

## EIA Screening for Cumbrae Slipway Reconstruction

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Cumbrae Slipway Reconstruction  
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## 1. Introduction

Caledonian Maritime Assets Ltd. (CMAL) would like to request a formal screening opinion from the Marine Scotland Licensing Operations Team (MS-LOT) and North Ayrshire Council to determine whether Phase 1 of the proposed Cumbrae ferry slipway reconstruction (hereafter referred to as 'the proposed works') is an Environmental Impact Assessment 'EIA' development. This EIA Screening Report sets out the initial assessment of a proposed project to determine whether it requires a full Environmental Impact Assessment (EIA).

This EIA Screening Report includes a description of the proposed development and comprehensive screening assessment of the potential environmental impacts of the project with regards to EIA legislation, specifically The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 and The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

Our view is that the development is not an EIA development as it falls under neither Schedule 1 or 2 of the Town and Country Planning or the Marine Works Regulations and the findings of the screening process conclude that the proposed works are not likely to result in significant environmental effects. As we consider the reconstruction works not to be an 'EIA' development, we request MS-LOT and North Ayrshire Council to provide a screening opinion on this determination.

### 1.1 Background and description of the Proposed Development

The original slipway was built in 1970s and has been repaired frequently over the years and is now deteriorating. An inspection of the facility in November 2020 identified that the general condition of the slipway was 'serviceable', but it was certainly at the end of its useful life. The conclusion was that maintaining a reliable lifeline ferry service might not be possible if the slipway was not replaced at the earliest opportunity. CMAL therefore commissioned an Options Study for the reconstruction of the slipway which was completed in late 2021. Detailed design of the slipway reconstruction is currently underway. The emerged Preferred Option is to reconstruct the existing double width slipway (southern half with cast-in rails) in its current location and maintain the ferry service for the duration of construction from a temporary slipway to be built south (about 35m away) of the existing slipway. The temporary slipway will be removed once the new slipway is operational.

The Cumbrae Slipway Reconstruction project is being considered in two separate phases. Phase 1 comprises works onshore and offshore which involve the reconstruction of the existing slipway and the construction of a temporary slipway to maintain the ferry service during construction (which will be demolished following reconstruction of the existing slipway). Phase 2 includes shoreside works to develop potential onshore facilities. Although the designs for Phase 2 have not yet been developed, it is likely that for Phase 2, a one-storey building would be situated to the north of the slipway, partly utilising the reclaimed land area. It is considered that the addition of a building in this location or anywhere within the proposed red line boundary on Figure 2 would not alter the conclusion of this EIA Screening.

Phase 2 is to be developed following further consultation with key stakeholders and this EIA screening Report considers only Phase 1. EIA Screening for Phase 2 would be subject to further consideration once the Phase 2 works have been defined.

### 1.2 Location

The Cumbrae ferry slipway is localised on the north-east coast of Great Cumbrae, in the Firth of Clyde, Scotland and is shown in Figure 1. The ferry slipway is a part of CalMac Ferries Millport which include Cumbrae Ferry Terminal, turning area, marshalling line, car park, bus stop and public toilets.



**Figure 1. Location of the existing ferry slipway at Great Cumbrae, Scotland**

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### 1.3 Details of the proposed works

The proposed works are to reconstruct the existing slipway in its current location. The construction area is outlined red in Figure 2, the work area above Mean Low Water Springs (MLWS) is 4,100 m<sup>2</sup> and the work area below Mean High Water Springs (MHWS) is 2,500 m<sup>2</sup>. An area of reclaimed land to the north of the existing slipway is required for the reconstruction of the slipway (required for the storage of plant and materials) and is proposed to be retained to support later phases of the Cumbrae Slipway Reconstruction project. Creation and retention of the reclaimed area is considered in this screening i.e. part of the Phase 1 works. However, the detail of the facilities that may be developed as part of the landside extent of the Cumbrae Slipway Reconstruction project i.e. Phase 2 would be considered in future once details of the works are known, and may need to be subject to separate EIA screening and/or planning.

The proposed works area also includes the existing car park and turning area. Minor modifications will be required to the car park road junction and turning area to accommodate the turning circle of vehicles during the use of the temporary slipway.

The ferry service will be maintained throughout the works from the temporary slipway, with the MV Loch Shira being the main vessel servicing this route at the moment. This vessel has a carrying capacity of 1027te. The slipways are being designed for other ferries with less capacity than the Loch Shira. It is anticipated at this stage that the proposed work will not change the type or frequency of ferries using the terminal.

A preliminary ecology walkover of the proposed works site did not identify any signs of protected species and Ground Investigation (GI) works are planned for summer 2023 which will comprise geophysical surveys and sampling to provide information for the detailed design stage.

