

## **Natura Impact Statement**

Construction of Public Toilets and Repair to Helicopter Pad, Repair to Pier Wall at Landing Pier and Repair of Gate Piers at Upper Lighthouse on Skellig Michael Island



ISSUE FORM			
Project number	12242		
Document number	6040		
Document revision	A		
Document title	Natura Impact Statement: Construction of Public Toilets, Repair to		
	Helicopter Pad, Repair to Pier Wall at Landing Pier and Repair of Gate Piers		
	at Upper Lighthouse on Skellig Michael Island		
Document status	Final		
Issue Date	11-05-2021		
Document prepared by	HD		
Document checked by	MKy (MWP 04-05-2021)		

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	Natura Impact Statement for Construction of Public Toilets, Repair to Helicopter		
Project Title	Pad, Repair to Pier Wall at Landing Pier and Repair of Gate Piers at Upper		
	Lighthouse on Skellig Michael Island		
Project Proponent	The Office of Public Works (OPW)		
	The project is located on Skellig Michael Island, located approximately 12.7 km		
Decident Location	west of the Iveragh Peninsula in County Kerry, Ireland. Works are proposed in		
Project Location	three separate locations on the island; Blind Man's Cove (Landing Pier), Cross		
	Cove (Public Toilets and Heli-pad) and Seal Cove (Upper Lighthouse gate piers).		
	In cases where Appropriate Assessment is required a Natura Impact Statement		
	(NIS) is prepared and includes a report of a scientific examination of evidence and		
Natura Impact Statement	data, carried out by competent persons to identify and classify any implications		
	of a proposal, individually, or in combination with other plans or projects, for		
	Natura 2000 sites in view of the conservation objectives of the sites.		
	A Natura Impact Statement has been undertaken to determine the significance of		
	the impact of the proposal on Natura 2000 sites. Provided that the mitigation		
	measures are implemented in full, it is considered that the proposal, either		
Conclusion	individually, or in combination with other plans/projects, will not affect the		
Conclusion	integrity of the site within the zone of impact, namely		
	Skelligs SPA (004007)		

#### **1 SUMMARY OF FINDINGS**

#### **2** INTRODUCTION

Appropriate Assessment is the consideration of the impact of the project on the integrity of the Natura 2000 site, either alone or in combination with other plans or projects, with respect to the site's ecological structure and function, and in view of the site's conservation objectives. The conservation objectives of a Natura 2000 site are site specific and based on the ecological requirements of the species and habitats present. They define the desired conservation condition of certain species and habitat types on the site. Conservation objectives are defined using attributes and targets that are based on parameters as set out in the Habitats Directive for defining favourable status, namely area, range, structure and function. The conservation objectives may be either to maintain or restore the favourable conservation condition of a habitat/species.

Article 6(3) of Directive 92/43/EEC stipulates that certain projects and plans must be subjected to an "appropriate assessment" of their effects on the integrity of Natura 2000 site(s). Article 6(3) provides in full:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

The Office of Public Works (OPW) is applying for Ministerial Consent to the Department of Housing, Local Government and Heritage (DHLGH) for proposed repair and construction works at three separate locations on Skellig Michael Island.

A screening for appropriate assessment report was completed for the proposed works to determine whether the project was likely to significantly affect Natura 2000 sites. Potential impacts that may arise from the proposal were identified and the significance of these was assessed through the use of key indicators:

- Habitat loss and alteration
- Disturbance and/or displacement of species
- Habitat or species fragmentation
- Water quality
- Cumulative or in-combination impacts

The screening for appropriate assessment report determined that a full appropriate assessment of the proposed works is required, as it could not be excluded, on the basis of objective information, that in the absence of mitigation, the proposed works, individually or in combination with other plans or projects, will not have a significant effect on one Natura 2000 site within the zone of impact of the proposal, namely Skelligs SPA (004007), in view of the site's conservation objectives.

Please refer to **Appendix 2** for the full screening for appropriate assessment report.



This NIS is a scientific examination of evidence and data, carried out by competent persons, to identify and classify any implications (ecological effects) for the Natura 2000 site outlined above in view of the conservation objectives of that site. The aim of the NIS is to provide a sufficient level of information to the competent authority on which to base their appropriate assessment of the proposed works described in **Section 4** below.

This NIS identifies the aspects of the proposed works that will interact with the ecological requirements or sensitivities of the species listed in **Section 8.1.1** to **8.1.6** and determines whether these will result in adverse effects for the species for which the Natura 2000 site listed above is designated. Mitigation measures to avoid or reduce ecological effects are provided in **Section 10**.

#### 2.1 STATEMENT OF COMPETENCY

This NIS has been prepared by Hazel Dalton (BSc.) Ecologist at Malachy Walsh and Partners (MWP). Hazel has six years' experience with MWP in ecological surveying, ecological impact assessment and the appropriate assessment process. She is an appropriately qualified, trained and competent professional. She has completed numerous ecological assessments for a wide variety of projects. She is an experienced field ecologist and has a diverse ecological survey profile, including habitats and flora, mammals (including bats), birds and terrestrial/aquatic invertebrates. She has held NPWS Licences for small mammal trapping, tape lure/endoscope bird surveys and photographing wild animals. She is familiar with Skellig Michael, has previously assisted with bird surveys on the island and has completed several AA screening reports for other OPW maintenance projects on the island.

#### 2.2 PROJECT OVERVIEW

There are currently no toilet facilities available to members of the public visiting Skellig Michael during each tourist open season. Due to public health and safety considerations, and in light of the current Covid-19 pandemic, it is considered that public toilets are required to facilitate tourists visiting the island. It is proposed to construct a public toilet block, comprising two cubicles, in an area of already built ground adjacent to the existing Helicopter Pad at Cross Cove. This area is directly adjacent to the Lower Lighthouse Road which leads from the boat Landing Pier to the base of the South Steps from which visitors access the Monastery buildings on the slopes above. Repairs to the existing fall arrest system at the Helicopter Pad are also proposed.

The project also involves repair works at two separate locations elsewhere on the island comprising a minor repair to the pier wall adjacent to the steps at the Landing Pier and repairs to the existing inner and outer gate piers at the ruined Upper Lighthouse.



#### **3 METHODOLOGY**

#### 3.1 APPROPRIATE ASSESSMENT GUIDANCE

This NIS has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2018) and guidance prepared by the NPWS (DoEHLG, 2009).

#### 3.2 CONSULTATION

Consultation has taken place between the OPW and the DHLGH.

#### 3.3 DESK STUDY

In order to complete the NIS certain information on the existing environment is required. A desk study was carried out to collate available information on the site's natural environment. This comprised a review of the following publications, data and datasets:

- OSI Aerial photography and 1:50000 mapping
- National Parks and Wildlife Service (NPWS)
- National Biodiversity Data Centre (NBDC) (on-line map-viewer)
- BirdWatch Ireland
- Teagasc soil area maps (NBDC website)
- Geological Survey Ireland (GSI) area maps
- Environmental Protection Agency (EPA) water quality data
- Other information sources and reports footnoted in the course of the report

### 4 DESCRIPTION OF PROJECT

#### 4.1 OVERVIEW OF THE GENERAL SITE

Skellig Michael is an island (the larger of the two Skellig Islands) located in the Atlantic Ocean, approximately 12.7 km west of the Iveragh Peninsula in County Kerry, Ireland.

Skellig Michael is home to one of the best preserved Christian, monastic settlements dating from the early medieval period, comprising a monastery, hermitage and several stone stairways, which connect the various archaeological features, as well as provide access throughout parts of the island (DEHLG, 2008). The settlement is extremely well-preserved, most probably as a result of the islands remoteness, which together with the harsh weather conditions experienced for much of the year, serves to limit human visitation. However, as a result of its immense archaeological, spiritual and cultural significance, Skellig Michael still attracts large numbers of tourists each year throughout the summer months. An on-going conservation programme, under the management of the OPW, also serves to maintain the site through managing visitor access and carrying out necessary maintenance works.

Located in the north-east Atlantic Ocean, the island is subject to a temperate Atlantic climate, strongly influenced by the Gulf Stream. The geology of Skellig Michael is characterised predominantly by Devonian Old Red Sandstone, which forms the islands two main peaks, the taller of which towers some 218 m above the sea below (DEHLG, 2008). Under the exposed weather conditions, erosion and fracturing of rock has resulted in the formation of a relatively flat area, known as Christ's Saddle, which



sits between the two peaks and from which stone steps ascend to the monastic buildings above (DEHLG, 2008).

Much of the island surface is characterised by sheer cliff-face, exposed bedrock, boulders and scree. As a result, vegetation cover is not extensive in any area. Where thin soils have accumulated exposure-tolerant plant species such as thrift (*Armeria maritima*), sea-campion (*Silene maritima*), sea-mayweed (*Tripleurospermum maritimum*) and rock sea-spurrey (*Spergularia rupicola*) occur. In some areas, such as Christ's Saddle and above the Monastery, more extensive areas of vegetation occur, mostly dominated by sea campion. Skellig Michael is of major importance, both in a national and international context, due to its populations of breeding seabirds, both in terms of the species and numbers it sustains (DEHLG, 2008).

#### 4.2 PURPOSE OF THE PROJECT

Public toilets are required on the island for visiting tourists due to health and safety considerations and public welfare concerns, in particular in light of the current Covid-19 pandemic.

Minor repair works are required to the pier wall at the Landing Pier to address storm damage which has resulted in cracking with the potential to affect the structures integrity if left in its current condition. Repair works are also required to the gate piers at the Upper Lighthouse to address existing defects. Large structural cracks are present in the outer gate pier in particular which is showing signs of substantial movement and is in danger of collapsing over the cliff-face.

#### 4.3 LOCATION AND BRIEF OVERVIEW OF PROPOSED WORKS

Works are proposed at three separate locations on the island as part of the project, as shown in **Figure 1** below.

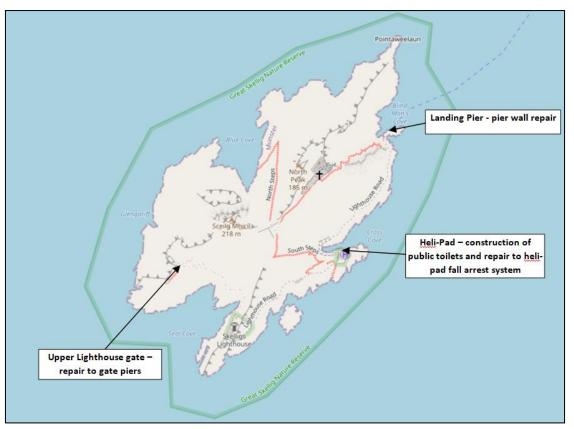


Figure 1. Locations of proposed works areas on Skellig Michael Island

In summary, the proposed works comprise of the following:

- 1. Construction of public toilets/Repair to Heli-pad fall arrest system the proposed public toilets will be located along the Lower Lighthouse Road on the eastern side of the island in an area known as Cross Cove. The toilet block will be constructed just off the existing pathway in an area of built ground located adjacent to the existing Helicopter Pad. Associated works will include removal of a section of existing dry stone wall, repair to an existing masonry pier, removal of the decommissioned oil tanks and associated pipe work, removal of existing concrete pads/plinths and removal of an area of existing naturally-exposed bedrock. Existing fencing, comprising both chain link fence and a steel balustrade, will be removed and replaced in this area. Repair works to the existing helicopter pad fall arrest system will also be carried out.
- 2. Repair works to the existing gate piers at the Upper Lighthouse repair and repointing of the inner gate pier with lime mortar, stone by stone dismantling and rebuilding of the outer gate pier as before with lime mortar, and repair and repointing of a section of seawall adjacent to the outer gate pier at the Upper Lighthouse, which is located in an area known as Seal Cove on the western side of the island.
- 3. **Repair to pier wall at Landing Pier** a repair of a minor section of the pier wall adjacent to the steps at the Landing Pier is also proposed. The Landing Pier is located in an area of the island known as Blind Man's Cove, located in the north-eastern corner of the island. Tourists arrive to and depart from the island by boat at this location.

#### 4.4 CHARACTERISTICS OF THE PROJECT

#### 4.4.1 Public Toilets and Repair to Helicopter Pad Fall Arrest System

The proposed location for the new public toilet block currently comprises an area of built ground located immediately adjacent to the existing pathway (known as the Lower Lighthouse Road) along which tourists travel on foot from the Landing Pier to the base of the South Steps to access the monastic buildings on the slopes above. There is an oil storage tank currently in-situ in this area. The oil tank is to be drained of any oil residue and dismantled.

Following removal of existing structures and the minor area of exposed bedrock (as outlined in **Section 4.3 Point 1** above), the surface will be levelled and made good and the toilet block will be constructed. A timber platform will provide access to the toilet block from the existing pathway. The removal of a minor section of existing dry stone wall will be required to facilitate access into the toilet block from the pathway (see **Figures 2** to **4** below and **Appendix 3a** for more information).

The new two-cubicle toilet block will be of timber construction (pre-fabricated on the mainland and brought to site) and will include 2 No. dry toilets and 1 No. dry urinal with internal hand sanitising stations and roof-mounted solar panel. The toilet block will sit on top of a fully-sealed 'Clivus' composting tank. The system utilises composting technology which allows for human waste to be decomposed over extended periods via natural biological processes which involve micro-organisms, ventilation and humidity<sup>1</sup>. The type of composting toilet which will be installed is an all-in-one

<sup>&</sup>lt;sup>11</sup> <u>http://www.clivusmultrum.eu/</u> [accessed 31/03/2021]



treatment system designed specifically for sites with no existing sewerage infrastructure. The system does not require any water supply and is a low maintenance system. There is no requirement for the use of any chemicals.

Most of the solid organic material is converted into carbon dioxide and water which evaporates. The remaining material (comprising decomposed solids) accumulates within the in-built storage compartment. This soil-like material is known as 'compost'. It contains similar minerals to that of soil, is free of any pathogenic organisms and is suitable for use in gardens as soil in a general context. Over time, the volume of waste reduces considerably. This is in part due to solids losing volume due to decomposition in down-time and through natural drying.

Liquid passes through the composting heap, undergoing biochemical changes, and is collected at the bottom of the tank. When it reaches this storage chamber it is transformed into a stable, odourless, saline solution, known as 'leachate'. It is a balanced high-nitrogen liquid fertilizer suitable for use in gardens. The leachate is biologically stable and can be stored if necessary<sup>2</sup>.

With regard to systems capacity, fifteen boats are currently licensed to make a single return trip to the island each day during the islands open season. Each boat has a maximum licensed carrying capacity of twelve people. The system which will be installed is designed to deal with possible loads of up to 200 users per day which will provide more than adequate usage capacity for the maximum number of tourist visitors which are permitted onto the island on a daily basis.

The system is fully-sealed; however, both the compost and separate leachate in-built storage compartments which will be positioned under the toilet block will require periodic emptying. The 'Clivus' tank will be monitored on a daily basis by on-site OPW staff during the islands open season to ensure that the system is emptied as and when required. The tank has a leachate monitoring gauge that allows for the leachate level to be monitored from the outside. The system includes an overflow leachate connection from which leachate can be drained from the tank when the need to empty arises. OPW staff resident on the island will also be responsible for the daily maintenance and upkeep of the toilet facilities throughout each open season.

It is envisaged that leachate will be removed periodically throughout each annual open season, as and when required, while the compost tank will be emptied on an annual basis at the start of each open season. All waste from the system will be removed to sealed plastic containers and transported to the mainland by boat from where waste will be disposed to a licensed facility.

<sup>&</sup>lt;sup>2</sup> <u>http://www.clivusmultrum.eu/compostingprocess.php</u> [accessed 31/03/2021]



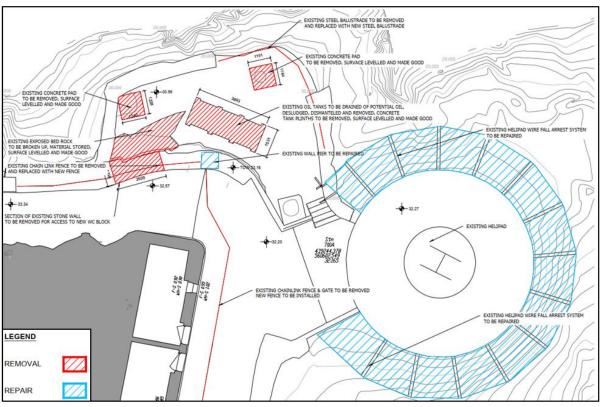


Figure 2. Proposed works at toilet location and helicopter pad (Source: Adapted from OPW Consent application documents)

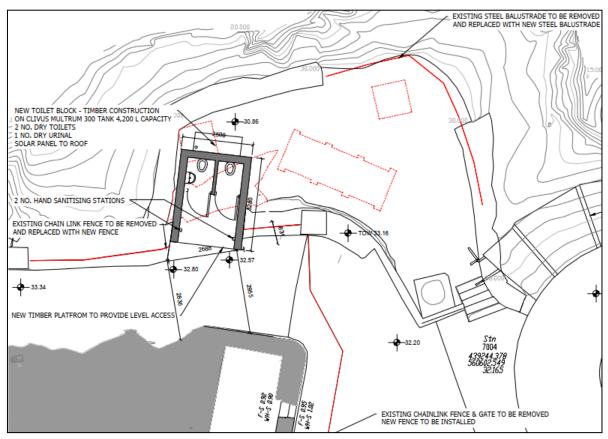


Figure 3. Proposed toilet block adjacent to helicopter pad (Source: Adapted from OPW Consent application documents)

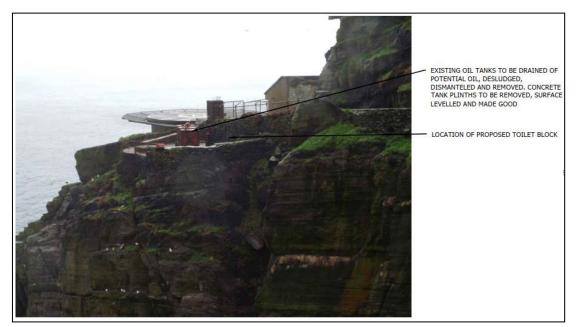


Figure 4. View of existing helicopter pad and location of proposed toilet block

#### 4.4.2 Repair to Upper Lighthouse Gate Piers and Pier Wall at Landing Pier

Repair works are proposed to both existing gate piers at the ruined Upper Lighthouse. Large structural cracks are present in the outer gate pier which is showing signs of substantial structural movement and is in danger of collapsing over the cliff-face. The outer gate pier is to be dismantled and stones numbered and recorded before being rebuilt as before with saved stones and lime mortar. The existing masonry seawall (of approximate length 1.9 m) located immediately adjacent to the outer pier will be repaired and repointed. The existing inner gate pier will also be repaired and repointed with lime mortar (see **Figure 5 & 6** below and **Appendix 3b** and **3c** for more information).

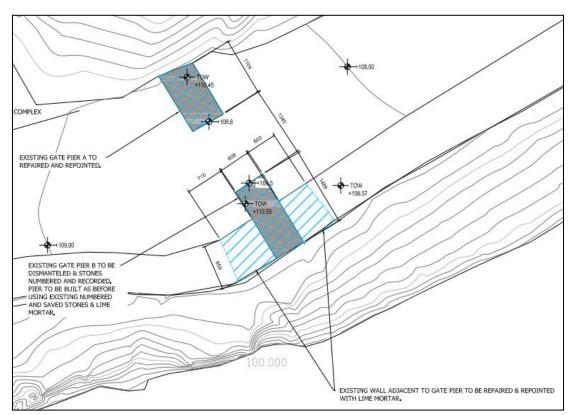


Figure 5. Proposed repair works to gate piers at Upper Lighthouse (Adapted from OPW Consent application documents)

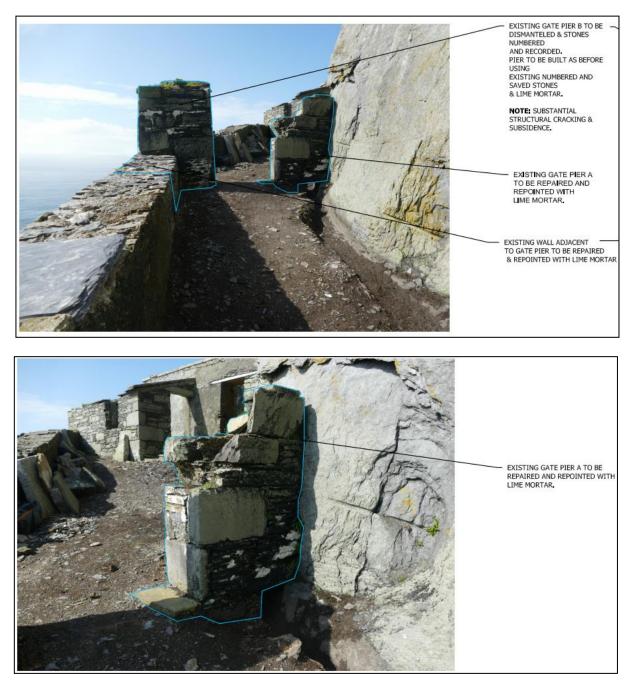


Figure 6. Proposed works to inner and outer gate piers at Upper Lighthouse

A minor section of the pier wall adjacent to the steps at the Landing Pier will also be repaired following storm damage which has resulted in substantial cracking (see **Figure 7** & **8** below and **Appendix 3** for more information).



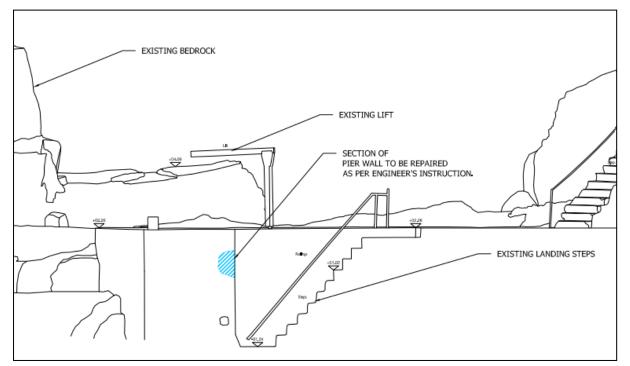


Figure 7. Proposed repair to section of seawall adjacent to steps at Landing Pier (Adapted from OPW Consent application documents)



Figure 8. Storm-damaged block work in pier wall

#### 4.4.3 Approach to Protection of Nesting Birds

The proposed works will take place during the breeding season for several seabird species which are SCIs (Special Conservation Interests) for the SPA. In light of the environmental sensitivity of the site, all repair and rebuilding works carried out will take particular cognisance of nesting seabirds, whether ground or cavity-nesting, or nesting on surrounding cliff-faces and breeding ledges. Wall maintenance in particular is a regular activity on the island and specific methodologies have been developed in light of the environmental sensitivity of the site with regard to breeding birds. As carried out in previous years, all building methods will be cognisant of the site's importance for breeding seabirds.



#### 4.4.4 **Project Characteristics Summary**

The proposal has been confirmed with the OPW. A summary of the project characteristics in the context of appropriate assessment is provided in the following table.

	The footprint of the works will comprise the following:		
	• Repairs to Upper Lighthouse Gate Piers (2.84 m <sup>2</sup> )		
	• Construction of Toilet block and repair to Heli-pad (9.1 m <sup>2</sup> )		
	• Also, a minor repair to blockwork in the pier wall at the Landing Pier		
	Overall, the proposed works are to existing man-made structures and/or will		
	occur on built ground on the island. The works will not extend beyond these		
Size, scale, area, land-take	areas. There will be no encroachment outside the area of works onto adjacent		
	habitats. All works will take place within the boundary of the Skelligs SPA		
	(004007).		
	To facilitate construction of the new toilet block, there is a requirement for		
	the removal of 0.35 m <sup>2</sup> of exposed bedrock located adjacent to the existing oil		
	tank in the area of already built ground adjacent to the helicopter pad. As there		
	is overlap with the SPA, this will result in a minor area of land-take (0.35 m <sup>2</sup> )		
	within the SPA.		
	Construction of Public Toilets		
	• Existing oil tanks to be drained of potential oil, desludged and		
	dismantled. Removal of decommissioned oil tanks and all associated		
	pipework.		
	Removal of section of wall to provide access to new public toilet block		
	(approx. area 2.5 m <sup>2</sup> )		
	Removal of existing balustrade and fencing and replacement with		
	new.		
	• Removal of existing exposed bedrock (0.35 m <sup>2</sup> ) (material to be stored)		
	and concrete pads and plinths with mechanical equipment and hand-		
	held drills. Levelling and making good of surface.		
	• Repair of existing fall arrest system to helicopter pad.		
Details of physical changes	Repair of existing wall pier.		
that will take place during	Construction of new public toilet block including installation of 4,200		
the various stages of	litre capacity composting tank, 2 no. dry toilets, 1 no. dry urinal, 2 no.		
implementing the proposal	internal hand sanitising stations and solar panel to roof.		
	Repair to Upper Lighthouse Gate Piers		
	• Repair and repointing with lime mortar of inner gate pier.		
	Dismantling of outer pier, stones numbered and recorded, pier to be		
	rebuilt as before using existing numbered and reusable stones and		
	lime mortar.		
	<ul> <li>Repair and repointing of Lighthouse Road wall adjacent to outer pier</li> </ul>		
	(approx. length 1.9 m).		
	(app		
	Repair to Pier Wall at Landing Pier		
	Minor repair to damaged stone block in pier wall adjacent to landing		
	steps.		
Description of resource	It is estimated that four site-based OPW personnel will undertake the		
requirements for the	proposed works.		



construction/operation and decommissioning of the proposal (water resources, construction material, human presence etc)	Some materials such as stone required for repair works are already in-situ on the island. Other materials required which will be brought to the island in advance of the proposed works include: <ul> <li>Lime mortar</li> <li>Light tools/hand-held drills</li> <li>Portable generator</li> <li>Timber</li> <li>Plywood</li> <li>Metal</li> <li>Replacement fencing/steel balustrade</li> <li>1 x Clivus Multrum M300 tank</li> <li>2 x CL810 stainless steel toilet fixtures</li> <li>1 x CL100 dry urinal round base</li> <li>2 x 12V ventilation fans</li> <li>1 x 12V Monocrystaline solar panal 20W</li> <li>1 x CK100 wind cowl</li> <li>Hand-sanitising station for internal mounting in toilet-block</li> </ul>
Description of timescale for the various activities that will take place as a result of implementation (including likely start and finish date)	<ul> <li>Pending approval, it is anticipated that the proposed works will take one week to complete and will be carried out in August or September 2021.</li> <li>All works will be dependent on weather/boat crossing conditions.</li> </ul>
Description of wastes arising and other residues (including quantities) and their disposal	<ul> <li>Construction phase wastes will include:</li> <li>Domestic waste arising from workers which shall be taken off the island on a daily basis for the duration of the works and disposed of at a suitably licensed facility.</li> <li>Workers shall utilise existing OPW staff toilet facilities currently available on the island.</li> <li>Excess lime mortar, washout and any other construction phase wastes e.g. waste concrete, packaging, materials etc shall be taken off the island and disposed of at a suitably licensed facility.</li> <li>Removed bedrock and other waste rock material generated during the construction phase will be stored on the island for re-use during general maintenance and repair works to the lighthouse road and seawall.</li> <li>Fuel/oil residues from oil tank and machinery to be removed from island by boat in sealed plastic containers.</li> <li>Operational phase wastes from the public toilet block will include: <ul> <li>Compost (decomposed solids) and leachate (biologically stable liquid). 'Clivus' tank will be monitored on a daily basis by on-site OPW staff during the island sopen season.</li> <li>All waste from the system will be removed from the island by boat in sealed plastic containers and transported to the mainland for disposal to a licensed waste facility. There will be no disposal of compost or leachate on the island.</li> <li>No other operational phase wastes are envisaged.</li> </ul></li></ul>



Identification of wastes	Excess lime mortar.	
arising and other residues	Washout (which shall be minimal as a limited amount of water will	
(including quantities) that	be required to create a dry mortar mix).	
may be of particular	• Fuel/oil residue from oil tank to be emptied. Also minor quantity of	
concern in the context of	fuel/oil for generator required for construction works.	
the Natura 2000 network	Wastes from public toilet block (compost, leachate).	
Description of any	Existing services and living accommodation are available on the island for	
additional services required	workers for the duration of the works (one week).	
to implement the project or		
plan, their location and	Water shall be brought to the site for mixing mortar. Electricity shall be	
means of construction	provided by means of a diesel powered generator. Water, fuel and waste to	
	be stored in storage shed beside the helipad.	

#### 5 IDENTIFICATION OF OTHER PROJECTS OR PLANS OR ACTIVITIES

#### 5.1 PLANS

The Kerry CDP 2015-2021 was reviewed with regard to Skellig Michael. The Plan identifies Skellig Michael as a UNESCO World Heritage Site of international importance. The Plan also makes reference to the requirement for protection of such sites and the potential significant economic and social benefits in promoting the value of such assets.

#### The Plan states:

"It is the intention of this Development Plan to actively support the protection, conservation and appropriate enhancement of the cultural heritage in Kerry to benefit residents and visitors alike and to target cultural tourism as a major economic driver in the County"<sup>3</sup>.

#### 5.2 TOURISM

The island is visited by significant numbers of tourists (approximately 18,000) on an annual basis. The open season typically runs from May to early October with exact opening and closing dates dependent on weather constraints and prevailing sea conditions. Fifteen boats are currently licensed to make a single return trip to the island each day during this period, when weather conditions are suitable for the sea crossing. Each boat has a maximum licensed carrying capacity of twelve people. All tourists are strictly daytime visitors, allowed to visit the island between the hours of 10:30 and 15:00 seven days a week. Tourist access is restricted to the eastern half of the island, comprising the East Landing (boat landing area), Lower Lighthouse Road, Monastery and the series of stone steps linking them. There is no public access to the Heli-pad area or the Upper Lighthouse Road.

# 5.3 ON-GOING REMEDIAL AND CONSERVATION WORKS TO THE UPPER LIGHTHOUSE ROAD AND SEAWALL

The OPW is currently undertaking a long-term conservation project on the Upper Lighthouse Road (also known as the Old Lighthouse Road) on Skellig Michael. This project has been undertaken on a phased basis over the last several years and will continue over the coming years during the island's annual open season, subject to the necessary consents.

Phase 1 of the project was granted consent and commenced in 2017. Phase 2 of the project was granted consent and commenced in 2018. Phase 3 of the project was granted consent and commenced in 2019. Screenings for appropriate assessment were undertaken for Phases 1 -3 of the project. Phase 1 and Phase 2 of the project are complete. Once the islands open season has commenced Phase 3 of the works will continue.

Ministerial Consent was recently granted by the DHLGH to OPW in relation to Phase 4 of the on-going remedial works. The Phase 4 works will encompass the seawall which surrounds the Upper Lighthouse, the Upper Lighthouse ruins & gatepost and a portion of seawall adjacent to the Lower Lighthouse. These sections of the Upper Lighthouse compound seawall and Lower Lighthouse seawall have been subject to varying degrees of damage as a result of natural rock-fall and exposed conditions and as such the degree of remedial works will vary between these locations.

<sup>&</sup>lt;sup>3</sup> http://atomik.kerrycoco.ie/ebooks/devplan/pdfs/Vol1/final\_vol\_1.pdf

Proposed works to the existing gate piers at the Upper Lighthouse, included in the granted Phase 4 works, will be replaced by the more detailed proposed works to the same structures which are described in this report, subject to consent. There is a possibility of overlap between some of the ongoing phased remedial works, namely the Phase 4 works which are proposed at the general location of the Upper Lighthouse, and some of the proposed works described within this NIS, namely the repair and rebuilding works to the Upper Lighthouse gate piers, subject to consent.

#### 6 IDENTIFICATION OF NATURA 2000 SITES

There are four Natura 2000 sites within 15km or the zone of potential impact influence of the proposal, as shown in **Figure 9** below.

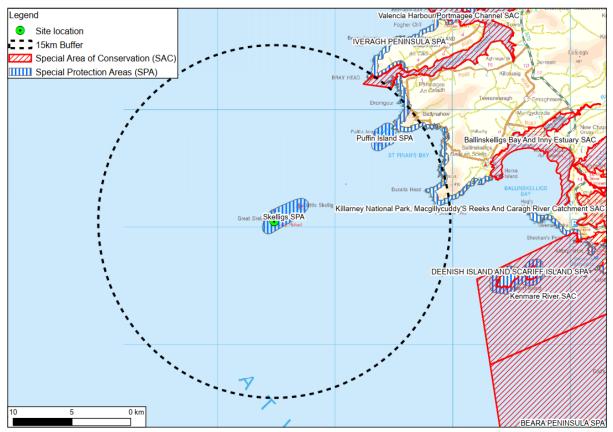


Figure 9. Natura 2000 sites within 15km or the zone of potential impact influence of the proposal

The screening for appropriate assessment report concluded that three of the four Natura 2000 sites within the zone of potential impact influence of the project can be excluded from significant impacts from the proposal to carry out various repair and construction works on Skellig Michael Island. These sites are as follows:

- Valencia Harbour/Portmagee Channel SAC (002262)
- Iveragh Peninsula SPA (004154)
- Puffin Island SPA (004003)

However, Skellig Michael, and thus the proposed works, are encompassed entirely within the boundary of the Skelligs SPA, as shown in **Figure 10** below.





Figure 10. Skellig Michael and the Skelligs SPA (004007) boundary

Based on the precautionary principal, it could not be objectively concluded at screening stage that, in the absence of mitigation, significant adverse impacts as a result of the proposal can be ruled out for the Skelligs SPA. Hence, the recommendation of the screening process was to proceed to Stage 2 NIS for this site to determine whether the project is likely to adversely affect the integrity of this Natura 2000 site.

Please refer to the screening for appropriate assessment report which can be found in **Appendix 2** for more information.

#### 6.1 DESCRIPTION OF SKELLIGS SPA (004007)

Skelligs SPA is designated for the protection of seven breeding seabird species, as follows:

- Fulmar (Fulmarus glacialis)
- Manx Shearwater (*Puffinus puffinus*)
- Storm Petrel (Hydrobates pelagicus)
- Gannet (Morus bassanus)
- Kittiwake (Rissa tridactyla)
- Guillemot (Uria aalge)
- Puffin (*Fraterclua arctica*)

The Skelligs SPA comprises the islands of Skellig Michael (Great Skellig) and Little Skellig and the surrounding marine waters. These highly exposed and isolated islands are located in the Atlantic some 12.7 km and 11 km (respectively) off the County Kerry mainland.

The site comprises one of the most important seabird colonies in the country in terms of both seabird populations and species diversity. Skellig Michael supports large breeding colonies of fulmar, manx shearwater, storm petrel, kittiwake, guillemot and puffin, all of which, together with gannet, are designated as Special Conservation Interest species for the SPA.

Skellig Michael has an internationally important population of storm petrel (9,994 pairs in 2002)<sup>4</sup>, with birds nesting both in the stonework associated with the monastic settlement and in natural crevices amongst the scree and rock. Skellig Michael also has one of the largest colonies of puffins in the country, with 4,000 individuals estimated in 1999. Other seabird species which occur on the island in nationally important numbers are fulmar (806 pairs), Manx shearwater (2,370 pairs), kittiwake (944 pairs), guillemot (2,551 individuals) and razorbill (454 individuals) (counts made between 1999 and 2002). Skellig Michael is also a traditional site for chough, though the relatively small size of the island supports only one nesting pair. Peregrine has also nested in some years. Little Skellig is best known for the long established colony of gannets, with 26,436 pairs in the last full census in 1994. This is by far the largest gannet colony in Ireland and one of the largest in the world.

The breeding seabirds on the Skelligs have been fairly well documented over the years, with references to the gannet colony dating back to the 1700s. Owing to the importance of the islands for birds, each has been designated a Statutory Nature Reserve. In addition, the non-governmental organisation, BirdWatch Ireland, holds a long-term lease on Little Skellig which is largely inaccessible. Skellig Michael by contrast receives large numbers of tourists on a daily basis during each of the islands annual open seasons. The tourist open season on Skellig Michael is determined by seasonal constraints and daily weather conditions but typically runs from May to early October.

This site is one of the top five seabird sites in the country and is of international importance on account of the storm petrel and gannet populations. Storm petrel is listed on Annex I of the EU Birds Directive, as is chough and peregrine. The NPWS Skelligs SPA site synopsis is included in **Appendix 2**.

<sup>&</sup>lt;sup>4</sup>https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004007.pdf

#### 7 **IDENTIFICATION OF POTENTIAL IMPACTS**

While protection of nesting seabirds is an inherent part of the project design, the NIS has not included any environmental measures for consideration in determining the potential likely ecological impacts which may arise as a result of the proposal.

Table 1. Potential ecological impacts arising	g from the project
Description of elements of the project likely to give rise to potential ecological impacts.	<ul> <li>Works will be conducted entirely within a Natura 2000 site (Skelligs SPA)</li> <li>Works are scheduled to take place during the breeding season for some SCI species</li> <li>Works will be conducted within or in close proximity to SCI breeding areas</li> <li>Sections of wall to be repaired/removed comprise potential breeding habitat for storm petrel.</li> </ul>
	Construction Phase
<ul> <li>Describe any likely direct, indirect or secondary ecological impacts of the project (either alone or in combination with other plans or projects) by virtue of:</li> <li>Size and scale;</li> <li>Land-take;</li> <li>Distance from Natura 2000 Site or key features of the Site;</li> <li>Resource requirements;</li> <li>Emissions;</li> </ul>	<ul> <li>Loss of minor area of potential nesting habitat for storm petrel (section of dry stone masonry wall to be removed adjacent to helicopter pad to facilitate construction of toilet block)</li> <li>Alteration of potential nesting habitat for storm petrel (repair of wall pier adjacent to toilets, repair and repointing of existing gate piers and section of dry stone masonry sea wall at Upper Lighthouse)</li> <li>Potential disturbance/displacement of SCIs during the breeding season as a result of fugitive noise emissions/vibration and increased human activity for duration of works.</li> </ul>
<ul> <li>Excavation requirements;</li> </ul>	Operational Phase
<ul> <li>Transportation requirements;</li> <li>Duration of construction, operation etc.; and</li> <li>Other.</li> </ul>	<ul> <li>Potential disturbance/displacement of SCIs during the breeding season as a result of fugitive noise emissions and increased human activity at the location of the public toilets</li> <li>Limited potential for indirect effects to seabird populations via potential impacts on marine water quality/prey resource (installation of public toilets in a sensitive site with no existing sewerage infrastructure).</li> </ul>



#### 8 SELECTION OF QUALIFYING FEATURES FOR IMPACT ASSESSMENT

When Natura 2000 sites are selected for stage 2 assessments, then all the qualifying features of conservation interest must be included in that stage of the assessment. However, when assessing impact, qualifying features are only considered relevant where a credible or tangible source-pathway-receptor link exists between the proposed development and a protected species or habitat type. In order for an impact to occur there must be a risk initiated by having a 'source' (e.g. nearby watercourse), a 'receptor' (e.g. a protected species associated aquatic or riparian habitats), and an impact pathway between the source and the receptor (e.g. a watercourse which connects the proposed development site to the site designated for the protection of the aforementioned species).

Identifying a risk that could, in theory, cause an impact does not automatically mean that the risk event will occur, or that it will cause or create an adverse impact. However, identification of the risk does mean that there is a latent possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature of the risk, the extent of the exposure to the risk and the characteristics of the receptor. Therefore, bearing in mind the scope, scale, nature and the timing of the project, its location relative to the spatial distribution of the species listed on the island and within the SPA and the degree of connectedness that exists between the project and the potential receptors, it is considered that not all of them are within the zone of potential impact of the proposal.

