development should aim to firstly achieve as much Biodiversity Net Gain on site, by creating or enhancing habitats to generate additional biodiversity. As a secondary measure, additional suitable locations must be identified to achieve the remaining 10% net gain requirements off site.</p> <p>Land Use Education/Health Quantum No land requirement within the site, developer contribution to be sought</p> <p>The Council will require contributions for the improvement of local education and health care provision off-site. This will need to be determined depending on the scale, mix and timing of residential development.</p> <p>Land Use Retail & Commercial Quantum Small number of commercial uses may be appropriate</p> <p>The emphasis should be on supporting existing amenities in Barrow town Centre, although some new retail and commercial use may be appropriate, particularly along Buccleuch Dock side / within the former Railway Station building, subject to technical review.</p> <p>Land Use Surface Water and Flood Risk</p> <p>Flood zone requirements based on EA flood mapping. Elaborate on flood mapping and future development levels.</p> <p>Land Use Utilities & Energy</p>	<p>adjacent to it.</p> <p>D2: The policy/principle indirectly and significantly affects a European site, the qualifying features of a European site, or the conservation objectives of a European e.g. because it provides for, or steers, a quantity or type of development that may be very close to it, or ecologically, hydrologically or physically connected to it or it may increase disturbance as a result of recreational pressure.</p>	<p>qualifying species is anticipated.</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>As part of the site remediation works across the site, there is the opportunity to remove some of the existing utility constraints across the site by diverting services away from the centre of the developable area.</p> <p>This includes:</p> <ul style="list-style-type: none"> • Re-alignment of the 11kVA cable to the eastern extent of the site, following the alignment of the existing and in-situ 33kVA cable • Existing 300 kVA substation relocated to the east of the site, freeing space for new residential development • Removal of the 6-6.6kVA cable as it is redundant • Existing Gas Governor and gas utility lines serving existing residential areas to remain in situ <p>Detailed assessments to determine the existing capacity of utility networks will be required and their ability to accommodate new development, as part of detailed masterplanning.</p> <p>A Utilities Strategy should be prepared for any future residential development setting out approaches to ensure a resilient development, considering Water and Electrical services and the additional provision of services required to support residential development. Similarly, an Energy Strategy should be prepared, setting out the future developments approach to sustainable development, encouraging innovation and diversification.</p>		



Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
MV3: Residential Development	<ol style="list-style-type: none">1. The SPD envisages that the site will deliver at least 800 dwellings.2. Planning applications will be accompanied by written and illustrative material which demonstrates how the residential development of the site can be achieved without compromising on quality of design, landscaping or construction.3. The precise housing mix and typologies to be delivered will be established through the planning application process in response to local market conditions, although a masterplan should be prepared in a way which provides for a range of different housing types and sizes across the site.4. The provision of a minimum of 10% affordable housing is required across the site in accordance with Barrow Borough Council's Local Plan Affordable Housing Policy H14. Future proposals for the site should look to encourage a mixed approach to Affordable Housing siting and locations as to ensure that it is not distinguishable from market housing (a tenure blind approach) and ensure it is secured and delivered alongside market housing.	D1 and D2: Classification dependent on European site, qualifying feature, or conservation objective	See MV2