### **1.3.1 Construction**

It is anticipated that construction would take approximately 16 months. The proposed works include replacing the existing double width slipway (approx. 20m width) and fitting the southern half with cast-in rail system. The reconstructed slipway gradient will be as existing i.e. remaining below the vessel keel at all states of currently predicted (or observed) low water conditions.

#### **1.3.1.1 Slipways**

The existing concrete surfacing will be removed to allow installation of anchor walls and tie rods required for the sheet piled walls. Waste concrete would be transferred into skips on a barge and transported to a licenced site on the mainland for recycling or disposal. Reuse of the concrete slab after processing may be permitted if it can be justified by testing.

The permanent slipway will be formed by a perimeter of sheet pile walls which will encapsulate the existing slipway. The proposal is to install the sheet piles using land-based plant, where possible. The plant used will depend on the ground conditions, which will be confirmed by GI to be undertaken in summer 2023. Where there is rock at or close to the surface a trench may need to be formed by an excavator. The piles would be lifted into place by an excavator or crane and the pile toe placed within the trench, which would then be filled with tremie concrete. Where there is a sufficient depth of overburden, we anticipate using an attachment to the excavator or crane to hammer or vibrate the piles through the seabed.

Granular fill material will be used to infill any voids within the existing structure and create a solid base material to support the new concrete slab which will form the surface of the slipway. The proposal is for the slab to be poured in-situ. For both the permanent and temporary slipway the intention at present is for the lower half of the slipway slab to be poured within a cofferdam to ensure a good quality finish and this should also minimise the risk of concrete migrating into the water column. The upper half of the slipway slab will be poured at a low tide again to provide good quality finish and minimise risk of concrete migrating into the water column.

A temporary slipway is proposed to be constructed to maintain the ferry service during reconstruction of the existing slipway. The 15m wide temporary slipway is to be constructed approximately 35m south of the existing facility. The proposal is for the lower half of the temporary slipway to be constructed in the same form as the permanent slipway with sheet pile walls, granular fill and a concrete capping slab. Again, the approach to installing the piles will be informed by GI but will be similar to the approach for the permanent slipway. For the upper half of the slipway, over the foreshore, rock armour revetments are proposed in lieu of sheet piles to support the sides.

It is anticipated that most of the construction materials will be imported by barge to avoid disruption to the ferry service.

On completion of the permanent slipway, the temporary slipway and its working platform will be removed, and the seabed will be reinstated to its original profile with non-natural material removed as confirmed by comparing pre and post works bathymetric surveys and by divers. It is anticipated that this will be undertaken using a long reach excavator and a crane barge carrying skips of material back to the mainland.

If possible, new materials from the temporary slipway working platform may be reused to construct the working platform to the north of the permanent slipway if that platform is to be retained. The working platform to the north of the permanent slipway may be kept to site facilities for CalMac and the public in the future.

#### **1.3.1.2 Working Platforms (Land Reclamation)**

It is proposed that both the working platform on the north side of the permanent slipway and the working platform to the south of the temporary slipway, will be built up in granular fill compacted and graded to the existing road level with a rock armour revetment constructed around the perimeter, comprising layers of geotextile, secondary rocks and larger primary rocks.

Most of the construction materials will be transported from the mainland to the site on a barge and placed using a long reach excavator or crane. Some granular material for the landward side of the platforms may be transported initially by road and ferry, if it cannot be placed using marine plant. A compactor will also be used to compact the fill above approximately mid tide level.

No piling is anticipated to be required for the construction of either of the working platforms.

CMAL are currently considering the need for a terminal building and where this should be located. It may be that the working platform to the north of the permanent slipway is kept for this purpose. If it is not needed, the intention is for it to be removed after the temporary slipway is removed and the seabed reinstated to its original profile as confirmed by a bathymetric survey and divers. The working platform to the south of the temporary slipway will be removed when the temporary slipway is being removed. Material generated by the removal of the working platforms will be taken to a licenced site on the mainland for disposal or recycling.

### **1.3.1.3 Dredging**

Dredging will be required in two locations, at the toe of the reconstructed slipway and the toe of the temporary slipways to provide access for ferries. The locations of the dredging are shown in Figure 2, the dredging area in front of permanent slipway is approximately 500 m<sup>2</sup> and the area in front of temporary slipway is approximately 600m<sup>2</sup> to an estimated maximum depth of 2m. The total estimated dredge volume is approximately 1500m<sup>3</sup>.