An evaluation based on these factors to determine which of the SCIs for the SPA are the plausible ecological receptors for potential impacts of the unmitigated proposal has been conducted and is summarised hereunder in **Table 2**. This was done through a scientific examination of ecological evidence and data listed above in **Section 3.3** or referenced in the text. This evaluation has determined that certain species should not be selected for further assessment as they are not considered plausible ecological receptors. Supporting rationale as to why each qualifying feature is or is not included for further assessment is provided in the table. Following this, an assessment is made of the potentially significant effects arising from the proposal.

Qualifying Feature	Potential for Significant Impacts	Rationale
Fulmar	Yes	<ul> <li>While fulmar do not utilise any of the habitats within the footprint of the works for nesting, they do nest on surrounding cliff-faces and rock ledges, including in the vicinity of the proposed toilet block.</li> <li>Construction works will potentially overlap with the fulmar breeding season.</li> <li>There is potential for disturbance/displacement of fulmar during the construction phase of the project and during operation of the toilets.</li> </ul>
Manx shearwater	Yes	<ul> <li>While Manx shearwater do not utilise any of the habitats within the footprint of the works for nesting, suitable ground- nesting habitat does occur within the Upper Lighthouse ruined structures.</li> </ul>

Table 2: Selection of qualifying features of the Skelligs SPA for impact assessment

Qualifying Feature	Potential for Significant Impacts	Rationale
		<ul> <li>As the works will potentially overlap with the Manx shearwater breeding season there is, albeit limited, potential for disturbance/ displacement of Manx shearwater during the construction phase of the project (repair of Upper Lighthouse gate piers).</li> </ul>
Kittiwake	Yes	<ul> <li>While kittiwake do not utilise any of the habitats within the footprint of the works for nesting, they do nest on surrounding cliff-faces and rock ledges, including in the vicinity of the proposed toilet block.</li> <li>Construction works will potentially overlap with the kittiwake breeding season.</li> <li>There is potential for disturbance/displacement of kittiwake during the construction phase of the project and during operation of the toilets.</li> </ul>
Guillemot	Yes	<ul> <li>While guillemot do not utilise any of the habitats within the footprint of the works for nesting, they do nest on surrounding cliff-faces and rock ledges, including in the vicinity of the proposed toilet block. The ledges below the toilet location comprise one of the main guillemot breeding sub-colonies on the island.</li> <li>Construction works will not overlap with the guillemot breeding season; however, there is potential for disturbance/ displacement of guillemots during the operational phase of the project once the public toilets are commissioned.</li> </ul>
Storm petrel	Yes	<ul> <li>Storm petrels utilise stone walls and other man-made structures throughout the island for nesting. Works will take place during the breeding season.</li> <li>The proposal will result in the permanent removal of a minor section of dry stone wall (2.5 m<sup>2</sup>) and repairs/repointing of masonry walls and gate piers, some of which comprise potential nesting habitat.</li> <li>There is potential for storm petrels to occur within suitable structures within and in proximity to the proposed works areas.</li> <li>There is potential for disturbance/displacement and habitat impacts to storm petrel during the construction and/or operational phases of the project.</li> </ul>
Puffin	Yes	<ul> <li>While puffins do not utilise any of the habitats within the footprint of the works for nesting, suitable nesting habitat occurs within proximity of the works.</li> <li>The works will take place largely outside the main breeding season for puffin but low numbers of puffin could still remain on the island at the time of the works.</li> <li>As there is some potential for works to overlap with the puffin breeding season on the island, and on a precautionary</li> </ul>

Qualifying Feature	Potential for Significant Impacts	Rationale
		<ul> <li>basis, there is some potential for disturbance/ displacement of puffin during the construction phase.</li> <li>There is also potential for disturbance/ displacement of puffin during the operational phase of the project once the toilets are commissioned.</li> </ul>
Gannet	Νο	<ul> <li>Gannet do not breed on Skellig Michael, and do not typically occur on the island at all. The gannet breeding colony within the SPA is confined to Little Skellig, located at a remove of 3 km from Skellig Michael.</li> <li>No potentially significant effects on gannet are likely as a result of the project.</li> </ul>

#### 8.1 CHARACTERISTICS OF THE ECOLOGICAL FEATURES SELECTED FOR IMPACT ASSESSMENT

The species of conservation interest for the Natura 2000 site (Skelligs SPA) which has been selected for impact assessment are described as follows.

### 8.1.1 Fulmar (Fulmarus glacialis)

Northern fulmar is a common, gull-like bird. They breed all around the North Atlantic and North Pacific, with the bulk of the Atlantic population breeding in Iceland (Mitchell, et al., 2004). In Ireland, fulmar is found all around the Irish coast, although the majority are found in the west (Mitchell, et al., 2004). Although the species typically winters at sea, they can be seen in Irish waters all year around. Fulmar is listed as amber-listed under the most recent assessment of the conservation status of birds in Ireland (2020-2026) (Gilbert, et al., 2021).

During the breeding season they are found nesting on grassy cliff-ledges and shelves, although they may utilise less sloping ground in some areas (Mitchell, et al., 2004). The breeding period typically begins in May when a single egg is laid. At Scottish colonies, the breeding period has been found to begin in mid-May, with chicks subsequently fledging the nest in late August (Edwards et al., 2013). Annual studies on Skomer Island off the coast of Wales, have found that egg laying typically occurs towards the end of May, but has been recorded at the beginning of May also, with chicks typically hatching within the first two weeks of July (Taylor, et al., 2012). Fulmar is a common breeder on Skellig Michael, typically present from January to September (DEHLG, 2008). Data collected under the National Seabird Monitoring Programme over the period 2013 – 2018 estimated the breeding population of fulmar on Skellig Michael to comprise 725 AOS (Apparently Occupied Sites)<sup>5</sup>.

During previous surveys undertaken on Skellig Michael by MWP in 2015, the breeding phenology of fulmar was examined. The bulk of egg-laying by fulmar was estimated to take place in mid-May. Hatching generally occurred in early July with fledging occurring in late August (MWP, 2015). The timing of fulmar egg laying and fledging on the island was found to correspond with findings of studies on breeding fulmar elsewhere, including studies on islands off the Scottish coast and on Skomer Island off the coast of Wales (Edwards et al., 2013; Taylor et al., 2012). In summary, the breeding phenology

<sup>&</sup>lt;sup>5</sup> https://www.npws.ie/sites/default/files/publications/pdf/IWM114.pdf

of fulmar on Skellig Michael was found to generally follow fulmar breeding phenology elsewhere within the species range at the time of the 2015 breeding seabird surveys.

#### 8.1.2 Manx Shearwater (*Puffinus puffinus*)

Manx shearwaters are medium-sized seabirds which are widely-distributed throughout the North Atlantic. Britain and Ireland have the majority of the global breeding population (Mitchell, et al., 2004). In Ireland, they are amber-listed due to their localised breeding distribution (Gilbert, et al., 2021), with the bulk of the population found on islands mainly off the coast of counties Kerry and Galway (Mitchell, et al., 2004).

The species spends the majority of its time at sea, only returning to land to breed. As they are groundnesting, these colonies occur mainly on remote, off-shore islands where they are free from the threat of mammalian predators. Manx shearwater feed at sea during the day before returning to burrows during the hours of darkness (Quillfeldt, et al., 2004; Spivey, et al., 2014). Therefore, their activity is only evident between dusk and dawn (Mitchell, et al., 2004). Outside of this time period they are typically not visible, either being off the island feeding or hidden underground. They have very limited movement on land and are cumbersome, which makes them very vulnerable to predation by gulls<sup>6</sup>. Landing is generally dependant on weather conditions, with birds typically only returning to land on dark, moonless nights, to minimise risk of attack from gulls. Skellig Michael supports a nationallyimportant population of Manx shearwater. In 2001, a quantitative whole-island survey for Manx shearwater resulted in an estimate of 902 AOBs (Apparently Occupied Burrows) (Newton, 2009 as cited in DEHLG, 2015).

A study by Perrins (2014) on Skokholm Island off the coast of Wales found that the single egg is typically laid in early May. Chicks typically depart burrows in late August/early September (Perrins, 2014). Like the adults, emerging chicks are also vulnerable to gull predation (Perrins, 2014). Previous surveys undertaken on Skellig Michael by MWP in 2015, which concentrated on the three main areas of suitable nesting habitat for Manx shearwater on the island, namely the upper Monastery peak, the Lower Monastery garden and Christ's Saddle, examined the breeding phenology of Manx shearwater on Skellig Michael. The bulk of egg laying was estimated to take place in early-May, with hatching generally occurring in late June and fledging occurring in late August (MWP, 2015). At the time of the 2015 surveys, some chicks were still found to be occupying burrows in the first few days of September. By the end of September, only one chick was found to remain (in one of the Monastery cells). The timing of Manx shearwater egg laying and fledging on the island during the 2015 survey period was found to correspond with timings suggested by Perrins (2014).

In summary, at the time of the 2015 breeding seabird surveys, the breeding phenology of Manx shearwater on Skellig Michael was found to generally follow the breeding phenology observed on other off-shore islands elsewhere within the species range, in particular Skokholm Island, which like Skellig Michael, holds an important breeding colony of this species,

<sup>&</sup>lt;sup>6</sup><u>http://birdwatchireland.ie/IrelandsBirds/Tubenoses/ManxShearwater/tabid/143/Default.aspx</u> [accessed 27/08/2015]



#### 8.1.3 European Storm Petrel (Hydrobates pelagicus)

Storm petrel is a very small seabird which may be found throughout the Atlantic and North Pacific. Storm petrel is listed as an Annex I species under the EU Birds Directive<sup>7</sup>. As the breeding population is confined to only a few sites, storm petrel is therefore amber-listed in Ireland (Gilbert, et al., 2021).

Storm petrel is a summer visitor to Ireland, typically occurring between April and September, having over-wintered in the south Atlantic<sup>8</sup>. They are mainly an oceanic species, typically only returning to land to breed. In Ireland, breeding takes place on islands off the west coast, mainly off counties Kerry, Mayo, Galway and Donegal (Mitchell, et al., 2004). Kerry holds most of the population with large colonies occurring on uninhabited islands such as Inis Tuaisceart (27,297 pairs) (Mitchell, et al., 2004). During the breeding period, a single egg is laid, deep within crevices under rocks, cavities within walled structures or in burrows in the soil. Storm petrel either feed at sea during the day, returning to nest sites at dusk and departing before dawn, or remain on the nest throughout the day (Watson, et al., 2014). They do not typically emerge from their nests during daylight hours (Ratcliffe, et al., 1998).

The breeding period typically commences in May/June (DEHLG, 2015), with the majority of eggs laid in late June, as indicated by studies by Ratcliffe, et al., (1998) and Watson, et al., (2014) on islands off the Irish and British coasts, including Inis Tuaisceart, part of the Blasket Islands. However, the breeding phenology of storm petrel is highly variable. Egg laying may commence as early as the start of June or indeed as late as early August (Ratcliffe, et al., 1998; Watson, et al., 2014). Hatching typically occurs between mid-July and mid-Aug with average departure dates on Skokholm Island ranging from 6<sup>th</sup> September – 20<sup>th</sup> October (Davies, 1957). Chicks are well-developed upon departure, however, like Manx shearwater chicks, they are still quite vulnerable to predation at this time.

Skellig Michael is an internationally important site for storm petrel, which utilise monastic stone structures, dry-stone walls and natural crevices in rocky areas on the island for nesting (NPWS, 2004). The 2002 national census reported that approximately 9,994 pairs were estimated to breed on the island, representing approximately 10% of the all-Ireland population (Mitchell, et al., 2004).

Previous surveys undertaken on Skellig Michael by MWP in 2015 examined the breeding phenology of storm petrel on the island. Survey results indicated that the return to breeding colonies most likely commenced in May with the bulk of egg laying taking place in late June/early July. Hatching generally occurred in the first two weeks of August with fledging commencing at the end of September (MWP, 2015). Based on the estimated fledging period, it was predicted that at least some chicks would depart the island in the first three weeks of October 2015. During surveys at the end of September 2015, the developmental range of chicks throughout the island was found to be highly variable with one approximately one week old chick found at this time. This was not considered unusual due to the species highly variable breeding phenology. The majority of chicks observed at this time, however, were well developed and the first fledglings were recorded leaving their nests at the end of September.

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<sup>&</sup>lt;sup>7</sup> European Union Directive (2009/147/EEC) on the Conservation of Wild Birds

<sup>&</sup>lt;u>\*http://birdwatchireland.ie/IrelandsBirds/Tubenoses/StormPetrel/tabid/303/Default.aspx</u> [accessed 27/08/2015]

The 2015 findings were considered consistent with the findings of other studies of storm petrel breeding biology, such as those by Davies (1957) on Skokholm Island and Ratcliffe (1998) on Inis Tuaisceart, located to the north of Skellig Michael.

#### 8.1.4 Kittiwake (Rissa tridactyla)

Kittiwake has a very large distribution occurring throughout much of the Northern Hemisphere. In Ireland, the largest colonies traditionally occur in counties Donegal, Dublin and Clare (1998-2002 data) (Mitchell, et al., 2004). The most recent assessment of conservation status has included kittiwake as red-listed in Ireland as the breeding population is in decline (Gilbert, et al., 2021).

Kittiwakes form large breeding colonies, often in association with other seabird species. The breeding season typically begins within the first two weeks of May (Mitchell, et al., 2004; Taylor, et al., 2012), although sometimes as early as January or February (DEHLG, 2015). Nests are built on steep cliff-faces, often on narrow, precarious ledges. This affords protection from predators. Between one and three eggs are laid, typically around mid-May with chicks hatching sometime in June (Taylor, et al., 2012). Fledging can occur at any time between five and seven weeks with chicks being relatively well-developed upon leaving the nests (Vincenzi & Mangel, 2013).

Skellig Michael holds nationally important numbers of kittiwake. Data collected under the National Seabird Monitoring Programme over the period 2013 – 2018 estimated the breeding population of kittiwake on Skellig Michael to comprise 789 AONs (Apparently Occupied Nests)<sup>9</sup>. There are four main kittiwake breeding sub-colonies on the island; these being at Seal Cove, Cross Cove, Blue Cove and Blind Man's Cove, where the landing jetty is located.

Previous surveys undertaken on Skellig Michael by MWP in 2015 examined the breeding phenology of kittiwake. It was estimated that overall, the bulk of egg laying by kittiwakes took place in mid-May with hatching generally occurring in the first week of June. By early July, the kittiwake colony located below the helicopter-landing pad was observed to be developing well, with the majority of chicks expected to leave within the next week and a half. Incidentally, the arrival of a Commissioners of Irish Lights (CIL) helicopter to the landing pad located adjacent to the kittiwake Cross Cove sub-colony in early July 2015 caused no obvious disturbance to nesting kittiwakes in the area. The bulk of chicks were found to fledge in the first two weeks of July. By mid-July the majority of chicks had departed from the Cross Cove colony and were observed out to sea. Two chicks were observed on nests above the canopy in Cross Cove in the third week of August. These chicks were believed to be the last chicks remaining on nests on the whole island. By the 3<sup>rd</sup> September 2015, all kittiwake chicks were found to have departed the nesting colony at Cross Cove. By mid-September, the entire breeding colony of kittiwake and juveniles had departed the island.

In summary, the 2015 findings were found to be consistent with the findings of other studies of kittiwake breeding biology, such as those by Taylor, et al., (2012) on Skomer Island and Mitchell et al., (2004).

#### 8.1.5 Common Guillemot (Uria aalge)

Guillemot is a highly-specialised marine species, widely distributed throughout the Northern Hemisphere. Due to a highly localised breeding distribution, the species is amber-listed in Ireland

<sup>&</sup>lt;sup>9</sup> https://www.npws.ie/sites/default/files/publications/pdf/IWM114.pdf

(Gilbert, et al., 2021), with the largest colonies occurring in counties Dublin, Clare and Wexford (1998-2002 data) (Mitchell, et al., 2004). Guillemot is found around the Irish coast all year round, only coming to land to breed. They form colonies on sea-cliffs where suitable nesting ledges are present. Rather than building nests, the eggs are laid directly onto rock. Nesting space is therefore often in short supply and adults will actively defend small patches of ground.

The breeding season begins around March/April, with a single egg usually laid between the end of April and the middle of May. Adults take it in turns to go to sea and feed, once the egg has hatched, typically sometime between the end of May and the middle of June (Birkhead, et al., 2012; Taylor, et al., 2012). Young typically leave the nest sometime between mid-June and mid-July to join the adult males at sea, where they continue to develop (Birkhead, et al., 2012; Taylor, et al., 2012; Taylor, et al., 2012). All young will have typically left the breeding ledges by mid-July.

Skellig Michael holds nationally important numbers of guillemot. Data collected under the National Seabird Monitoring Programme over the period 2013 – 2018 estimated the breeding population of guillemot on Skellig Michael to comprise 2,297 individuals<sup>10</sup>. These are dispersed between the same four sub-colonies as used by kittiwake (DEHLG, 2015).

Previous surveys undertaken on Skellig Michael by MWP in 2015 examined the breeding phenology of guillemot on the island. It was estimated that overall, the bulk of egg laying took place in the first week of May, with hatching generally occurring in the first week of June and fledging generally occurring in the first two weeks of July (MWP, 2015). The guillemot sub-colony at Cross Cove was found to be virtually empty by the 8<sup>th</sup> July during the 2015 survey period. The sub-colony at Lighthouse Bay was also found to have emptied by mid-July.

In summary, the 2015 findings were considered consistent with the findings of other studies of guillemot breeding biology, such as those by Birkhead, et al., (2012) and Taylor, et al., (2012),

#### 8.1.6 Atlantic Puffin (Fratercula arctica)

Puffin is a small species of auk which has a very large distribution, occurring throughout the North Atlantic Ocean from north-west Greenland to north Norway and down to the Iberian Peninsula and beyond. The species is red-listed in Ireland as the Irish population has a localised distribution. The species is considered to be of global conservation concern (Gilbert, et al., 2021). Traditionally, the largest numbers occur in Co. Kerry with 9,514 burrows recorded during the 1998-2002 national census (Mitchell, et al., 2004). Other important sites for puffin in Ireland include counties Mayo, Wexford and Donegal (Mitchell, et al., 2004).

Skellig Michael is a nationally important site for this species with 6,000 pairs estimated in 2002<sup>11</sup>. Like guillemot, puffins also nest in large colonies. They are typically ground-nesting, digging burrows in grassy slopes (Finney, et al., 2001), although they will occasionally utilise natural crevices in boulder scree. They have been known to also make use of rabbit burrows. As they are ground-nesting they tend to nest on off-shore islands which are free from mammalian predators. However, chicks are still susceptible to predation by gulls and likewise adults are open to attack, particularly when returning to burrows with food (Finney, et al., 2001).

<sup>&</sup>lt;sup>10</sup> https://www.npws.ie/sites/default/files/publications/pdf/IWM114.pdf

<sup>&</sup>lt;sup>11</sup> <u>https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004007.pdf</u> [accessed 01/04/2021]

The breeding season lasts from April to early August<sup>12</sup>, although birds may arrive to breeding colonies as early as February (DEHLG, 2015). Like many other seabird species, a single egg is laid (Finney, et al., 2001). Eggs are normally laid during May (DEHLG, 2015), although it can occur earlier in the season, as found by some studies. A study on Skomer Island, off the Welsh coast, found some eggs to have been laid within the first week of April, with at least some eggs hatched by mid-May (Taylor, et al., 2012). Estimates of the fledging period vary from 36 to 83 days (DEHLG, 2015; Taylor, et al., 2012; Finney, et al., 2001). Population censuses on the island, between 1990 and 2002, have recorded counts of between 3,055 and 6,000 individuals (Merne & Walsh, 2005 as cited in DEHLG, 2015). The latest population census, carried out in 2010, estimated 2,170 individuals<sup>13</sup>.

Previous surveys undertaken by MWP on Skellig Michael in 2015 examined the breeding phenology of puffin. It was estimated that overall, the bulk of egg laying took place in the second two weeks of April, hatching occurred between the end of May and middle of June and fledging typically occurred in the middle two weeks of July (MWP, 2015). By mid-July the bulk of young puffins were departing the nests, with some already having left the island. By the second week of August, puffins were virtually absent from the island although could be seen out to sea to the south of the island.

With regard to other studies, the estimated egg laying period for puffin on Skellig Michael in 2015 was found to be later in the breeding season than what has been found elsewhere; however, like storm petrel, it is apparent that puffin have a variable breeding phenology. Although the estimated timing of hatching was found to be slightly later than the mid-May hatching period recorded by Taylor, et al., (2012) on Skomer Island, it was largely similar to the end of May hatching period found by Finney, et al., (2001).

<sup>&</sup>lt;sup>12</sup> <u>http://birdwatchireland.ie/IrelandsBirds/Auks/Puffin/tabid/363/Default.aspx</u> [accessed 27/08/2015]

<sup>&</sup>lt;sup>13</sup> <u>http://jncc.defra.gov.uk/smp</u> [accessed 16/10/2015]

#### 9 ASSESSMENT OF POTENTIALLY SIGNIFICANT EFFECTS TO NATURA 2000 SITES

There follows an evaluation of the potential ecological impacts identified above which may arise as a result of the proposed works on the qualifying features that have been selected for impact assessment in **Section 8** above and determines whether the proposal is likely to have adverse effects on the Conservation Objectives of the Skelligs SPA.

The likelihood of adverse effects to the Skelligs SPA from the proposed works has been determined based on a number of indicators including:

- Water quality
- Habitat loss or alteration
- Disturbance and/or displacement of species
- Habitat or species fragmentation

The likelihood of significant cumulative/in-combination effects is assessed in Section 9.6 below.

#### 9.1 WATER QUALITY

The proposed works will take place entirely on Skellig Michael, an off-shore island. There are no natural watercourses or waterbodies on the island. However, maintenance of marine water quality in the surrounding waters is important in terms of the quality of the seabird foraging resource in general.

The remedial works which form part of the proposal (Upper Lighthouse gate piers and repair to Landing Pier wall) are not considered to have any potential for significant water quality impacts within the marine environment and are largely similar to the remedial works which are on-going on the island; however, due to the use of minor amounts of mortar which will be used, and the use of fuel/oils for the generator, on a precautionary basis, general measures for protection of water quality are proposed with regards to these aspects of the works.

Water quality impacts within the marine environment could potentially occur from the on-site treatment/storage of human waste generated from the public toilets once operational, and its subsequent removal from the island to the mainland for disposal, in the absence of appropriate protection measures. With regard to the 'Clivus' composting toilet which will be installed, the system is a fully sealed system. All waste produced will be stored within the system itself (tank positioned underneath the toilets) where it will biodegrade naturally over time into harmless substances, suitable for use in gardens in a general context. There will be no storage of waste anywhere else on the island. When required, compost and/or leachate waste will be emptied from the system into sealed plastic containers which will then be transported from the island to the mainland by boat for disposal to a suitably-licensed facility. There will be no disposal of any wastes on the island. All wastes will be taken off the island in a carefully controlled manner. The toilets will be monitored on a daily basis by OPW staff to ensure that there is always sufficient usage capacity remaining in the system.

On a precautionary basis, and to ensure that there is no potential for water quality impacts within the marine environment, several mitigation measures are recommended in relation to this aspect of the project. **Section 10** below outlines mitigation measures designed to avoid or reduce any potential adverse water quality impacts that might ensue as a result of the proposal. Residual impacts are assessed in **Section 11** below.

#### 9.2 HABITAT LOSS/ALTERATION

As part of the works, a minor area of naturally exposed bedrock (approximate area 0.35 m<sup>2</sup>) which is located adjacent to the Lower Lighthouse Road and existing oil tanks, is to be broken out and removed to facilitate construction of the new two-cubicle toilet block. Removal of this minor area of bedrock constitutes a minor area of land-take within the SPA boundary; however, this habitat comprises neither a qualifying interest for the SPA or a supporting habitat of any intrinsic ecological value to SCIs for the SPA. Removal of this minor area of bedrock at the location of the toilets will not affect the structure or functioning of the SPA.

The project will involve the permanent removal of a minor section of dry stone masonry wall and the repair of an existing pier located immediately adjacent to the Lower Lighthouse Road and next to the helicopter pad to facilitate access to the public toilets from the existing pathway. The works will also involve the repair and repointing of existing masonry structures comprising the inner and outer gate piers at the Upper Lighthouse, and a section of masonry seawall immediately adjacent to the outer gate post which is also to be repaired and repointed. Storm petrel utilise stone walls, steps and masonry structures located throughout the island for nesting. There is, therefore, potential for loss or alteration of potential nesting habitat for storm petrel as a result of the project.

With regard to the removal of drystone wall at the location of the toilets, the section of wall in question has an approximate area of 2.5 m<sup>2</sup>. While potentially suitable crevices for nesting storm petrel occur within this section of wall, the area which will be removed is considered minor in the context of the abundance of masonry structures present on the island in general including manmade walls, steps, Monastic buildings, and also natural crevices, which comprise suitable nesting habitat for storm petrels. Considering the area of wall to be removed, loss of this minor area of potential nesting habitat is not considered to comprise significant loss of habitat for storm petrel within the SPA.

With regard to potential loss/alteration of storm petrel nesting habitat and the proposed repair of the wall pier adjacent to the Heli-pad and the repair and repointing of the inner and outer gate piers at the Upper Lighthouse, only areas which were previously mortared will be re-pointed as part of the remedial works, similar to that which has been done during previous masonry remedial works on the island. A lime-based mortar, similar to that which was previously in-situ, will be used for re-pointing. The minimum quantity of mortar will be used so as to ensure the structural integrity of the piers. The mortar in the Upper Lighthouse gate piers is largely intact and as such there is not an abundance of existing crevices which would comprise potential storm petrel nesting habitat.

Similarly, repair and repointing of the minor section of masonry seawall immediately adjacent to the outer gate pier at the Upper Lighthouse, which has an approximate length of 1.9 m, will be undertaken as per previous and on-going wall remedial works on the island. Wall maintenance is an on-going issue on the island due to the age and, therefore, vulnerability of the dry-stone structures, particularly in light of the highly exposed, maritime conditions to which the island is subjected, and thus wall repairs are carried out throughout the island on an annual basis. The remedial works will follow wall maintenance methodologies which have been developed on Skellig Michael over many years.

The walls inner face is likely to retain some degree of render relative to the walls seaward face and as such is not expected to contain an abundance of suitable crevices or nesting storm petrel. However, due to the exposed conditions, render has likely been lost from much of the walls seaward face and so there is potential for nest-sites to be located in these areas. Here, tightening stones, rather than

mortar, will be used to improve the structural integrity of the masonry. This approach will ensure that gaps in the masonry which may potentially be utilised by nesting storm petrel remain open within the structure. This aspect of the proposal will ensure that alteration of potential nesting habitat within the existing stone structure is minimised as much as possible. The aim of the proposed works will be to return the section of wall to its original state, in so far as possible, while minimising impacts on storm petrel nesting habitat.

Bearing in mind the limited scope of the proposal with regard to proposed masonry removal/remedial works, significant habitat loss or alteration within the Skelligs SPA for storm petrel or any other SCI is not envisaged. However, based on the precautionary principal, a number of mitigation measures in relation to these aspects of the project are recommended to avoid or reduce any potential adverse habitat impacts that might ensue. These are outlined in **Section 10** below. Residual impacts are assessed in **Section 11** below.

#### 9.3 DISTURBANCE AND/OR DISPLACEMENT OF SPECIES

#### 9.3.1 Construction Phase

Fulmar do not utilise any of the habitats within the footprint of the works for nesting; however, they do nest on surrounding cliff-faces and rock ledges, including in the vicinity of the proposed toilet block. Works are scheduled to take place sometime in August or September. Previous surveys have found that the bulk of juvenile fulmars typically fledge at the end of August. Therefore, construction activity may potentially overlap with the fulmar breeding season.

Manx shearwater do not utilise any of the habitats within the footprint of the works for nesting. Suitable nesting habitat does not generally occur in the vicinity of the proposed toilet location; however, suitable nesting habitat does occur within the Upper Lighthouse compound and potentially in proximity to the gate piers and section of seawall which are to be repaired as part of the works. Previous studies have found that Manx shearwaters typically fledge at the end of August and into September therefore, the proposed works will overlap with the Manx shearwater breeding season.

Kittiwake do not utilise any of the habitats within the footprint of the works for nesting; however, they do nest on surrounding cliff-faces and rock ledges, including in the vicinity of the proposed toilet block in Cross Cove. Previous surveys found that by mid-July the majority of kittiwake juveniles had departed from the colony at Cross Cove. A small number were found to still be present in August. The Cross Cove kittiwake colony was found to have departed by the start of September. Construction works will potentially overlap with the kittiwake breeding season.

Puffins do not utilise any of the habitats within the footprint of the works for nesting; however, suitable nesting habitat occurs within proximity of the works. Previous surveys found that by mid-July the bulk of young puffins were departing the nests. By the second week of August, puffins were virtually absent from the island. The works will take place largely outside the main breeding season for puffin but low numbers of puffin could potentially still remain on the island at the time of the works.

Guillemot do not utilise any of the habitats within the footprint of the works for nesting; however, they do nest on surrounding cliff-faces and rock ledges, including in the vicinity of the proposed toilet block. The ledges below the proposed toilet location comprise one of the main guillemot breeding

sub-colonies on the island. Previous surveys found that the guillemot sub-colony at Cross Cove was virtually empty by early July. Due to the timing of the works, construction activity will not overlap with the guillemot breeding season and so construction related disturbance or displacement impacts on guillemot are not envisaged.

Storm petrels utilise stone walls and other man-made structures throughout the island for nesting. The proposal will result in the removal of a minor section of dry stone wall and repair/repointing of masonry walls and gate piers, some of which comprise potential nesting habitat. Previous surveys found that hatching generally occurred in the first two weeks of August with fledging commencing at the end of September, therefore, works will overlap with the breeding season for storm petrel. There is potential for both adult and juvenile storm petrels, potentially including young chicks, to occur within suitable structures within and in proximity to the proposed works areas.

#### 9.3.1.1 Remedial works to the gate piers and seawall at the Upper Lighthouse

With regard to proposed remedial works to the gate piers and seawall at the Upper Lighthouse, it is considered that storm petrel has the most potential to be subjected to potentially significant disturbance/displacement impacts. As workers rebuild/repair the gate piers and section of wall there could be some temporary disturbance of storm petrels potentially occurring in the general surrounding area as a result of human presence and fugitive noise. However, given that storm petrels successfully breed within very close proximity to considerable volumes of people throughout each breeding season e.g. within cavities in the steps, monastery walls etc, it is considered likely that storm petrels on nests are habituated to some degree of activity. It is noted that the works in this area are highly temporary, to take place over a number of days, and will take place during daylight hours. Therefore, workers will not be present during the hours of darkness when adult storm petrels return to nesting sites. All rebuilding and repair works which will be carried out will be similar to the maintenance works which are carried out throughout the island on a regular basis. Standard methodologies have been developed for wall repair and conservation works which will minimise disturbance of any storm-petrels potentially in the area.

However, due to the potential for adult or young birds to occur within the structures to be repaired, it is considered that, in the absence of appropriate mitigation measures, there is potential for significant disturbance/displacement of storm petrels which may be nesting within the works footprint. To avoid or reduce any disturbance or displacement impacts to storm petrel, mitigation measures are recommended in relation to the proposed remedial works (see **Section 10**).

The proposed works in this area are not considered to have the potential to result in significant disturbance/displacement of any of the remaining SCI species, namely fulmar, Manx shearwater, kittiwake or puffin, by virtue of the scale of the work and the highly localised and temporary nature of the work. While significant disturbance or displacement impacts to these SCIs are not envisaged, on a precautionary basis, general protective mitigation measures are included in **Section 10** in relation to construction activity.

#### 9.3.1.2 Construction of Toilets and other works in vicinity of Heli-pad

Although the works are to take place in a localised area, and will be temporary in nature (all works scheduled to take place over a one week period), the nature of the works in this area and the timing of the works has the potential to result in significant disturbance/displacement of nesting SCIs and/or

their young, primarily through the release of fugitive noise emissions/vibration, and to a lesser extent increased human activity.

There will be increased human activity, albeit four workers, in this specific area for the duration of the works. Bearing in mind that on any given day during the summer months the maximum number of daily visitors permitted on the island are present throughout much of the site over a relatively short period, it is expected that breeding seabirds on Skellig Michael can be expected to be habituated to a moderate degree of human activity. In relation to the human resources required to carry out the works, this aspect of the proposal does not comprise any great increase in human activity over and above that which exists at background level on the island over each summer season.

Proposed works at the location of the toilets and in the vicinity of the Heli-pad will result in fugitive noise emissions. Removal of the area of bedrock and existing concrete pads/plinths in particular will cause considerable noise disturbance, albeit for a very limited period of time. Removal of oil storage tanks, fencing and other associated works also has the potential to generate noise emissions.

These aspects of the proposal have the potential to result in disturbance and/or displacement of SCIs in the vicinity of the works, in particular fulmar and kittiwake, which are known to breed on surrounding cliff-ledges in this area, storm petrel which could potentially occur in suitable habitat within or in proximity to the works, and to a lesser extent puffin, depending on the timing of the works. The works are scheduled to take place over one week in August/September. Previous surveys have indicated that the bulk of the fulmar chicks fledge at the end of August. While the bulk of kittiwakes fledge in mid-July, some chick may still be on nests in mid-August. Storm petrel chicks fledge throughout September and into October. Puffins may still be present on the island during August.

Removal of the section of dry-stone wall and repair of the wall pier could also result in significant disturbance of storm petrels which could potentially be nesting within these structures at the time of the works. Manx shearwaters are not expected to occur within the vicinity of the toilet block and Helipad in any great numbers due to a lack of suitable nesting habitat and so significant disturbance/displacement impacts are not envisaged.

Mitigation measures are recommended to avoid or reduce any adverse impacts such that any disturbance or displacement of SCIs is minimised for the duration of construction activity in this location. Recommended mitigation measures are included in **Section 10**. Residual impacts are discussed in **Section 11**.

#### 9.3.1.3 Repair to pier wall at Landing Pier

The repair to the pier wall at the Landing Pier will comprise a minor repair to masonry block following storm damage. Significant disturbance or displacement species impacts from this element of the construction works are not envisaged.

#### 9.3.2 Operational Phase (Visitor Toilets)

Manx shearwaters are not expected to occur within the vicinity of the proposed toilet block in any great numbers due to a lack of suitable nesting habitat and so significant disturbance/displacement impacts to Manx shearwater are not envisaged.

Fulmar, kittiwake and guillemot are all known to utilise cliff-faces and ledges in Cross Cove, including in the vicinity of the proposed toilet block. The cliff-face below the general area of the toilet block supports the main breeding sub-colony of guillemots on the island. Puffins and storm petrels nest throughout the island in suitable areas of habitat, as previously discussed, and thus have the potential to occur in the general vicinity where suitable habitat occurs on surrounding slopes and/or within masonry walls in the case of storm petrel.

Once commissioned, the public toilets will be open on a daily basis throughout each of the islands annual open seasons which overlap with the breeding season for SCIs. Visitors arrive to the island via boat in the morning and typically depart sometime in the early afternoon. All visitors are strictly daytime only visitors. The arrival and departure of boats to and from the island is staggered. Vessels are given allocated departure slots from the mainland. Only one vessel can make the approach to the Landing Pier at a time. Once disembarked, visitors typically begin the short journey on-foot along the Lower Lighthouse Road within a short time-frame as their time on the island is limited.

With regards to the potential for disturbance or displacement of SCIs during operation of the toilets, it is noted that the toilet block will be situated immediately off the pathway adjacent to the Heli-pad. Visitors will access the two-cubicle toilet block directly off the pathway via a small wooden platform. There will be no access available to members of the public to any other area, other than the toilet-block; therefore, there will be no encroachment by members of the public into the adjacent area which currently contains the oil storage tanks and which overlooks the cliff-face and breeding ledges situated below. This area, including the adjacent Heli-pad, will be completely fenced off and access prohibited as is currently the case on the island.

The Lower Lighthouse Road comprises the sole access route along which visitors walk from the Landing Pier to the base of the stone steps which lead to the monastic buildings on the slopes above. It is traversed daily by all visitors to the island throughout the open season. This activity will continue, although it is possible that there may be some minor increase in human activity at the location of the toilet as members of the public use the facility.

It is not considered that usage of the toilet block has the potential to result in significant disturbance or displacement of any breeding SCIs due to the small scale of the proposed toilet facility and considering that the area in question comprises a negligible extension of the area which is already currently accessible to members of the public. Breeding SCIs in this area, primarily guillemot, fulmar and kittiwake which are known to traditionally utilise surrounding cliff-ledges, are likely to be already habituated to human activity and noise in this area to some degree by virtue of the existing level of activity comprising tourists walking along the roadway, the existing oil storage area which is accessible to OPW staff on the island and the adjacent Heli-pad which is operational, although not used on a regular basis. However, based on the precautionary principal, some mitigation measures are proposed, namely regarding the use of appropriate signage, to prevent any unnecessary disturbance to SCIs which may occur in the surrounding area. These measures are outlined in **Section 10**. Residual impacts are discussed in **Section 11**.

#### 9.4 HABITAT OR SPECIES FRAGMENTATION

Habitat fragmentation has been defined as 'reduction and isolation of patches of natural environment' (Hall *et al.*, 1997 cited in Franklin *et al.*, 2002) which results in spatial separation of habitat areas which had previously been in a state of greater continuity. Adverse effects of habitat fragmentation on

species or populations can include increased isolation of populations which can detrimentally impact on the resilience or robustness of the populations thereby reducing overall species diversity and altering species abundance.

With regard to the removal of drystone wall at the location of the toilets, the section of wall in question has an approximate area of 2.5 m<sup>2</sup>. While potentially suitable crevices for nesting storm petrel occur within this section of wall, the area which will be removed is considered minor in the context of the abundance of masonry structures present on the island in general including manmade walls, steps, Monastic buildings, and also natural crevices, which comprise suitable nesting habitat for storm petrels. Considering the area of wall to be removed, loss of this minor area of potential nesting habitat is not considered to have the potential to result in significant habitat or species fragmentation impacts for storm petrel within the SPA.

Proposed repair works to the various masonry structures which comprise potential nesting habitat for storm petrel (gate piers and seawall at Upper Lighthouse, wall pier adjacent to Heli-pad) are to be undertaken in the same manner and approach as has been adopted elsewhere on the island. The approach to all wall and other masonry remedial works on the island is mindful of the sensitivity of the site and the importance of such structures for nesting storm petrel. Bearing this in mind, significant habitat or species fragmentation impacts are not predicted.

In summary, it is not considered that the proposal has potential to result in significant habitat or species fragmentation impacts within the SPA; however, mitigation measures are proposed with regard to the works, including masonry remedial works and removal of the section of wall, as discussed above (see **Section 10** below).

#### 9.5 ASSESSMENT OF EFFECT ON THE CONSERVATION OBJECTIVES OF THE SKELLIGS SPA

In **Section 8** above, an evaluation was undertaken to determine which of the SCIs for the Skelligs SPA potentially lie within the zone of influence of the project and required further assessment in the NIS. This was done through a scientific examination of ecological evidence and data listed above in **Section 3.3** or referenced. In this case, all SCIs apart from gannet, were selected for further assessment (see **Section 8** for more information).

The effects of the project on the SCIs as a result of the proposal have been assessed against the measures designed to achieve the Conservation Objectives of the site. In the absence of site-specific Conservation Objectives for the SPA, the Conservation Objectives of other sites for which the same SCIs are designated have been used.

In the case of fulmar, kittiwake, guillemot and puffin, the specific species Attributes and Targets contained within the Saltee Islands SPA (004002) Conservation Objectives (NPWS, 2011) have been used. There are no specific Conservation Objectives available for either Manx shearwater or storm petrel for any designated SPA. Therefore, the Attributes and Targets for puffin, also a ground-nesting seabird species, outlined within the Saltee Islands SPA Conservation Objectives, have been used. The outcome of the assessment has been presented in the following sections.