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
MV4: Public Open Space	<p>Public open space should be provided on the site as follows:</p> <ol style="list-style-type: none"> 1. Creation of a Buccleuch Docksides events space which is flexible in its design to allow a variety of events and activities to be hosted for the benefit of the wider town. 2. Open space should be provided in accordance with Policy and guidance emerging from the Local Plan. In the absence of adopted policy, the Fields in Trust Guidance can be used. 3. The final spatial extent, distribution and form of open spaces within the site or provided off site will be agreed with the Council as part of the planning application process. 4. The masterplan should include a Green Infrastructure and Public Open Space Framework(s), with the design and use of open spaces an essential part of the overall development. 5. Open spaces should perform a variety of functions including: offering green connectivity, enhancing biodiversity, sustainable drainage, attenuation and easements, and earth movement to facilitate construction, as well as ensuring an appropriate setting for the St George's Square Conservation Area Public Open Spaces within the site – and the green links and corridors that connect them – should have active development frontages. 6. Open spaces must be proven to be practical and manageable in the long term and avoid creating an unsustainable maintenance burden. 	C2: Principles that steer a quantum or type of development with the potential to cause an indirect significant effect upon a European site, due to ecological or hydrological links to a European site.	The creation of a Buccleuch Docksides event space may cause impacts to qualifying features of European sites depending on the nature of the type of events being held within the event space. This may include impacts to functionally linked habitat.
MV5: Access	<p>Access should be provided as follows:</p> <ol style="list-style-type: none"> 1. Vehicular access to the development will be from the existing road network, including the recently delivered junction off Salthouse Road and new junctions off Cavendish Dock Road. 2. Locations and general form for road access points will be established through the masterplanning process, and these must lead to a legible and attractive network within the site (see also Streets, Paths and Movement below). Final detailed design will be agreed at the planning application stage. 3. Additional managed access points for pedestrians and cyclists which facilitate safe and convenient movement between the site, local amenities and facilities (in particular to shops 	A5: Principles that make provisions but which could have no foreseeable direct or indirect effect on a European site, the qualifying features of a European site, or the conservation objectives of a European site, due	Vehicular and pedestrian links towards the town or along Salthouse Road and Cavendish Road have no foreseeable direct or indirect effects on European sites. As the access provision into the Nature conservation area will be managed, mitigation measures are inherent to the principle and therefore the principle contains