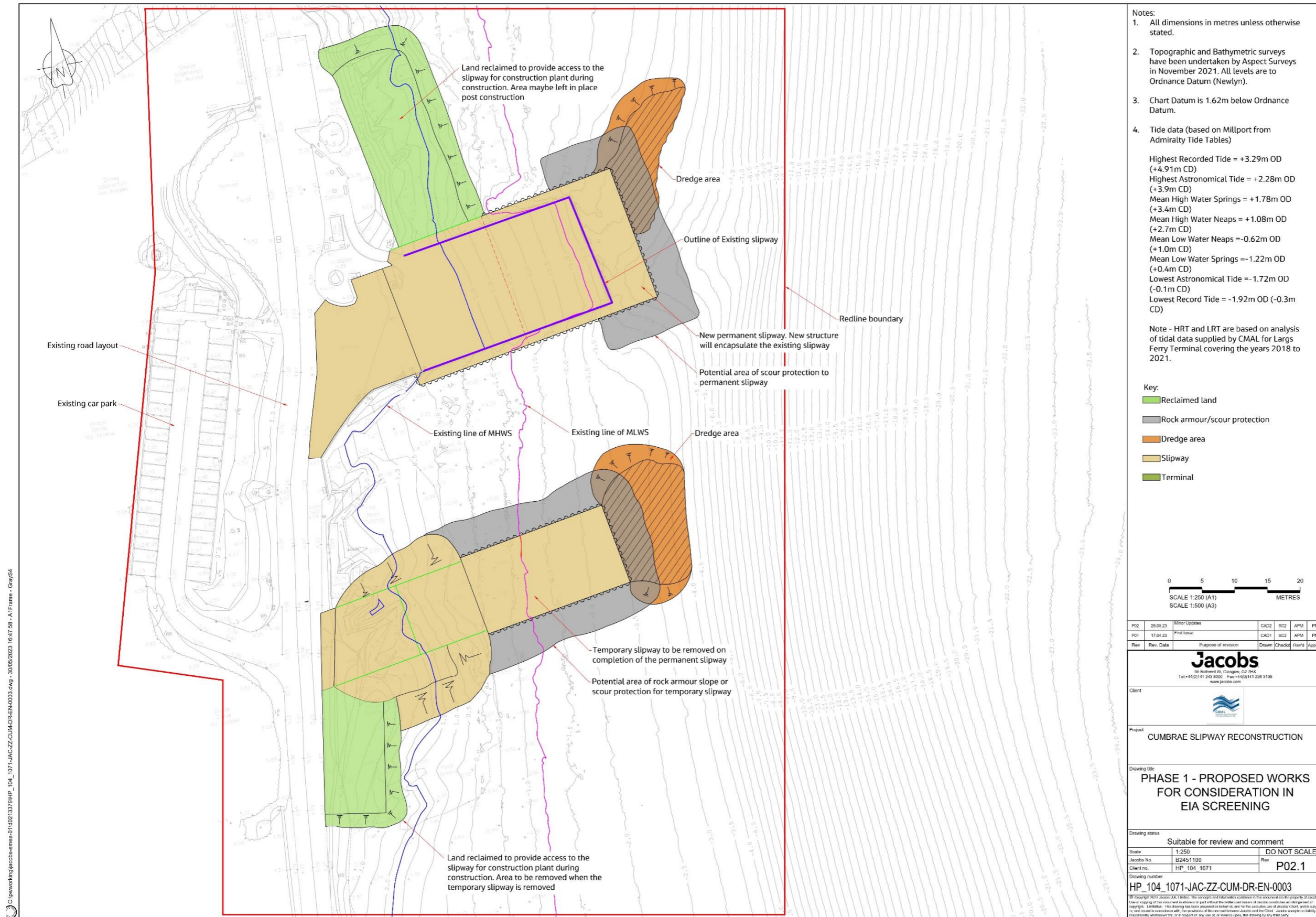


Figure 2. Construction plan of Cumbrae Ferry Slipway reconstruction works



## 2. Relevant Legislation

### 2.1 EIA Legislation

In Scotland there are a number of EIA regulations that implement the requirements of the Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment. Those relevant in relation to the replacement of Cumbrae ferry facility are The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (hereafter referred to as the Town and Country Planning EIA Regulations) and The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (hereafter referred to as the Marine Works EIA Regulations).

## 3. Screening Assessment

Both the Marine Works EIA Regulations and Town and Country Planning EIA Regulations form the legislative framework for undertaking EIA for certain projects and define an 'EIA development' as either a 'Schedule 1' or 'Schedule 2' development likely to have significant effects on the environment by virtue of factors such as the projects nature, size or location. This Section outlines consideration of whether the project is EIA development under both of the relevant EIA Regulations with regards to the proposed works for Phase 1.

