Archaeological Impact Assessment

of

Proposed Canopy Installation,

Lower Lighthouse Road, Skellig Michael Co. Kerry.





Alan R. Hayden June 2022.

# Archaeological Impact Assessment of Proposed Canopy Installation, Lower Lighthouse Road, Skellig Michael Co. Kerry.

Alan R. Hayden Archaeological Projects Ltd. June 2022.

### Introduction

As a result of a recent rockfall on the lighthouse roadway below Cross Cove, the OPW propose to install an extra c. 100m-length of canopy on the roadway leading to the already canopied length at Cross Cove. (figs. 1 & 2). The proposed canopy will be of similar construction to that already in place in Cove Cove (Photo 8) and will consist of pairs of linked scaffold poles, the outer set in a pit dug into the fill of the roadway immediately inside the parapet wall and the inner in a pit in the base of lateral drain or on bedrock, carrying a 4" thick sloping timber deck.

### The Lighthouse Roadway

The Lighthouse Roadway on Skellig Michael (fig. 1) was made in the 1820s by drilling and blasting a ledge out of the bedrock cliffs. The outer side of the road was supported and protected by a limemortar bonded wall composed of masonry derived from the blasted rock, capped with flat rectangular yellow sandstone slabs that appear to have come from Yorkshire. The original capstones have been replaced by slabs of local rock or more recently by slabs of Valentia slate in many areas where rockfalls or winter storms damaged or removed the original capstones. The outer edge of the lowest part of the roadway up from the landing was not defined by a wall but by iron posts and chains due to the vulnerability of this part of the roadway to winter storms.

Falls of rock and earth have occurred several times on the roadway in recent years but there are also many references to the lighthouse keepers clearing earth and debris from the roadway in the past.

Although little render survives on the wall today, anywhere the base of its inner face was exposed during works it proved to be rendered fully and it is clear that it was originally rendered on both sides.

The inner edge of the road was defined by a band of vertically laid stones set transversely to the line of the road. The parapet wall and inner edging retained a fill of clay, small stones and rock debris. The fines in this material wash or are blown away over time and has been augmented on many occasions by material from elsewhere. Much of the lower end of the roadway from the landing leading up towards Cross Cove from the landing was paved with stone or was surfaced with vertically set stones or concrete as this area was more prone to erosion.

The area between the inner edge of the road and the rising cliff was generally used as a lateral drain gathering the water that flowed down from the cliff. Where bedrock was not exposed in its base, it was often floored with tightly packed, small vertically set stones, usually laid with their long axis parallel to the line of the road. Several large stone-lined and capped drains carried water from openings in the lateral drain across and under the roadway to rectangular outlets in the parapet wall.

The complete length of the roadway between the lighthouses was excavated in 2017-2019 while small areas and pits were excavated on the lower road at Cross Cove in 2015-2016 when sections damaged by rockfalls were being rebuilt and the canopy extended. A few test trenches were also excavated on the section of the road below the lower lighthouse to examine the structure of the wall before conservation was undertaken at an earlier time.

## The Section of the Roadway to be Canopied

At the request of the OPW, on the 22<sup>nd</sup> of June 2022 the writer examined and photographed the length of roadway where it is proposed to install the new canopy.

The lowest part of the road to be canopied is the end of the paved section up from the landing (Photo 1). The next section up has a concrete surface both on the roadway and in the lateral drain (Photo 2). The concrete is likely to date to the first half of the twentieth century. There is a stone-lined

drain crossing beneath this section. The road surface above this point is composed of clay and stones (Photos 3-5 and 7-8) except for a short section where it is partly composed of vertically-set stones (fig. 1 & Photo 6). The lateral drain on this length generally has a lining of small vertically-set stones except in one area where it is rock cut (Photo 4). There is one short section where the lateral drain is much deeper and has no stone lining (fig. 1) and higher up one short length where the stone lining is missing (fig. 1). There are three stone-lined drains, the lowest is partly rock cut (Photo 4), crossing beneath this section of the road.



Fig. 1. Location and scale sketch plan of the length of roadway to be canopied with features evident and location of photographs marked.



*Fig. 2. The length of roadway to be canopied, viewed from the helipad.* 

#### The Archaeological Impact of the proposed works

Small pits (no bigger than 300mm by 300m) will have to be dug to hold bases of the outer line of scaffold poles immediately inside the parapet wall. This will involve removing the loose soil and stone fill, and on the lowest sections, areas of concrete and vertically set stone. The loose fill as noted above has been augmented many times and past experience excavating it completely on the upper lighthouse roadway and with pits dug into it on the lower lighthouse roadway has shown that it contains no cultural material. Therefore, the excavation of these pits will have no archaeological impact. Where concrete or vertically-set stones have to be removed on the lower sections it is even more unlikely that any cultural material will survive and so again the proposed pits will have no archaeological impact. The vertically set stones should be replaced near as possible to their original settings both to retain the visual aspect of the roadway but also to ensure that the other stones are not loosened by erosion.

The posts at the inner side of the canopy will either be set on bedrock where it is exposed or in pits dug through the vertically set stone lining of the base of the lateral drain. There will be no cultural material encountered in this work and therefore it also has no archaeological impact. The lifting and replacement of the vertically-set stone lining has been done in the past when the canopy was previously extended at Cross Cove. Both there and in repairs undertaken to the base of the lateral drain on the upper lighthouse roadway it was a simple matter to lift and replace the vertically set stones. This was done successfully on many occasions and a after a short while the replaced stones blend in perfectly with the original. It is important that the lifted stone is replaced to avoid weakening the adjacent stonework.

#### Conclusions

The area of the roadway where it is proposed to erect an extension of the canopy has been examined and recorded by the archaeologist.

The proposed works will have no appreciable archaeological impact and once the vertically-set stones removed are replaced it will have no long-term impact on the visual or structural integrity of the roadway.

Care should be taken not to locate any of the poles of the outer line of supports on top of the line of any of the four drains crossing beneath the roadway.

As no cultural material is likely to be uncovered there should be no requirement to have the works archaeologically monitored as they are proceeding. A resurvey of the area of the roadway by the archaeologist once works are completed to record the replacement of stonework would suffice.

# PHOTOGRAPHS (see fig. 1 for location)



Photo 1. Stone paved road surface.

Photo 2. Concrete road surface and lateral drain





Photo 4. Rock cut drain and lateral drain base on right.

Photo 3.



Photo 5.

Photo 6. Vertically set stone surface on roadway







Photo 8. The uppermost part leading to existing canopy.