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>in the town Centre, schools and public transport stops), the Nature Conservation Area and Buccleuch Dock edge.</p> <p>4. A pedestrian link should be created to provide pedestrian connectivity between Vulcan Road Park and any new residential development, facilitating the ability to connect onwards towards Buccleuch Dock edge.</p> <p>5. Pedestrian links and connections to existing footpaths and routes off Salthouse Road should be explored.</p> <p>6. The detail of any accesses / roads that cross utility assets will need to be agreed.</p>	<p>of one of the following reasons:</p> <ul style="list-style-type: none"> • The type of the development • The quantum of the development • The proposed location of development and the fact there is no link or pathway between them and the qualifying interests • The principle contains criteria to prevent likely adverse impacts on European sites, the qualifying features of a European site, and/or the conservation objectives of a European site. 	<p>criteria to prevent likely adverse impacts on European sites.</p>
MV6: Utilities and Services	<p>1. The masterplan and development parcel should be prepared and agreed with utility providers. Services required for residential development (potable water, electricity and telecommunications) are understood to be available for the site. Further assessment will be required to determine if any network reinforcements are required as well as the provision of additional sub stations and pumping stations to support residential development. Foul and sustainable surface water arrangements will need to be agreed in full and as part of a strategy for the whole site.</p> <p>2. Phase 1 and Phase 2 remediation strategy for the site includes the relocation and realignment of some existing, on-site utility infrastructure. Future development will confirm the required easements to existing utility infrastructure and ensure ease of access and maintenance when required. Agreement on any approach to construction / engineering /</p>	<p>B2: Principles that could have an effect but would not be likely to have a significant effect on a European site in isolation because the effects are trivial or 'de minimis'</p>	<p>The agreement of foul and sustainable surface water arrangements themselves are not likely in themselves to cause damage to a European site. Works to confirm locations of utilities on site for the purposes of establishing easements are likely to be minor in nature.</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>remediation works, in the vicinity of utility assets will need to be agreed with the relevant undertaker.</p> <p>3. Service and access requirements to the relocated 300kVA substation is likely to be required as the development is being built out and development phasing and will need to be considered to ensure temporary and permanent access through the site is achieved.</p> <p>4. A comprehensive foul and surface Drainage Strategy must be prepared for the site that sets out a full assessment of surface water hierarchy. Revision: A comprehensive foul and surface Drainage Strategy that sets out a full assessment of surface water hierarchy must be prepared for the site and agreed by the council prior to its implementation.</p> <p>5. The masterplan will be accompanied by a utilities plan which sets out the strategy for the maintenance, installation and delivery of existing and new required services including electricity, water supply, surface and foul water drainage, waste management, and broadband.</p>		
MV7: Streets and Movement	<p>The key movement principles that the SPD seeks to establish include:</p> <p>1. Create a movement network where the mode of choice for most people on a daily basis is to walk, to cycle, or use public transport. To promote non-car movements, a quality network will need to be provided, including the delivery of green routes.</p> <p>2. Vehicle access points are taken from the new Salthouse Road junction and the improved Cavendish Dock Road junction with Salthouse Road. Secondary access points should also be considered along Cavendish Dock Road to ensure permeability.</p> <p>3. A network of low traffic routes and shared paths across the site providing improved accessibility to areas of open space or heritage interest. Cycle infrastructure should be supported by effective cycle parking, e-bike charging and cycle hire and to accommodate both residents and visitors. This needs to be considered 'in-property' and 'on-street'. All networks need to be designed to LTN 1/20 standards and Active Travel England should be involved in the design of future proposals / planning applications as a statutory consultee.</p> <p>4. Residential streets should be designed as social, multifunctional spaces and not simply</p>	<p>C2: Principles that steer a quantum or type of development with the potential to cause a direct significant effect upon a European site, the qualifying features of a European site, or the conservation objectives of a European site, although the effect would be dependent upon implementation in the future e.g. location and scale of development.</p>	<p>Whilst the majority of the points in this guiding principle steers impacts away from European Sites by requiring carefully considered design in respect of the movement of people for the promotion of non-car movements, carefully considered access points, and use of electric vehicles, Point 11 requires the enhancement of amenity of the England Coast Path through the site.</p> <p>Enhancement and use of the England Coast Path in this</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>designed to accommodate the car's needs. A clear street hierarchy should be established to promote low-speed and family friendly streets that support active travel.</p> <ol style="list-style-type: none"> 5. Create a new processional, primary street approach into the site from the existing access point along Salthouse Road. 6. Establish a permeable and legible street layout that maximises opportunities to connect back to Barrow's existing network of streets and dockside paths. Street layout should be efficient, creating movement loops and avoiding the over-use of cul-de-sacs. 7. Buccleuch Dock becomes an attractive and comfortable promenade that provides active travel access to and from the Town Centre. 8. Explore carefully managed pedestrian links through the Nature Conservation Area to connect existing and new residents with outdoor amenity and provide links towards Salthouse and Roose Road potentially under the existing railway viaduct. 9. Creating streets which prioritise pedestrian and active travel links between the town, employment, education and any planned public open spaces /amenities and to the Buccleuch dockside. These should be low car traffic environments that promote healthier, active travel journeys. 10. Establish pedestrian links to Vulcan Road play area. 11. Enhance the amenity of the England Coast Path through the site. 12. Car parking and EV charging provision across the site will need to be carefully designed as part of the residential environment and a variety of approaches to car parking provision should be explored, to ensure that the streetscape does not become dominated by car parking. 13. Creating opportunities for enhanced pedestrian crossing facilities across Salthouse Road to allow pedestrians and cyclists to access the existing street network to the north of the site. These will need to integrate with the proposed, partially segregated cycle lanes under LCWIP and Town Deal proposals along Salthouse Road. 		<p>location may cause disturbance to qualifying species. Whilst the enhancement of the amenity of the England Coast Path is not anticipated to cause large impacts, requirements have not been decided at this time. As such, a project level HRA may be required to assess impacts of proposals to enhance the amenity of the England Coast Path.</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>14. Sensitive consider the balance of requirements for movement of vehicles requiring access to Barrow Port with the amenity of residential environments that will address Cavendish Dock Road.</p> <p>15. Access to the existing Telecoms mast and relocated substation (next to Vulcan Park) through the site must be facilitated and integrated as part of the residential street network.</p>		
MV8: Landscape & Ecology	<p>1. Achieve 10% BNG associated with new residential development, with as much as the % uplift accommodated on site through enhancement of existing habitats and provision of new habitats for flora and fauna.</p> <p>2. Create a strong landscape buffer between the Nature Conservation Area and proposed new residential development. The landscape buffer should be designed to prevent pedestrian crossing into the Nature Conservation Area and be sufficient to protect the wider ecological network for nature recovery.</p> <p>3. Manage pedestrian access through the Nature Conservation Area, through managed paths / routes for example boardwalks to ensure no disruption to existing and enhanced habitats.</p> <p>4. Surface water management features e.g ponds, wetlands, swales will be designed and managed to support favourable conditions for habitats and species.</p> <p>5. Existing trees to the north of the site along Salthouse Road should be retained and integrated as part of new development (subject to more detailed arboricultural surveys to ascertain their condition).</p> <p>6. Use of locally appropriate native planting species that are tolerant to local climatic conditions should be used across public open space and streetscape design throughout the development.</p>	A2: Principles solely for the conservation or enhancement of the natural environment, including biodiversity where conservation/enhancement measures will not be likely to cause any likely significant effects to a European site.	Guiding principle MV8 is solely for the conservation or enhancement of the natural environment, including biodiversity. Conservation and enhancement measures are not likely to cause likely significant effects to a European site.
MV9: Sustainable Drainage	<p>1. Development should be planned in a way that restricts surface water run-off into existing water systems, as part of a site wide Flood Risk and Water Management Strategy.</p> <p>2. A variety of SuDS features should form positive and integrated features as part of the wider landscape strategy for the site, providing ecological benefits, providing habitat for local flora and fauna.</p>	C2: Principles that steer a quantum or type of development with the potential to cause an indirect significant effect	Surface water discharge into Buccleuch Dock has the potential to enter Morecambe Bay SAC and Morecambe Bay & Duddon Estuary SPA as the dock system