Table 1 provides assessment of the reconstruction works against Schedules 1, 2 and 3 of the Town and Country Planning EIA Regulations and Table 2 provides assessment against the Marine Works EIA Regulations.

As shown in Table 1 and 2 the proposed works are not considered to fall under Schedule 1 or Schedule 2 of the Marine Works or Town and Country Planning EIA Regulations. The proposed works are for the reconstruction of the existing Cumbrae ferry slipway, which is a development that is already authorised, executed and in operation.

Reconstruction of a ferry slipway is not a listed development under Schedule 1 and therefore not considered a Schedule 1 development under the Marine Works EIA Regulations or the Town and Country Planning EIA Regulations. As a result, it is not automatically classed as an EIA Development and therefore must be considered under Schedule 2 of both Regulations.

Although Schedule 2, Class 10 (m) of both sets of EIA regulations is of particular relevance. The proposals are for maintenance and reconstruction of an existing structure which is specifically excluded under Class 10 (M). Refer to the extract from Schedule 10 with emphasis added for clarity – *“Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, **excluding the maintenance and reconstruction of such works**”*.

Our view is that the development is not an EIA development as it falls under neither Schedule 1 or 2 of the Town and Country Planning or the Marine Works Regulations. As we consider the reconstruction works not to be an 'EIA' development, we request MS-LOT and North Ayrshire Council to provide a screening opinion on this determination.

For completeness the development has also been screened against the Schedule 3 criteria used to determine if Schedule 2 developments trigger an EIA. The screening is provided in Tables 1 and 2 and the findings of the screening process conclude that the proposed works are not likely to result in significant environmental effects.

**Table 1. Assessment against Town and Country Planning EIA Regulations**

Schedule	Class	Applicable to reconstruction works	Justification
Schedule 1	Works do not fall under Schedule 1	No	The proposed works are <b>not listed</b> as a Schedule 1 development.
Schedule 2	Class 10 (m) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, <b>excluding the maintenance and reconstruction of such works.</b>	No	As the proposed works (including construction of the temporary slipway) are associated with the reconstruction of the existing Cumbrae ferry facility, it is our view that they are excluded under paragraph 10(m), and the works <b>would not be classed as EIA development under Schedule 2.</b>
Schedule 3 Characteristics of works. 1. The characteristics of works must be considered having regard, in particular, to:	a) the size and design of the development;	No	Indicative plans of the detailed design show that the ferry slipway proposed works footprint above MLWS will cover 4,100 m <sup>2</sup> this includes the area for reclamation. The area within the red line boundary above MLWS is approximately 13,860 m <sup>2</sup> . This area is required to enable the construction for example through storage of materials and movement of construction equipment.
	(b) cumulation with other existing development and/or approved development;	No	The proposed works will include reconstruction of the existing ferry slipway and construction of the temporary slipway. There are no other existing developments and/or consented developments occurring which would potentially give rise to significant cumulative effects.
	(c) the use of natural resources, in particular land, soil, water and biodiversity;	No	An area of land to the north of the existing slipway is proposed to be reclaimed to enable construction. During construction, a temporary land take is associated with the construction of the temporary slipway about 25 m south of the existing slipway. However, the temporary slipway is not considered a permanent facility and will be removed upon the end of construction. No significant effects are anticipated related to the use of natural resources.
	(d) the production of waste;	No	During construction, waste will be either be reused or removed from site to an appropriate waste facility. During operation there may be requirement for maintenance works, however, the production of waste from these works is anticipated to be low volume and would not be considered to result in a significant effect.
	(e) pollution and nuisances;	No	The proposed works are not located within a Noise Management Area (NMA) or an Air Quality Management Area (AQMA).