#### 9.5.1 Fulmar [A009]

The conservation objective for fulmar within the Skelligs SPA is to maintain/restore the favourable conservation condition of this species. The specific species Attributes and Targets with regard to fulmar which are defined in relation to the achievement of the Conservation Objectives for the Saltee Islands SPA (NPWS, 2011) are presented in **Table 3** below which also includes an assessment of the effects of the project against these measures.

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Breeding population abundance: Apparently Occupied Sites (AOSs)	No significant decline	No significant decline in the breeding population abundance of fulmar within the SPA is predicted as a result of the proposal.	No
Productivity rate	No significant decline	No significant decline in productivity rate of fulmar within the SPA is predicted as a result of the proposal.	No

#### Table 3. Assessment of effects on conservation objectives of fulmar

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Distribution: breeding colonies	No significant decline	No significant decline in the distribution of fulmar breeding colonies within the SPA is predicted as a result of the proposal.	No
Prey biomass available	No significant decline	No significant decline in the prey biomass available to fulmar within the SPA is predicted as a result of the proposal. However, on a precautionary basis, some general mitigation measures in relation to protection of water quality during construction and operation are recommended.	Yes See Section 10
Barriers to connectivity	No significant increase	There will be no increase in barriers to connectivity for fulmar within the SPA as a result of the proposal.	No
Disturbance at the breeding site	No significant increase	Mitigation measures are proposed to reduce any potential disturbance impacts to fulmar at breeding sites which may arise as a result of increased human activity and fugitive noise emissions, in particular during the construction phase. A significant increase in disturbance of fulmar at breeding sites is not envisaged during either the construction or operational phase of the project.	Yes See Section 10
Disturbance at marine areas immediately adjacent to the colony	No significant increase	There will be no increase in disturbance at marine areas adjacent to the fulmar colony as a result of the proposal.	No

#### 9.5.2 Manx Shearwater [A013]

The conservation objective for Manx shearwater within the Skelligs SPA is to maintain/restore the favourable conservation condition of this species. The specific species Attributes and Targets with regard to puffin for the Saltees SPA (NPWS, 2011), which are used here as a proxy for Manx shearwater, are presented in **Table 4** below which also includes an assessment of the effects of the project against these measures.

#### Table 4. Assessment of effects on conservation objectives of Manx shearwater

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Breeding population abundance: Apparently Occupied Sites (AOS)	No significant decline	No significant decline in the breeding population abundance of Manx shearwater within the SPA is predicted as a result of the proposal.	No
Productivity rate	No significant decline	No significant decline in productivity rate of Manx shearwater within the SPA is predicted as a result of the proposal.	No
Distribution: breeding colonies	No significant decline	No significant decline in the distribution of Manx shearwater breeding colonies within the SPA is predicted as a result of the proposal.	No
Prey biomass available	No significant decline	No significant decline in the prey biomass available to Manx shearwater within the SPA is predicted as a result of the proposal. However, on a precautionary basis, some general mitigation measures in relation to protection of water quality during construction and operation are recommended.	Yes See Section 10
Barriers to connectivity	No significant increase	There will be no increase in barriers to connectivity for Manx shearwater within the SPA as a result of the proposal.	No
Disturbance at the breeding site	No significant increase	Mitigation measures are proposed to reduce any potential disturbance impacts to Manx shearwater at breeding site which may arise as a result of increased human activity and fugitive noise emissions, in particular during the construction phase. A significant increase in disturbance of Manx shearwater at breeding sites is not envisaged during either the construction or operational phase of the project.	Yes See Section 10

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Disturbance at marine areas immediately adjacent to the colony	No significant increase	There will be no increase in disturbance at marine areas adjacent to the Manx shearwater colony as a result of the proposal.	No
Occurrence of mammalian predators	Absent or under control	The proposal will result in a number of boat trips between the island and the mainland over the course of the construction phase (one week). On a precautionary basis, some general mitigation measures in relation to preventing the spread of mammalian predators onto the island are proposed.	Yes See Section 10

#### 9.5.3 European Storm Petrel [A014]

The conservation objective for storm petrel within the Skelligs SPA is to maintain/restore the favourable conservation condition of this species. The specific species Attributes and Targets with regard to puffin for the Saltees SPA (NPWS, 2011), which are used here as a proxy for storm petrel, are presented in **Table 5** below which also includes an assessment of the effects of the project against these measures.

#### Table 5. Assessment of effects on conservation objectives of storm petrel

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Breeding population abundance: Apparently Occupied Site (AOS)	No significant decline	No significant decline in the breeding population abundance of storm petrel within the SPA is predicted as a result of the proposal.	No
Productivity rate	No significant decline	No significant decline in productivity rate of storm petrel within the SPA is predicted as a result of the proposal.	No
Distribution: breeding colonies	No significant decline	No significant decline in the distribution of storm petrel breeding colonies within the SPA is predicted as a result of the proposal.	No
Prey biomass available	No significant decline	No significant decline in the prey biomass available to storm petrel within the SPA is predicted as a result of the proposal. However, on a precautionary basis,	Yes

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
		some general mitigation measures in relation to protection of water quality during construction and operation are recommended.	See Section 10
Barriers to connectivity	No significant increase	There will be no increase in barriers to connectivity for storm petrel within the SPA as a result of the proposal.	No
Disturbance at the breeding site	No significant increase	In the absence of appropriate mitigation, it is considered that removal and/or repair of masonry structures comprising potential nesting habitat for storm petrel has the potential to result in significant disturbance of storm petrel at breeding sites. Mitigation measures are proposed to reduce any potential disturbance impacts to storm petrel at breeding sites which may arise as a result of proposed masonry works, or increased human activity/fugitive noise emissions, in particular during the construction phase.	Yes See Section 10
Disturbance at marine areas immediately adjacent to the colony	No significant increase	There will be no increase in disturbance at marine areas adjacent to the storm petrel colony as a result of the proposal.	No
Occurrence of mammalian predators	Absent or under control	The proposal will result in a number of boat trips between the island and the mainland over the course of the construction phase (one week). On a precautionary basis, some general mitigation measures in relation to preventing the spread of mammalian predators onto the island are proposed.	Yes See Section 10

#### 9.5.5 Kittiwake [A188]

The conservation objective for kittiwake within the Skelligs SPA is to maintain/restore the favourable conservation condition of this species. The specific species Attributes and Targets with regard to kittiwake which are defined in relation to the achievement of the Conservation Objectives for the Saltee Islands SPA (NPWS, 2011) are presented in **Table 6** below which also includes an assessment of the effects of the project against these measures.

#### Table 6. Assessment of effects on conservation objectives of kittiwake

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Breeding population abundance: Apparently Occupied Nests (AONs)	No significant decline	No significant decline in the breeding population abundance of kittiwake within the SPA is predicted as a result of the proposal.	No
Productivity rate	No significant decline	No significant decline in productivity rate of kittiwake within the SPA is predicted as a result of the proposal.	No
Distribution: breeding colonies	No significant decline	No significant decline in the distribution of kittiwake breeding colonies within the SPA is predicted as a result of the proposal.	No
Prey biomass available	No significant decline	No significant decline in the prey biomass available to kittiwake within the SPA is predicted as a result of the proposal. However, on a precautionary basis, some general mitigation measures in relation to protection of water quality during construction and operation are recommended.	Yes See Section 10
Barriers to connectivity	No significant increase	There will be no increase in barriers to connectivity for kittiwake within the SPA as a result of the proposal.	No
Disturbance at the breeding site	No significant increase	Mitigation measures are proposed to reduce any potential disturbance impacts to kittiwake at breeding sites which may arise as a result of increased human activity and fugitive noise emissions, in particular during the construction phase. A significant increase in disturbance of kittiwake at breeding sites is not envisaged during either the construction or operational phase of the project.	Yes See Section 10

#### 9.5.6 Common Guillemot [A199]

The conservation objective for guillemot within the Skelligs SPA is to maintain/restore the favourable conservation condition of this species. The specific species Attributes and Targets with regard to guillemot which are defined in relation to the achievement of the Conservation Objectives for the Saltee Islands SPA (NPWS, 2011) are presented in **Table 7** below which also includes an assessment of the effects of the project against these measures.

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Breeding population abundance: individual adult	No significant decline	No significant decline in the breeding population abundance of guillemot within the SPA is predicted as a result of the proposal.	No
Productivity rate	No significant decline	No significant decline in productivity rate of guillemot within the SPA is predicted as a result of the proposal.	No
Distribution: breeding colonies	No significant decline	No significant decline in the distribution of guillemot breeding colonies within the SPA is predicted as a result of the proposal.	No
Prey biomass available	No significant decline	No significant decline in the prey biomass available to guillemot within the SPA is predicted as a result of the proposal. However, on a precautionary basis, some general mitigation measures in relation to protection of water quality during construction and operation are recommended.	Yes See Section 10
Barriers to connectivity	No significant increase	There will be no increase in barriers to connectivity for guillemot within the SPA as a result of the proposal.	No
Disturbance at the breeding site	No significant increase	Mitigation measures are proposed to reduce any potential disturbance impacts to guillemot at breeding sites which may arise as a result of increased human activity and fugitive noise emissions, in particular during the construction phase. A significant increase in disturbance of guillemot at breeding sites is not envisaged during either the construction or operational phase of the project.	Yes See Section 10

#### Table 7. Assessment of effects on conservation objectives of guillemot

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Disturbance at marine areas immediately adjacent to the colony	No significant increase	There will be no increase in disturbance at marine areas adjacent to the guillemot colony as a result of the proposal.	No

#### 9.5.7 Atlantic Puffin [A204]

The conservation objective for puffin within the Skelligs SPA is to maintain/restore the favourable conservation condition of this species. The specific species Attributes and Targets with regard to puffin which are defined in relation to the achievement of the Conservation Objectives for the Saltee Islands SPA (NPWS, 2011) are presented in **Table 8** below which also includes an assessment of the effects of the project against these measures.

#### Table 8. Assessment of effects on conservation objectives of puffin

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Breeding population abundance: Apparently Occupied Burrow (AOB)	No significant decline	No significant decline in the breeding population abundance of puffin within the SPA is predicted as a result of the proposal.	No
Productivity rate	No significant decline	No significant decline in productivity rate of puffin within the SPA is predicted as a result of the proposal.	No
Distribution: breeding colonies	No significant decline	No significant decline in the distribution of puffin breeding colonies within the SPA is predicted as a result of the proposal.	No
Prey biomass available	No significant decline	No significant decline in the prey biomass available to puffin within the SPA is predicted as a result of the proposal. However, on a precautionary basis, some general mitigation measures in relation to protection of water quality during construction and operation are recommended.	Yes See Section 10
Barriers to connectivity	No significant increase	There will be no increase in barriers to connectivity for puffin within the SPA as a result of the proposal.	No

Attribute/Measure	Target	Assessment of Potentially Significant Effects	Mitigation Required
Disturbance at the breeding site	No significant increase	Mitigation measures are proposed to reduce any potential disturbance impacts to puffin at breeding sites which may arise as a result of increased human activity and fugitive noise emissions, in particular during the construction phase. A significant increase in disturbance of puffin at breeding sites is not envisaged during either the construction or operational phase of the project.	Yes See Section 10
Disturbance at marine areas immediately adjacent to the colony	No significant increase	There will be no increase in disturbance at marine areas adjacent to the puffin colony as a result of the proposal.	No
Occurrence of mammalian predators	Absent or under control	The proposal will result in a number of boat trips between the island and the mainland over the course of the construction phase (one week). On a precautionary basis, some general mitigation measures in relation to preventing the spread of mammalian predators onto the island are proposed.	Yes See Section 10

#### 9.6 CUMULATIVE/IN-COMBINATION IMPACTS

As well as singular effects, the potential for in-combination or cumulative affects also need to be considered. A cumulative impact arises from incremental changes caused by another past, present or reasonably foreseeable future actions together with the proposed developments. The EC (2001) guidelines on the provision of Article 6 of the Habitats' Directive state that the phrase 'in combination with other plans or projects' in Article 3(3) of the Habitats Directive refers to the cumulative impacts due to plans or projects 'that are currently under consideration together with the effects of any existing or proposed projects or plans.' Relevant plans and projects have been identified in **Section 5** above.

#### 9.6.1 Plans

With regards to the potential for significant cumulative or in-combination impacts due to interaction with the proposed works and the Kerry County Development Plan (CDP) 2015 - 2021, it is considered that in general, County Development Plans, including the Kerry CDP 2015 - 2021, have a range of environmental and natural heritage policy safeguards in place. These safeguards, which protect the natural environment, will also apply to the proposal described in this report. No significant cumulative impacts are predicted with the Kerry CDP 2015 - 2021.

#### 9.6.2 Tourism

Tourists do not have access to the Upper Lighthouse. Construction of the toilet block and associated works, repair of the Heli-pad and repair of the pier wall will take place over a one week period in August or September 2021. While tourists would typically have access to the island at this time of year, there are currently no plans to open the island to tourists in 2021 due to the on-going Covid emergency.

Therefore, cumulative or in-combination impacts between the construction phase of the proposed works and tourist activity on the island are not predicted, bearing in mind the timing of the works considered in this proposal.

#### 9.6.3 On-going Remedial and Conservation Works to the Upper Lighthouse Road and Seawall

Phase 3 of this on-going conservation project will continue during the coming open season. Similarly, if consent for Phase 4 of the works is granted, these works will commence. While the proposed Phase 4 works include works in the vicinity of the Upper Lighthouse compound, it is not considered that there is potential for significant cumulative or in-combination impacts due to interaction with the works proposed to the Upper Lighthouse gate piers, which form part of this assessment. This is due to the scale of the works proposed, the proposed approach to work methods, and considering the highly localised nature of the works and the short duration over which they will occur (less than one week).

Bearing the above factors in mind, significant cumulative impacts arising from this aspect of the proposal due to interaction with on-going remedial and conservation works to the Upper Lighthouse Road and seawall are not predicted.

#### **10 MITIGATION**

#### **10.1 CONSTRUCTION PHASE**

#### 10.1.1 Recommended Timing of Works

It is recommended that, if possible, works are conducted in September. Pushing out works to later in the breeding season will reduce the likelihood of an overlap between construction activity and SCI breeding activity on the island.

#### 10.1.2 Environmental Clerk of Works (ECoW)

A suitably-qualified Environmental Clerk of Works (ECoW) will be appointed by OPW to oversee and monitor the works. The OPW and DHLGH will meet with the ECoW at the commencement of the works to discuss and agree all details of the proposed works.

The ECoW will undertake a pre-construction survey for SCIs in the vicinity of the works, as outlined in **Section 10.1.3** below. The work crew will be briefed by the ECoW on environmental measures in advance of any works. The ECoW will monitor breeding SCIs present in the area, in particular any birds on breeding ledges in the vicinity of the toilet block, for any evidence of disturbance, notably when bedrock and concrete pads/plinths are being removed. The ECoW is to submit a report to OPW on completion of the works which will be forwarded to the DHLGH and NPWS for comment.

#### 10.1.3 Pre-construction Bird Survey

A pre-construction survey of areas considered to comprise suitable nesting habitat for SCIs within the footprint or immediate vicinity of the works will be conducted by a suitably qualified ECoW in advance of any works, with a focus on storm petrel. With regard to storm petrel, this survey will focus in particular on the area of wall to be removed and/or repaired at the toilet location, and the gate piers and seawall to be repaired at the Upper Lighthouse.

The pre-construction survey methodology will have regard to methods previously employed on the island. Prior to any construction work commencing, areas of suitable masonry within and immediately adjacent to the works will be investigated thoroughly for evidence and signs of nesting storm petrel. This survey will utilise tape playback and endoscope surveys methods to establish the presence of any nesting storm petrel which may be present. The survey will be conducted in accordance with the relevant NPWS derogation licence and any conditions therein. This licence will need to be granted in advance of the tape-lure and endoscope pre-construction survey. Any nest locations which are identified will be clearly marked using wooden batons. Workers will be made aware of their presence.

#### 10.1.4 General Approach to Masonry Works

With regard to masonry repair and repointing works, every effort shall be made to ensure that alteration of the existing structures are minimised in so much as possible so as to minimise alteration of potential nesting habitat while acting to conserve and protect the structures from further damage/deterioration. Where nests are identified, masonry repair works will take cognisance of identified nest-sites such that they are not altered in any way. Access holes to known nest-sites will be left open. Pointing will not extend outside the footprint of existing mortared areas.

Repair works will be overseen by the ECoW to ensure that nests are protected and disturbance is minimised. All areas of wall repair work will be brushed down at the end of each day such that dust

and other debris is cleaned off and does not impede access to holes within the structures. Wet mortar will be covered with hessian and stored in a secure area at the end of each working day.

With regard to the removal of the minor section of wall at the toilet location, if any nest-sites are identified within this structure as part of the pre-construction survey, or during the works, and it is not possible to retain them, then NPWS should be consulted and advice sought prior to any works continuing. In this circumstance, it will be necessary to seek the relevant NPWS licence to allow for disturbance of the breeding place of a wild animal under Section 23 of the Wildlife Act.

#### **10.1.5** Measures to Reduce Potential Disturbance of Birds

To avoid or reduce any potential disturbance of breeding birds in the area over the course of the construction phase, the following measures are proposed:

- Manual methods should be employed as much as is practicably possible to minimise noise e.g. where there is a requirement to remove damaged masonry, a crow-bar should be employed.
- With regard to masonry repairs, workers may, at most, use light hand-tools e.g. hammers, mallets to carry out the repair works.
- These measures will reduce fugitive noise emissions as much as possible and will help to minimise any potential disturbance of breeding/loafing birds in the area.

#### 10.1.6 Measures to Avoid Accidental Introduction of Mammalian Predators to the Island

To prevent the accidental introduction of potential mammalian predators to the island, all equipment and materials brought to the island for the proposed works are to be securely stored on the mainland. Equipment, materials and the vessels themselves are to be checked for any signs of rodent infestation prior to arriving to the island.

#### **10.1.7 Other General Mitigation Measures**

- Construction materials, equipment and fuel for generator are to be stored in a designated, secure area (existing storage sheds adjacent to Heli-pad).
- All construction phase wastes, including any oil residues removed from the oil tank to be decommissioned, are to be removed from the island in a controlled manner and disposed of appropriately at a suitably-licensed facility on the mainland.

#### **10.2 OPERATIONAL PHASE**

#### **10.2.1** Visitor Toilets

- The toilet composting system is be monitored on a daily basis to ensure that the tank is emptied at the intervals necessary to ensure that the system functions correctly.
- There is to be no disposal of wastes on the island.
- Wastes are to be removed and stored in fully-sealed plastic containers for removal from the island by boat. These waste containers are to be secured adequately during transport to reduce risk of accidental spillage.
- Wastes are to be disposed of appropriately at a suitably-licensed facility on the mainland.
- It is recommended that signage be erected at the location of the toilets to inform members
  of the public of the presence of breeding birds in the general area and requesting that people
  do not linger or gather unnecessarily at the location to reduce any potential disturbance to
  breeding birds.

#### **11 RESIDUAL IMPACTS**

Provided that the recommended mitigation measures set out in **Section 10** are implemented in full, it is not expected that significant residual impacts will result from the works proposed.

#### **12 CONCLUSION**

It has been objectively concluded, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed works and with the implementation of the mitigation measures proposed, that the proposed works will not adversely affect (either directly or indirectly) the integrity of any European site, namely the Skelligs SPA (004007), either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.



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# Appendix 1 Stages of Appropriate Assessment

#### Stage 1 - Screening

This is the first stage of the Appropriate Assessment process and that undertaken to determine the likelihood of significant impacts as a result of a proposed project or plan. It determines need for a full Appropriate Assessment.

If it can be concluded that no significant impacts to Natura 2000 sites are likely then the assessment can stop here. If not, it must proceed to Stage 2 for further more detailed assessment.

#### Stage 2 - Natura Impact Statement (NIS)

The second stage of the Appropriate Assessment process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site with respect to the conservation objectives of the site and its ecological structure and function. This is a much more detailed assessment that Stage 1. A Natura Impact Statement containing a professional scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.

If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned.

#### Stage 3 - Assessment of alternative solutions

A detailed assessment must be undertaken to determine whether alternative ways of achieving the objective of the project/plan exists.

Where no alternatives exist the project/plan must proceed to Stage 4.

#### Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain

The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site where no less damaging solution exists.



# Appendix 2

Screening for Appropriate Assessment



# **Screening for Appropriate Assessment**

Construction of Public Toilets and Repair to Helicopter Pad, Repair to Pier Wall at Landing Pier and Repair of Gate Piers at Upper Lighthouse on Skellig Michael Island



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ISSUE FORM	
Project number	12242
Document number	6039
Document revision	A
Document title	Screening for Appropriate Assessment: Construction of Public Toilets, Repair to Helicopter Pad, Repair to Pier Wall at Landing Pier and Repair of Gate Piers at Upper Lighthouse on Skellig Michael Island
Document status	Final
Issue date	11-05-2021
Document prepared by	HD
Document checked by	MKy (MWP 04-05-2021)

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#### **1 SUMMARY OF FINDINGS**

#### 1.1 SCREENING FOR APPROPRIATE ASSESSMENT

Project Title	Screening for Appropriate Assessment for Construction of Public Toilets, Repair to
	Helicopter Pad, Repair to Pier Wall at Landing Pier and Repair of Gate Piers at
	Upper Lighthouse on Skellig Michael Island
Project Proponent	The Office of Public Works (OPW)
Project Location	The project is located on Skellig Michael Island, located approximately 12.7 km
	west of the Iveragh Peninsula in County Kerry, Ireland. Works are proposed in
	three separate locations on the island; Blind Man's Cove (Landing Pier), Cross Cove
	(Public Toilets and Heli-pad) and Seal Cove (Upper Lighthouse gate piers).
Conclusion	It has been objectively concluded during the screening process that three sites
	within 15km or the zone of potential impact influence of the project can be
	excluded from likely significant impacts from the proposal. These include:
	Valencia Harbour/Portmagee Channel SAC (002262)
	• Iveragh Peninsula SPA (004154)
	Puffin Island SPA (004003)
	However, based on the precautionary principal, it cannot be objectively concluded
	that significant impacts as a result of the proposal can be ruled out at this stage
	for the following Natura 2000 site:
	• Skelligs SPA (004007)
	Further assessment is required to determine whether the project is likely to adversely affect the integrity of this Natura 2000 site. Hence, the recommendation
	of the screening process is to proceed to Stage 2 Natura Impact Statement (NIS) for the Skelligs SPA.

#### **2** INTRODUCTION

#### 2.1 PURPOSE OF ASSESSMENT

The Office of Public Works (OPW) is applying for Ministerial Consent to the Department of Housing, Local Government and Heritage (DHLGH) for proposed repair and construction works on Skellig Michael Island.

This screening for appropriate assessment report has been undertaken to determine whether the proposed works by OPW at three separate locations on Skellig Michael are likely to result in significant effects on nearby sites with European conservation designations (i.e. Natura 2000 Sites). The screening exercise determines the need for a full appropriate assessment.

The screening for appropriate assessment report has been undertaken by Malachy Walsh and Partners (MWP) ecologists.

#### 2.2 PROJECT OVERVIEW

There are currently no toilet facilities available to members of the public visiting Skellig Michael Island during each tourist open season. Due to public health and safety considerations, and in light of the current Covid-19 pandemic, it is considered that public toilets are required to facilitate tourists visiting the island. It is proposed to construct a public toilet block, comprising two cubicles, in an area of already built ground adjacent to the existing Helicopter Pad (also known as the Heli-pad) at Cross Cove. This area is directly adjacent to the Lower Lighthouse Road which leads from the boat Landing Pier to the base of the South Steps from which visitors access the Monastery buildings on the slopes above. Repairs to the existing fall arrest system at the Helicopter Pad are also proposed.

The project also involves repair works at two separate locations elsewhere on the island comprising a minor repair to the pier wall adjacent to the steps at the Landing Pier and repairs to the existing inner and outer gate piers at the ruined Upper Lighthouse.

#### 2.3 LEGISLATIVE CONTEXT

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats of wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of Special Protected Areas (SPAs). It is the responsibility of each member state to designate SPAs and SACs, both of which form part of Natura 2000, a network of protected sites throughout the European Community. The Habitats Directive has been transposed into Irish law and the relevant Regulations are the European Communities (Birds and Natural Habitats) Regulations 2011.

The requirement for appropriate assessment of the implications of plans and projects on the Natura 2000 network of sites comes from the Habitats Directive (Article 6(3)). The current assessment was conducted within this legislative framework and also the DoEHLG (2009) guidelines. A screening for appropriate assessment determines whether an appropriate assessment of the proposed development is required if it cannot be excluded, in view of best scientific knowledge, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site, in view of the site's conservation objectives.

The information presented in this screening for appropriate assessment report will be used by the competent authority to assist them to complete their screening exercise. If it is determined that an

appropriate assessment is required in respect of the proposed development, a Natura Impact Statement (NIS) must be prepared. The NIS will assist the competent authority to conduct the appropriate assessment.

#### 2.4 STAGES OF APPROPRIATE ASSESSMENT

The appropriate assessment process is a four-stage process with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. The stages are set out in Appendix 1.

#### **3** ASSESSMENT METHODOLOGY

#### 3.1 APPROPRIATE ASSESSMENT GUIDANCE

This screening for appropriate assessment, or Stage 1, has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2018) and guidance prepared by the NPWS (DoEHLG, 2009).

#### 3.2 CONSULTATION

Consultation has taken place between the OPW and the DHLGH.

#### 3.3 DESK STUDY

In order to complete the screening for appropriate assessment certain information on the existing environment is required. A desk study was carried out to collate available information on the site's natural environment. This comprised a review of the following publications, data and datasets:

- OSI Aerial photography and 1:50000 mapping
- National Parks and Wildlife Service (NPWS)
- National Biodiversity Data Centre (NBDC) (on-line map-viewer)
- BirdWatch Ireland
- Teagasc soil area maps (NBDC website)
- Geological Survey Ireland (GSI) area maps
- Environmental Protection Agency (EPA) water quality data
- Other information sources and reports footnoted in the course of the report

#### 3.4 SCREENING FOR APPROPRIATE ASSESSMENT

As set out in the NPWS (DoEHLG, 2009) guidance, the task of establishing whether a plan or project is likely to have an effect on a Natura 2000 site is based on a preliminary impact assessment using available information and data, including that outlined above, and other available environmental information, supplemented as necessary by local site information and ecological surveys. This is followed by a determination of whether there is a risk that the effects identified could be significant. The precautionary principal approach is required.

Once the potential impacts that may arise from the proposal are identified the significance of these is assessed through the use of key indicators:

- Habitat loss
- Habitat alteration

- Disturbance and/or displacement of species
- Habitat or species fragmentation
- Water quality and resource

#### 4 SCREENING FOR APPROPRIATE ASSESSMENT

Screening for appropriate assessment (Stage 1) determines the need for a full appropriate assessment (Stage 2) and consists of a number of steps, each of which is addressed in the following sections of this report:

- Establish whether the proposal is necessary for the management of a Natura 2000 site
- Description of the project (construction of public toilets, repair to existing Heli-pad fall arrest system, repair to pier wall at landing pier and repair of existing gate piers at the Upper Lighthouse)
- Identification of Natura 2000 sites potentially affected
- Identification and description of individual and cumulative impacts of the project
- Assessment of the significance of the impacts on the integrity of Natura 2000 sites
- Conclusion of screening stage

#### 4.1 MANAGEMENT OF NATURA 2000 SITES

The proposal is not connected with or necessary to the conservation management of a Natura 2000 site.

#### 4.2 DESCRIPTION OF PROJECT

#### 4.2.1 Overview of the Site

Skellig Michael is an island (the larger of the two Skellig Islands) located in the Atlantic Ocean, approximately 12.7 km west of the Iveragh Peninsula in County Kerry, Ireland.

Skellig Michael is home to one of the best preserved Christian, monastic settlements dating from the early medieval period, comprising a monastery, hermitage and several stone stairways, which connect the various archaeological features, as well as provide access throughout parts of the island (DEHLG, 2008). The settlement is extremely well-preserved, most probably as a result of the islands remoteness, which together with the harsh weather conditions experienced for much of the year, serves to limit human visitation. However, as a result of its immense archaeological, spiritual and cultural significance, Skellig Michael still attracts large numbers of tourists each year throughout the summer months. An on-going conservation programme, under the management of the OPW, also serves to maintain the site through managing visitor access and carrying out necessary maintenance works.

Located in the north-east Atlantic Ocean, the island is subject to a temperate Atlantic climate, strongly influenced by the Gulf Stream. Much of the island surface is characterised by sheer cliff-face, exposed bedrock, boulders and scree. As a result, vegetation cover is not extensive in any area.

Skellig Michael is of major importance, both in a national and international context, due to its populations of breeding seabirds, both in terms of the species and numbers it sustains (DEHLG, 2008).

#### 4.2.2 Site Location

Works are proposed at three separate locations on the island as part of the project:

- Works are proposed at/adjacent to the existing Heli-pad located along the Lower Lighthouse Road in Cross Cove.
- Minor works are proposed at the Landing Pier in Blind Man's Cove. Both Cross Cove and Blind Man's Cove are located on the eastern side of the island.
- Works are proposed at the Upper Lighthouse gate, located at the top of the Upper Lighthouse Road in an area known as Seal Cove which is located on the western side of the island.

Figure 1 below shows the locations of the proposed works.

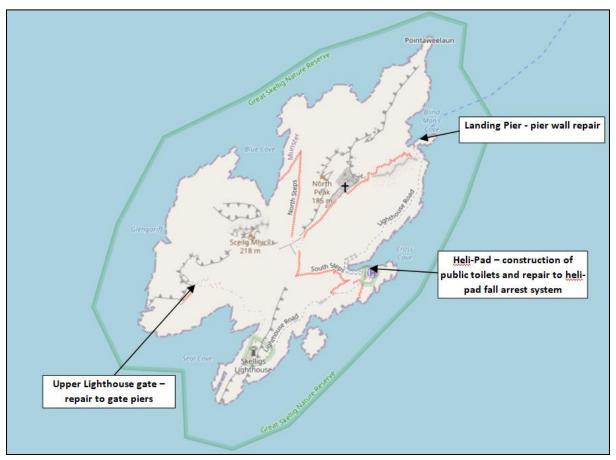


Figure 1. Locations of proposed works areas on Skellig Michael Island

#### 4.2.3 Purpose of the Project

Public toilets are required on the island for visiting tourists due to health and safety considerations and public welfare concerns, in particular in light of the current Covid-19 pandemic.

Minor repair works are required to the pier wall at the Landing Pier to address storm damage which has resulted in cracking with the potential to affect the structures integrity if left in its current condition. Repair works are also required to the gate piers at the Upper Lighthouse to address existing defects. Large structural cracks are present in the outer gate pier in particular which is showing signs of substantial movement and is in danger of collapsing over the cliff-face.

#### 4.2.4 Brief Project Description

The proposed works comprise of the following:

- 1. Construction of public toilets/Repair to Heli-pad fall arrest system the proposed public toilets are to be constructed in an area of built ground located along the Lower Lighthouse Road adjacent to the existing Heli-pad. Associated works include removal of a section of existing dry stone wall, removal of decommissioned oil tanks and pipe work, removal of existing concrete pads and removal of existing exposed bedrock. Following this, the surface will be levelled and made good and the toilets will be constructed. A new timber platform will provide access from the existing pathway (Lower Lighthouse Road) to the toilet block. Existing fencing will be removed and replaced. Repair works to the existing helicopter pad fall arrest system will also be carried out.
- 2. **Repair works to the existing gate piers at the Upper Lighthouse** repair and repointing of the inner gate pier with lime mortar, stone by stone dismantling and rebuilding of the outer gate pier as before with lime mortar, and repair and repointing of a section of existing seawall adjacent to the outer gate pier at the Upper Lighthouse.
- 3. **Repair to pier wall at Landing Pier** repair to minor section of the pier wall following storm damage.

#### 4.2.5 Characteristics of the Project

#### 4.2.5.1 Public Toilets

The type of composting toilets which will be installed will comprise an all-in-one treatment system designed specifically for sites with no existing sewerage infrastructure. They do not require any water supply and are low maintenance systems. The toilets will utilise composting technology which allows for human waste to be decomposed over extended periods via natural biological processes.

The new two-cubicle toilet block will be of timber construction and will include 2 No. dry toilets and 1 No. dry urinal with hand sanitising stations and roof-mounted solar panel. Over time, two types of waste are produced from the system; compost (decomposed solids) and leachate (biologically stable liquid). The system will be fully-sealed; however, both the compost and separate leachate in-built storage compartments will require periodic emptying.

#### 4.2.5.2 Repair to Upper Lighthouse Gate Piers and Pier Wall at Landing Pier

Large structural cracks are present in the existing Upper Lighthouse outer gate pier which is showing signs of substantial structural movement. The outer gate pier is to be dismantled and stones numbered and recorded before being rebuilt as before with saved stones and lime mortar. A section of seawall adjacent to the outer gate pier, encompassing approximately 1.9 m in length, and the existing inner gate pier, are also to be repaired and repointed with lime mortar.

A minor section of the pier wall adjacent to the steps at the Landing Pier will also be repaired following storm damage which has resulted in substantial cracking.

The proposal has been confirmed with the OPW. A summary of the project characteristics in the context of appropriate assessment is provided in the following table.



	The footprint of the works will comprise the following:
	<ul> <li>Repairs to Upper Lighthouse Gate Piers (2.84 m<sup>2</sup>)</li> </ul>
	• Construction of Toilet block and repair to Heli-pad (9.1 m <sup>2</sup> )
	• Also, a minor repair to blockwork in the pier wall at the Landing Pier
	Overall, the proposed works are to existing man-made structures and/or will
Size, scale, area, land-take	occur on built ground on the island. The works will not extend beyond these
Size, scule, ulea, ialia-lake	areas. There will be no encroachment outside the area of works onto adjacent
	habitats. All works will take place within the boundary of the Skelligs SPA
	(004007).
	To facilitate construction of the new toilet block, there is a requirement for
	the removal of 0.35 m <sup>2</sup> of exposed bedrock located adjacent to the existing oil
	tank in the area of already built ground adjacent to the helicopter pad. As there is overlap with the SPA, this will result in a minor area of land-take (0.35 m <sup>2</sup> )
	within the SPA.
	Construction of Public Toilets
	• Existing oil tanks to be drained of potential oil, desludged and
	dismantled. Removal of decommissioned oil tanks and all associated
	pipework.
	Removal of section of wall to provide access to new public toilet block
	(approx. area 2.5 m <sup>2</sup> )
	Removal of existing balustrade and fencing and replacement with
	new.
	• Removal of existing exposed bedrock (0.35 m <sup>2</sup> ) (material to be stored)
	and concrete pads and plinths with mechanical equipment and hand-
	held drills. Levelling and making good of surface.
Details of physical changes	Repair of existing fall arrest system to helicopter pad.
that will take place during	Repair of existing wall pier.
the various stages of	<ul> <li>Construction of new public toilet block including installation of 4,200 litre capacity composting tank, 2 no. dry toilets, 1 no. dry urinal, 2 no.</li> </ul>
implementing the proposal	internal hand sanitising stations and solar panel to roof.
	internal hand sandising stations and solar panel to root.
	Repair to Upper Lighthouse Gate Piers
	<ul> <li>Repair and repointing with lime mortar of inner gate pier.</li> </ul>
	• Dismantling of outer pier, stones numbered and recorded, pier to be
	rebuilt as before using existing numbered and reusable stones and
	lime mortar.
	Repair and repointing of Lighthouse Road wall adjacent to outer pier
	(approx. length 1.9 m).
	Repair to Pier Wall at Landing Pier
	Minor repair to damaged stone block in pier wall adjacent to landing
Description of recommend	steps.
Description of resource requirements for the	It is estimated that four site-based OPW personnel will undertake the
construction/operation and	proposed works.
decommissioning of the	
proposal (water resources,	
, , , , , , , , , , , , , , , , , , , ,	1



construction material,	Some materials such as stone required for repair works are already in-situ on
human presence etc)	the island. Other materials required which will be brought to the island in
	advance of the proposed works include:
	Lime mortar
	Light tools/hand-held drills
	<ul> <li>Portable generator</li> </ul>
	Timber
	Plywood
	Metal
	<ul> <li>Replacement fencing/steel balustrade</li> <li>1 x Clivus Multrum M300 tank</li> </ul>
	1 x CL100 dry urinal round base
	<ul> <li>2 x 12V ventilation fans</li> <li>1 x 12V Menographica color panel 2004</li> </ul>
	1 x 12V Monocrystaline solar panal 20W
	• 1 x CK100 wind cowl
<b>-</b>	Hand-sanitising station for internal mounting in toilet-block
Description of timescale for	
the various activities that	Pending approval, it is anticipated that the proposed works will take
will take place as a result of	one week to complete and will be carried out in August or September
implementation (including	2021.
likely start and finish date)	All works will be dependent on weather/boat crossing conditions.
	Construction phase wastes will include:
	• Domestic waste arising from workers which shall be taken off the
	island on a daily basis for the duration of the works and disposed of
	at a suitably licensed facility.
	<ul> <li>Workers shall utilise existing OPW staff toilet facilities currently</li> </ul>
	available on the island.
	• Excess lime mortar, washout and any other construction phase
	wastes e.g. waste concrete, packaging, materials etc shall be taken
	off the island and disposed of at a suitably licensed facility.
Description of wastes	Removed bedrock and other waste rock material generated during
Description of wastes	the construction phase will be stored on the island for re-use during
arising and other residues	general maintenance and repair works to the lighthouse road and
(including quantities) and	seawall.
their disposal	• Fuel/oil residues from oil tank and machinery to be removed from
	island by boat in sealed plastic containers.
	Operational phase wastes from the public toilet block will include:
	Compost (decomposed solids) and leachate (biologically stable
	liquid). Clivus tank will be monitored on a daily basis by on-site OPW
	staff during the islands open season.
	All waste from the system will be removed from the island by boat
	in plastic containers and transported to the mainland for disposal to
	a licensed waste facility. There will be no disposal of compost or
	leachate on the island.

	<ul> <li>No other operational phase wastes are envisaged.</li> </ul>
Identification of wastes	Excess lime mortar.
arising and other residues	• Washout (which shall be minimal as a limited amount of water will
(including quantities) that	be required to create a dry mortar mix).
may be of particular	• Fuel/oil residue from oil tank to be emptied. Also minor quantity of
concern in the context of	fuel/oil for generator required for construction works.
the Natura 2000 network	• Wastes from public toilet block (compost, leachate).
Description of any	Existing services and living accommodation are available on the island for
additional services required	workers for the duration of the works (one week).
to implement the project or	
plan, their location and	Water shall be brought to the site for mixing mortar. Electricity shall be
means of construction	provided by means of a diesel powered generator. Water, fuel and waste to
	be stored in storage shed beside the helipad.

#### 4.2.6 Identification of Other Projects or Plans or Activities

#### 4.2.6.1 Kerry County Development Plan (CDP) 2015-2021

The Kerry CDP 2015-2021 was reviewed with regard to Skellig Michael. The Plan identifies Skellig Michael as a UNESCO World Heritage Site of international importance. The Plan also makes reference to the requirement for protection of such sites and the potential significant economic and social benefits in promoting the value of such assets.

The Plan states:

"It is the intention of this Development Plan to actively support the protection, conservation and appropriate enhancement of the cultural heritage in Kerry to benefit residents and visitors alike and to target cultural tourism as a major economic driver in the County"<sup>1</sup>.