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>Revision suggestion: The wider landscape strategy for the site should include a variety of positive and integrated SuDS features that provided ecological benefits and habitats for flora and fauna.</p> <p>3. Opportunities to include green roofs and grey water recycling should be explored.</p> <p>4. Surface water drainage design will need to consider climate change (increase in peak rainfall intensity) of 50% for the 1 in 100 year storm event, given the intended residential use (considered to have development lifetime of 100 years).</p> <p>5. SuDS strategy will be holistic, covering the whole of the site to ensure a comprehensive solution.</p> <p>6. Surface Water Discharge into Buccleuch Dock needs further investigation and engagement with stakeholders. Any Surface Water Discharge into Buccleuch Dock should not negatively impact water quality within connected European sites & functionally linked habitat.</p> <p>7. It is anticipated that Surface Water Discharge into Cavendish Dock is not suitable. Revision suggestion: It is unlikely that Surface Water Discharge into Cavendish Dock will be acceptable unless it can be robustly demonstrated that there will be no negative impacts to European sites.</p>	<p>upon a European site, due to ecological or hydrological links to a European site.</p>	<p>is linked to Morecambe bay.</p> <p>The effects are dependent upon how this would be implemented in terms of pollution mitigation but without mitigation would be likely to impact water and/or habitat quality.</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
MV10: Density and Scale	<p>Development density and intensity principles should consider:</p> <ol style="list-style-type: none"> 1. Creating a range of densities across the site, arranged as a gradual increase in intensity from the east to west. This would create a clear transition from existing urban environments to a new, urban Buccleuch dockside destination. 2. Higher density development focused along Buccleuch Dock. 3. Lower density overlooking Cavendish Dock and onto Vulcan Road residential area, stepping down to respect local residential amenity and to reflect the naturalistic landscape character of the Nature Conservation Area edge. 4. Deliver a variety of densities that maximise the development potential of the site and which respond to local built context. 	C2: Principles that steer a quantum or type of development with the potential to cause an indirect significant effect upon a European site, due to ecological or hydrological links to a European site.	An increased density of dwellings along Buccleuch Dockside may cause impacts to qualifying features of European sites using the sites themselves and/or functionally linked habitat, such as light spill or increased recreational disturbance.
MV11: Development sustainability	<p>New development should minimise its impacts on the environment through the following measures:</p> <ol style="list-style-type: none"> 1. Development on the site will be gas free, with heating provided electrically and no new provision of gas service connections should be made. The most appropriate technical solution should be sought taking into account insulation and airtightness e.g Air Source Heat Pumps (ASHPs). Various approaches to provision of heating across the neighbourhood should be explored, including centralised, decentralised and hybrid approaches. 2. Delivery of energy efficiency through building construction (fabric first approaches should be explored). Where mechanical ventilation is required it should be coupled with natural ventilation for all building typologies within the development. 3. Delivery of energy efficiency through site layout and building design, e.g. through orientation of streets and design of housing for solar gain/shading. 4. Microgeneration of renewable energy through the installation of Photovoltaic (PV) Panels 	A5: Principles that make provisions but which could have no foreseeable direct or indirect effect on a European site, the qualifying features of a European site, or the conservation objectives of a European site, due to one of the following reasons: <ul style="list-style-type: none"> • The type of the development • The quantum of the 	The proposals within this guiding principle have no foreseeable direct or indirect effect on a European site due to the type and quantum of development proposed.