Schedule	Class	Applicable to reconstruction works	Justification
			<p>The nearest receptor is the Cumbrae Sport National Centre, a recreation property, located approximately 470 m south of the site. The nearest residential receptor is a single property approximately 600m south and there is one farm located approximately 750m south-west.</p> <p>The temporary adverse construction noise and vibration impacts during the construction period are considered negligible due to lack of noise sensitive receptors within 300m of the site.</p> <p>During the construction phase, temporary potential impacts may arise from dust generation, however, these are considered to be negligible and temporary and can be managed adequately through dust control measures on-site.</p> <p>The sound levels and air quality during operation are not anticipated to change from current operations at the Cumbrae ferry facility.</p>
	(f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	No	The coastal flood risk at the site of the proposed works is 10% per year (SEPA, 2023). However, it is not anticipated that the project will increase this flood risk, and as the site will continue to operate as it does now, it is not anticipated that there would be additional risk of major accidents and disasters.
	(g) the risks to human health (for example due to water contamination or air pollution)	No	<p>The construction site is located approximately 600m from the nearest residential property. Disturbance during construction (e.g. from noise and dust) will be temporary and is not anticipated to result in significant effects, especially if best practice construction methods and adherence to Standards are considered.</p> <p>No significant effects anticipated during construction.</p> <p>During operation, the situation will be the same as present.</p>
Schedule 3 Location of works: 2. The environmental sensitivity of geographical areas likely to be affected by works must be considered having regard in particular to:	(a) the existing and approved land use:	No	<p>The proposed works are to replace the existing facility; therefore, it is not considered that overall, the project will permanently change the existing and approved land use.</p> <p>The project includes a small area of reclamation required for construction that would be permanently retained in addition to temporary land take associated with the construction of the temporary slipway about 25 m south of the existing slipway. However, the temporary slipway will be removed upon the end of construction.</p>
	(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;	No	<p>No part of the proposed works fall within/or adjacent to a site designated for its ecological or geological value.</p> <p>The Ballochmartin Bay Site of Special Scientific Interest (SSSI) is located approximately 550m to the south of the proposed works and is the only designated site within 2km of the proposed</p>

Schedule	Class	Applicable to reconstruction works	Justification
			<p>works. The qualifying features for this site are Sandflats – Marine – including marine mammals. There is no feature condition assessment for this site.</p> <p>The British Geological Survey seabed geology layers indicate that the material is likely to be mud and sandy, however due to the area being in a narrow channel with reasonably strong tidal streams, there is a presumption that the material will be towards the coarser end of the classification. Dredging is anticipated to result in a short term resuspension of sediments, the duration and extent of which will be dependent on sediment size, dredging methodology and timing of works. Assuming a realistic worse case, increased turbidity from localised resuspension is expected to disperse over a single tidal cycle and is unlikely to result in increased deposition on the Ballochmartin Bay SSSI site 500m away from the Scheme. A sediment sampling plan has been prepared, which will assess the proposed dredge area for sediment bound contaminants. The WFD classification for the waterbody (Largs Channel) is Good with a Pass for specific pollutants and the Marine Scotland Hazardous Substances data do not indicate any levels of concern in the area to be dredged. No significant effects are therefore predicted on the features of the SSSI.</p> <p>The Cumbrae ferry facility is located on the coast of the Firth of Clyde, a marine environment. The following protected species are known to occur within the wider project area:</p> <ul style="list-style-type: none"> <li>▪ harbour porpoise (<i>Phocoena phocoena</i>);</li> <li>▪ common dolphin (<i>Delphinus delphis</i>);</li> <li>▪ basking shark (<i>Cetorhinus maximus</i>).</li> </ul> <p>The proposed works have a potential to create some disturbance during construction to the identified protected species, especially harbour porpoise. However, any disturbance during the construction stage (noise and/or vibration) would affect small numbers of individuals as the scale of the proposed works is minor and temporary. A preliminary walkover of the site did not identify any signs of protected species.</p> <p>Disturbance to biodiversity during construction works will be mitigated with best practice measures and EPS disturbance licences will be obtained where required.</p> <p>JNCC Guidelines for the prevention of injury or harm to marine mammals will be followed. (<a href="https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf">https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf</a>). In line with JNCC guidelines, non percussive (vibro, augered, pushed or gravity) piling methods would be used preferentially to drive piles to target depths. Where percussive piling is required to make depth then hammer modifications should be</p>