#### 4.2.6.2 Tourism

The island is visited by significant numbers of tourists (approximately 18,000) on an annual basis. The open season typically runs from May to early October with exact opening and closing dates dependent on weather constraints and prevailing sea conditions. Fifteen boats are currently licensed to make a single return trip to the island each day during this period, when weather conditions are suitable for the sea crossing. Each boat has a maximum licensed carrying capacity of twelve people. All tourists are strictly daytime visitors, allowed to visit the island between the hours of 10:30 and 15:00 seven days a week. Tourist access is restricted to the eastern half of the island, comprising the East Landing (boat landing area), Lower Lighthouse Road, Monastery and the series of stone steps linking them. There is no public access to the Heli-pad area or the Upper Lighthouse Road.

#### 4.2.6.3 On-going Remedial and Conservation Works to the Upper Lighthouse Road and Seawall

The OPW is currently undertaking a long-term conservation project on the Upper Lighthouse Road (also known as the Old Lighthouse Road) on Skellig Michael. This project has been undertaken on a phased basis over the last several years and will continue over the coming years during the island's annual open season, subject to the necessary consents.

Phase 1 of the project was granted consent and commenced in 2017. Phase 2 of the project was granted consent and commenced in 2018. Phase 3 of the project was granted consent and

<sup>&</sup>lt;sup>1</sup> http://atomik.kerrycoco.ie/ebooks/devplan/pdfs/Vol1/final\_vol\_1.pdf

commenced in 2019. Screenings for appropriate assessment were undertaken for Phases 1 -3 of the project. Phase 1 and Phase 2 of the project are complete. Once the islands open season has commenced Phase 3 of the works will continue.

Ministerial Consent was recently granted by the DHLGH to the OPW in relation to Phase 4 of the ongoing remedial works. The Phase 4 works will encompass the seawall which surrounds the Upper Lighthouse, the Upper Lighthouse ruins & gatepost and a portion of seawall adjacent to the Lower Lighthouse. These sections of the Upper Lighthouse compound seawall and Lower Lighthouse seawall have been subject to varying degrees of damage as a result of natural rock-fall and exposed conditions and as such the degree of remedial works will vary between these locations.

Proposed works to the existing gate piers at the Upper Lighthouse, included in the granted Phase 4 works, will be replaced by the more detailed proposed works to the same structures which are described in this report, subject to consent. There is a possibility of overlap between some of the ongoing phased remedial works, namely the Phase 4 works which are proposed at the general location of the Upper Lighthouse, and some of the proposed works described within this Stage 1 screening report, namely the repair and rebuilding works to the Upper Lighthouse gate piers, subject to consent.

#### 4.3 IDENTIFICATION OF NATURA 2000 SITES

#### 4.3.1 Likely Zone of Impact Influence

As described above, the test for the screening for appropriate assessment is to assess, in view of best scientific knowledge, if the development, individually or in combination with other plans or projects is likely to have a significant effect on a Natura 2000 site. If there are any significant, potentially significant, or uncertain effects, it will be necessary to proceed to appropriate assessment and submit a NIS. National guidance recommends that a list is compiled of all Natura 2000 sites within what is described as a 'likely zone of impact of [a] plan or project' (DoEHLG , 2009, p.32) and which may, or ultimately may not , be impacted upon by the proposal. In the case of plans it is recommended that this zone extends out for a distance of 15km (Scott Wilson *et al.*, 2006, cited in DoEHLG, 2009). With regard to projects, the guidance goes on to state, as follows:

For projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects. (DoEHLG, 2009)

The Natura 2000 sites within this 'likely zone of impact' and their qualifying features of conservation interest are identified in **Section 4.3.2** and **4.3.3** below, and the conservation objectives of the sites are described in accordance with the guidance. Following this, the potential impacts associated with the proposal will be identified before an assessment is made of the likely significance of these impacts. If, at the end of the screening process, it cannot be objectively concluded that no significant impacts are likely or, if the screening concludes that there is uncertainty about the significance of the impacts, it will be necessary to proceed to Stage 2 appropriate assessment.

#### 4.3.2 Identification of Natura 2000 Sites

Adopting the precautionary principal in identifying potentially affected European sites, it has been decided to include all SACs and SPAs within 15km of the proposal site. **Table 1** below lists designated

SACs and SPAs within 15km or the zone of influence of the proposal site including their proximity. A map showing these designated sites in relation to the proposal is given in **Figure 2**.

No.	Designated Site	Site Proximity of subject site to nearest point of			
		Code	designated site		
1	Skelligs SPA	004007	The proposal site lies fully within the SPA		
1	Skelligs SFA	004007	boundary		
2	Puffin Island SPA	004003	This designated site is located 10.1km north		
2			east of the proposal site		
3	2 Iveragh Daningula SDA		This designated site is located 12.8km north		
3	Iveragh Peninsula SPA	004154	east of the proposal site		
4	Valentia Harbour/Portmagee Channel	002262	This designated site is located 13.5km north		
4	SAC	002202	east of the proposal site		

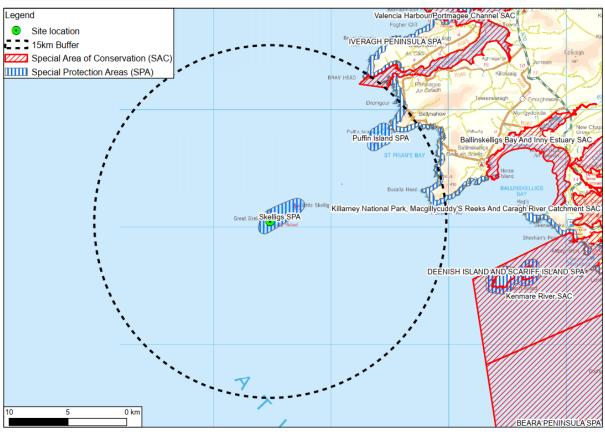


Figure 2. Natura 2000 sites within 15km or the zone of potential impact influence of the proposal

#### 4.3.3 Characteristics of Natura 2000 Sites

The following table lists the qualifying features of conservation interest for the SAC and SPA sites that lie within the zone of potential impact influence of the proposal. Information pertaining to designated sites is from site synopses, conservation objectives and other information available on www.npws.ie.

Table 2: Natura 2000 sites with qualifying features of conservation interest					
Designated Site	Qualifying features of conservation interest				
	Fulmar (Fulmarus glacialis)				
	Manx Shearwater (Puffinus puffinus)				
	Storm Petrel (Hydrobates pelagicus)				
Skelligs SPA (004007)	Gannet (Morus bassanus)				
	Kittiwake (Rissa tridactyla)				
	• Guillemot ( <i>Uria aalge</i> )				
	• Puffin ( <i>Fratercula arctica</i> )				
	Fulmar (Fulmarus glacialis)				
	Manx Shearwater (Puffinus puffinus)				
Puffin Island SPA (004003)	• Storm Petrel (Hydrobates pelagicus)				
Pullin Islanu SPA (004005)	Lesser Black-backed Gull (Larus fuscus)				
	Razorbill (Alca torda)				
	Puffin (Fratercula arctica)				
	Fulmar (Fulmarus glacialis)				
woragh Doningula SDA	• Peregrine (Falco peregrinus)				
Iveragh Peninsula SPA (004154)	Kittiwake (Rissa tridactyla)				
(004134)	• Guillemot ( <i>Uria aalge</i> )				
	Chough (Pyrrhocorax pyrrhocorax)				
Valentia Harbour /	Mudflats and sandflats not covered by seawater at low tide (1140)				
Portmagee Channel SAC	Large shallow inlets and bays (1160)				
(002262)	• Reefs (1170)				

#### Table 2: Natura 2000 sites with qualifying features of conservation interest

#### 4.3.4 Conservation Objectives

According to the Habitats Directive, the *conservation status of a natural habitat* will be taken as 'favourable' within its bio-geographic range when:

- its natural range and areas it covers within that range are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined below.

According to the Habitats Directive, the conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' within its bio-geographic range when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and

• there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The specific conservation objectives for each site are available on <u>www.npws.ie</u>. These have been accessed for the sites listed in the tables above on the 31/03/2021. Generic conservation objectives were available for the following sites:

- Skelligs SPA (004007), generic version 8.0, produced 23/03/2021
- Puffin Island SPA (004003), generic version 8.0, produced 23/03/2021
- Iveragh Peninsula SPA (004154), generic version 8.0, produced 23/03/2021

Site specific and more detailed conservation objectives were available for the following site:

• Valencia Harbour/Portmagee Channel SAC (002262), version 1.0, produced 31/10/2012

Management plans were not available for any sites. All conservation objectives together with other designated site information are available on <u>http://www.npws.ie/protectedsites/</u>.



#### 4.4 IDENTIFICATION OF POTENTIAL IMPACTS

Potential likely ecological impacts arising from the project are identified in this section.

		Works will be conducted entirely within a Natura 2000     aite (Skalling SDA)
~		site (Skelligs SPA)
	scription of elements of the project	Works are scheduled to take place during the breeding
	ely to give rise to potential ecological	season for some SCI species
im	pacts.	Works will be conducted within or in close proximity to
		SCI breeding areas
		<ul> <li>Sections of wall to be repaired/removed comprise</li> </ul>
		potential breeding habitat for storm petrel.
		Construction Phase
		<ul> <li>Loss of minor area of potential nesting habitat for storm</li> </ul>
		petrel (section of dry stone masonry wall to be removed
De	scribe any likely direct, indirect or	adjacent to helicopter pad to facilitate construction of
sec	condary ecological impacts of the	toilet block)
pro	oject (either alone or in combination	Alteration of potential nesting habitat for storm petrel
wit	th other plans or projects) by virtue of:	(repair of wall pier adjacent to toilets, repair and
		repointing of existing gate piers and section of dry stone
0	Size and scale;	masonry sea wall at Upper Lighthouse)
0	Land-take;	Potential disturbance/displacement of SCIs during the
0	Distance from Natura 2000 Site or	breeding season as a result of fugitive noise
	key features of the Site;	emissions/vibration and increased human activity for
0	Resource requirements;	duration of works.
0	Emissions;	
0	Excavation requirements;	Operational Phase
0	Transportation requirements;	<ul> <li>Potential disturbance/displacement of SCIs during the</li> </ul>
0	Duration of construction, operation	breeding season as a result of fugitive noise emissions
	etc.; and	and increased human activity at the location of the public
0	Other.	toilets
		Limited potential for indirect effects to seabird
		populations via potential impacts on marine water
		quality/prey resource (installation of public toilets in a
		sensitive site with no existing sewerage infrastructure).

#### 4.5 ASSESSMENT OF SIGNIFICANCE OF POTENTIAL IMPACTS

This section considers the list of sites identified in **Section 4.3.2** above together with the potential ecological impacts identified in the previous section and determines whether the project is likely to have significant effects on a Natura 2000 site.

When assessing impact, Natura 2000 sites are only considered relevant where a credible or tangible source-pathway-receptor link exists between the proposed development and a protected species or habitat type. In order for an impact to occur there must be a risk initiated by having a 'source' (e.g. excavation), a 'receptor' (e.g. a protected habitat/species and/or the habitats on which they depend), and an impact pathway between the source and the receptor (e.g. a waterbody which connects the proposal site to the protected species or habitats).

An evaluation based on these factors to determine which Natura 2000 sites are the plausible ecological receptors for potential impacts of the proposal was carried out. The evaluation had regard to the scope, scale, nature and size of the project, its location relative to the Natura 2000 sites listed in **Table** 

**1** above and the degree of connectedness that exists between the project and each Natura 2000 site's potential ecological receptors.

Because Skellig Michael is an island in the north-east Atlantic Ocean and the following Natura 2000 sites, namely Puffin Island SPA, Valentia Harbour/Portmagee Channel SAC and the Iveragh Peninsula SPA, all lie at a remove of in excess of 10km from the subject site, with the Atlantic Ocean intervening, it is considered that no plausible impact pathway connects the habitats and species for which these sites are designated to the location of the proposed works through which significant impacts could occur. As a consequence, these Natura 2000 sites will not be considered further in this document.

This screening exercise will, therefore, only focus on the Skelligs SPA within which the proposal area is located.

The likelihood of significant effects to the Skelligs SPA from the project was determined based on a number of indicators including:

- Habitat loss and/or alteration
- Habitat or species fragmentation
- Disturbance and/or displacement of species
- Water quality

The likelihood of significant cumulative/in-combination effects is assessed in **Section 4.5.5** below.

#### 4.5.1 Habitat Loss and/or Alteration

The Skelligs SPA is not designated for the protection of any habitat-types; however, some of the habitats which are encompassed within the footprint of the proposed works comprise suitable breeding habitat for qualifying interests of the SPA.

The project will involve the permanent removal of a minor section of dry stone masonry wall (2.5 m<sup>2</sup>) which bounds the Lower Lighthouse Road adjacent to the helicopter pad to facilitate access by members of the public from the existing pathway to the proposed toilet block. The works will also involve the repair and repointing of masonry structures comprising the existing inner and outer gate piers at the Upper Lighthouse, and a section of masonry seawall immediately adjacent to either side of the outer gate post which is also to be repaired and repointed.

The Skelligs SPA is designated for the protection of several breeding seabird species. While some such as fulmar (*Fulmarus glacialis*), kittiwake (*Rissa tridactyla*) and guillemot (*Uria aalge*) breed on cliff-faces and ledges throughout the island, species such as European storm petrel (*Hydrobates pelagicus*), Manx shearwater (*Puffinus puffinus*) and puffin (*Fratercula arctica*) utilise underground burrows and natural/man-made crevices for breeding. Storm petrel, in particular, utilise stone walls, steps and masonry structures located throughout the island for nesting. There is, therefore, potential for loss or alteration of potential nesting habitat for storm petrel as a result of the construction phase of the project and further assessment is required.

As part of the works, a minor area of naturally exposed bedrock (approx. area 0.35 m<sup>2</sup>) located in an area of built ground adjacent to the Lower Lighthouse Road where oil storage tanks are currently located, is to be broken out and removed to facilitate construction of the new two-cubicle toilet block. While this habitat does not comprise potential breeding habitat for any species, or comprise a habitat

of any intrinsic ecological value to SCIs, removal of this area of bedrock constitutes a minor area of land-take within the SPA boundary.

During the operational phase of the project, namely operation of the public toilets, it is considered that there is potential, albeit limited, for indirect alteration of marine aquatic habitat for seabird species through the generation and on-site treatment of human waste and its subsequent periodic removal from the island to the mainland by boat, in the event of accidental overflow, leakage or loss during transport. The potential for significant impacts to marine water quality which is functionally linked to populations of qualifying breeding seabirds on the island and within the SPA cannot be ruled out at this stage, and thus further assessment is required. This is discussed further in Section 4.5.3 below.

#### 4.5.2 Disturbance and/or Displacement of Species

Apart from gannet (*Morus bassanus*) which does not breed or typically occur on Skellig Michael, all of the other SCI species for the site, comprising storm petrel, Manx shearwater, puffin, guillemot, fulmar and kittiwake are found on the island during the breeding season.

The breeding phenology for each SCI found on the island varies. Some species such as guillemot typically arrive relatively early in the year with young fledging mid-summer, while others, such as storm petrel and fulmar commence fledging much later in the season (typically August/September and even later), departing relatively late in the season for their respective wintering grounds.

Breeding seabirds can be found throughout the island during the season with some species favouring the islands cliff-faces and rocky ledges for nesting while others use man-made stone structures or are ground-nesting, as outlined previously. Storm petrels utilise stone walls for nesting throughout the island and could potentially occur within the areas of dry stone wall to be removed and/or repaired/repointed as part of the works. The cliff-faces and rocky ledges in Seal Cove, including those situated above, below and in the general vicinity of the helicopter pad and proposed toilet location are used by breeding sub-colonies of kittiwake and guillemot. Fulmars also use these cliffs and ledges for nesting. Puffin and Manx shearwater have the potential to use natural crevices and burrows in suitably vegetated areas on the surrounding slopes or in the vicinity of the Upper Lighthouse for nesting.

The proposed works will involve the loss and alteration of potential breeding habitat for some species, in particular storm petrel. Construction activity and associated works, including removal of bedrock, existing concrete pads/plinths and existing fencing, and use of machinery and equipment will result in fugitive noise emissions and increased human activity in close proximity to breeding seabird areas, and could result in potential disturbance/displacement impacts to SCIs.

In summary, the proposal will result in increased human activity in close proximity to potential breeding habitat and several known breeding seabird sub-colonies, as outlined above, during both the construction and operational phases of the project, both of which overlap with the breeding season for SCI species. Due to the spatial and temporal overlap between the project and breeding SCIs for which the Skelligs SPA is designated, significant direct and indirect disturbance and displacement impacts on qualifying interests for the SPA cannot be ruled out at this stage, and thus further assessment is required.

#### 4.5.3 Water Quality

The proposed works will take place entirely on Skellig Michael, an off-shore island. There are no natural watercourses or waterbodies on the island. The remedial works which form part of the proposal (Upper Lighthouse gate piers and repair to Landing Pier wall) are not considered to have any potential for significant water quality impacts within the marine environment; however, once the toilets are operational, during each annual island open season, there is potential, albeit limited, for such impacts via the production of human waste, it's in-situ treatment/storage within the toilet composting system and its subsequent removal from the island to the mainland by boat.

In the event of overflow, leakage or spillage from the system itself or vessels used for disposing to the mainland, potential impacts to marine water quality, although likely to be relatively localised in extent, could potentially result in indirect effects to qualifying interests for the SPA via a reduction in the quality of seabird foraging habitat in the surrounding area and/or impacts on prey species. Based on the precautionary principal, significant water quality impacts within the Skelligs SPA cannot be ruled out at this stage, and thus further assessment is required.

#### 4.5.4 Habitat or Species Fragmentation

Habitat fragmentation has been defined as 'reduction and isolation of patches of natural environment' (Hall *et al.*, 1997 cited in Franklin *et al.*, 2002) which results in spatial separation of habitat areas which had previously been in a state of greater continuity. Adverse effects of habitat fragmentation on species or populations can include the increased isolation of populations which can detrimentally impact on their resilience or robustness thereby reducing overall species diversity and altering species abundance.

The preceding sections have concluded that there is potential for significant habitat loss/alteration, species disturbance or displacement and water quality impacts within the Skelligs SPA, or that significant impacts cannot be ruled out at this stage. Therefore, there is potential for habitat or species fragmentation impacts with regard to the Skelligs SPA, and thus further assessment is required.

#### 4.5.5 Cumulative/In-combination Impacts

With regard to on-going tourist activity on the island, the works are scheduled to take place during August or September which overlaps the island's typical open season for visitors.

The public do not have access to the ruined Upper Lighthouse compound where repairs to the existing gate piers and adjacent sea wall are proposed. Therefore, it is considered that there is no potential for significant cumulative or in-combination impacts as a result of interaction between tourism and this element of the proposed works. However, proposed construction and repair works at and adjacent to the Helicopter Pad and at the Landing Pier will potentially take place alongside tourists visiting the island.

Proposed remedial works to the Upper Lighthouse gate piers and adjacent sea wall have the potential to overlap both temporally and spatially with Phase 4 of the islands on-going conservation works, which have received Ministerial Consent.

There is potential for significant cumulative or in-combination impacts within the Skelligs SPA as a result of the proposal, or significant cumulative or in-combination impacts cannot be ruled out at this stage, and thus further assessment is required.

#### 4.6 CONCLUSION OF SCREENING STAGE

In conclusion, to determine the potential impacts, if any, of the project on nearby Natura 2000 sites, a screening process for appropriate assessment was undertaken. There are four Natura 2000 sites within 15km or the zone of potential impact influence of the proposal.

It has been objectively concluded during the screening process that significant impacts arising from the proposal to carry out various repair and construction works on Skellig Michael Island can be excluded for three of the sites. These sites are as follows:

- Valencia Harbour/Portmagee Channel SAC (002262)
- Iveragh Peninsula SPA (004154)
- Puffin Island SPA (004003)

However, based on the precautionary principal, it cannot be objectively concluded that significant impacts as a result of the proposal can be ruled out at this stage for the following Natura 2000 site:

• Skelligs SPA (004007)

Further assessment is required to determine whether the project is likely to adversely affect the integrity of this Natura 2000 site. Hence, the recommendation of the screening process is to proceed to Stage 2 Natura Impact Statement for this site.



#### REFERENCES

DoEHLG, 2009. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

DEHLG, 2008. *Skellig Michael World Heritage Site Management Plan 2008-2018,* Dublin, Ireland: Department of the Environment, Heritage and Local Government.

EC (2018). *Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*. Luxembourg: Office for Official Publications of the European Communities.

EC (2001). Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Luxembourg: Office for Official Publications of the European Communities.

Franklin, Alan B., Noon, Barry R. & Luke George T., (2002), What is Habitat Fragmentation? *Studies in Avian Biology* **No. 25**:20-29.



# Appendix 1

Stages of Appropriate Assessment

#### Stage 1 - Screening

This is the first stage of the Appropriate Assessment process and that undertaken to determine the likelihood of significant impacts as a result of a proposed project or plan. It determines need for a full Appropriate Assessment.

If it can be concluded that no significant impacts to Natura 2000 sites are likely then the assessment can stop here. If not, it must proceed to Stage 2 for further more detailed assessment.

#### Stage 2 - Natura Impact Statement (NIS)

The second stage of the Appropriate Assessment process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site with respect to the conservation objectives of the site and its ecological structure and function. This is a much more detailed assessment that Stage 1. A Natura Impact Statement containing a professional scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.

If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned.

#### Stage 3 - Assessment of alternative solutions

A detailed assessment must be undertaken to determine whether alternative ways of achieving the objective of the project/plan exists.

Where no alternatives exist the project/plan must proceed to Stage 4.

#### Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain

The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site where no less damaging solution exists.



# Appendix 2 Site Synopses

#### SITE SYNOPSIS

#### SITE NAME: SKELLIGS SPA

#### **SITE CODE: 004007**

The site comprises Great Skellig and Little Skellig islands. These highly exposed and isolated islands, which are separated by a distance of 3 km, are located in the Atlantic some 14 km and 11 km (respectively) off the County Kerry mainland. The geology of the islands is of Old Red Sandstone, with a little slate and veins of white quartzite. Both islands are precipitous rocky sea stacks, Great Skellig rising to 218 m and Little Skellig to 134 m.

Great Skellig supports a sparse maritime flora on shallow soils. Common plant species include Thrift (*Armeria maritima*), Sea Campion (*Silene maritima*) and Rock Sea-spurrey (*Spergularia rupicola*), with patches of Red Fescue (*Festuca rubra*), Dock (*Rumex* sp.) and Sea Mayweed (*Matricaria maritima*) occurring frequently. Little Skellig is largely unvegetated, due both to the low soil cover and to the effect that the nesting birds have on the vegetation. However, Sea Mayweed occurs on ledges that are too small for Gannets, and Tree Mallow (*Lavatera arborea*), a local species in Ireland, has been recorded.

The Skelligs comprise one of the most important seabird colonies in the country for populations and species diversity. Great Skellig has an internationally important population of Storm Petrel (4,000-6,000 pairs in 2002), with birds nesting both in the stonework associated with the monastic settlement and in natural crevices amongst the scree and rock. Little Skellig is best known for the long established colony of Gannets, with 26,436 pairs in the last full census in 1994. This is by far the largest colony in Ireland and one of the largest in the world. Great Skellig also has one of the largest colonies of Puffins in the country, with 4,000 individuals estimated in 1999. Other seabird species which occur on the islands in nationally important numbers are as follows (counts made between 1999 and 2002): Fulmar (806 pairs), Manx Shearwater (2,370 pairs), Kittiwake (944 pairs), Guillemot (2,551 individuals) and Razorbill (454 individuals).

Great Skellig is a traditional site for Chough, though the relatively small size of the island supports only one nesting pair. Peregrine has also nested in some years.

The breeding seabirds on the Skelligs have been fairly well documented over the years, with references to the Gannets dating back to the 1700s. Owing to the high importance of the islands for birds, each has been designated a Statutory Nature Reserve. In addition, the non-governmental organisation, BirdWatch Ireland, holds a long-term lease on Little Skellig. There are no known direct threats to the breeding seabird populations, though high numbers of day trippers to Great Skellig could cause disturbance to the fragile soil cover and lead to soil erosion, particularly if visitors do not keep to the stone paths. Little Skellig is largely inaccessible.

In addition to the bird interests, Great Skellig is well known for its early Christian monastic settlement. An automated lighthouse also exists on Great Skellig.

This site is one of the top five seabird sites in the country and is of international importance on account of the Storm Petrel and Gannet populations. Storm Petrel is listed on Annex I of the E.U. Birds Directive, as is Chough and Peregrine.



## Site Name: Valencia Harbour/Portmagee Channel SAC

## Site Code: 002262

Valencia Harbour and Portmagee Channel, at the tip of the Iveragh peninsula in Co. Kerry, separate Valencia Island from the mainland. The channel, which is approximately 1 km wide, and Valencia Harbour and Doulus Bay to the east of the island, contain important examples of three habitats in particular reefs, large shallow inlets and tidal mudflats.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):

[1140] Tidal Mudflats and Sandflats[1160] Large Shallow Inlets and Bays[1170] Reefs

The reefs at this site range from high water to 34 m in depth. They support an excellent range of communities from those that are typical of areas very exposed to wave action to those typical of areas sheltered from wave action but with some tidal stream present. A number of uncommon shallow subtidal communities occur here. The area also has an excellent range of sediment communities present including beds of free living red calcareous algae, generally called maerl beds (also known as 'coral'), with the uncommon anemone *Halcampa chrysanthellum*. Areas of soft mud or muddy sand are characterised by the sea pen *Virgularia mirabilis* and a range of burrowing anemones, including the very rare species *Edwardsia delapiae*, which has not been recorded since it was originally found and described from this area in 1928. Also present is *Scolanthus callimorphus*, only known from Kilkieran Bay, Co. Galway and one site in England. The phoronid *Phoronis psammophila* occurs in this community and has not been recorded elsewhere in Ireland or Britain.

The littoral reefs of Valencia Island are composed of areas that are exposed to, or very sheltered from, wave action. At exposed sites there is a typical zonation for this habitat: an upper shore with a narrow band of the brown alga *Pelvetia canaliculata*; a mid shore covered by barnacles, limpets and mussels, with rock pools containing the Purple Sea Urchin *Paracentrotus lividus* and coralline algal crusts; and a low shore dominated by mussels and barnacles with *Porphyra* sp., followed by mixed kelp species (*Laminaria digitata, Laminaria saccharina* and *Saccorhiza polyschides*). On mixed substrate in sheltered areas there is a typical zonation of bands of *Ascophyllum nodosum* and *Fucus vesiculosus* in the mid shore, with *Fucus serratus* in the low shore. The subtidal fringe has mixed kelp species with an understorey of red algae. On the north-east shore of Portmagee Channel, the very low shore has Eelgrass (*Zostera*)

*marina*) beds and a variety of bivalve species. Burrowing anemones, in particular *Cereus pedunculatus*, occur in gravel and mud in very sheltered areas. Boulders in the sublittoral fringe have a kelp community on top, and on the undersides a community of bryozoans and sea squirts (*Polyclinum aurantium* and *Morchellium argus*).

The shallow water reefs in areas very exposed to wave action have kelp park communities of *Laminaria hyperborea*, with dense foliose algae, the jewel anemone *Corynactis viridis* and the sea squirt *Pycnoclavella aurilucens*. Reefs moderately exposed to wave action with moderate current display good examples of *L. hyperborea* forest with a cushion fauna of sponges and ascidians which is considered uncommon. Another unusual community characterised by the keel worm *Pomatoceros triqueter* and occasional kelp occurs on areas of scoured cobbles. Vertical rock supports a range of hydroids, red algae, the sea urchin *Echinus esculentus*, with only occasional kelp plants. In sheltered areas either a species rich community of mixed kelps with sand scour tolerant fauna may be present, or a forest of *L. hyperborea* and *L. saccharina* may occur. This latter community is considered uncommon. Isolated silty bedrock outcrops support sponges, hydroids, anemones and occasional red and brown algae.

In deeper water at the western entrance to Portmagee Channel the reefs are very exposed or moderately exposed to wave action. Very steep bedrock is characterised by sponges, the jewel anemone *Corynactis viridis* and the cup coral *Caryophyllia smithi*. More gently sloping and upward facing circalittoral bedrock is characterised by pink coralline crusts, encrusting bryozoans, *Caryophyllia smithi*, *Echinus esculentus* and the sponges *Haliclona viscosa* and *Mycale rotalis*. These communities are typical of these habitats.

The very sheltered beach on the shores of the Valencia River estuary has a gradually sloping shingle beach, with a narrow band of *Fucus vesiculosus, Ascophyllum nodosum* and *Enteromorpha* sp., amphipods (e.g. *Echinogammarus marina*) and winkles (e.g. *Littorina littorea*) are frequent under the algae. Seaward of the shingle in muddy sand the polychaete *Scoloplos armiger* and the lug-worm *Arenicola marina* are common. The tide-swept low shore is characterised by the polychaete *Lanice conchilega*. The bivalve *Scrobicularia plana* is common in the upper mid shore, while *Angulus tenuis* is more prevalent in the mid and low shore.

The site has a good range of sediment communities which vary from gravel and pebbles to maerl, sand and mud. The moderately exposed sediments consist of areas of medium sand with the burrowing sea urchin *Spatangus purpureus* and the bivalve *Dosinia exoleta*. Areas with mixed sediments with different combinations of pebbles, gravel and mud are generally characterised by a variety of hydroids, anemones, bivalves and red algae. Soft mud or muddy sand is characterised by burrowing anemones, in particular *Sagartiogeton undata* and *Edwardsia claparedii*, the sea pen *Virgularia mirabilis*, the molluscs *Philine aperta* and *Haminoae navicula*, and bivalves. *H. navicula* is common in these communities but rare elsewhere in Ireland. A number of other uncommon marine species are found within the site including the rare pharonid *Phoronis psammophila* which occurs at a number of locations within the site, and two rare burrowing anemones *Edwardsia delapiae* and *Scolathus callimorphus*.

This site is of particular interest and importance because it contains good examples of three habitats listed on Annex I of the E.U. Habitats Directive – tidal mudflats and sandflats, large shallow inlets and bays, and reefs.

## SITE SYNOPSIS

### SITE NAME: IVERAGH PENINSULA SPA

### SITE CODE: 004154

The Iveragh Peninsula SPA is a large site situated on the west coast of Co. Kerry. The site encompasses the high coast and sea cliff sections of the peninsula from just west of Rossbehy in the north, around to the end of the peninsula at Valencia Island and Bolus Head, and as far east as Lamb's Head in the south. The site includes the sea cliffs, the land adjacent to the cliff edge (inland for 300 m) and also areas of sand dunes at Derrynane and Beginish. The high water mark forms the seaward boundary except at Doulus Head/Killelan Mountain where the adjacent sea area to a distance of 500 m from the cliff base is included to provide areas for foraging and socialising activities for breeding seabirds. The site is underlain by Devonian sandstones, siltstones and mudstones. A small area of igneous rocks (dolerite and gabbro) occurs at Beginish and on the adjacent shore.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Chough, Peregrine, Guillemot, Fulmar, and Kittiwake.

Vegetated sea cliffs dominate the site; these occur along the length of the site and support a good variety of plant species typical of the habitat, including Thrift (*Armeria maritima*), Sea Campion (*Silene vulgaris* subsp. *maritima*), Sea Spleenwort (*Asplenium marinum*) and Rock Seaspurry (*Spergularia rupicola*). The cliff-tops support heath or coastal grassland. Apart from the sea cliffs themselves, the site includes areas of dry heath, wet heath, upland acid grassland, dense Bracken (*Pteridium aquilinum*), semi-improved and improved pasture grassland, dune grassland, streams, bedrock shores and islets.

The site supports an important population of breeding Chough, a Red Data Book species that is listed on Annex I of the E.U. Birds Directive; 109 breeding pairs were recorded from the site in the 1992 survey and 88 in the 2002/03 survey. The birds are found around the coast from Lamb's head in the south-west to Rossbehy in the north. A small number of pairs are found inland, mainly around the Macgillycuddy's Reeks.

The topography of the Iveragh Peninsula, with its mosaic of grazed semi-improved and improved pastures, extensive inland upland areas of coastal heath and grassland, and sand dune systems in close proximity to breeding cliffs, favours Chough. Particularly high densities of Chough occur at Valencia Island where livestock grazing presents the species with widespread feeding opportunities. Valencia Island held the largest autumn flock, (42 birds), observed in the period 2002 to 2004. Choughs also benefit from the close proximity of the dune systems at Rossbehy in the north and at Inch, where flocks of up to 81 birds have been observed in the autumn. The smaller area of dune habitat at Derrynane is also used, with flocks of up to 33 birds present in October 2003. Communal roosts exist on Lamb's Head near Derrynane and at the western tip of Valencia Island. Pairs and small flocks of Chough can be found around the coast and in the mountainous uplands of the Iveragh Peninsula throughout the year. Studies have shown that Chough forage mainly within 300 m of the cliff tops used for breeding and these areas have been included in the site.

Landuse is predominantly extensive grazing of sheep, and to a lesser degree, cattle. This grazing regime, which results in a tight vegetation sward, is beneficial to Chough. The habitats present

are quite robust and there are few noticeable activities negatively impacting on the Chough population. However, the reduction in cattle numbers and increase in sheep numbers in the recent past, is less beneficial to Chough, as sheep grazing results in a more uniform vegetation sward. One other potential threat is the residue left in livestock dung due to the application of broad-spectrum anti-parasitic drugs.

The site supports an important Peregrine population (6 pairs in 2002); this species is listed on Annex I of the E.U. Birds Directive. The site also holds nationally important populations of Guillemot (2,860 pairs in 1999-2000), Fulmar (766 pairs in 1999-2000), Kittiwake (1,150 pairs in 2000), Great Black-backed Gull (63 pairs in 1999-2000) and Black Guillemot (118 individuals in 1999), as well as smaller populations of other breeding seabirds: Razorbill (90 pairs in 1999-2000), Herring Gull (30 pairs in 1999-2000), Cormorant (33 pairs in 1999-2000) and Shag (11 pairs in 1999-2000).

The Iveragh Peninsula SPA is the second most important site in the country for Chough and is of high importance for Peregrine. It also supports a range of breeding seabirds, including populations of Guillemot, Fulmar, Kittiwake, Great Black-backed Gull and Black Guillemot of national importance. The presence of Chough and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive, is of particular significance.

13.11.2006

#### SITE SYNOPSIS

#### SITE NAME: PUFFIN ISLAND SPA

#### SITE CODE: 004003

Puffin Island lies approximately 0.5 km off the northern side of St Finan's bay in south-west Co. Kerry. It is a long, narrow island of Old Red Sandstone. The island is almost divided into two halves – the southern half is a long narrow, rocky ridge, rising to 130 m, while the northern half broadens into a grassy plateau though has a high point of 159 m. The island is surrounded by mostly steep cliffs and slopes. The vegetation of the main part of the island is a typical maritime grassy sward, though nine different plant communities have been distinguished, including a small area of Ling Heather (*Calluna vulgaris*) heath. A Thrift (*Armeria maritima*) community dominates the slopes. In the past Puffin Island was grazed quite heavily by sheep, and today rabbits are common.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Fulmar, Manx Shearwater, Storm Petrel, Lesser Black-backed Gull, Razorbill and Puffin. The site is also of special conservation interest for holding an assemblage of over 20,000 breeding seabirds.

Puffin Island is one of the most important seabird sites in Ireland. In the recent Seabird 2000 survey, it was rated as of international importance for its breeding populations of Storm Petrel (5,177 pairs), Manx Shearwater (6,329 pairs) and Puffin (5,125 individuals). The colony of Puffins was the largest recorded in Ireland during the survey, while that of Manx Shearwater is the second largest colony after the Blaskets. The island also supports nationally important populations of Fulmar (447 pairs in 2000), Lesser Black-backed Gull (139 pairs in 2000), Great Black-backed Gull (72 pairs in 2000) and Razorbill (800 pairs in 1982 - incomplete survey in 2000). Other seabirds which breed are Shag (5+ pairs in 2000), Kittiwake (250 pairs in 1982), and Guillemot (250 pairs in 1982).

A further bird species of conservation importance which breeds on Puffin Island is Chough, with up to 3 pairs recorded in 1992 and at least one pair in 2000. During winter the resident population may be joined by other birds that breed on the mainland. The presence of Chough and Storm Petrel is of particular note as these species are listed on Annex I of the E.U. Birds Directive.

Puffin Island is owned by BirdWatch Ireland and is managed for conservation. The island is also a Statutory Nature Reserve. Unauthorised grazing, which has occurred in the past, is the main threat to the island as this could lead to erosion of the fragile soil cover.

# Appendix 3a

OPW Ministerial Consent Application Documents – Visitor Toilets and Heli-pad



Form NMS 5A - 06

## **Check List for Application for Ministerial Consent**

Section 14 of the National Monuments Act 1930 (as amended)

Name of Site:	Helicopter Pad, Skellig Michael, Co. Kerry				
Applicant:	Fergus McCormick Senior Architect OPW				
On behalf of:	Office of Public Works				
	No.52 St Stephens Green				
	Dublin 2				
Description of Works:	The construction of public toilets and associated works including removal of section of existing wall, removal of decommissioned oil tanks, removal and replacement of fencing and helicopter pad fall arrest repair works at the Helicopter Pad, Skellig Michael, Co. Kerry.				
Status of Monument:	State Ownership/Guardianship; Preservation Order; Local Authority Ownership/Guardianship				
County:	Kerry				
Townland:	Skellig Michael				
National Grid Easting:	424836				
Use GPS to derive the six figure co-ordi <b>National Grid Northing:</b> Use GPS to derive the six figure co-ordi	560610				
RMP Number:	KE104A001				
Signed: Fergus Mc Cormick Senior Architect Date: 18/01/2021					
For office use only:					
Application Received:/	/				
Response Issued:/	/				



**FORM NMS 5 – 06** 

### **APPLICATION FOR CONSENT**

#### Section 14 of the National Monuments Act 1930 (as amended)

## **Applicant**

Name	Fergus Mc Cormick Senior Conservation Architect OPW					
Address:	Office of Public Works					
	No.52 St Stephens Green					
	Dublin 2					
Telephone	01647 6675 0871671141 Email Fergus.mccormick@opw.ie					
Director of Services /Authorised Officer:	Terri Sweeney Meade, Assistant Principal Architect, OPW					

## **National Monument**

RMP No.:	KE104A001
Name of Monument:	Helicopter Pad, Skellig Michael
Location: (Townland/County)	Skellig Michael, Co. Kerry
National Grid Reference:	E 424836, N 560610

## **Owner Details**

(Complete as appropri	iate)
Local Authority	
Name	Not Applicable
Address:	
Telephone	Email
Director of Services /Authorised Officer:	
Private Owner	
Name	Not Applicable
Address:	

_	
Telephone	Email

## **Works**

## Purpose of Proposed Works

OPW is applying Ministerial Consent for the construction of public toilets and associated works including removal of section of existing wall, removal of decommissioned oil tanks, removal and replacement of fencing and helicopter pad fall arrest repair works at the Helicopter Pad, Skellig Michael, Co. Kerry.

## Description of Proposed Works

The proposed works comprise of the following:

- Removal of decommissioned oil tanks and supporting concrete plinths.
- Removal of all associated pipework.
- Removal of concrete pads, levelling and making good of surface.
- Removal of section of wall to provide access to new public toilet block.
- Removal of existing balustrade and replacement with new balustrade.
- Removal of the existing fencing to wall and replacement with new fencing.
- Repair of existing fall arrest system to helicopter pad.
- Repair of existing wall pier.
- Construction of new public toilet block including installation of 4,200 litre capacity composting tank, 2 no. dry toilets, 1 no. dry urinal, 2 no. internal hand sanitising stations and solar panel to roof.

