Reinstatement of the roadway features removed to facilitate construction of the three all-metal crash decks on the Lower and Upper Lighthouse Roadways, Sceilg Mhichíl, Co. Kerry.





Alan Hayden September 2024

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Sceilg Mhichíl, Co. Kerry. Alan Hayden Archaeological Projects Ltd, September 2024

### Abstract

The sections of the lateral drain, road edging (and on the Upper Lighthouse Roadway) the 1910-1914 cable channel, removed during the construction of the three, all-metal crash decks On Sceilg Mhichíl in 2022 were successfully reinstated by the OPW in 2024.

#### The Site

The island of *Sceilg Mhichíl* lies 11.6km off Bolus Head, the westernmost tip of the Iveragh Peninsula, Co. Kerry (SMR: KE 104A-001; National Grid Reference 024812 060654). The island, which is approximately 21.9 hectares in area, is owned by the Minister for Housing, Local Government and Heritage on behalf of the Irish people, with the exception of the Lower Lighthouse Station, the helipad and adjacent stores, which are owned by the Commissioners of Irish Lights (CIL). *Sceilg Mhichíl* is a National Monument and the entire island was inscribed on the UNESCO World Heritage List in 1996 in recognition of the outstanding universal significance of its cultural landscape and the importance of its protection to the highest international standards.

## **Historical & Archaeological Background**

On present evidence the monastery on *Sceilg Mhichíl* was founded in the seventh century. The monks appear to have abandoned full-time occupation of the island in the twelfth or thirteenth century and moved to the Augustinian Priory at Ballinskelligs on the mainland. However, the island continued to be used as a place of pilgrimage into the eighteenth century and remained in the hands of the monks until 1578, when, as a result of the Desmond Rebellion, Queen Elizabeth I dissolved certain monasteries that were under the protection of the earl of Desmond. The two Skellig islands thus passed into secular hands and eventually to the Butler family from Waterville.

After surveys and reports by George Halpin in 1820, the Corporation for Preserving and Improving the Port of Dublin- also known as the Ballast Board- the predecessors of the Commissioners of Irish Lights, purchased *Sceilg Mhichíl* in 1821 from James Butler of Waterville under a compulsory purchase order, for the purpose of erecting two lighthouses on the Atlantic side of the rock. Access was created by improving the old landing at Blind Man's Cove and a roadway was blasted out of the precipitous southern and eastern sides of the island leading to the sites of the two lighthouses. Both lighthouses (referred to as Skelligs Rock, Upper and Lower in CIL documentation) came into service on the 4<sup>th</sup> December 1826 but works continued on the island on and off for at least another eleven years.

The Upper Lighthouse Station was withdrawn from service in 1870 and the buildings of the station were stripped of timber, slates, doors, windows etc. but not demolished. The light was removed from the lighthouse but its tower and lantern otherwise remained largely intact up to at least the 1930s, sometime after which, the lantern collapsed damaging the internal floors and stairs of the tower. The Upper Lighthouse Roadway, which led to the Upper Station appears not to have been maintained after its abandonment; stones and clay built up on it surface to a considerable depth in places before a concrete cable channel was laid down bringing power to a fog signal station constructed in 1910-1914 on a spur accessed off the Upper Lighthouse Roadway. The fog signal was replaced in 1954 by a temporary signal at the Lower Lighthouse Station following two rockfalls, which severed the roadway leading to its original location. The fog signal equipment was withdrawn from the island on 25<sup>th</sup> September 1960.

The Lower Lighthouse Station was altered in 1909-1911 after the keepers' families were moved ashore to Valentia Island in 1901 and again in 1924 following storm damage. It was even more radically reworked in the 1960s when the original lighthouse tower and the 1924 corridor were demolished and replaced with the present reinforced concrete structures. A reinforced concrete helipad was also built below the Wailing Woman Ledge close to Cross Cove in 1969. The Lower Lighthouse Station was continuously manned until it was automated in May 1987.

## The Lighthouse Roadways

The outer side of the roadway to the lighthouses was defined by a rendered and whitewashed, mortared, rubble masonry wall, originally capped with yellow 'Yorkshire' flagstones. The rising natural cliff defined the inner side of the passage. The inner edge of the roadway lay a short distance away from the inner cliff and the loose fill of the roadway was retained on its inner side by a band of vertically set stones, laid laterally to the line of the roadway. The space between this road edging and the rising cliff acted as a drain leading away water that trickled down the cliff. The base of the drain was generally lined with smaller vertically set stones laid with their long axis parallel to that of the roadway. In a few places where rock was too high, either the bedrock or stones laid flat formed the base of the drain.

# **The Crash Decks**

In 2022 steel crash decks were erected at three locations prone to rockfalls, one on the Lower Lighthouse Roadway and two on the Upper Lighthouse Roadway (fig. 1)- Ministerial Consent No. C0001053; Excavation Licence No. E005336; Detection Device Licence No. R000560.