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
	<p>and associated battery storage should be incorporated.</p> <p>5. The use of energy / battery storage, reducing number of substations and maximising participation in flexible energy services should be explored.</p> <p>6. Electric vehicle charging points integrated as part of both dwelling and street design. Sustainable approach to water management through the provision of SUDs, both as part of the streetscape and landscape strategy.</p> <p>7. Explore opportunities to retro-fit the former Railwaymen's listed building in accordance PAS2035 / PAS 2038 guidelines depending upon its future use.</p> <p>8. Ensuring proposals incorporate water efficiency measures.</p>	<p>development</p> <ul style="list-style-type: none"> The proposed location of development and the fact there is no link or pathway between them and the qualifying interests The principle contains criteria to prevent likely adverse impacts on European sites, the qualifying features of a European site, and/or the conservation objectives of a European site. 	
MV12: Planning Application Requirements	<p>Developers and those looking to submit planning applications in relation to this Residential Opportunity site are directed to the Council's guidance on submitting planning applications, these include:</p> <ul style="list-style-type: none"> national planning validation requirements local planning validation requirements waste and minerals planning validation requirements biodiversity net gain planning advice Biodiversity Supplementary Planning Document <p>These provide technical or other information that we will need to validate your application. By taking early pre application advice officers will identify validation and consultee requirements and establish timescales and explain the planning processes to ensure a timely determination.</p>	<p>A1: Principles that will not themselves lead to development, e.g. because they are not a land use principle</p>	<p>Guiding principle MV12 is not a land use principle.</p>

Principle	Principle Wording	Screening Appraisal	
		Potential Effects Category A-D	Rationale
MV13: Infrastructure Requirements	<p>Developers are encouraged to engage in pre-application discussions with the Council and Statutory Consultees to negotiate the need for financial contributions, taking account of the Affordable Housing and Developer Contributions SPD. Such contributions from the developer will be used to support the delivery of local services and infrastructure. The types of infrastructure that developers may be required to provide contributions towards include, but are not limited to:</p> <ul style="list-style-type: none"> • Biodiversity maintenance, protection and enhancement, including biodiversity net gain. • Climate change and energy initiatives. • Community infrastructure, such as the enhancement of the public realm at St. George's Square and surrounding area, public art, the restoration of the Grade II listed Railwaymen's Club and attached warehouse, the provision of school places, sports facilities and enhancement of health services. • Flood prevention, sustainable drainage measures, utilities and waste. • Green infrastructure, including open space and children's play areas. • Transport, including cycling and walking infrastructure, highway improvements, and Travel Plan monitoring. <p>There may be planning applications where the total cumulative cost of the requested developer contributions will undermine the deliverability of the development. In cases where the applicant is seeking the reduction in the level of financial contributions, an independent viability appraisal will be required from the applicant.</p> <p>If it is determined that viability and deliverability concerns are justified, consideration will be given to reapportioning contributions or seeking revision to the proposal. In consultation with statutory consultees, regard will be had to the most important agreed priorities and outcomes, ensuring that the proposal suitably and sustainably integrates with on and off-site biodiversity features, local communities and services, taking account of current national and local planning policies and legislation and any site specific requirements necessary to make the development acceptable.</p>	A1: Principles that will not themselves lead to development, e.g., because they are not a land use principle.	This principle is not a land use principle and requires that consultees are involved with the decision making process to protect any developer contributions required for the purposes of mitigation.