## Items to be included

Please ensure 2 copies of all documentation including the following items are enclosed with your application:

- OS Map showing location of site Rural 1:5000/1:10000 Urban 1:1000
- Method Statement if archaeological excavation required (template attached)

2

- Letter from Local Authority (if applying on behalf of a Local Authority)
- Name and contact details of archaeologist/engineer preparing documents

The completed application form should be submitted to:

The Principal Officer National Monuments Section Department of Housing, Local Government and Heritage Custom House Dublin 1





The Principal Officer, National Monuments Section, Department of Housing, Local Government and Heritage Custom House, Dublin 1

18th January 2021

Request for Ministerial Consent for the construction of public toilets, removal of decommissioned oil tanks, removal and replacement of fencing and helicopter pad fall arrest repair works at the Helicopter Pad, Skellig Michael, Co. Kerry.

Dear Sirs,

With reference to the provisions of section 14 of the National Monuments Act, 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004 I hereby request Ministerial Consent for the construction of public toilets and associated works including removal of section of existing wall, removal of decommissioned oil tanks, removal and replacement of fencing and helicopter pad fall arrest repair works at the Helicopter Pad, Skellig Michael, Co. Kerry.

Please find enclosed the following documents.

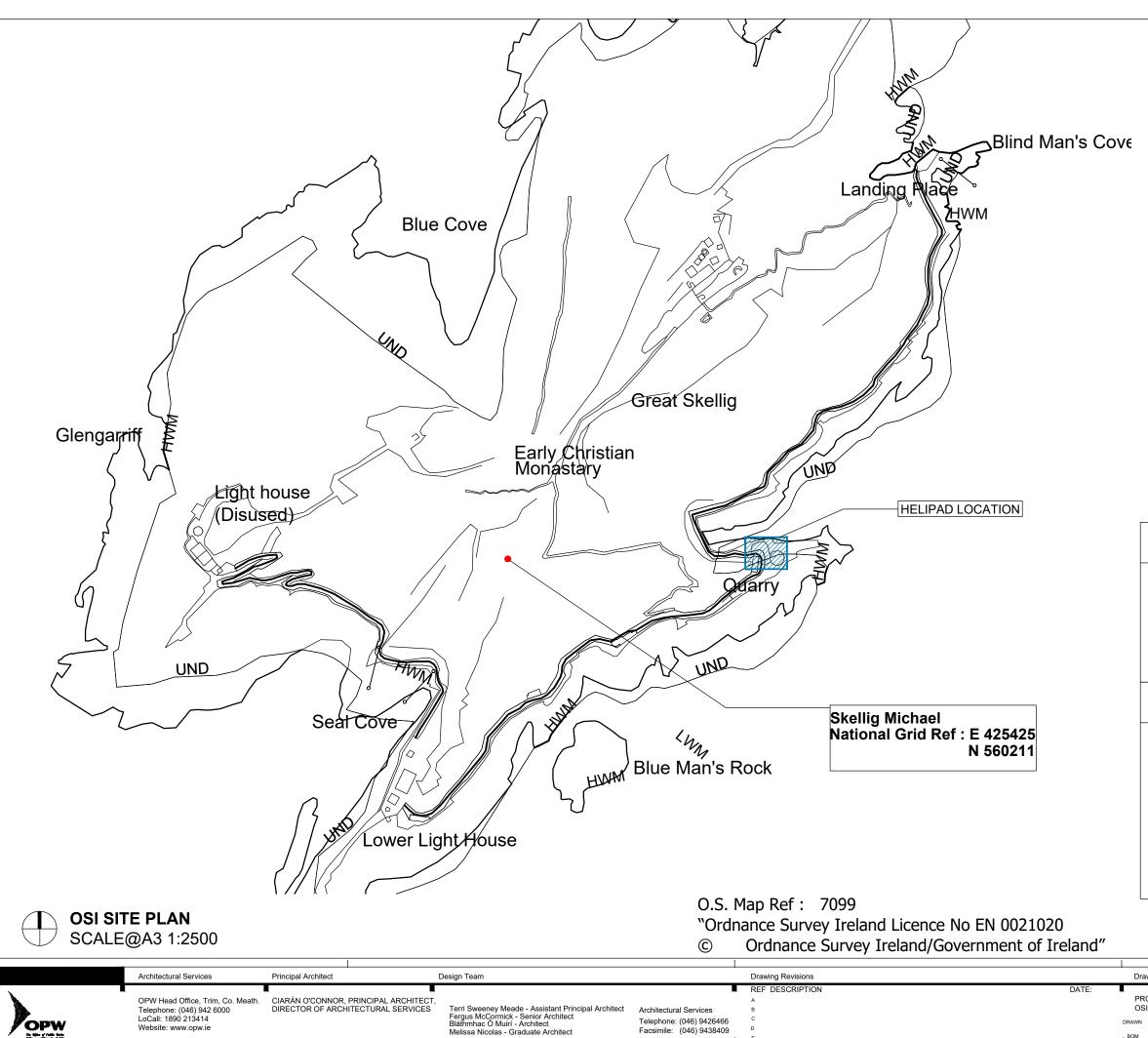
- Completed Checklist for Application for Ministerial Consent dated 18.01.21.
- Completed Consent Application Form dated 18.01.21.
- Drawings and Drawing Issue Sheet.

I am issuing DHLGH with digital copies of the above consent application documents by e-mail today.

If you have any queries in relation to the application please contact me.

Yours sincerely,

Fergus Mc Cormick Senior Conservation Architect Grade 1 Office of Public Works National Monuments Section 52 St Stephen Green, Dublin 2 Phone (01) 647 6675 Mobile 087 1671141



## Legend



Area subject to Consent

## **National Monument Details**

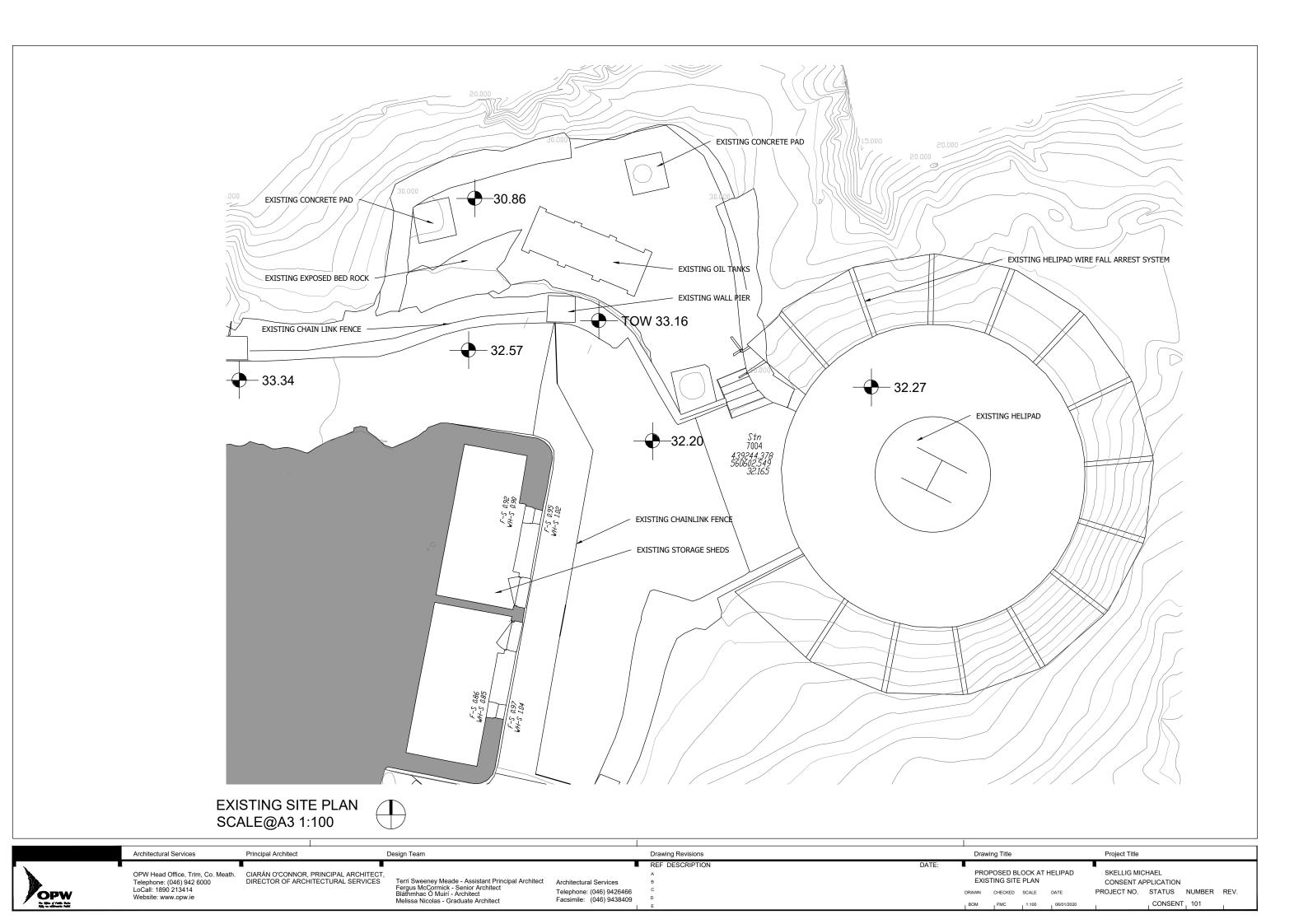
: Skellig Michael Name

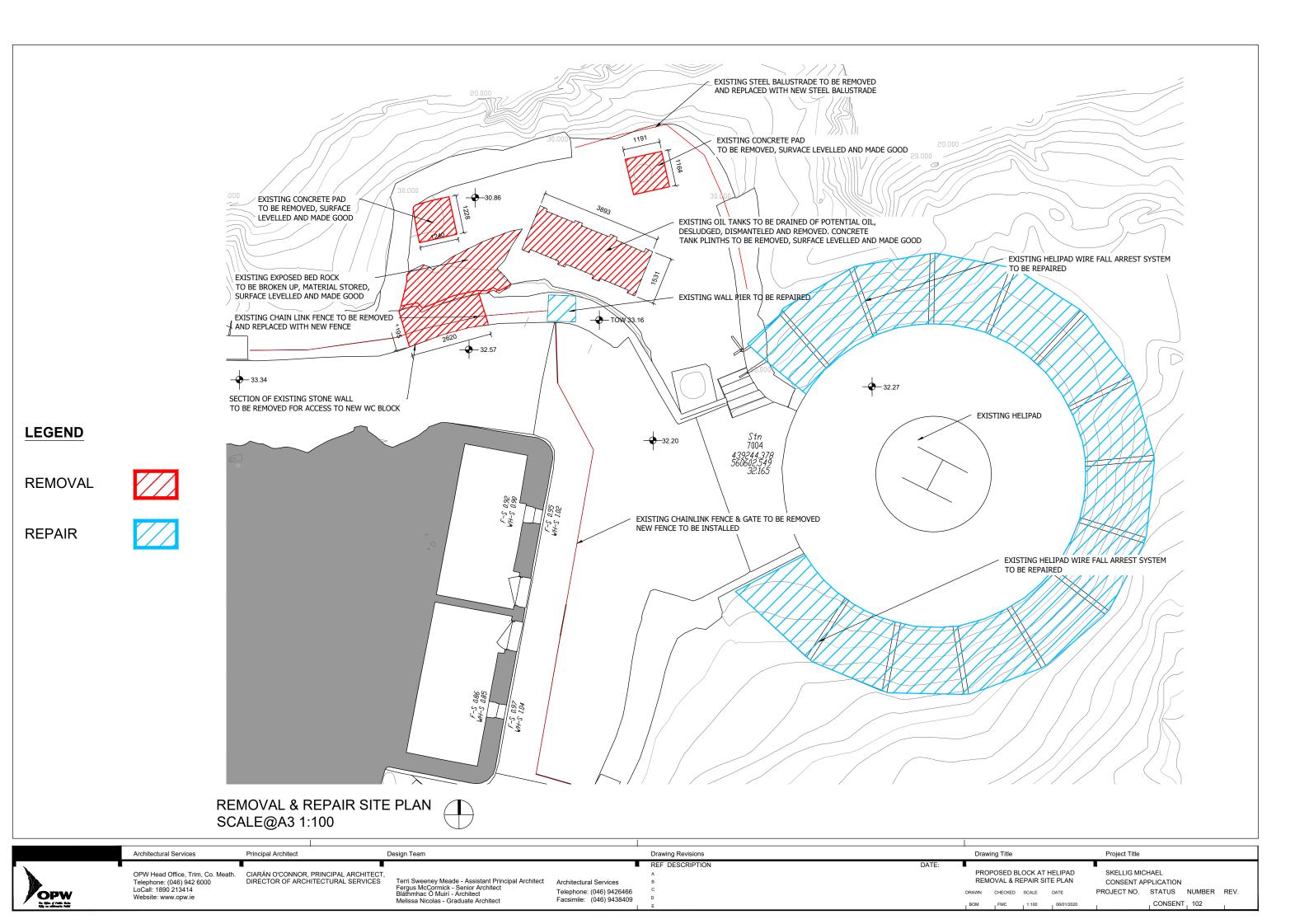
- : Skellig Michael, Address Co. Kerry.
- : KE104A001 RMP No.

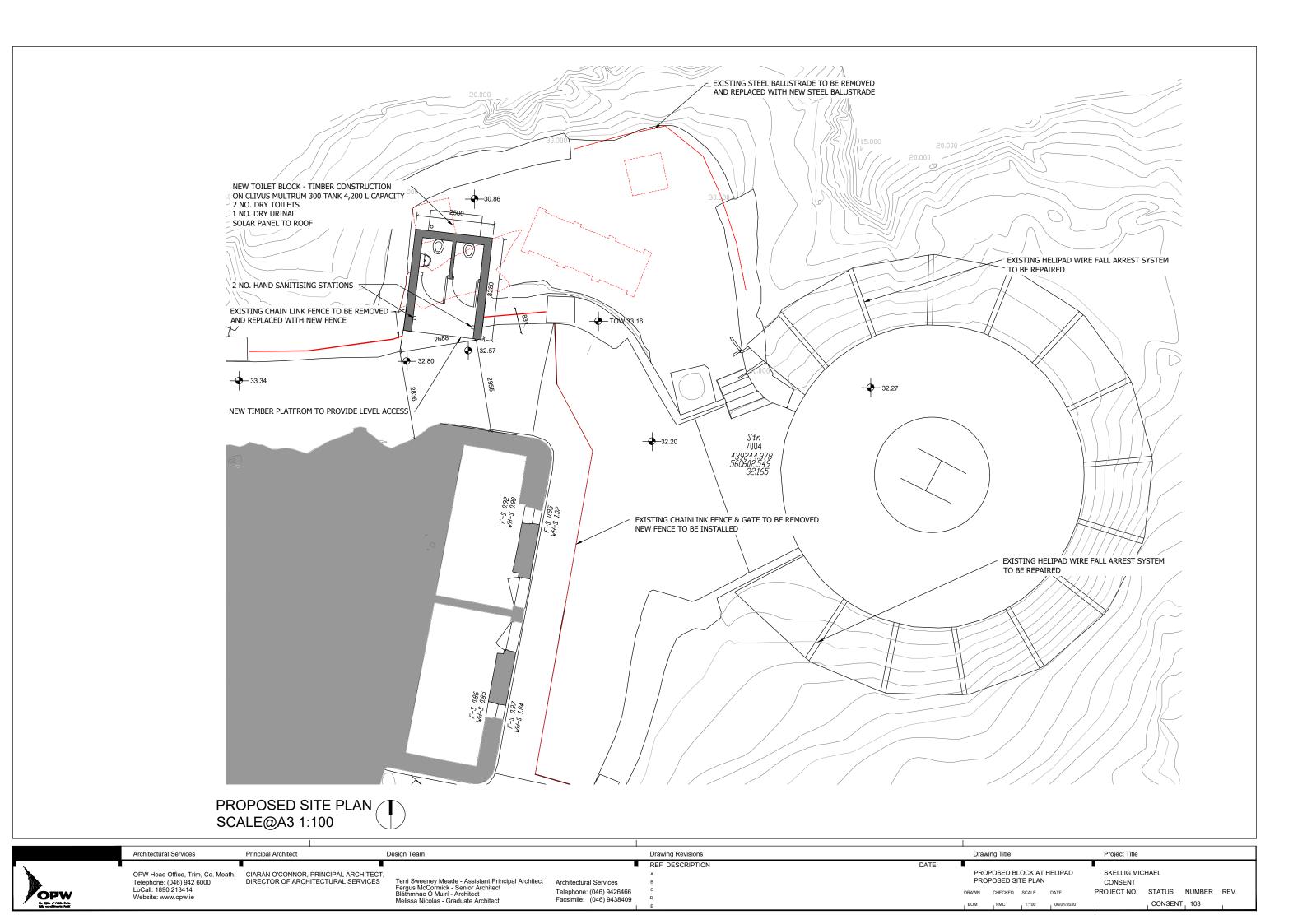
: E 425425, N 560211 Nat. Grid

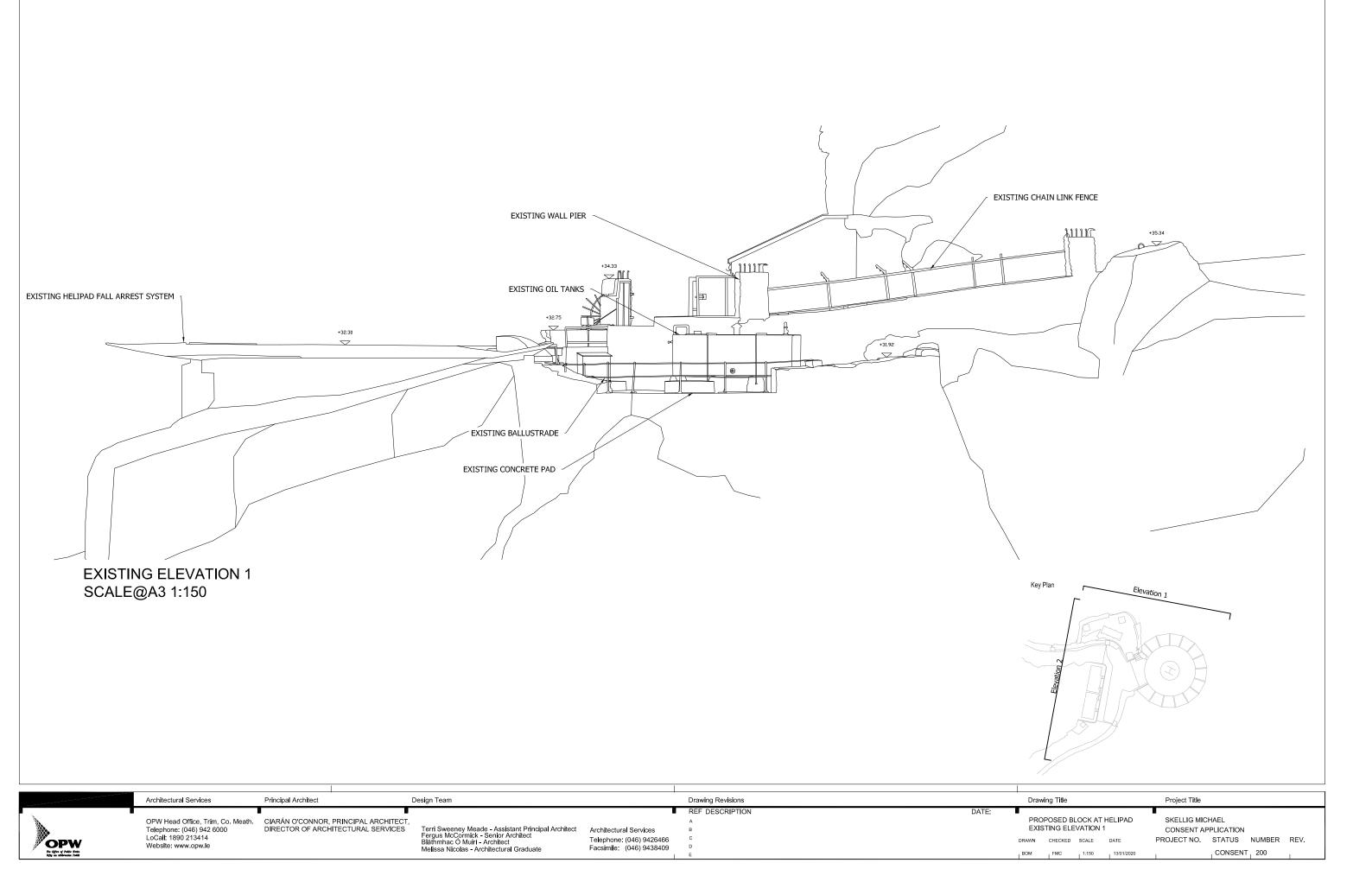
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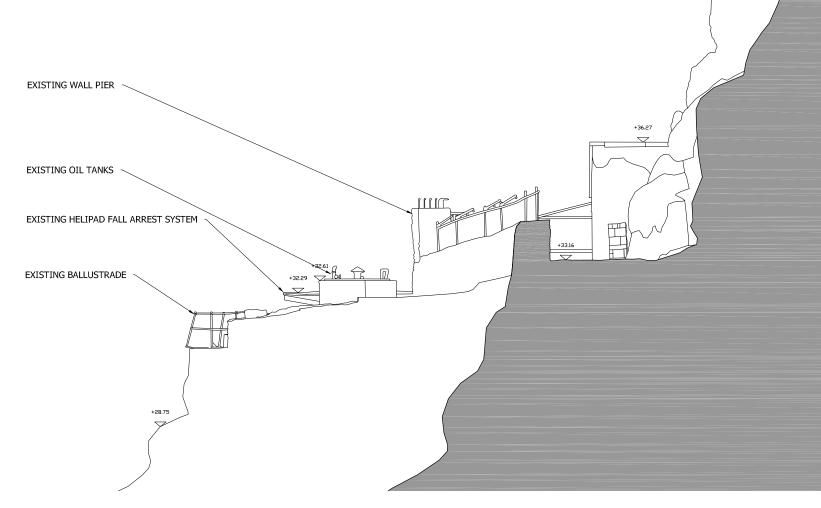
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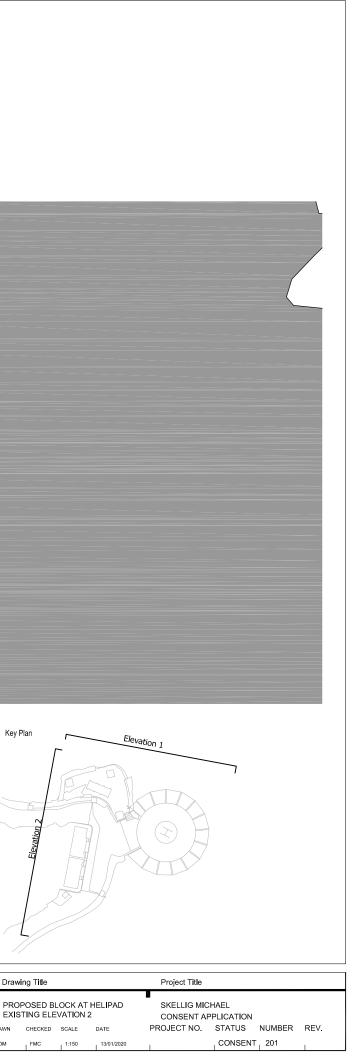


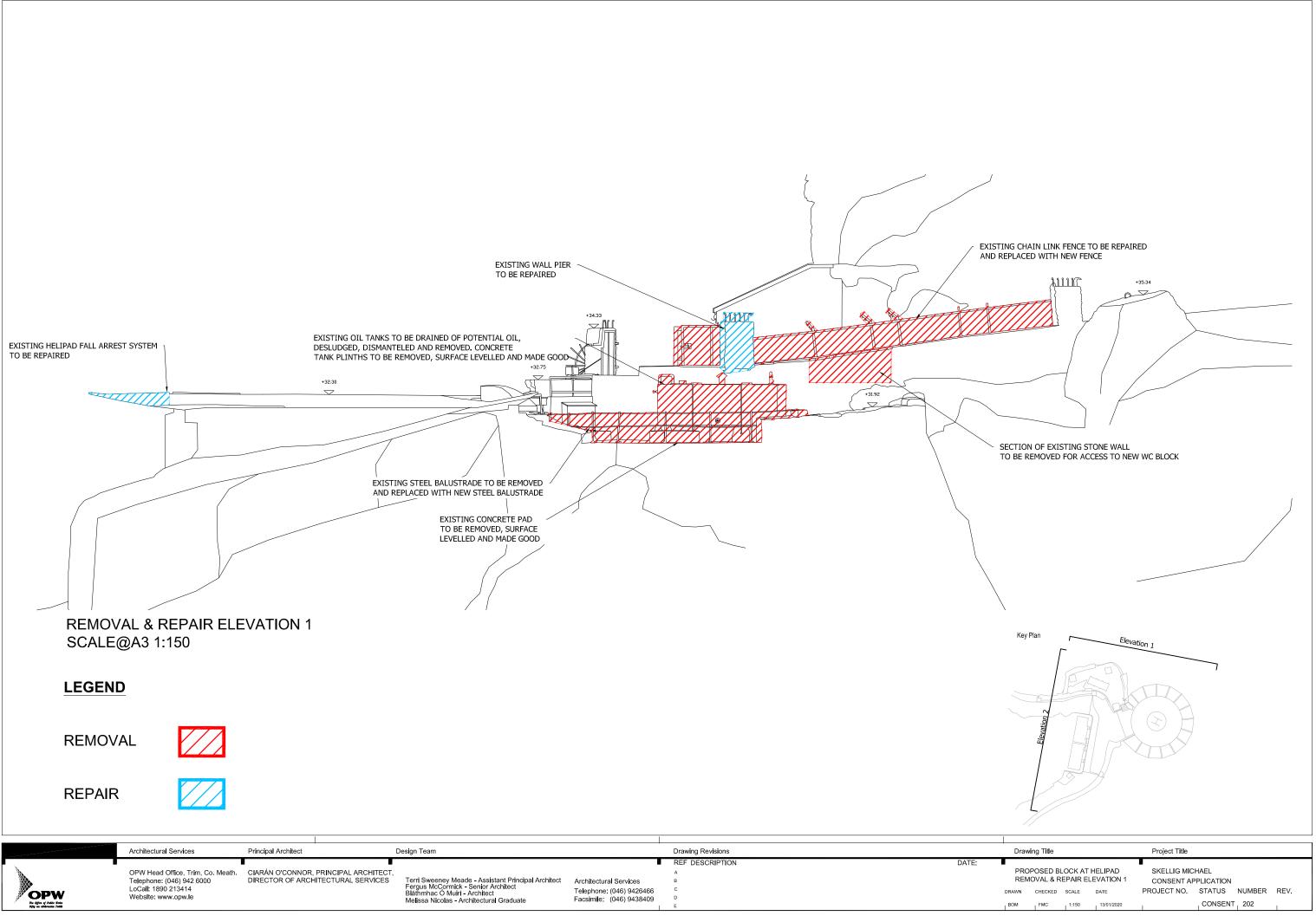




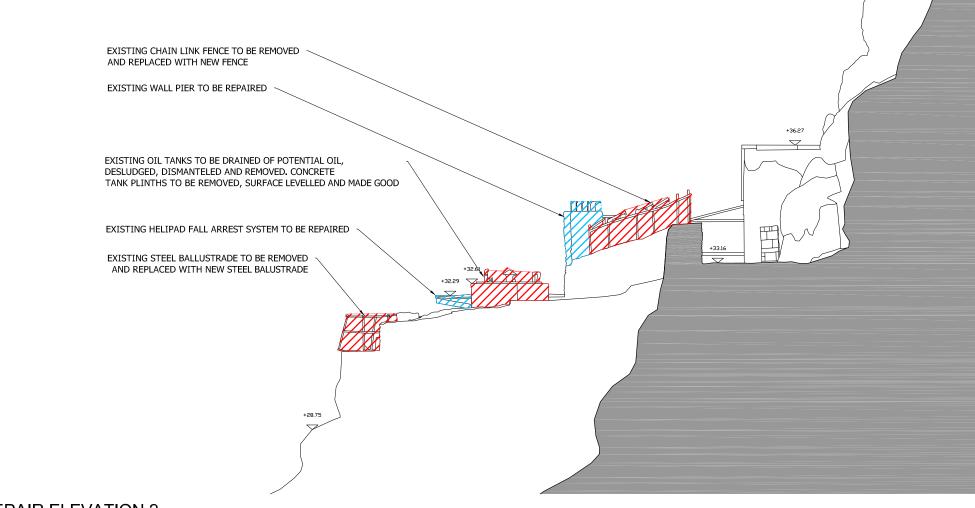
## EXISTING ELEVATION 2 SCALE@A3 1:150

 Architectural Services	Principal Architect	Design Team		Drawing Revisions	 Drav
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Webslte: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	PRO EXI DRAWN





	Architectural Services	Principal Architect	Design Team		Drawing Revisions	Drawing
OPW	OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES	Terri Sweeney Meade - Assistant Principal Architect Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect	Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION a b c p	DATE: PROPO REMOV. Drawn ch
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## REMOVAL & REPAIR ELEVATION 2 SCALE@A3 1:150

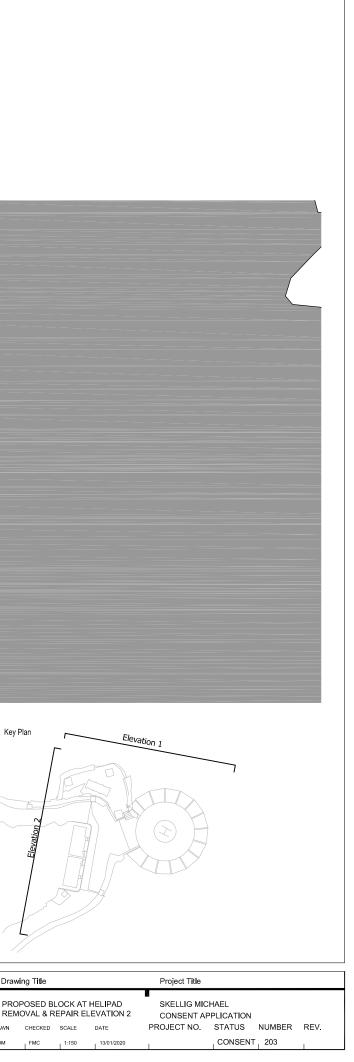
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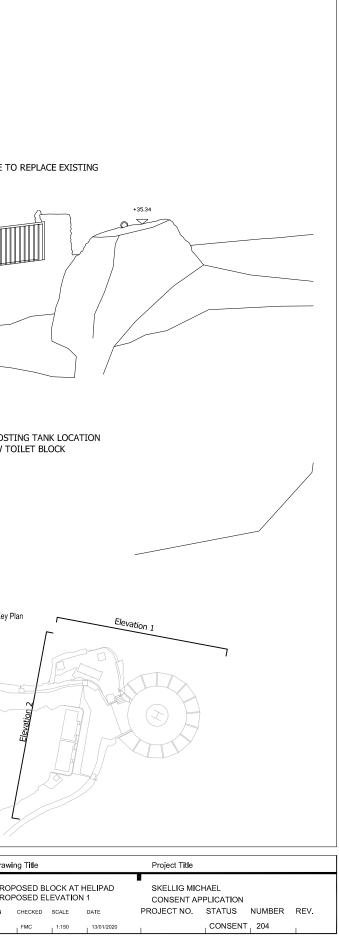


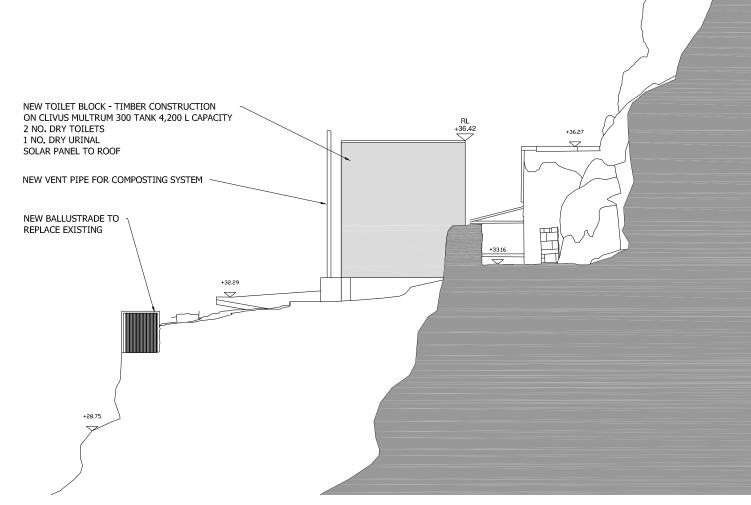
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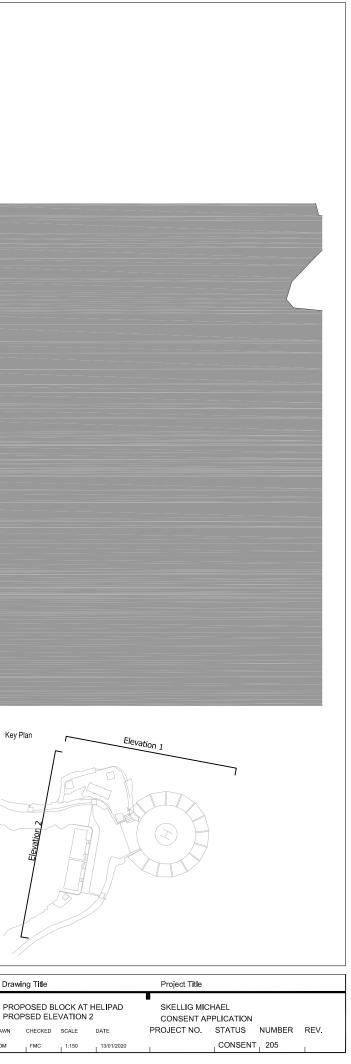
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OPW	LoCall: 1890 213414		Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect	Telephone: (046) 9426466	С		DRAWN
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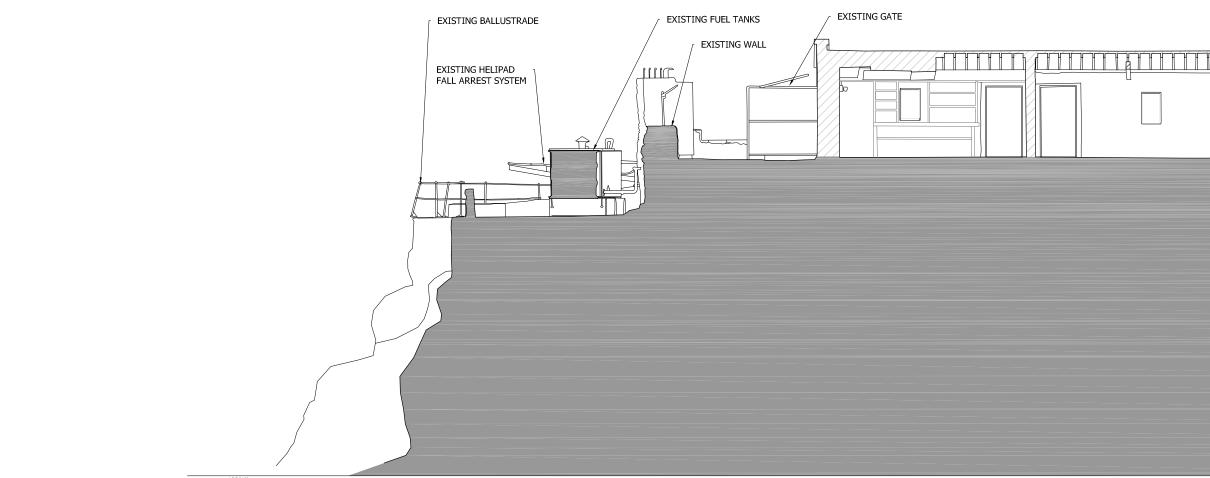




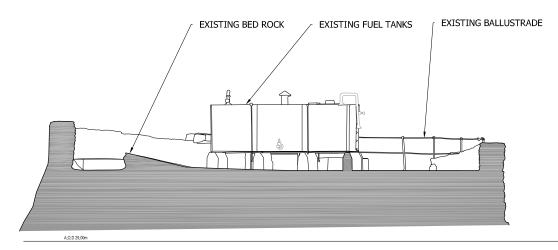
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 Architectural Services	Principal Architect	Design Team		Drawing Revisions		Draw
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	PRO PRO DRAWN





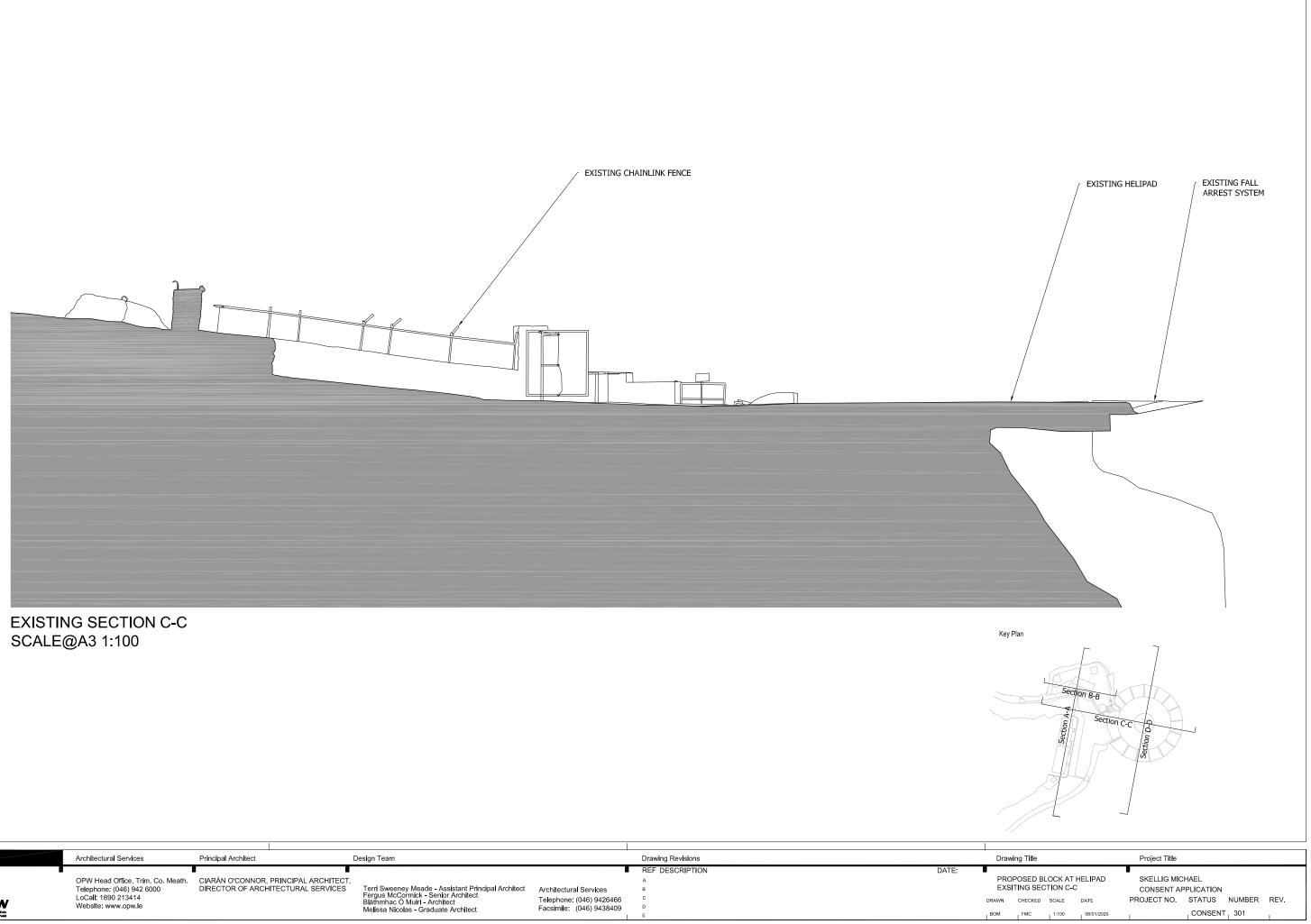
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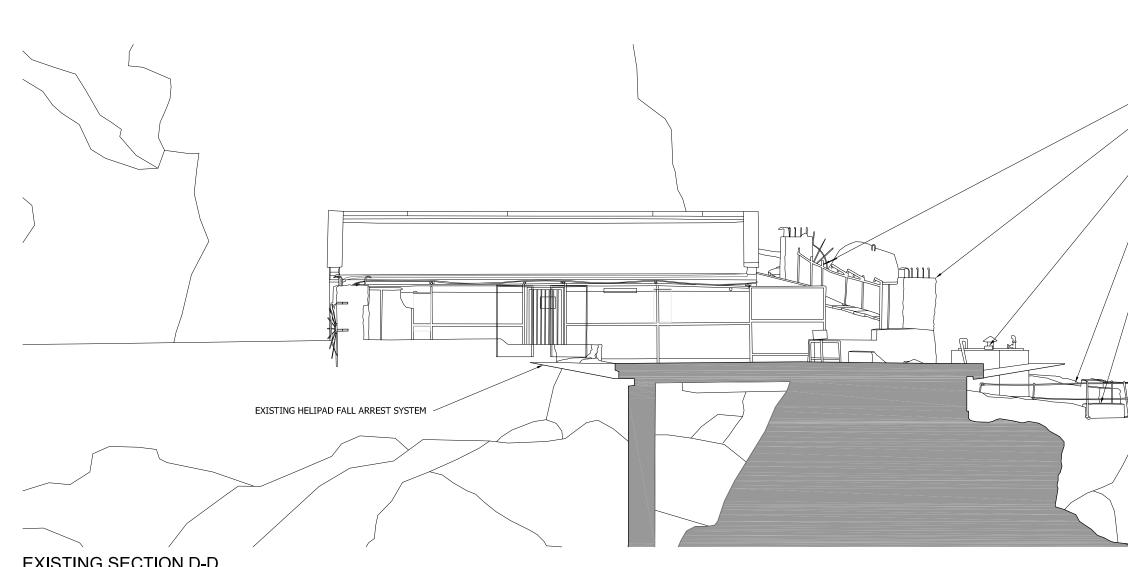
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		Telephone: (046) 942 6000	DIRECTOR OF ARCHITECTURAL SERVICE		Architectural Services	В		EXIST
	<b>OPW</b>	LoCall: 1890 213414		Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect	Telephone: (046) 9426466	C		DRAWN
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OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL DIRECTOR OF ARCHITECTURAL		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE: PROP EXSIT DRAWN



# EXISTING SECTION D-D SCALE@A3 1:100

 Architectural Services	Principal Architect	Design Team		Drawing Revisions		Drawing Title	Project Title
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	PROPOSED BLOCK AT HELIPAD EXISTING SECTION D-D DRAWN CHECKED SCALE DATE BOM FMC 1:100 06/01/2020	SKELLIG MICHAEL CONSENT APPLICATION PROJECT NO. STATUS NUMBER REV.