The features in the area of Crash Deck 1 were fully visible before works were undertaken and were planned and recorded by the writer in advance of construction in 2022 (fig. 2). The areas beneath Crash Decks 2 and 3 were fully excavated, planned and recorded as part of the works on the Upper Lighthouse Roadway in 2017 and 2018 (figs. 3 & 4) (Hayden 2017 & 2018).

The foundations of the three crash decks included RSJs set in concrete linking the uprights, both parallel with the long axis of the roadway and crossing it at right angles. The construction of many of the beams and uprights on the inner side of the roadway required the removal of part of or all of the road edging and lateral drain depending on the line of the edging relative to that of the crash decks. The excavation of all the foundations was archaeologically monitored by the writer (Hayden 2022).

## Reinstatement

#### Introduction

The stones of the road edging and lateral drain and the sections of the concrete cable channel removed before construction works were undertaken, were all carefully lifted and stored to facilitate their reinstatement, before construction began in each area.

The writer had previously drawn 1:20 or 1:50 scale detailed plans and had taken detailed photographs of all these features, which were used to guide the reinstatement works.

The OPW mason and crew had experience previously repairing sections of the lateral drain and road edging damaged or removed over the years by natural erosion or rockfalls. The reinstatement works were monitored and recorded by the writer.

## Crash Deck 1(figs. 5-8)

Except for the concrete wall of the so-called 'duckpond'<sup>1</sup> (of which only a short section was removed) the features on the internal side of the roadway had to be removed in full before the construction works. The lateral drain at the west end of this area was composed of stones laid flat due to the height of the underlying bedrock. Only a small section of the outer wall of the 'duckpond' had to be removed to facilitate one of the beams crossing under the roadway. This section was not reinstated as the concrete in the 4-inch thick wall will have to be tested to ensure that, that which is used to fill the gap matches the original.

## Crash Deck 2 (figs. 9-12)

The features on the internal side of the roadway here had to be removed in full to facilitate construction. Several parts of the cable channel were in very poor condition and were not reinstated as they survived only as fragments. To ensure the long- term preservation of the sections reinstated, they were set down into the lateral drain, with their top at the same level as the surface of the lateral drain, to ensure they did not block water flow.

## Crash deck 3 (figs 13 & 14)

The features on the internal side of the roadway here were only removed where the ends of the lateral beams protruded across their line and hence the original line of the road edging and surface of the lateral drain was preserved in the undug sections. Over the lower half of the area of this crash deck the cable channel was set down into the lateral drain originally and was reinstated in its original position (fig. 13). Over the upper half of the area of the cable channel originally lay in soil well above the level of the lateral drain drain. As original sections of the lateral drain here remained *in situ* and were not disturbed by construction, the cable channel could not be set down into the surface of the drain. It was relaid in its original position set in mortar on top of the surface of the lateral drain, as it would not impede water flow (fig. 14).

### Conclusions

The reinstatement of the features removed from the inner side of the roadways during construction of the three crash decks in 2022 was successfully undertaken in 2024. The OPW

<sup>&</sup>lt;sup>1</sup> Richard Foran (*pers. comm.*) said that the concrete walled area was not a duckpond (and indeed there is no evidence it was) but was simply built to prevent stones washing into and blocking the large drain under the roadway here.

mason and crew did an excellent job and the new work matches well with the original. A short section of the concrete wall of the 'duckpond' beneath Crash Deck 1 remains to be repaired.

## References

- Hayden, A.R. (2017) Archaeological monitoring of works to lighthouse road, Skellig Michael Co. Kerry, 2017. Ministerial Consent No. C000819; Excavation No. E004885; Detection device licence no. R00463; Works No. W00.0309. Unpublished report lodged with OPW and NMS.
- Hayden, A. R. (2018) Archaeological Monitoring of Works on the Upper Lighthouse Road, Skellig Michael, Co. Kerry in 2018. Ministerial Consent No. C000819, Excavation No.E004885, Detection device licence No. R00463. Unpublished report lodged with OPW and NMS.
- Hayden, A.R. (2022) Skellig Michael, Co. Kerry- Archaeological Monitoring of Construction of 3 No. Crash Decks on the Lighthouse Roadway. (Ministerial Consent No. C0001053; Excavation Licence No. E005336; Detection Device Licence No. R000560). Unpublished report lodged with OPW and NMS.

# FIGURES



Fig. 1. The location on Sceilg Mhichíl of the three crash decks.



Fig. 2. Scan of field plan of the roadway features at Crash Deck 1.



Fig. 3. Plan of excavated roadway at location of Crash deck 2.



Fig. 4. Plan of excavated roadway at location of Crash deck 3.



Figs. 5 & 6. Crash Deck 1, general views of the reinstated features.



Figs. 7 & 8. Crash Deck 1, the remaining gap in the wall of the 'duckpond'.



Fig. 9. Crash Deck 2, reinstated road edging, cable channel and lateral drain, looking downhill.



Fig. 10. Crash Deck 2, junction of original and reinstated road edging.



Figs. 11 & 12. Crash Deck 2, details of reinstated cable channel sections sunken into reinstated lateral drain.



lower half.

Fig. 13. Crash Deck 3, the reinstated features in its Fig. 14. Crash Deck 3, the reinstated features in its upper half.