Schedule	Class	Applicable to reconstruction works	Justification
			<p>investigated to reduce noise levels. Soft or ramp starts would be used where possible to allow marine mammals to exit the affected area during piling activities. A Marine Mammal Observer may be required to undertake pre works checks and ensure that the area is clear of marine mammals before work commences.</p> <p>The duration and extent of effects from dredging may be mitigated by the selection of dredger type and timing of works. Where possible the dredge will be undertaken by a method that minimises the opportunity for sediment remobilisation. Undertaking dredging activities on neap tidal cycles may reduce the extent to which sediments are distributed beyond the site.</p> <p>Biodiversity enhancements will be considered as part of the new slip way design. These have the potential to increase habitat area available to recolonisation by marine fauna and flora.</p> <p>As the proposed works include the reconstruction of an existing facility and will be used for the same purposes, no significant effects are anticipated during the operational stage.</p> <p>No significant adverse effects are anticipated.</p>
	<p>(c) the absorption capacity of the natural environment, paying particular attention to the following areas –</p> <ul style="list-style-type: none"> <li>(i) wetlands, riparian areas, river mouths;</li> <li>(ii) coastal zones and the marine environment;</li> <li>(iii) mountain and forest areas;</li> <li>(iv) nature reserves and parks;</li> <li>(v) European sites and other areas classified or protected under national legislation;</li> <li>(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;</li> <li>(vii) densely populated areas;</li> <li>(viii) landscapes and sites of historical, cultural or archaeological significance.</li> </ul>	No	<p>With regard to the sub-criteria:</p> <ul style="list-style-type: none"> <li>(i) Not applicable to the proposed works as the works take place on the coast.</li> <li>(ii) The proposed works at the Cumbrae Ferry Slipway are located adjacent to the Firth of Clyde, a marine environment. The proposed works include the reconstruction of the existing ferry facility, therefore no significant effect on coastal waters is anticipated during operation. Impacts during construction are temporary and are not anticipated to result in significant effects.</li> <li>(iii) Not applicable to the proposed works as the works taking place on the coast and there is no woodland identified within the works area.</li> <li>(iv) The proposed works are not located in a national park or nature reserve.</li> <li>(v) The proposed works are not located within/adjacent to a European site or other areas classified or protected under national legislation. The closest designated site (Ballochmartin Bay SSSI) is located within approximately 550 m south of the project.</li> <li>(vi) The proposed works are not located in an area in which there has already been a failure to meet the environmental quality standards laid down in EU legislation and relevant to the works or in which it is considered that there is such a failure.</li> <li>(vii) The proposed works are not located in a densely populated area. The nearest residence is approximately 600m south of the existing ferry slipway.</li> </ul>

Schedule	Class	Applicable to reconstruction works	Justification
			<p>(viii) The proposed works do not lie within any conservation areas designated for its historical value. There are no scheduled monuments or listed buildings identified within 300m of the project. There is an aircraft wreck Consolidated Catalina Flying Boat (Reference: 102752) listed under Canmore Maritime, located approximately 130m east of the proposed works, which is not considered to be disturbed by the works as it is located in some distance away.</p> <p>It is anticipated that there will be no impact to cultural heritage features as no records within the proximity of the works were identified, therefore no change to existing conditions is anticipated.</p>
<p>Schedule 3 Characteristics of the potential impact 3. The likely significant effects of the works on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the works on the factors specified in regulation 4(3), taking into account -</p>	<p>the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); the nature of the impact; the transboundary nature of the impact; the intensity and complexity of the impact; the probability of the impact; the expected onset, duration, frequency and reversibility of the impact; the cumulation of the impact with the impact of other existing and/or approved development; the possibility of effectively reducing the impact.</p>	<p>No</p>	<p>As this project is reconstructing an existing slipway, it is not considered that there would be cumulative or transboundary effects.</p>

**Table 2. Assessment against Marine Works EIA Regulations**

Schedule	Class	Applicable to reconstruction works	Justification
Schedule 1	Works do not fall under Schedule 1	No	The proposed works are not listed as a Schedule 1 development.
Schedule 2	Class 10 (m) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, <i>excluding the maintenance and reconstruction of such works.</i>	No	As the proposed works (which include construction of the temporary slipway), are associated with the reconstruction of the existing Cumbrae ferry facility, they are not considered to fall under paragraph 10(m), therefore the works <b>would not be classed as EIA development under Schedule 2.</b>
Schedule 3 Characteristics of works. 1. The characteristics of works must be considered having regard, in particular, to:	a) the size and design of the works;	No	Indicative plans of the detailed design show that the footprint of the ferry slipway proposed works area below the MHWS will cover 2,500 m <sup>2</sup> . The area within the red line boundary below MHWS is approximately 14,065 m <sup>2</sup> . This area is required to enable the construction for example through storage of materials and movement of construction equipment.
	(b) cumulation with other existing development and/or approved development;	No	The proposed works will include reconstruction of the existing ferry slipway and construction of the temporary slipway, for the duration of construction exclusively. There are no other existing developments and/or consented developments occurring which would potentially give rise to significant cumulative effects.
	(c) the use of natural resources, in particular land, soil, water and biodiversity;	No	The proposed works include dredging required at the toe of the replacement slipway and to enable construction of the temporary slipway. An area of land to the north of the existing slipway is proposed to be reclaimed to enable construction.  A temporary land take is associated with the construction of the temporary slipway about 25 m south of the existing slipway. However, the temporary slipway is not considered a permanent facility and will be removed upon the end of construction.  No significant effects are anticipated related to the use of natural resources.
	(d) the production of waste;	No	During construction, waste will be either be reused or removed from site to an appropriate waste facility.  During operation there may be requirement for maintenance works, however, the production of waste from these works is anticipated to be low volume and would not be anticipated to result in a significant effect.