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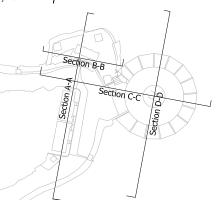
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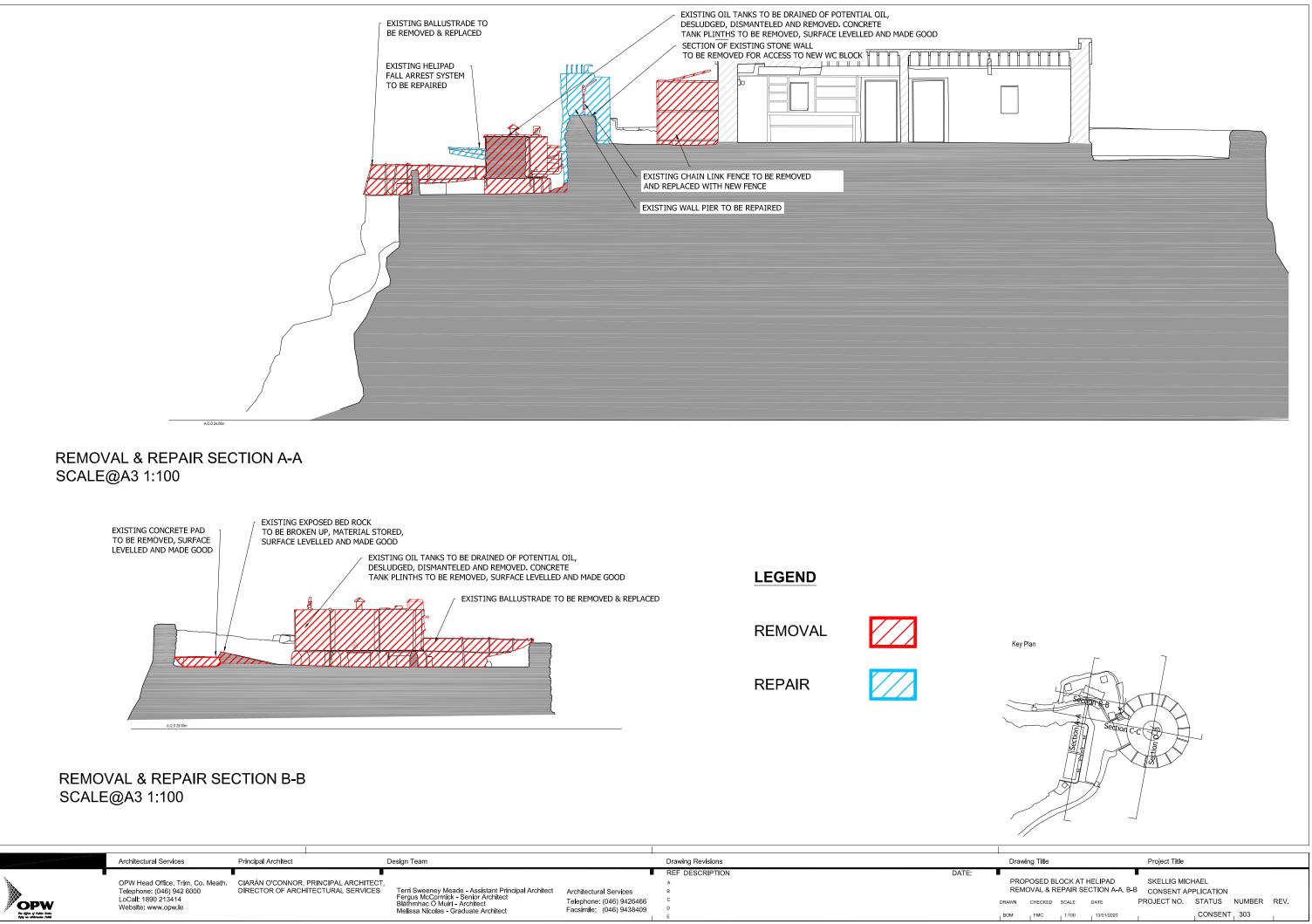
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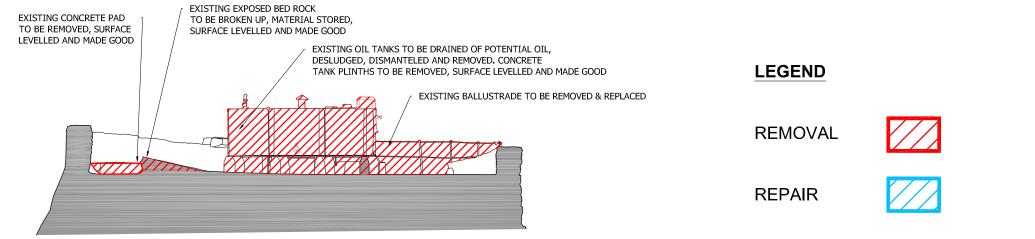
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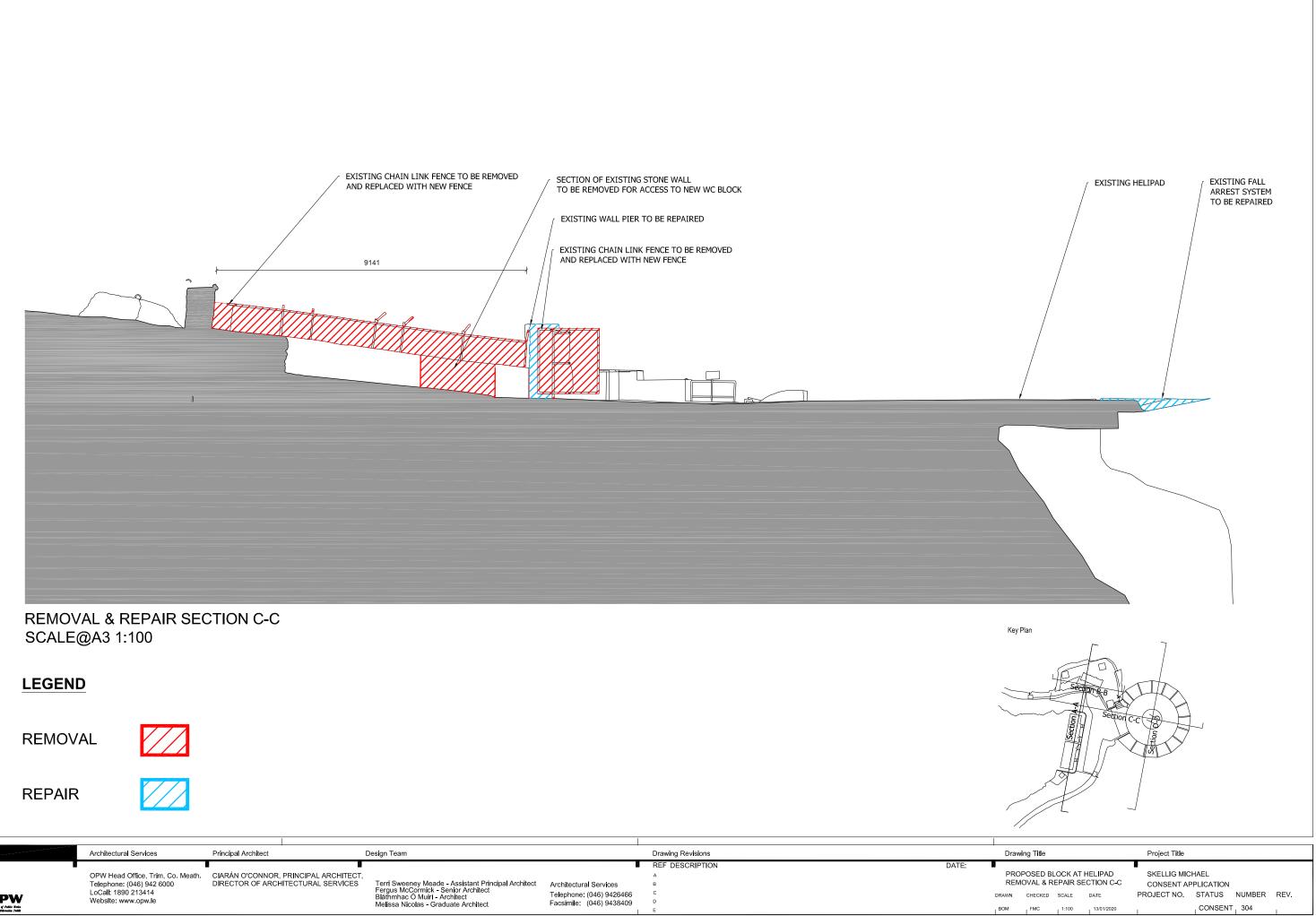
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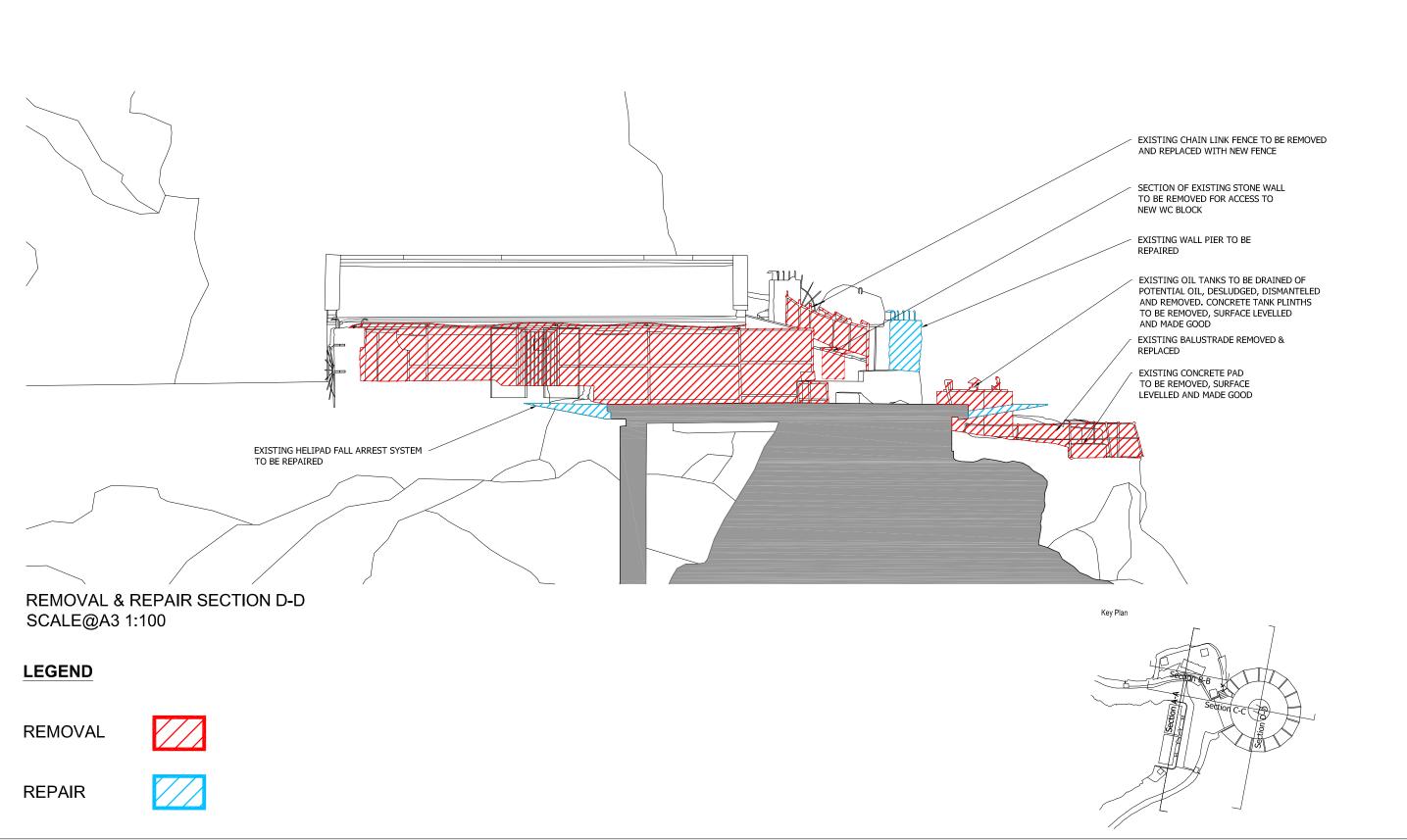




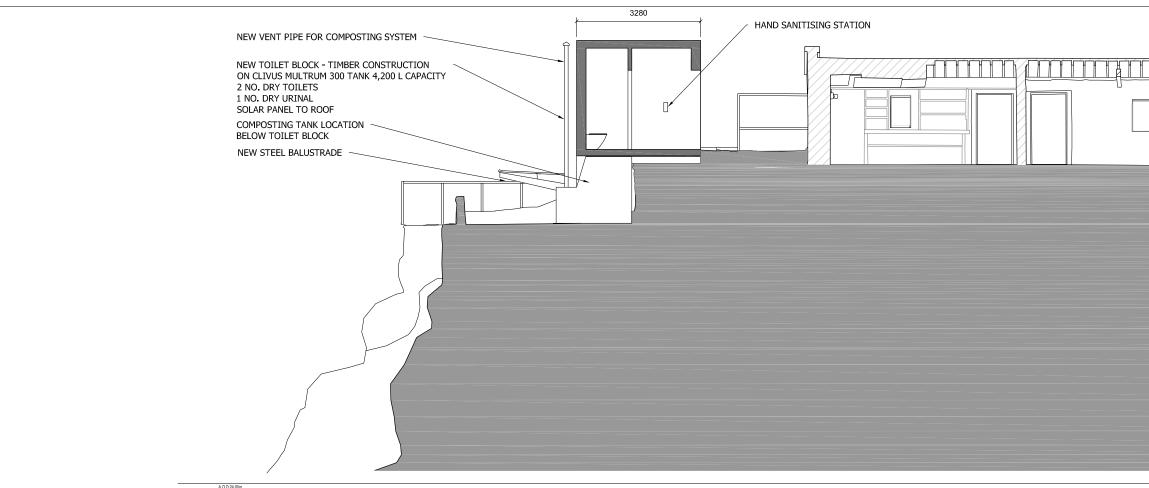
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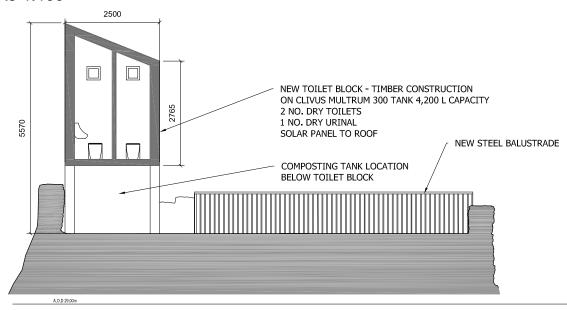
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OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Webslte: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	PROPOREMO REMO DRAWN (



 Architectural Services	Principal Architect	Design Team	ł	Drawing Revisions		Drawing Title	Project Title
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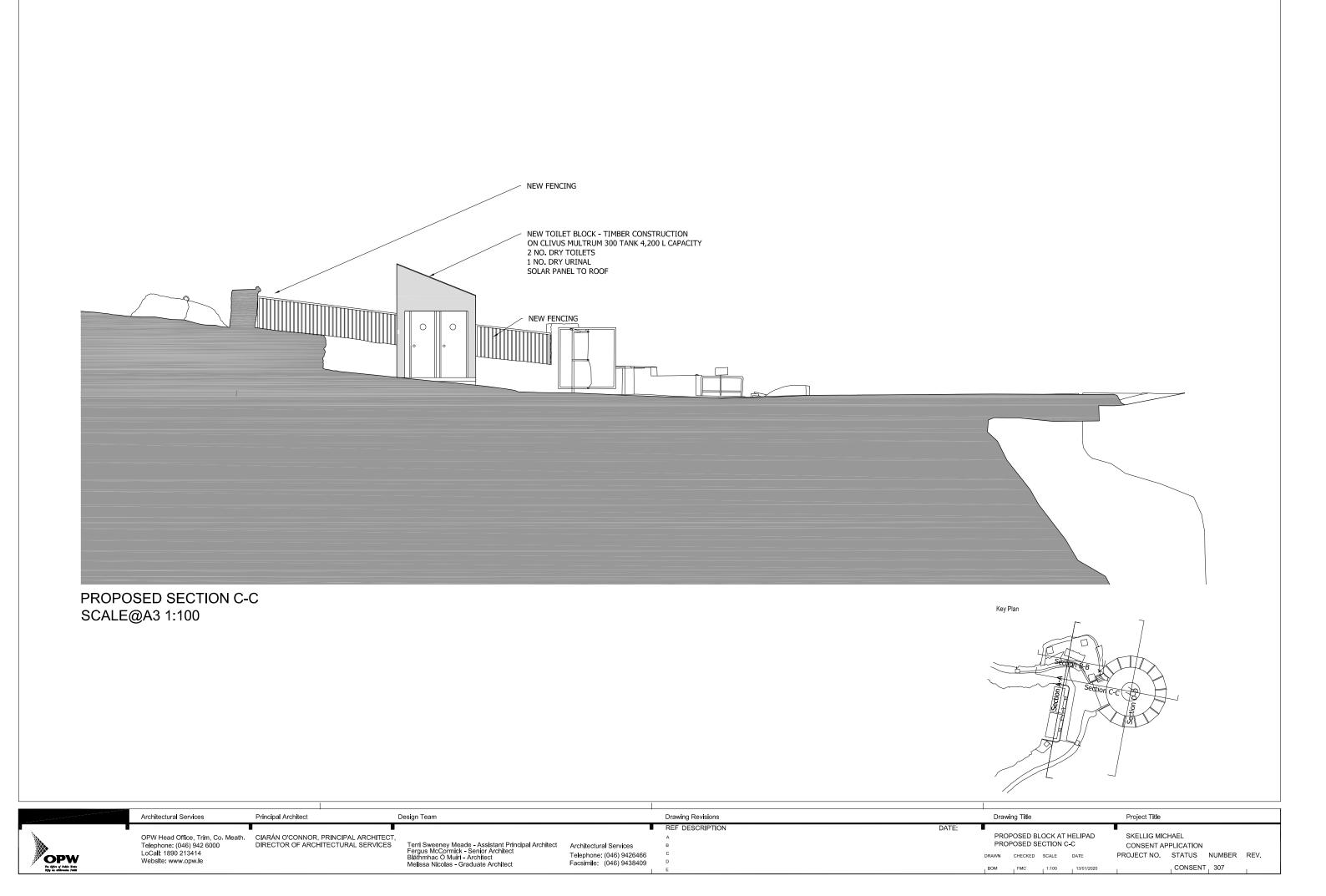
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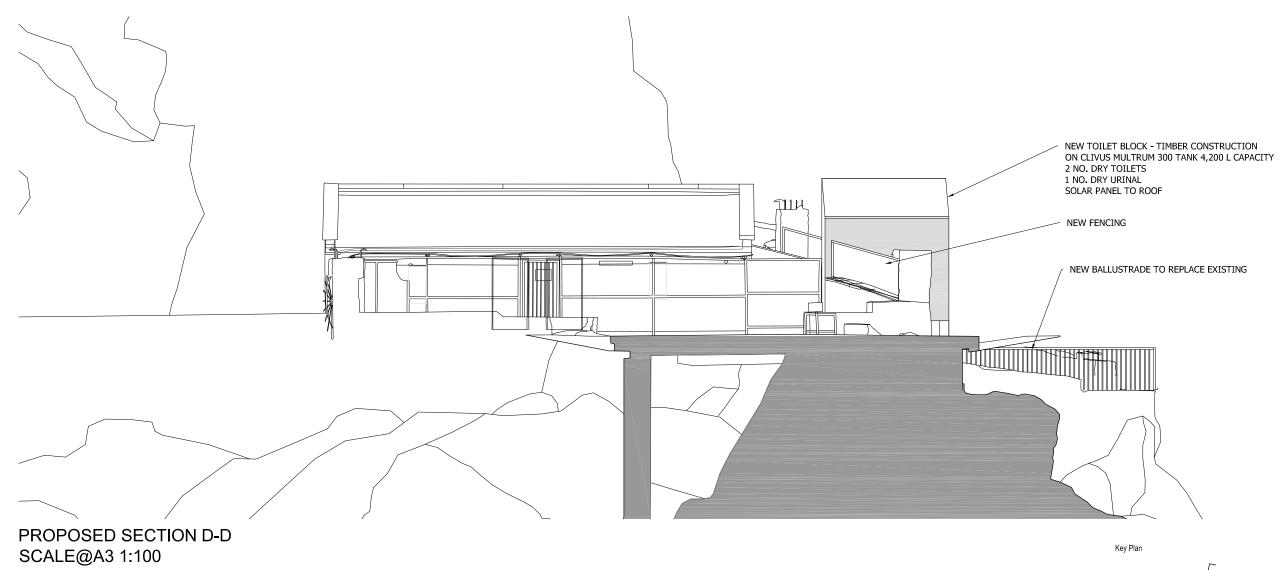


## **PROPOSED SECTION B-B** SCALE@A3 1:100

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OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION  A  B  C  D  C  C  C  C  C  C  C  C  C  C  C	DATE:	PROF PROF DRAWN

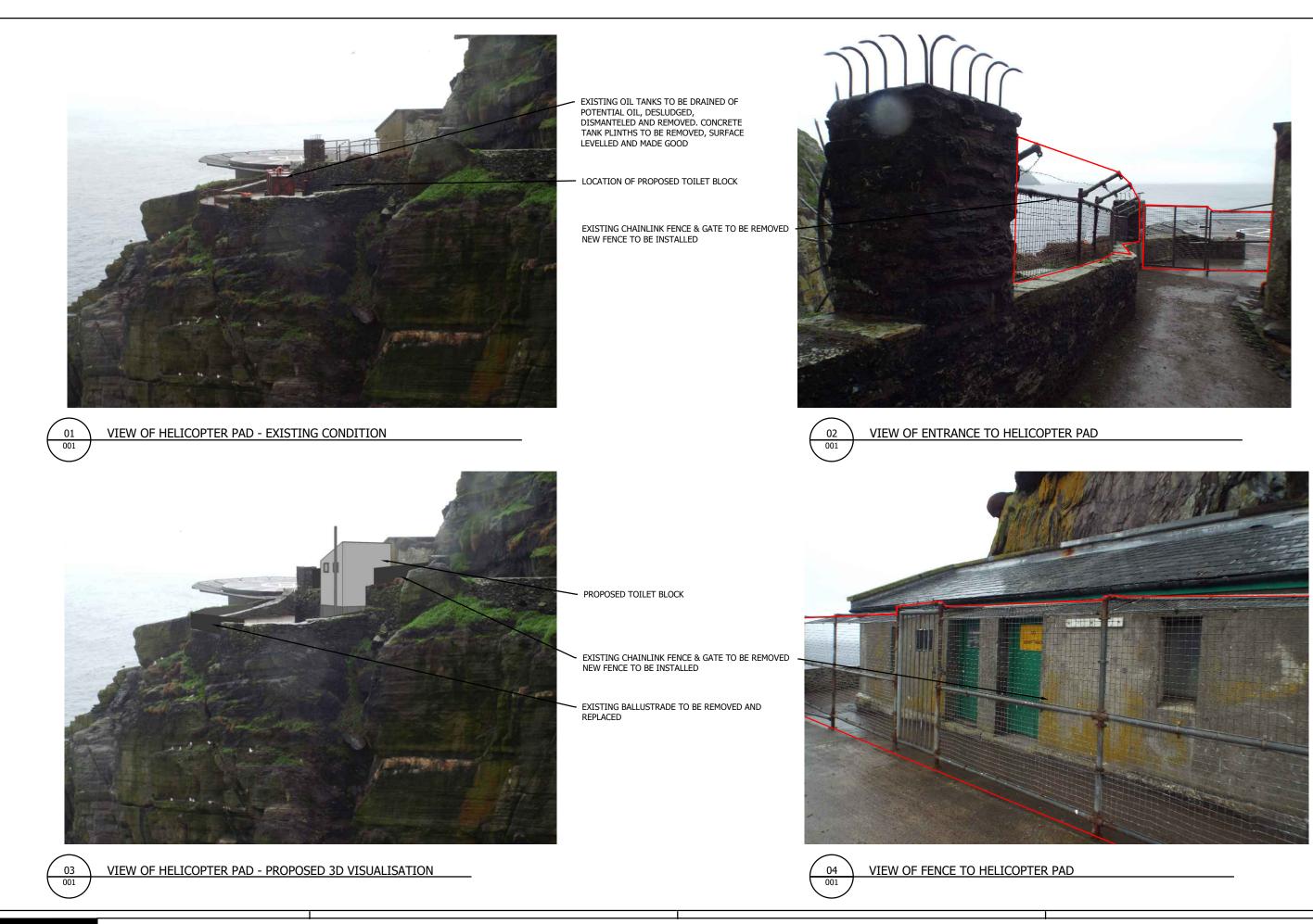






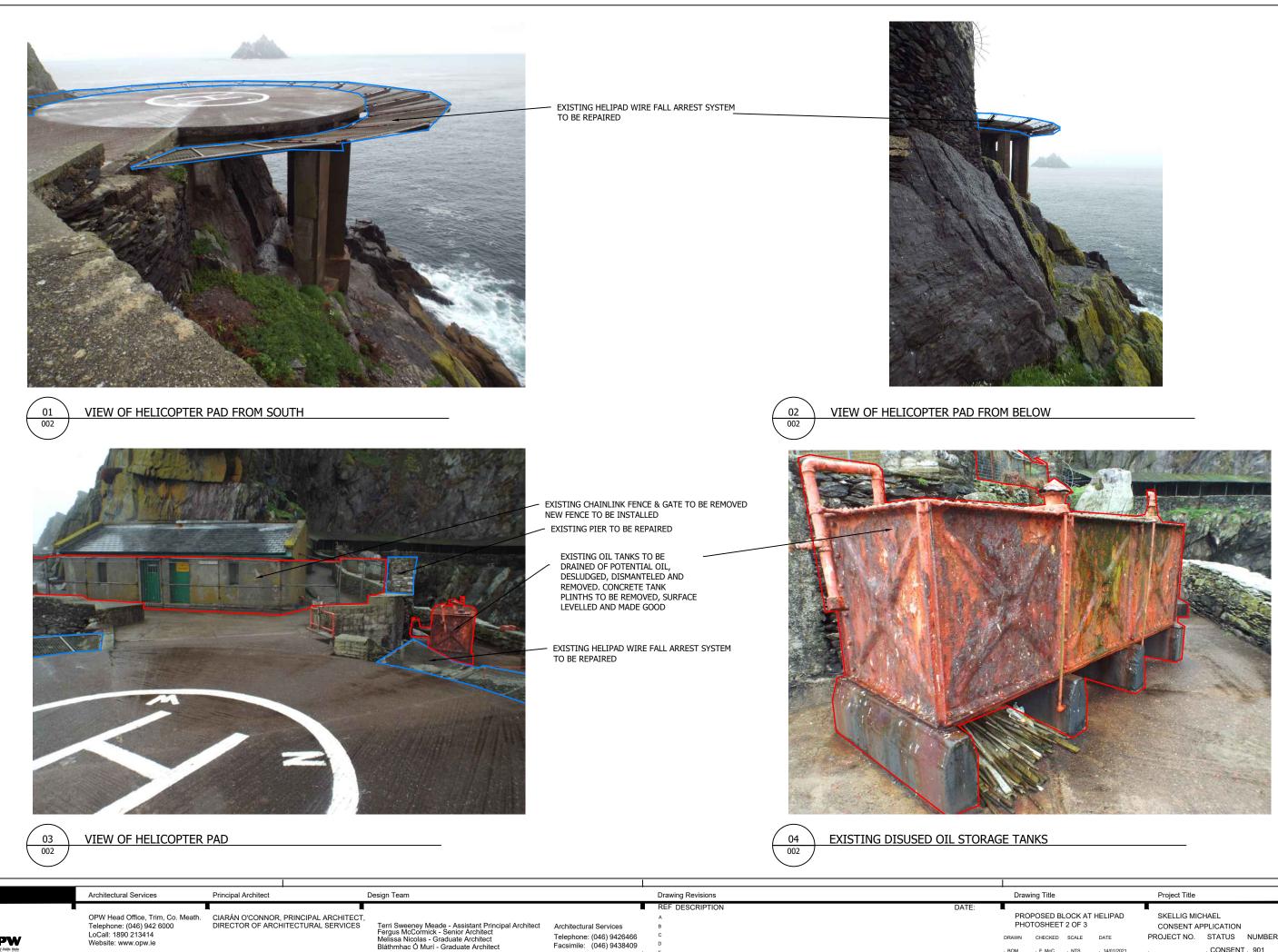
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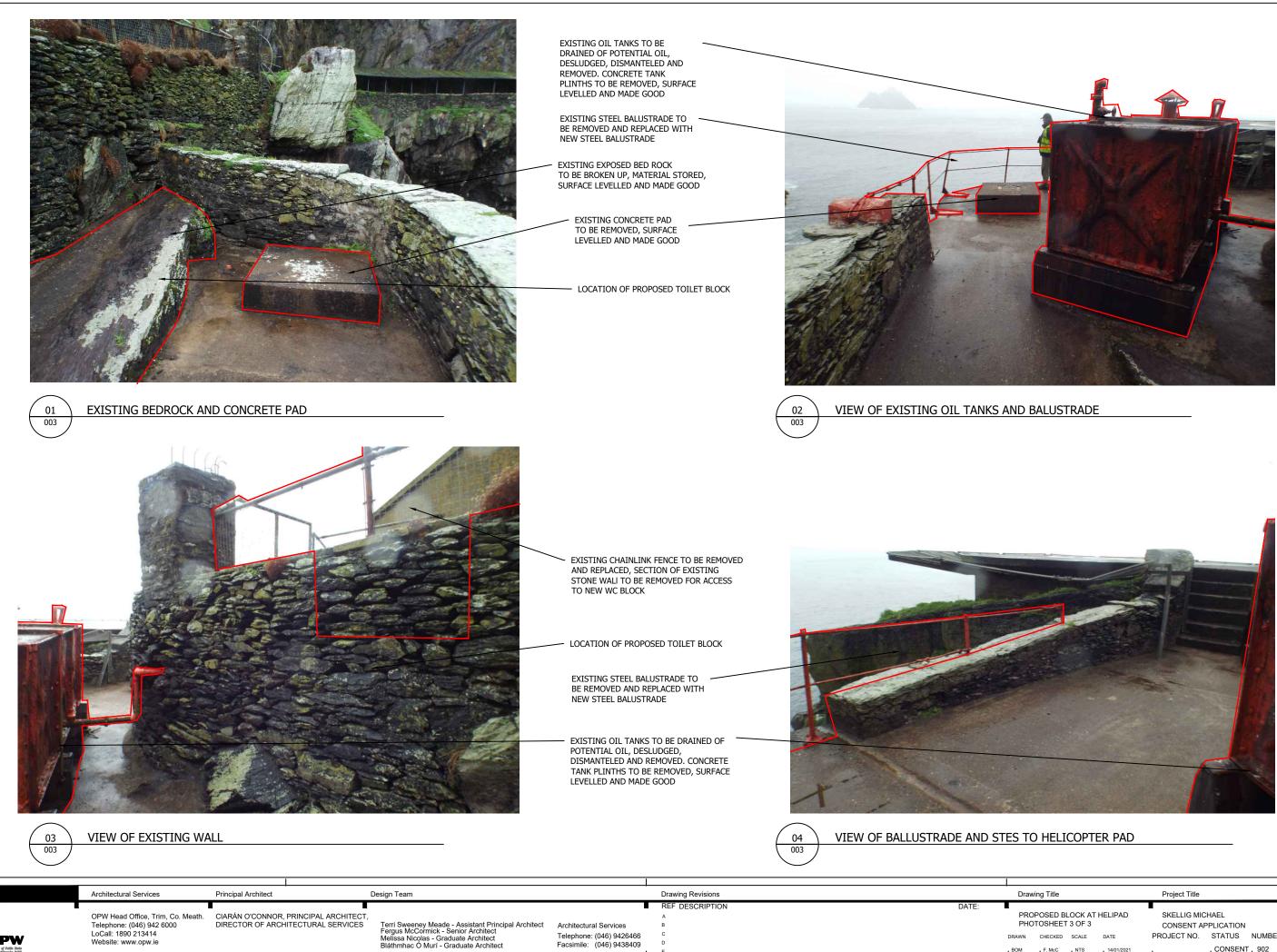
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OPW	LoCall: 1890 213414 Website: www.opw.ie		Fergus McCormick - Senior Architect Bláthmhac Ó Murí - Architect Molicae Nicelae	Telephone: (046) 9426466 Facsimile: (046) 9438409	C D		DRAWN
The Office of Andrew Tester Office an addressed a Table	•		Melissa Nicolas - Graduate Architect	1 acaimic. (0+0) 5450405	E		BOM

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Telephone: (046) 9426466 Facsimile: (046) 9438409

OPW

Website: www.opw.ie

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#### M300

H x D x W = 176 cm x 200 cm x 167 cm

The M300 tank is aimed at public facilities with a larger

number of visitors. The upper and lower parts of the tank can be separated for transport. Individually the parts fit through a standard size door.

Volume :

- 4,200 litres(total) . Max. 2,280 litres compost •
- . Max. 1,120 litres leachate
- Starter bed is ~300 litres .

Capacity :

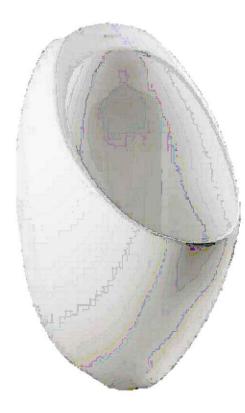
- Max. 25,000 visits per year Fits 2-4 toilet fixtures •
- .

Made of durable black recycled (and recyclable) polyethylene. The walls have a 9 mm thickness.



# CL810 DRY TOILET SOLUTION

# M300 COMPOSTING TANK



#### CL100 & CL101 - Dry Urinal (Ceramic)

H x D x W = 69 cm x 40 cm x 43 cm

Color: White

These wall-mounted waterless / dry urinals are ideal for high traffic public facilities. They have a patented mechanism that ensures an airtight trap to avoid foul odors coming from the pipe into the bathroom.

Made of vitreous china





### CK500 WIND FAN & CK100 WIND COWL

### CL100 DRY URINAL

Architectural Services	Principal Architect	Design Team		Drawing Revisions		Drawing Title	Project Title
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.ie	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	PROPOSED BLOCK AT HELIPAD TECHNICAL DATA DRAWN CHECKED SCALE DATE BOM F. McC NTS 15/01/2021	SKELLIG MICHAEL CONSENT APPLICATION PROJECT NO. STATUS NUMBER REV.

#### CL810 - Dry Toilet (Stainless Steel)

H x D x W = 39 cm x 50 cm x 34 cm

This waterless / dry toilet fixture is mounted right above the composting tank. It connects to a 250 mm discharge pipe.

Ideal for public places susceptible to vandalism. Extra strong, easy to clean. Made entirely of stainless steel.

#### CK500 – Wind Powered Fan

This fan uses wind power to ventilate.

The efficient design allows the fan to work at low wind speeds and it is not dependent on the wind's direction.

The fan is made of aluminium and painted black. Capacity: 300 - 1300 m3/h depending on wind speed.

Available for 110mm, 125mm and 160mm pipe.

#### CK100 - Wind Cowl

Wind cowl to top of ventillation pipe.

# Appendix 3b

OPW Ministerial Consent Application Documents – Repair of Gate Piers at Upper Lighthouse





Form NMS 5A - 06

# **Check List for Application for Ministerial Consent**

Section 14 of the National Monuments Act 1930 (as amended)

Name of Site:	Upper Lighthouse, Skellig Michael, Co. Kerry					
Applicant:	Fergus McCormick Senior Architect OPW					
On behalf of:	Office of Public Works No.52 St Stephens Green Dublin 2					
Description of Works:	The repair and repointing of inner gate pier and section of road wall and stone by stone dismantling and rebuilding of outer gate pier, at the Upper Lighthouse, Skellig Michael, Co. Kerry.					
Status of Monument:	State Ownership/Guardianship; Preservation Order; Local Authority Ownership/Guardianship					
County:	Kerry					
Townland:	Skellig Michael					
National Grid Easting: Use GPS to derive the six figure co-ord National Grid Northing: Use GPS to derive the six figure co-ord	560596					
RMP Number:	KE104A001					
Signed: Fergus Mc Cormick Senior Architect Date: 22/01/2021						
For office use only:						
Application Received:/	//					
Response Issued:/	//					





The Principal Officer, National Monuments Section, Department of Housing, Local Government and Heritage Custom House, Dublin 1

22<sup>nd</sup> January 2021

# Request for Ministerial Consent for the repair of Gate Piers at the Upper Lighthouse, Skellig Michael, Co. Kerry.

Dear Sirs,

With reference to the provisions of section 14 of the National Monuments Act, 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004 I hereby request Ministerial Consent for the repair of Gate Piers at the Upper Lighthouse, Skellig Michael, Co. Kerry.