Appendix 2: Maps

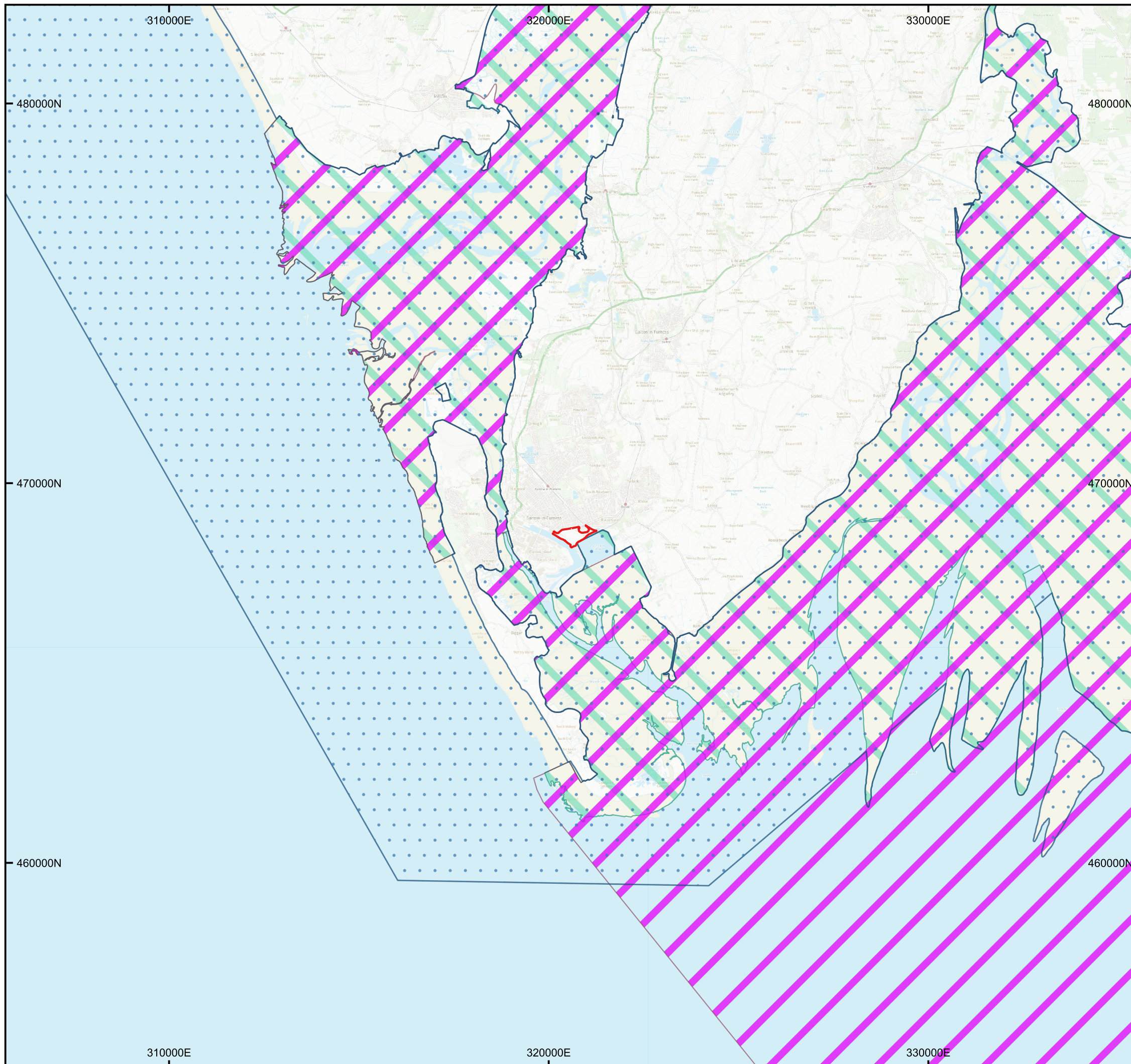
Marina Village Residential Opportunity Site

**Marina Village SPD
HRA**

**Figure 1- Location and
European Sites**

KEY

-  Marina Village Residential Opportunity Site
-  Ramsar Site
-  Special Area of Conservation (SAC)
-  Special Protection Area



0 2,000 4,000 m



SHEET: A3	SCALE: 1:100,000	BY:AB	QA:LM	REV: 1.0
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Projection: OSGB 1936/British National Grid - EPSG 27700 13/12/2024

Marina Village Residential Opportunity Site

**Marina Village SPD
HRA**

**Figure 2 - Detailed
Location and European
Sites**

KEY

-  Marina Village Residential Opportunity Site
-  Ramsar Site
-  Special Area of Conservation (SAC)
-  Special Protection Area

0 500 1,000 m



SHEET: A3	SCALE: 1:25,000	BY:AB	QA:LM	REV: 1.0
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Projection: OSGB 1936/British National Grid - EPSG 27700 13/12/2024