Schedule	Class	Applicable to reconstruction works	Justification
	(e) pollution and nuisances;	No	<p>The proposed works are not located within a Noise Management Area (NMA) or an Air Quality Management Area (AQMA).</p> <p>The nearest receptor is the Cumbrae Sport National Centre, a recreation property, located approximately 470 m south of the site. The nearest residential receptor is a single property approximately 600m south and there is one farm located approximately 750m south-west.</p> <p>The temporary adverse construction noise and vibration impacts during the construction period are considered negligible due to lack of noise sensitive receptors within 300m of the site.</p> <p>During the construction phase, temporary potential impacts may arise from dust generation, however these are considered to be negligible and temporary and can be managed through dust control measures on-site.</p> <p>The sound levels and air quality during operation are not anticipated to change from current operations at the Cumbrae ferry facility.</p>
	(f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge;	No	<p>The coastal flood risk at the site of the proposed works is 10% per year (SEPA, 2023). However, it is not anticipated that the project will increase this flood risk and as the site will continue to operate as it does now, it is not anticipated that there would be additional risk of major accidents and disasters.</p>
	(g) the risks to human health (for example due to water contamination or air pollution)	No	<p>The proposed works are located approximately 600m from the nearest residential property.</p> <p>Disturbance during construction (e.g from noise and dust) will be temporary and is not anticipated to result in significant effects, especially if best practice construction methods and adherence to Standards are considered.</p> <p>No significant effects anticipated during construction.</p> <p>During operation, the situation will be the same as present.</p>
Schedule 3 Location of works: 2. The environmental sensitivity of geographical areas likely to be affected by works must be considered	(a) the existing and approved land use:	No	<p>The proposed works are to replace the existing facility; therefore, it is not considered that the project will permanently change the existing and approved land use.</p> <p>A temporary land take is associated with the construction of the temporary slipway about 25 m south of the existing slipway. However, the temporary slipway is not considered a permanent facility and will be removed upon the end of construction.</p>
	(b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil,	No	<p>No part of the proposed works falls within/or adjacent to a site designated for its ecological or geological value.</p>



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having regard in particular to:	land, water and biodiversity) in the area and its underground;		<p>The Ballochmartin Bay Site of Special Scientific Interest (SSSI) is located approximately 550m to the south of the proposed works and is the only designated site within 2km of the proposed works. The qualifying features for this site are Sandflats – Marine – including marine mammals. There is no feature condition assessment for this site.</p> <p>The British Geological Survey seabed geology layers indicate that the material is likely to be mud and sandy, however due to the area being in a narrow channel with reasonably strong tidal streams, there is a presumption that the material will be towards the coarser end of the classification. Dredging is anticipated to result in a short term resuspension of sediments, the duration and extent of which will be dependent on sediment size, dredging methodology and timing of works. Assuming a realistic worse case, increased turbidity from localised resuspension is expected to disperse over a single tidal cycle and is unlikely to result in increased deposition on the Ballochmartin Bay SSSI site 500m away from the Scheme. A sediment sampling plan has been prepared, which will assess the proposed dredge area for sediment bound contaminants. The WFD classification for the waterbody (Largs Channel) is Good with a Pass for specific pollutants and the Marine Scotland Hazardous Substances data do not indicate any levels of concern in the area to be dredged. No significant effects are therefore predicted on the features of the SSSI.</p> <p>The Cumbrae ferry facility is located on the coast of the Firth of Clyde, a marine environment. The following protected species are known to occur within the wider project area:</p> <ul style="list-style-type: none"> <li>▪ harbour porpoise (<i>Phocoena phocoena</i>);</li> <li>▪ common dolphin (<i>Delphinus delphis</i>);</li> <li>▪ basking shark (<i>Cetorhinus maximus</i>).</li> </ul> <p>The proposed works have a potential to create some disturbance during construction to the identified protected species, especially harbour porpoise. However, disturbance during the construction stage (noise and/or vibration) would affect small numbers of individuals as the scale of the proposed works is minor and temporary. A preliminary walkover of the site did not identify any signs of protected species.</p> <p>Disturbance to biodiversity during construction works will be mitigated with best practice measures and EPS disturbance licences will be obtained where required.</p> <p>JNCC Guidelines for the prevention of injury or harm to marine mammals will be followed. (<a href="https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf">https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf</a>). In line with JNCC guidelines, non-percussive (vibro, augered,</p>