Please find enclosed the following documents.

- Completed Checklist for Application for Ministerial Consent dated 22.01.21.
- Completed Consent Application Form dated 22.01.21.
- Drawings and Drawing Issue Sheet.

I am issuing DHLGH with digital copies of the above consent application documents by e-mail today.

If you have any queries in relation to the application please contact me.

Yours sincerely,

Fergus Mc Cormick Senior Conservation Architect Grade 1 Office of Public Works National Monuments Section 52 St Stephen Green, Dublin 2 Phone (01) 647 6675 Mobile 087 1671141



**FORM NMS 5 – 06** 

#### **APPLICATION FOR CONSENT**

#### Section 14 of the National Monuments Act 1930 (as amended)

### **Applicant**

Name	Fergus Mc Cormick Senior Conservation Architect OPW					
Address:	Office of Public Works					
	No.52 St Stephens Green					
	Dublin 2					
Telephone	01647 6675 0871671141 Email Fergus.mccormick@opw.ie					
Director of Services /Authorised Officer:	Terri Sweeney Meade, Assistant Principal Architect, OPW					

### **National Monument**

RMP No.:	KE104A001
Name of Monument:	Upper Lighthouse, Skellig Michael
Location: (Townland/County)	Skellig Michael, Co. Kerry
National Grid Reference:	E 424482, N 560596

### **Owner Details**

(Complete as appropr	iate)		
Local Authority			
Name	Not Applicable		
Address:			
Telephone		Email _	
Director of Services /Authorised Officer:			
Private Owner			
Name	Not Applicable		
Address:			

Telephone	Email	

### <u>Works</u>

### Purpose of Proposed Works

OPW is applying Ministerial Consent for the repair and repointing of inner gate pier and section of road wall and stone by stone dismantling and rebuilding of outer gate pier at the Upper Lighthouse, Skellig Michael, Co. Kerry.

#### Description of Proposed Works

The proposed works comprise of the following:

- Repair and repointing with lime mortar of inner gate pier.
- Dismantling of outer pier, stones numbered and recorded, pier to be rebuilt as before using existing numbered and reusable stones and lime mortar.
- Repair and repointing of Lighthouse Road wall adjacent to outer pier.

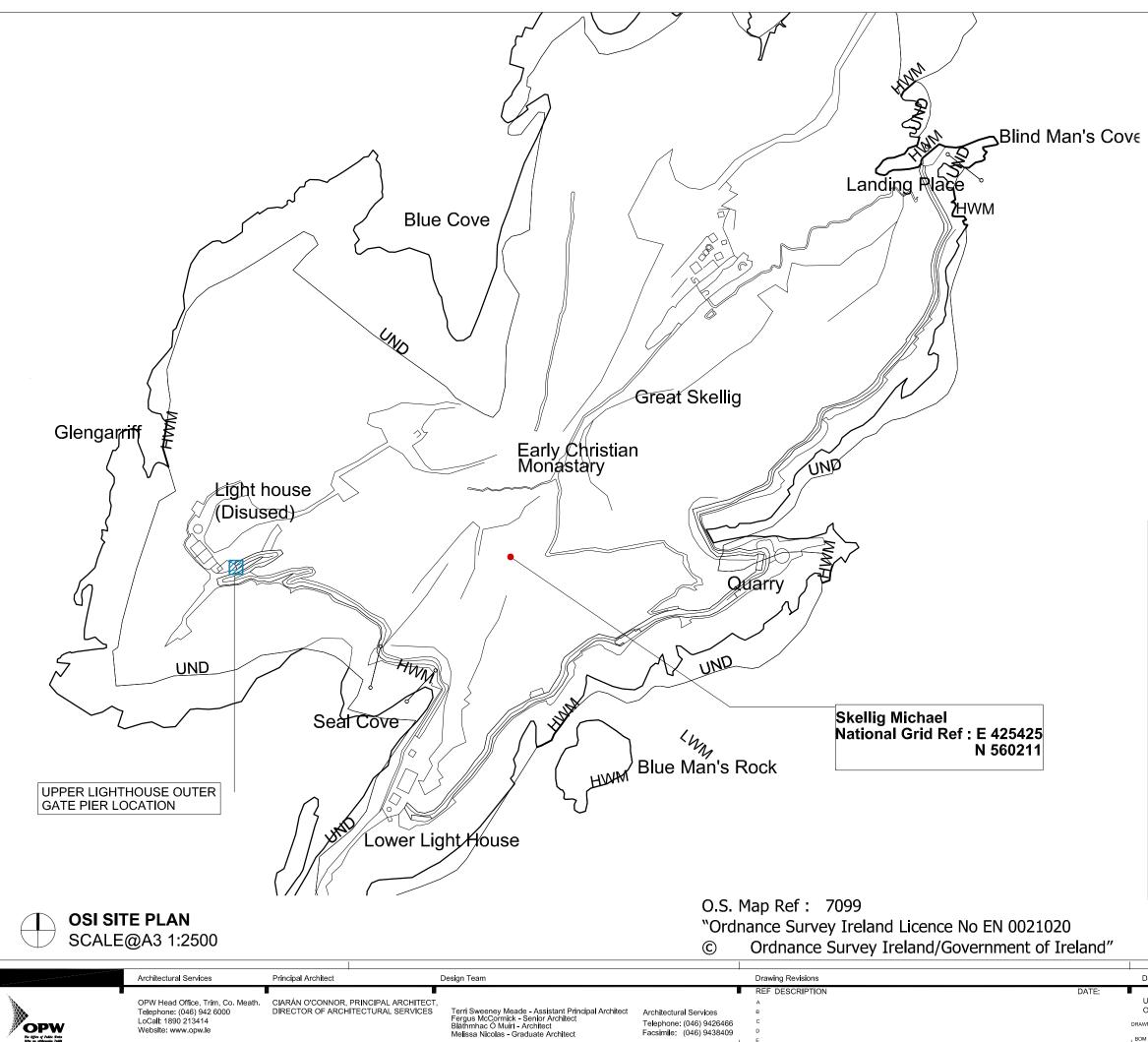
### Items to be included

Please ensure 2 copies of all documentation including the following items are enclosed with your application:

- OS Map showing location of site Rural 1:5000/1:10000 Urban 1:1000
- Method Statement if archaeological excavation required (template attached)
- Letter from Local Authority (if applying on behalf of a Local Authority)
- Name and contact details of archaeologist/engineer preparing documents

#### The completed application form should be submitted to:

The Principal Officer National Monuments Section Department of Housing, Local Government and Heritage Custom House Dublin 1



Website: www.opw.le

# Legend



Area subject to Consent

# National Monument Details

Name

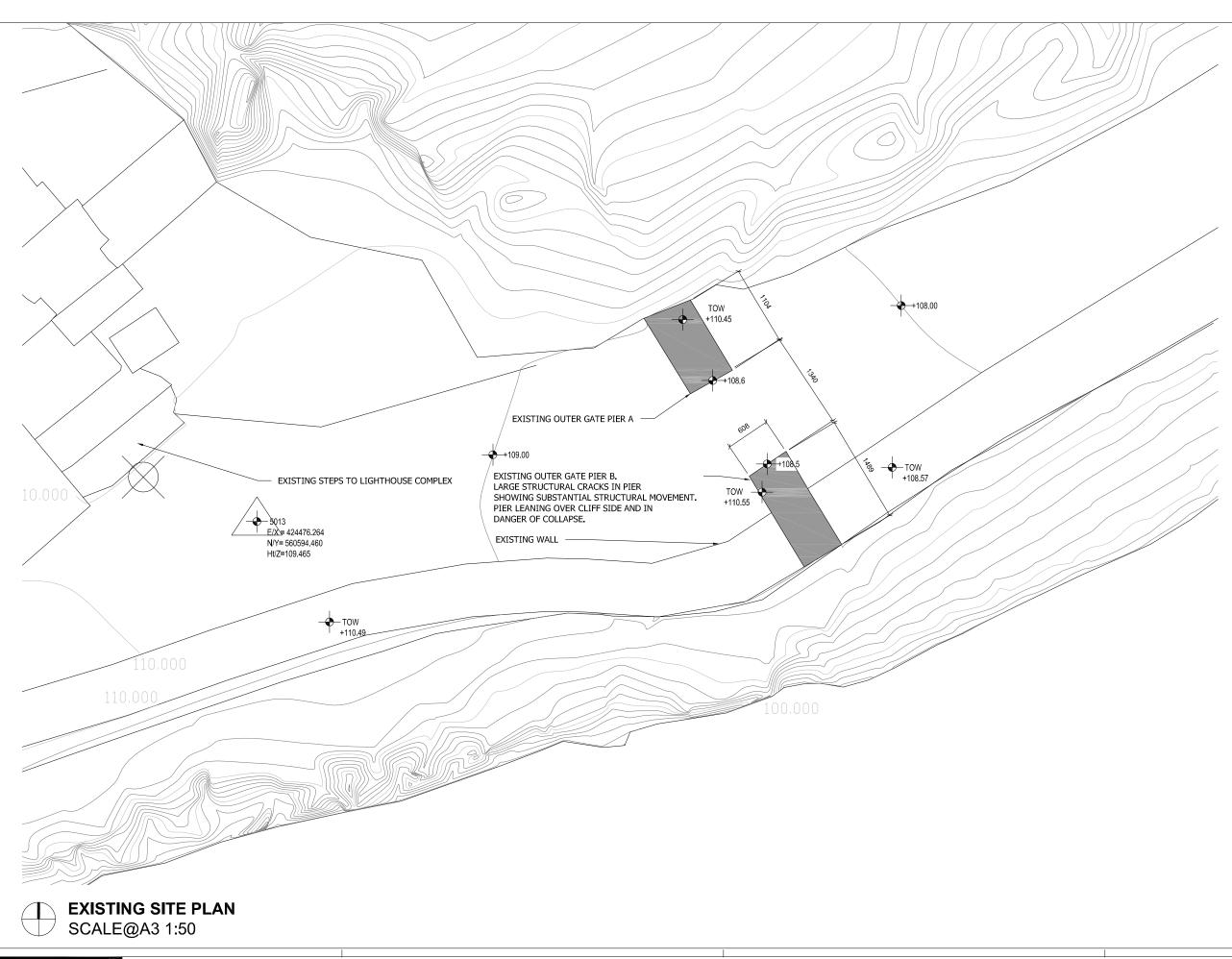
- : Skellig Michael
- : Skellig Michael, Address Co. Kerry.
- RMP No. : KE104A001

Nat. Grid Ref.

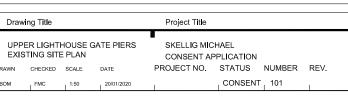
BOM

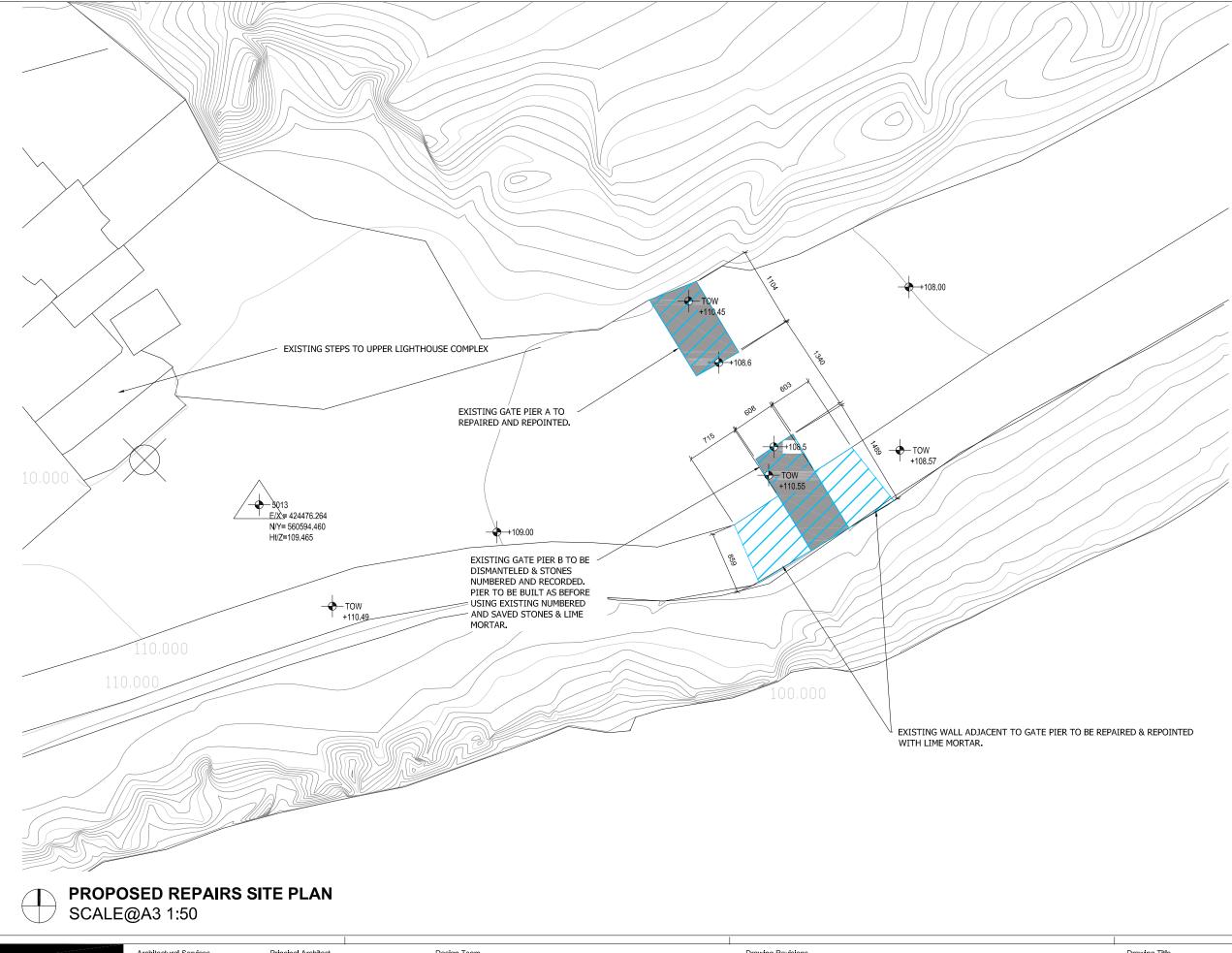
: E 425425, N 560211

rawir	ıg Title			Project Title				
PPER LIGHTHOUSE GATE PIERS SI SITE PLAN			TE PIERS	SKELLIG MICH CONSENT APP				
4	CHECKED	SCALE	DATE	PROJECT NO.	STATUS	NUMBER	REV.	
	FMC	1:2500	18/01/2020	I	CONSENT	100	1	



	Architectural Services	Principal Architect	Design Team		Drawing Revisions		Dra
OPW	OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.oow.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT DIRECTOR OF ARCHITECTURAL SERVICES	Terri Sweeney Meade - Assistant Principal Architect Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect	Architectural Services Telephone: (046) 9426466	REF DESCRIPTION A B C	DATE:	UF EX DRAWN
The Office of Public Storks Office as molecular Public			Melissa Nicolas - Graduate Architect	Facsimile: (046) 9438409	E		BOM



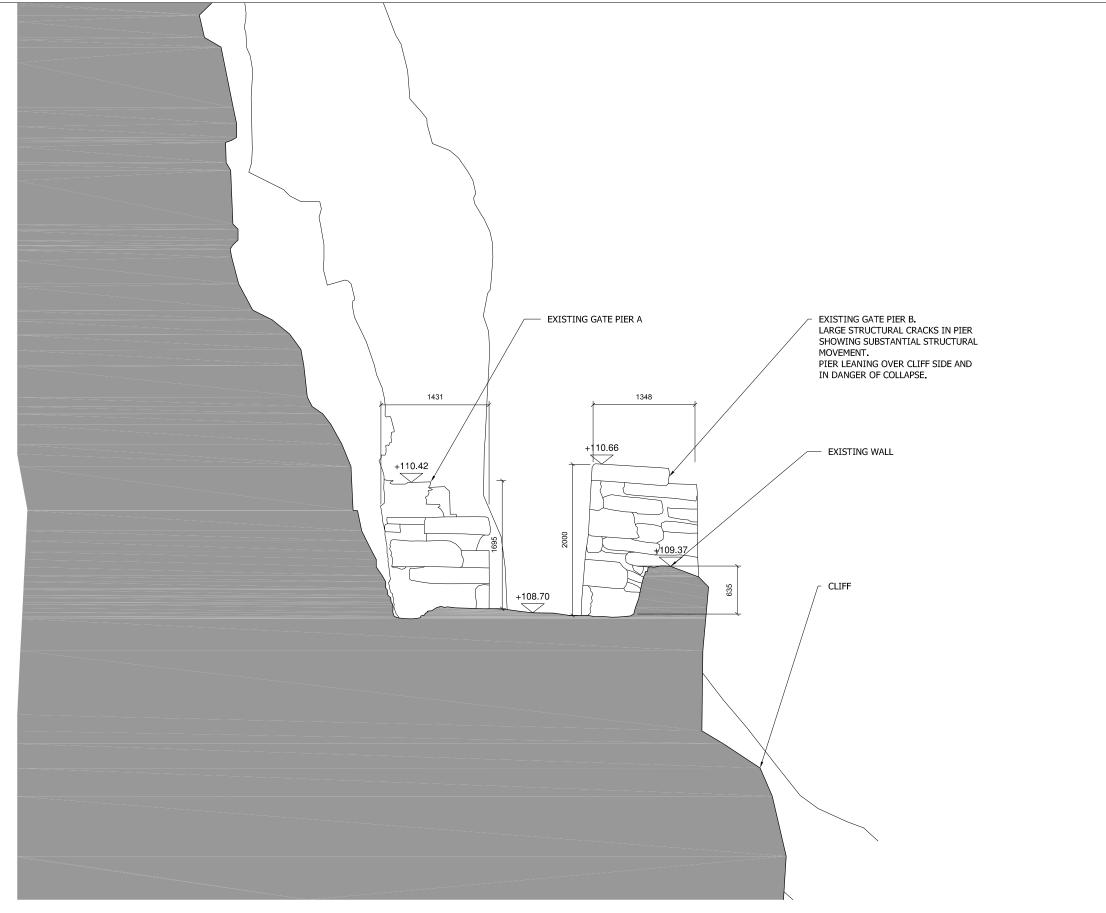


Architectural Services	Principal Architect	Design Team		Drawing Revisions		Drawing Title	Project Title
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	UPPER LIGHTHOUSE GATE PIERS PROPOSED REPAIRS SITE PLAN DRAWN CHECKED SCALE DATE BOM FMC 150 20/01/2020	SKELLIG MICHAEL CONSENT APPLICATION PROJECT NO. STATUS NUMBER REV. CONSENT 102

# LEGEND

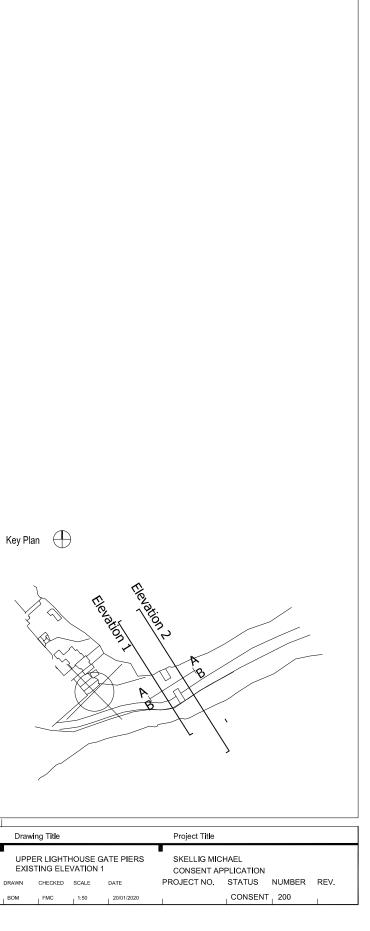
## REPAIR

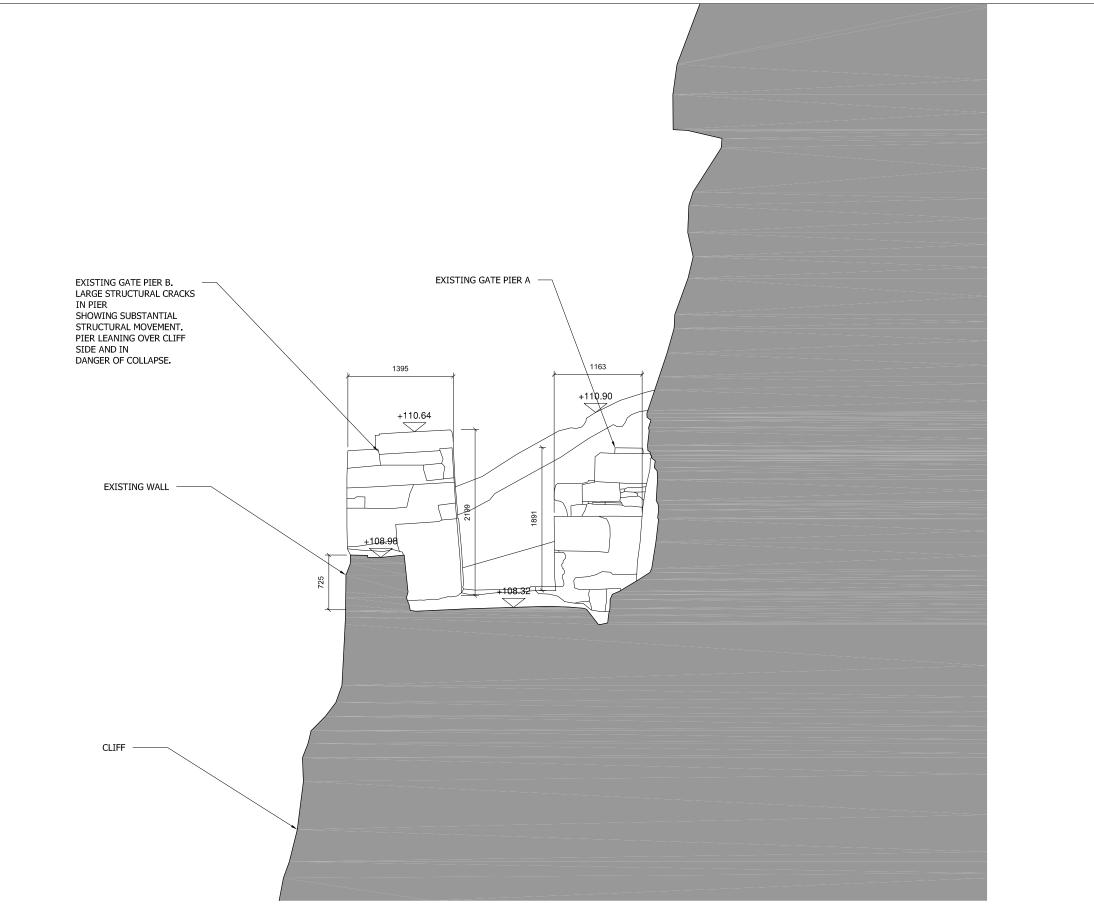




# EXISTING ELEVATION 1 SCALE@A3 1:50

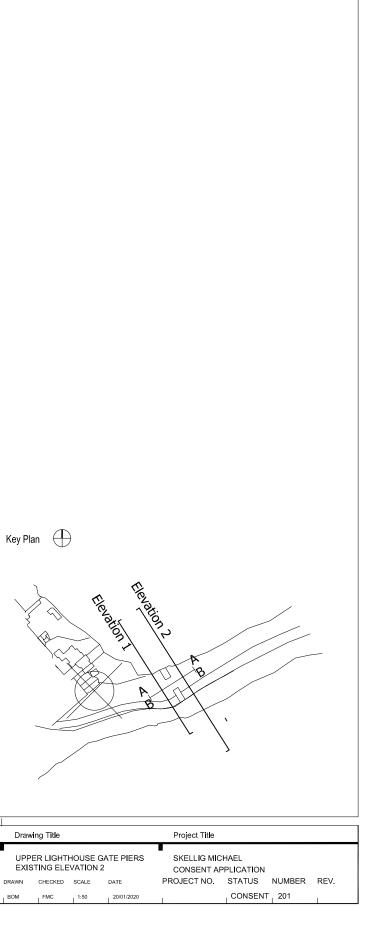
 Architectural Services	Principal Architect	Design Team		Drawing Revisions	[	5
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL AR DIRECTOR OF ARCHITECTURAL SE		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	

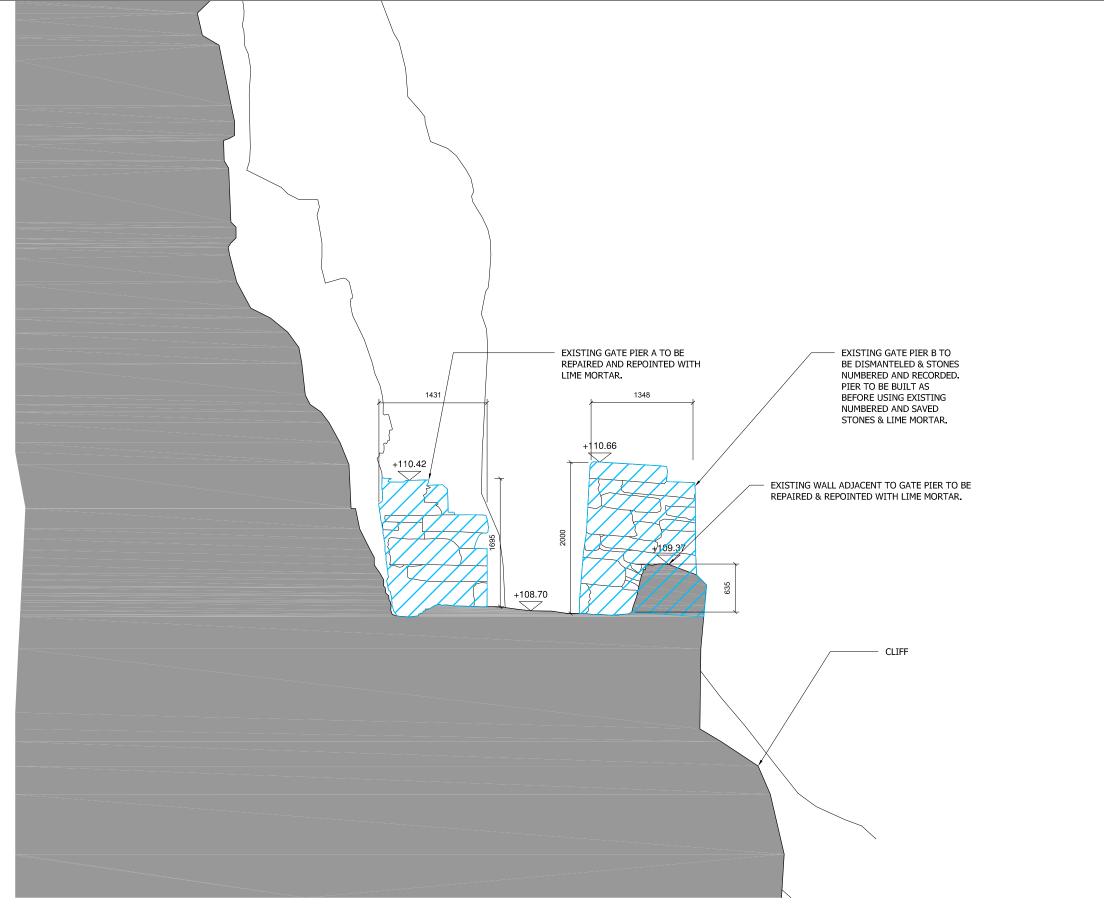




# EXISTING ELEVATION 2 SCALE@A3 1:50

	Architectural Services	Principal Architect	Design Team		Drawing Revisions		0
N					REF DESCRIPTION	DATE:	( <u> </u>
100	OPW Head Office, Trim, Co. Meath	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC	-		A		ι
×**	Telephone: (046) 942 6000	DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services	В		E
	LoCall: 1890 213414		Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect	Telephone: (046) 9426466	c		DRAW
OPW	Website: www.opw.le		Melissa Nicolas - Graduate Architect	Facsimile: (046) 9438409	D		
The Office of Public Horks Offig ma.mothreache.Poblit					E		BOM

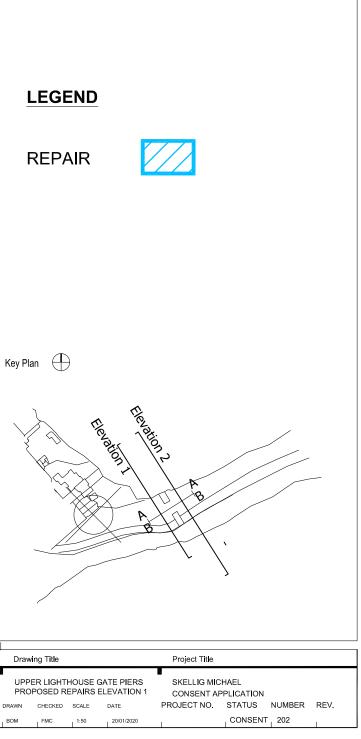


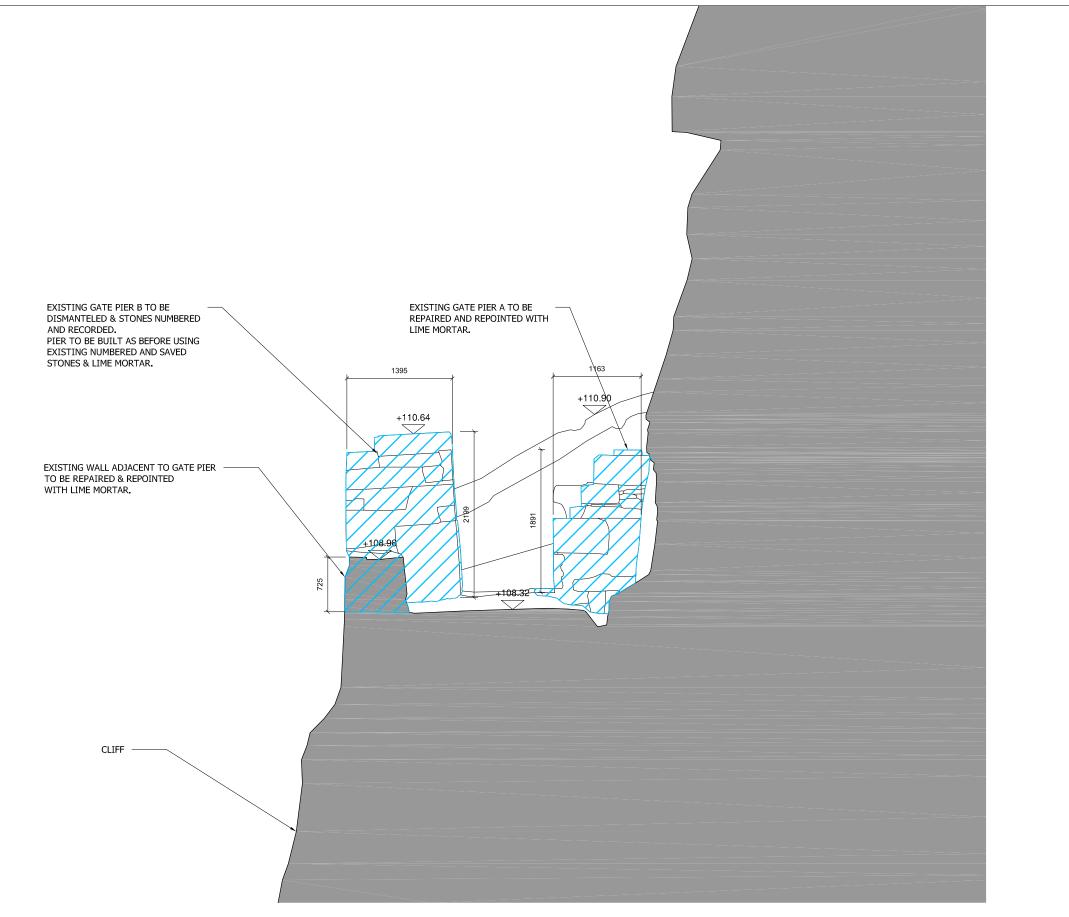


# **PROPOSED REPAIRS ELEVATION 1**

SCALE@A3 1:50

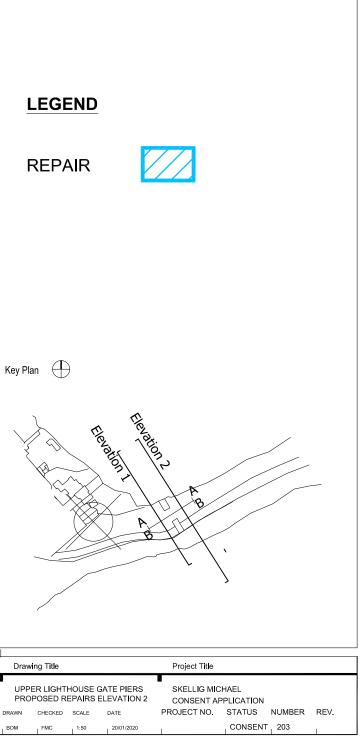
 Architectural Services	Principal Architect	Design Team		Drawing Revisions	
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHI DIRECTOR OF ARCHITECTURAL SERVIO		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE: U F DRAW BOM

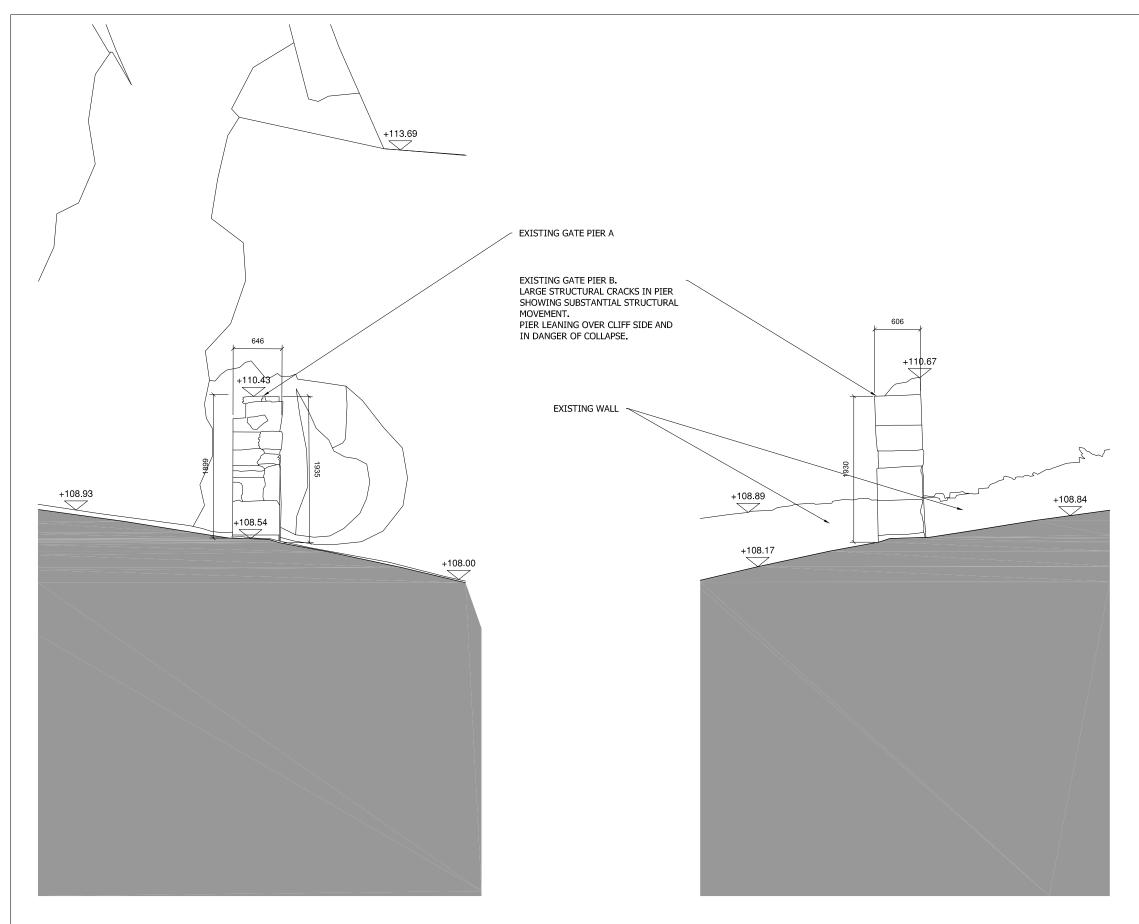




# PROPOSED REPAIRS ELEVATION 2 SCALE@A3 1:50

	Architectural Services	Principal Architect	Design Team		Drawing Revisions		[
					REF DESCRIPTION	DATE:	
1	OPW Head Office, Trim, Co. Meath	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT	- ,		A		1
×	Telephone: (046) 942 6000	DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services	В		, I
	LoCall: 1890 213414		Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect	Telephone: (046) 9426466	C		DRAV
The office of Public Kerley	Website: www.opw.le		Melissa Nicolas - Graduate Architect	Facsimile: (046) 9438409	D		
Difig na nOliveana Politi					E		BON