Schedule	Class	Applicable to reconstruction works	Justification
			<p>pushed or gravity) piling methods would be used preferentially to drive piles to target depths. Where percussive piling is required to make depth then hammer modifications should be investigated to reduce noise levels. Soft or ramp starts would be used where possible to allow marine mammals to exit the affected area during piling activities. A Marine Mammal Observer may be required to undertake pre works checks and ensure that the area is clear of marine mammals before work commences.</p> <p>The duration and extent of effects from dredging may be mitigated by the selection of dredger type and timing of works. Where possible the dredge will be undertaken by a method that minimises the opportunity for sediment remobilisation. Undertaking dredging activities on neap tidal cycles may reduce the extent to which sediments are distributed beyond the site.</p> <p>Biodiversity enhancements will be considered as part of the new slip way design. These have the potential to increase habitat area available to recolonisation by marine fauna and flora.</p> <p>As the proposed works include the reconstruction of existing facility and will be used for the same purposes, no significant effects are anticipated during the operational stage.</p> <p>No significant adverse effects are anticipated.</p>
	<p>(c) the absorption capacity of the natural environment, paying particular attention to the following areas –</p> <ul style="list-style-type: none"> <li>(i) wetlands, riparian areas, river mouths;</li> <li>(ii) coastal zones and the marine environment;</li> <li>(iii) mountain and forest areas;</li> <li>(iv) nature reserves and parks;</li> <li>(v) European sites and other areas classified or protected under national legislation;</li> <li>(vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;</li> <li>(vii) densely populated areas;</li> <li>(viii) landscapes and sites of historical, cultural or archaeological significance.</li> </ul>	No	<p>With regard to the sub-criteria:</p> <ul style="list-style-type: none"> <li>(i) Not applicable to the proposed works as the works taking place on the coast.</li> <li>(ii) The proposed works at the Cumbrae ferry facility are located adjacent to the Firth of Clyde, a marine environment. The proposed works include the reconstruction of the existing ferry facility, therefore no significant effect on coastal waters is anticipated during operation. Impacts during construction are temporary and are not anticipated to result in significant effects. A dredging licence will be prepared for the dredging works.</li> <li>(iii) Not applicable to the proposed works as the works taking place on the coast and there is no woodland identified within the works area.</li> <li>(iv) The proposed works are not located in a national park or nature reserve.</li> <li>(v) The proposed works are not located within/adjacent to a European site or other areas classified or protected under national legislation. The closest designated site (Ballochmartin Bay SSSI) is located within approximately 550 m south of the project.</li> </ul>

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			<p>(vi) The proposed works are not located in an area in which there has already been a failure to meet the environmental quality standards laid down in EU legislation and relevant to the works or in which it is considered that there is such a failure.</p> <p>(vii) The proposed works are not located in a densely populated area. The nearest residence is approximately 600m south of the existing ferry slipway.</p> <p>(viii) The proposed works do not lie within any conservation areas designated for its historical value. There are no scheduled monuments or listed buildings identified within 300m of the project. There is an aircraft wreck Consolidated Catalina Flying Boat (Reference: 102752) listed under Canmore Maritime, located approximately 130m east of the proposed works, which is not considered to be disturbed by the works as it is located in some distance away.</p> <p>It is anticipated that there will be no impact to cultural heritage features as no records within the proximity of the works were identified, therefore no change to existing conditions is anticipated.</p>
<p>Schedule 3 Characteristics of the potential impact 3. The likely significant effects of the works on the environment must be considered in relation to criteria set out in paragraphs 1 and 2 above, with regard to the impact of the works on the factors specified in regulation 5(3), taking into account -</p>	<p>the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected); the nature of the impact; the transboundary nature of the impact; the intensity and complexity of the impact; the probability of the impact; the expected onset, duration, frequency and reversibility of the impact; the cumulation of the impact with the impact of other existing and/or approved development; the possibility of effectively reducing the impact.</p>	<p>No</p>	<p>As this project is reconstructing an existing slipway, it is not considered that there would be cumulative or transboundary effects.</p>

## 4. References

### National Legislation

The Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017

The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017

### Assessments and reports

Site Visit Report by Arch Henderson

CMAL Cumbrae Slipway Options Assessment by Arch Henderson

Cumbrae Ferry Users Group Meeting Presentation 10 January 2023 by CMAL.

<https://www.cmassets.co.uk/wp-content/uploads/2022/01/Cumbrae-Slipway-Development-CFUG-Meeting-Jan-2023-FINAL.pdf> [Accessed April 2023]

JNCC (2010) Statutory nature conservation agency protocol for minimising the risk of injury to marine mammals from piling noise. <https://data.jncc.gov.uk/data/31662b6a-19ed-4918-9fab-8fbcff752046/JNCC-CNCB-Piling-protocol-August2010-Web.pdf> [Accessed April 2023]

SEPA (2023). Flood Hazard and Flood Risk Information. Available at: <https://map.sepa.org.uk/floodmaps/FloodRisk/PostCode> [Accessed April 2023]