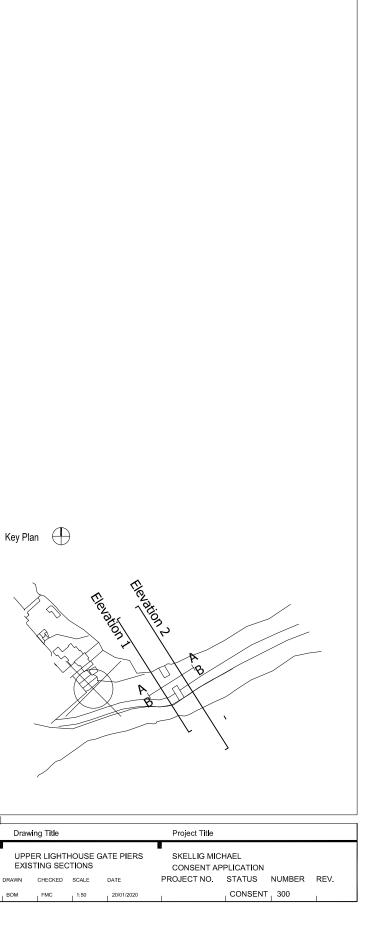


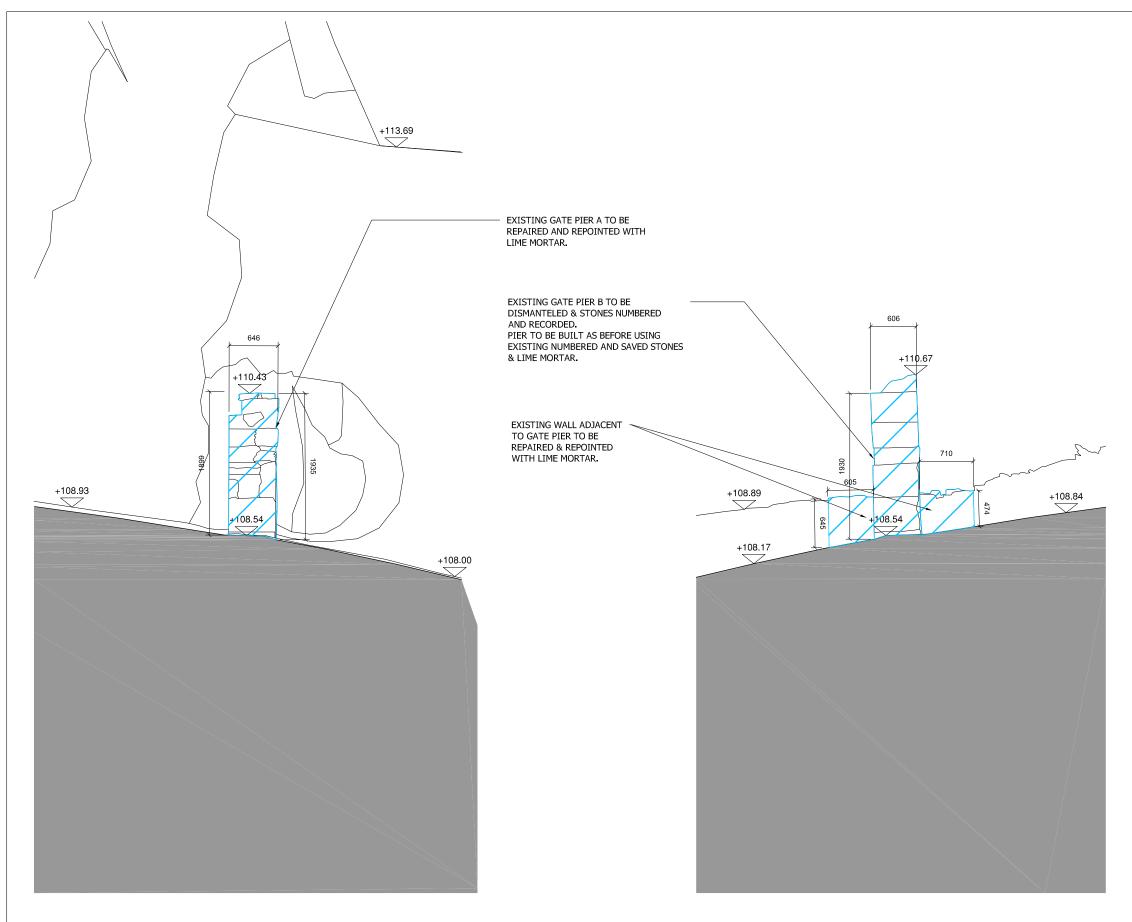


## EXISTING SECTION A-A - GATE PIER A SCALE@A3 1:50

## **EXISTING SECTION B-B - GATE PIER B** SCALE@A3 1:50

 Architectural Services	Principal Architect	Design Team		Drawing Revisions	
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Webslte: www.opw.le	CIARÁN O'CONNOR, PI DIRECTOR OF ARCHIT		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:

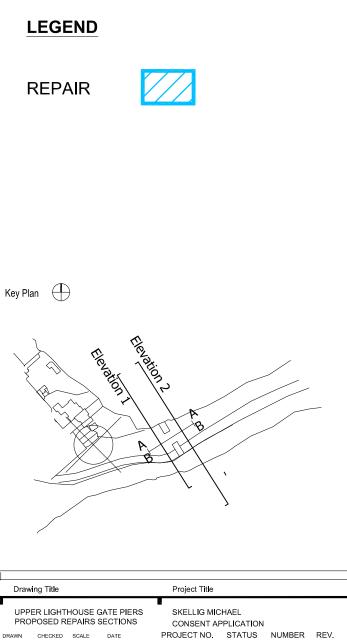




### **PROPOSED REPAIRS SECTION A-A - GATE PIER A** SCALE@A3 1:50

## PROPOSED REPAIRS SECTION B-B - GATE PIER B SCALE@A3 1:50

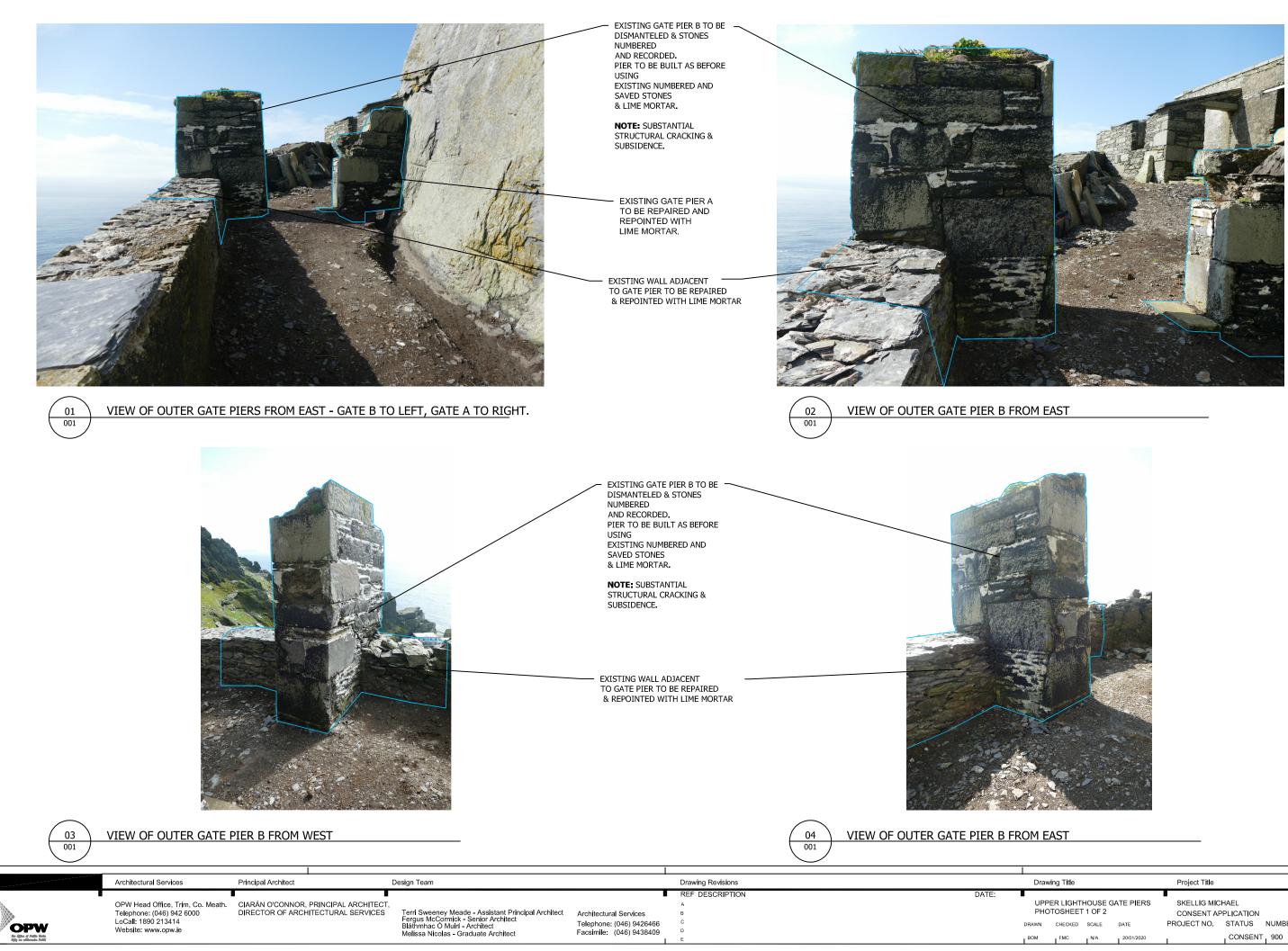
 Architectural Services	Principal Architect	Design Team	ł	Drawing Revisions	 Draw
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	UPP PRC DRAWN



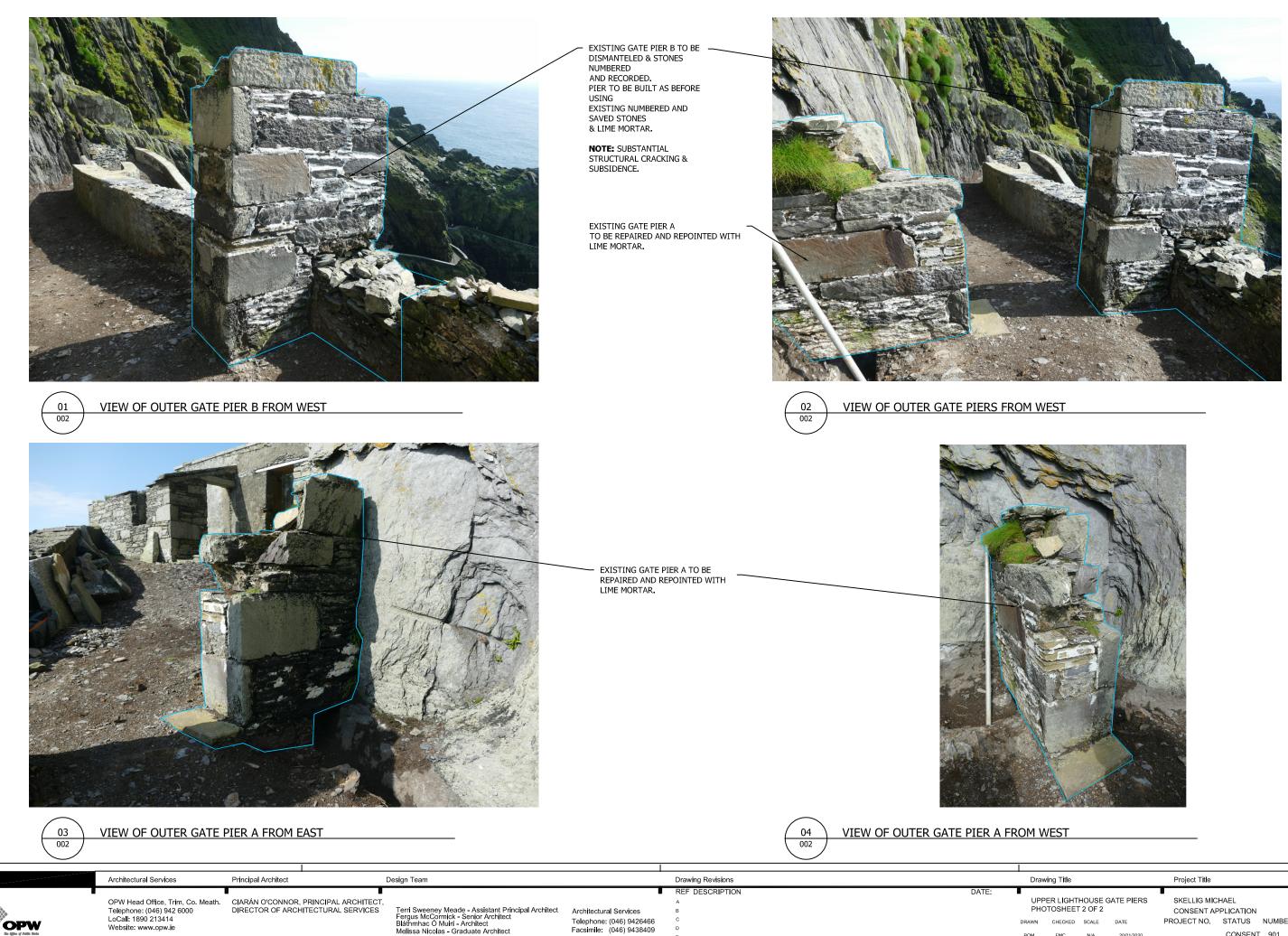
CONSENT 301

FMC

1:50 20/01/2020



Drawing Title				Project Title			
UPPER LIGHTHOUSE GATE PIERS				SKELLIG MIC	HAEL		
PHO	TOSHEET	1 OF 2		CONSENT AF	PPLICATION		
RAWN	CHECKED	SCALE	DATE	PROJECT NO.	STATUS	NUMBER	REV.
BOM	FMC	I <sup>N/A</sup>	20/01/2020	1	CONSEN	T 900	1
		-					



Drawing Title	Project Title
UPPER LIGHTHOUSE GATE PIE PHOTOSHEET 2 OF 2	RS SKELLIG MICHAEL CONSENT APPLICATION
RAWN CHECKED SCALE DATE	PROJECT NO. STATUS NUMBER REV.
BOM FMC N/A 20/01/20	20 CONSENT 901

# Appendix 3c

OPW Ministerial Consent Application Documents – Landing Pier Repairs



Form NMS 5A - 06

# **Check List for Application for Ministerial Consent**

Section 14 of the National Monuments Act 1930 (as amended)

Name of Site:	Landing Pier, Skellig Michael, Co. Kerry		
Applicant:	Fergus McCormick Senior Architect OPW		
On behalf of:	Office of Public Works No.52 St Stephens Green Dublin 2		
Description of Works:	Repair works to pier wall adjacent to landing steps, Landing Pier, Skellig Michael, Co. Kerry.		
Status of Monument:	State Ownership/Guardianship; Preservation Order; Local Authority Ownership/Guardianship Circle as appropriate		
County:	Kerry		
Townland:	Skellig Michael		
National Grid Easting: Use GPS to derive the six figure co-ord National Grid Northing: Use GPS to derive the six figure co-ord	560874		
RMP Number:	KE104A001		
Signed: Fergus Mc Corn	nick Senior Architect Date: 26/01/2021		
For office use only:			
Application Received:	//		
Response Issued:	//		



**FORM NMS 5 – 06** 

#### **APPLICATION FOR CONSENT**

#### Section 14 of the National Monuments Act 1930 (as amended)

### **Applicant**

Name	Fergus Mc Cormick Senior Conservation Architect OPW			
Address:	Office of Public Works			
	No.52 St Stephens Green			
	Dublin 2			
Telephone	01647 6675 0871671141 Email Fergus.mccormick@opw.ie			
Director of Services /Authorised Officer:	Terri Sweeney Meade, Assistant Principal Architect, OPW			

### **National Monument**

RMP No.:	KE104A001
Name of Monument:	Landing Pier, Skellig Michael
Location: (Townland/County)	Skellig Michael, Co. Kerry
National Grid Reference:	E 424950, N 560874

.

#### **Owner Details**

(Complete as appropri	nate)
Local Authority	
Name	Not Applicable
Address:	
Telephone	Email
Director of Services /Authorised Officer:	
Private Owner	
Name	Not Applicable
Address:	

Telephone \_\_\_\_\_ Email \_\_\_\_\_

#### <u>Works</u>

#### Purpose of Proposed Works

OPW is applying Ministerial Consent for repair works to pier wall adjacent to landing steps, Landing Pier, Skellig Michael, Co. Kerry.

Description of Proposed Works

The proposed works comprise of the following:

• Repair to damaged section of pier wall adjacent to landing steps.

#### Items to be included

Please ensure 2 copies of all documentation including the following items are enclosed with your application:

- OS Map showing location of site Rural 1:5000/1:10000 Urban 1:1000
- Method Statement if archaeological excavation required (template attached)
- Letter from Local Authority (if applying on behalf of a Local Authority)
- Name and contact details of archaeologist/engineer preparing documents

The completed application form should be submitted to:

The Principal Officer National Monuments Section Department of Housing, Local Government and Heritage Custom House Dublin 1





The Principal Officer, National Monuments Section, Department of Housing, Local Government and Heritage Custom House, Dublin 1

26th January 2021

# Request for Ministerial Consent for repair works to pier wall adjacent to landing steps, Landing Pier, Skellig Michael, Co. Kerry.

Dear Sirs,

With reference to the provisions of section 14 of the National Monuments Act, 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004 I hereby request Ministerial Consent for repair works to pier wall adjacent to landing steps, Landing Pier, Skellig Michael, Co. Kerry.

Please find enclosed the following documents.

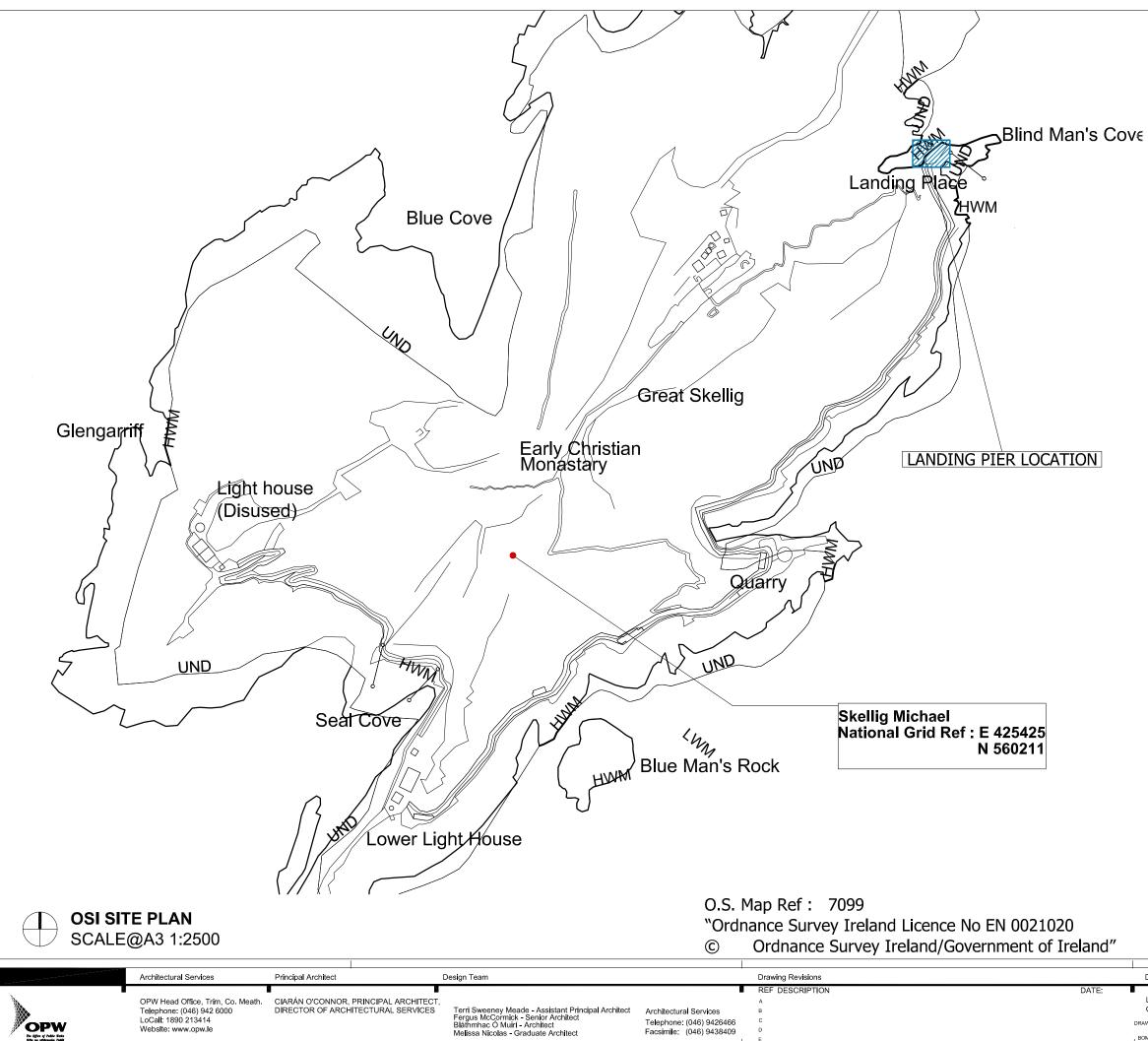
- Completed Checklist for Application for Ministerial Consent dated 26.01.21.
- Completed Consent Application Form dated 26.01.21.
- Drawings and Drawing Issue Sheet.

I am issuing DHLGH with digital copies of the above consent application documents by e-mail today.

If you have any queries in relation to the application please contact me.

Yours sincerely,

Fergus Mc Cormick Senior Conservation Architect Grade 1 Office of Public Works National Monuments Section 52 St Stephen Green, Dublin 2 Phone (01) 647 6675 Mobile 087 1671141



# Legend



Area subject to Consent

# National Monument Details

Name

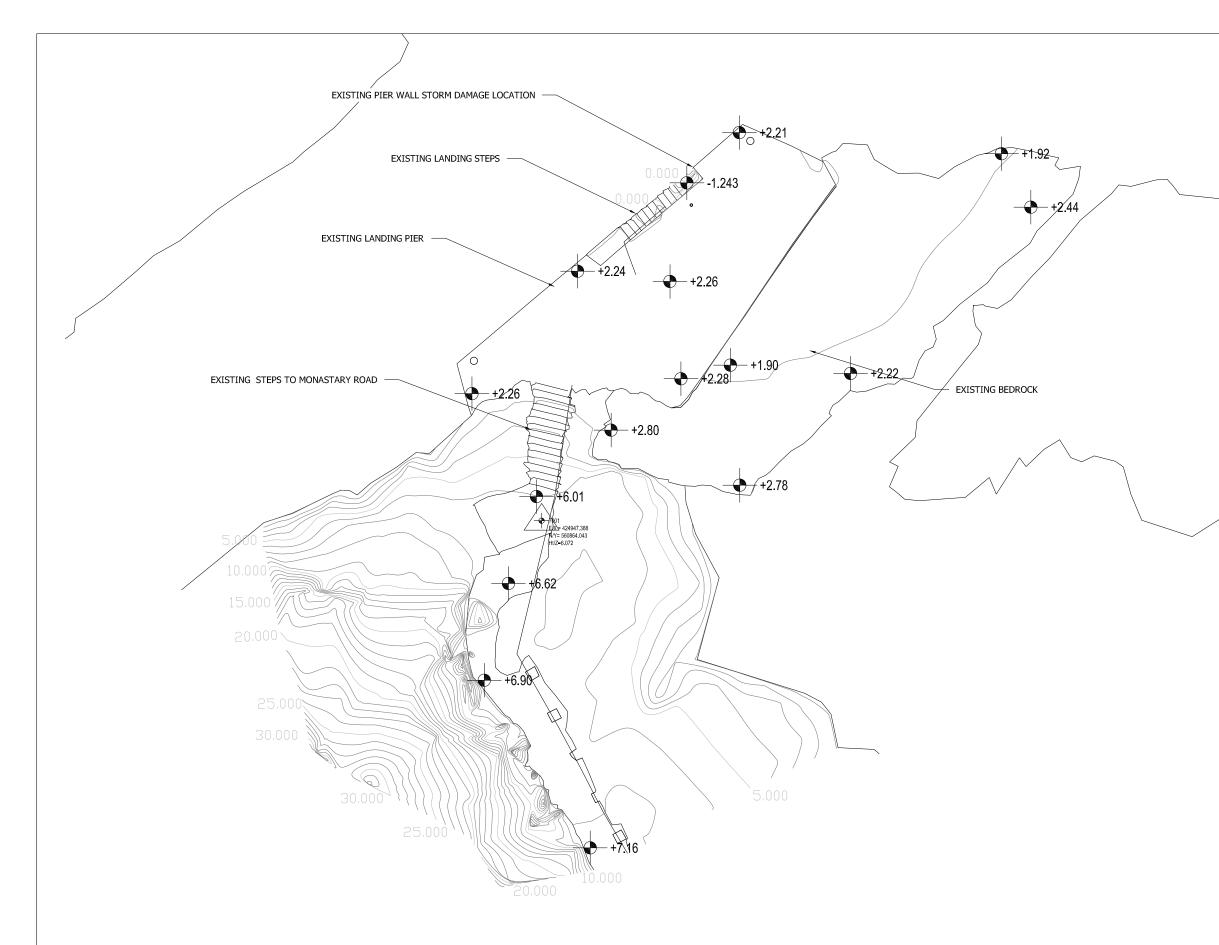
- : Skellig Michael
- : Skellig Michael, Address Co. Kerry.
- RMP No.

Nat. Grid Ref.

BON

- : KE104A001
- : E 425425, N 560211

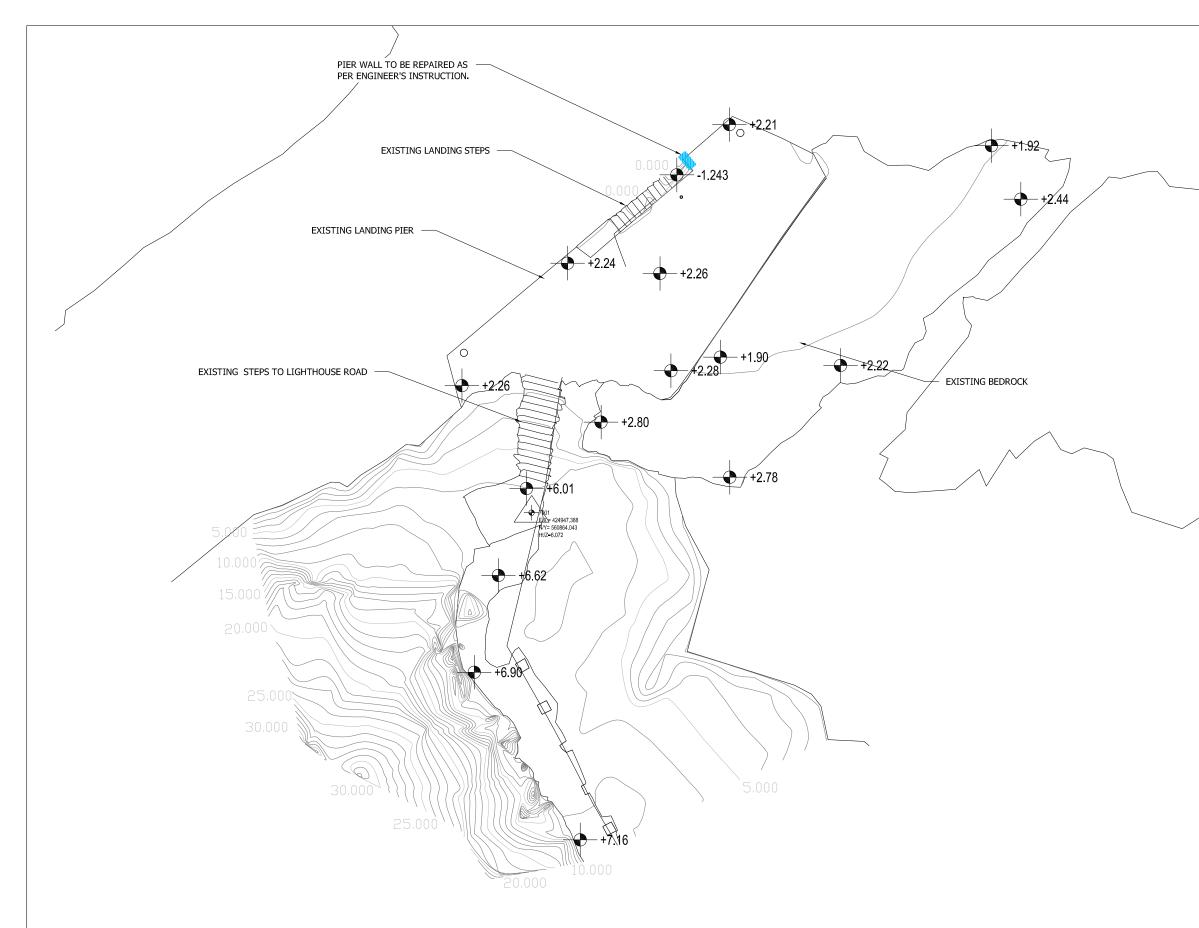
raw	ing Title			Project Title				
	DING PIEF SITE PLAN			SKELLIG MIC CONSENT AF				
N	CHECKED	SCALE	DATE	PROJECT NO.	STATUS	NUMBER	REV.	
	FMC	1:2500	19/01/2020		CONSEN	T 100	1	



# EXISTING SITE PLAN SCALE@A3 1:150

	Architectural Services	Principal Architect	Design	n Team	·	Drawing Revisions		D
			N		8	REF DESCRIPTION	DATE:	N
110.	OPW Head Office, Trim, Co. Meath	CIARÁN O'CONNOR, PRINCIP/	AL ARCHITECT,			A		L
	Telephone: (046) 942 6000	DIRECTOR OF ARCHITECTUR		ri Sweeney Meade - Assistant Principal Architect	Architectural Services	В		E
OPW	LoCall: 1890 213414			gus McCormick - Senior Architect thmhac Ó Muirí - Architect	Telephone: (046) 9426466	C		DRAW
	Website: www.opw.le			issa Nicolas - Graduate Architect	Facsimile: (046) 9438409	D		
The Office of Public Storks Offic na módessaka Poblit						E		BOM

Drawi	ng Title			Project Title	
	ING PIER FING SITE			SKELLIG MICHAEL CONSENT APPLICATION	
RAWN	CHECKED	SCALE	DATE	PROJECT NO. STATUS NUMBER REV.	
BOM	FMC	1:150	19/01/2020	CONSENT 101	

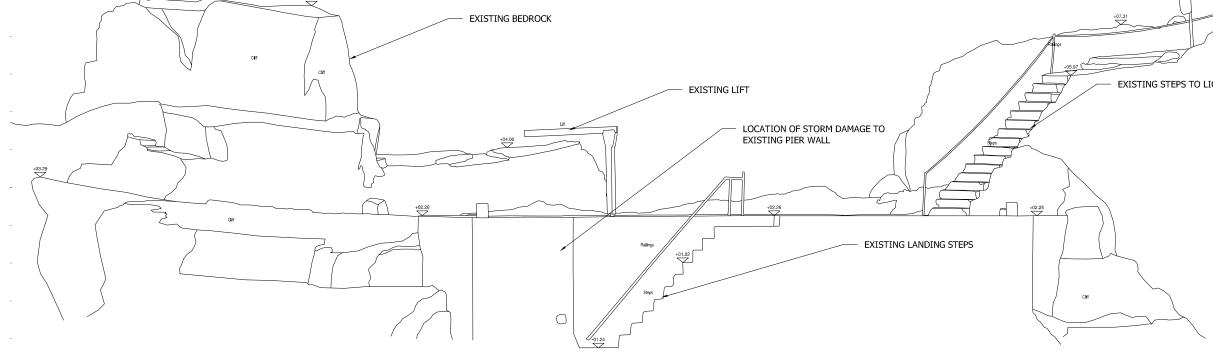




	Architectural Services	Principal Architect	D	Design Team		Drawing Revisions		D
OPW Ry Nor of Allen Res	OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Webslte: www.opw.le	CIARÁN O'CONNOR, PR DIRECTOR OF ARCHITE		Terri Sweeney Meade - Assistant Principal Architect Fergus McCormick - Senior Architect Blåthmhac Ó Muirí - Architect Melissa Nicolas - Graduate Architect	Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	L. R DRAWI



Draw	ing Title			Project Title				
	DING PIEF			SKELLIG MIC	HAEL			
REP/	AIRS SITE	PLAN		CONSENT AF	PPLICATION			
RAWN	CHECKED	SCALE	DATE	PROJECT NO.	STATUS	NUMBER	REV.	
BOM	FMC	1:150	19/01/2020		CONSEN	T 102		

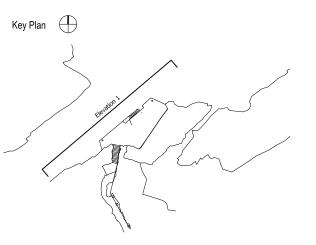


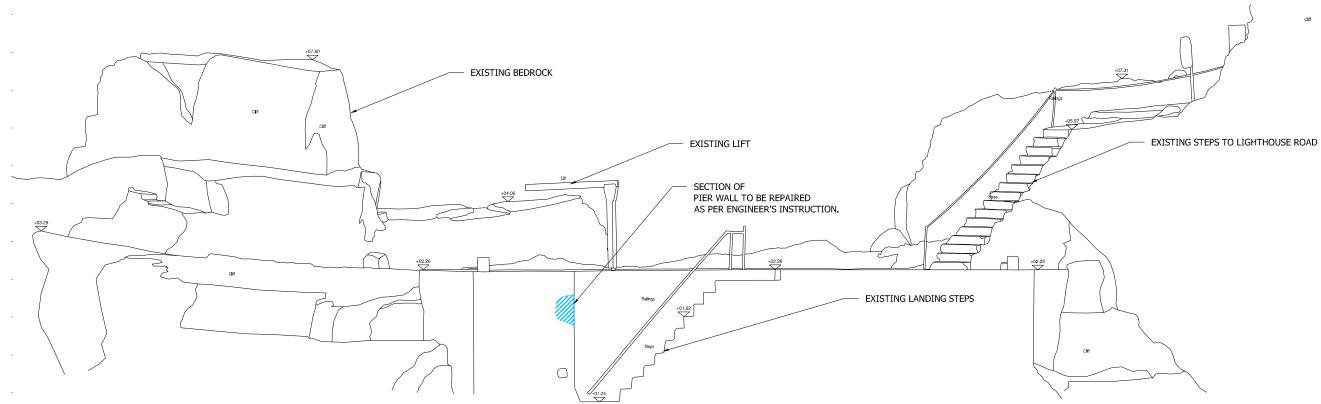
# **EXISTING ELEVATION 1** SCALE@A3 1:100

 Architectural Services	Principal Architect	Design Team		Drawing Revisions		Drawing Title	Project Title
OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	LANDING PIER EXISTING ELEVATION DRAWN CHECKED SCALE DATE BOM FMC 1:100 19/01/2020	SKELLIG MICHAEL CONSENT APPLICATION PROJECT NO. STATUS NUMBER REV. CONSENT 200



EXISTING STEPS TO LIGHTHOUSE ROAD





# **REPAIRS ELEVATION 1**

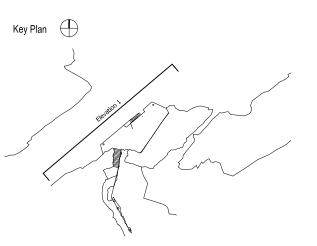
SCALE@A3 1:100

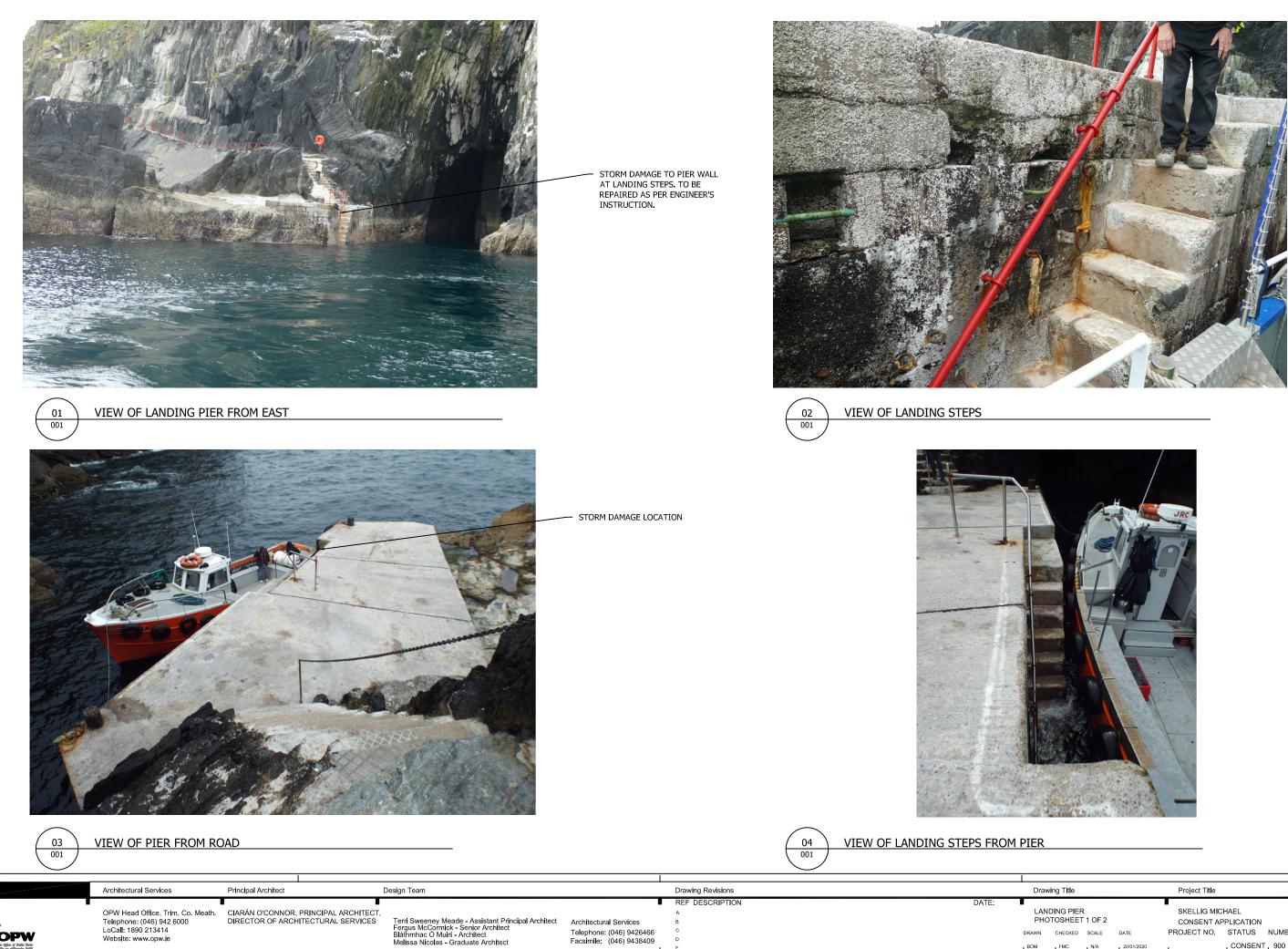
# LEGEND

REPAIR



	Architectural Services	Principal Architect	Design Team		Drawing Revisions		Drawing Title	Project Title
OPW Region of Amateria	OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.le	CIARÁN O'CONNOR, PRINCIPAL ARCHITEC DIRECTOR OF ARCHITECTURAL SERVICES		Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	LANDING PIER REPAIRS ELEVATIONS DRAWN CHECKED SCALE DATE BOM FMC 1:100 20/01/2020	SKELLIG MICHAEL CONSENT APPLICATION PROJECT NO. STATUS NUMBER REV.





Telephone: (046) 9426466 Facsimile: (046) 9438409

**OPW** 

Website: www.opw.ie

Draw	ring Title			Project Title					
				N					
LANI	DING PIEF	2		SKELLIG MICHAEL					
PHO	TOSHEET	1 OF 2		CONSENT APPLICATION					
RAWN	CHECKED	SCALE	DATE	PROJECT NO.	STATUS	NUMBER	REV.		
BOM	FMC	I N/A	20/01/2020	1	CONSEN	T 900	1		



VIEW OF DAMAGE TO PIER WALL

STORM DAMAGE TO PIER WALE AT LANDING STEPS. TO BE REPAIRED AS PER ENGINEER'S INSTRUCTION.

**NOTE:** SUBSTANTIAL CRACKING & TEMPORARY, EMERGENCY REPAIRS



02 VIEW OF DAMAGE TO PIER WALL

 	Architectural Services	Principal Architect	Design Team	ļ	Drawing Revisions		Drawing Title	Project Title
	OPW Head Office, Trim, Co. Meath. Telephone: (046) 942 6000 LoCall: 1890 213414 Website: www.opw.ie	CIARÁN O'CONNOR, PRINCIPAL ARCHITECT DIRECTOR OF ARCHITECTURAL SERVICES	Terri Sweeney Meade - Assistant Principal Architect Fergus McCormick - Senior Architect Bláthmhac Ó Muirí - Architect Melissa Nicolas - Graduate Architect	Architectural Services Telephone: (046) 9426466 Facsimile: (046) 9438409	REF DESCRIPTION A B C D E	DATE:	LANDING PIER PHOTOSHEET 2 OF 2 DRAWN CHECKED SCALE DATE BOM FMC N/A 20/01/2020	SKELLIG MICHAEL CONSENT APPLICATION PROJECT NO. STATUS NUMBER REV. CONSENT 901