From: O'Malley Vincent

Sent: Wednesday 8 December 2021 15:46

To: Chamberlain Greg **Cc:** Nea Christian

Subject: RE: Re. Bangor Erris Bridge (MO-N59-023.00) [Reactive Maintenance]

Greg,

Based om the content and attachments of the Atkins email, I accept the reasoned determination set out below.

Sincerely Vincent

From: Chamberlain Greg

Sent: Wednesday 8 December 2021 12:51

To: O'Malley Vincent

Cc: Nea Christian

Subject: FW: Re. Bangor Erris Bridge (MO-N59-023.00) [Reactive Maintenance]

Vincent

Having reviewed Paul's email below and having regard to the nature of the works, I recommend that the following reasoned determination can be made:

Having performed screening for Appropriate Assessment in respect of the proposed reactive maintenance works detailed in the email received from Paul O'Donoghue dated the 7th December, 2021, and entitled Re. Bangor Erris Bridge (MO-N59-023.00) [Reactive Maintenance] I accept the recommendations of Atkins that the proposed reactive maintenance works, individually or in combination with other plans or projects, would not be likely to have a significant effect on any European site in view of the best scientific knowledge and the site's conservation objectives. I determine that an Appropriate Assessment of these proposed works is not required, as it can be excluded on the basis of objective scientific information following the screening done that the proposed works, individually or in combination with other plans or projects, will have a significant effect on any European site.

Kind Regards

Greg

From: O'Donoghue, Paul

Sent: Tuesday 7 December 2021 19:41

To: Chamberlain Greg

Cc: Nea Christian ; Gregan, John ; Jennings,

Martin >; Daly, Vincent

Subject: Re. Bangor Erris Bridge (MO N59 023.00) [Reactive Maintenance]

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Greg

Re. Bangor Erris Bridge (MO-N59-023.00) [Reactive Maintenance]

Bangor Erris Bridge is on the N59 Regional road south of Bangor, Co. Mayo; as shown below circled in red (Source: NBDC webviewer). The bridge spans a small stream which flows westwards to Tullaghan Bay. The north east curved section of parapet wall has been severely damaged following vehicular impact.

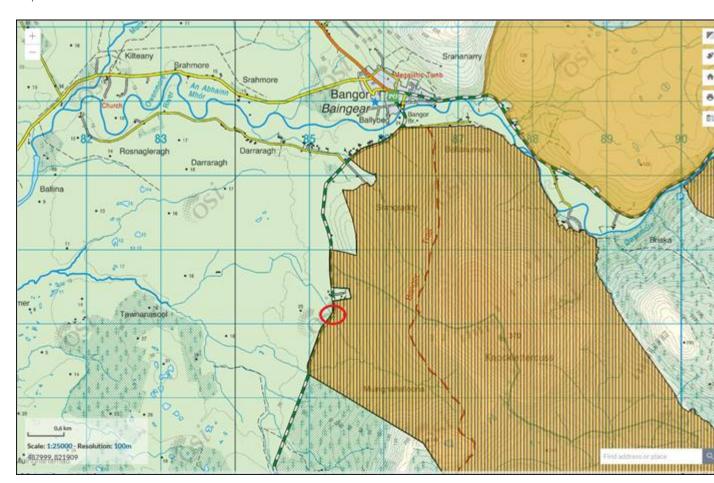


Figure 1. Bangor Erris Bridge (circled in red) [Source: NBDC mapviewer].

Existing Damage:

The north east curved section of parapet wall is 500mm thick and comprises an unreinforced stone masonry wall faced both sides in up to 140mm thick cut stone masonry set in a random joint pattern. The infill concrete to the wall appears to be a weak concrete. The parapet wall is capped with 500mm thick stone masonry profiled copings x 250mm high at top. The finish to the copings appears to be a lightly textured bush hammered finish. The height of the damaged parapet wall including copings is 1550mm and extends 150mm below the level of the roadside grass verge. The parapet wall extends from the top of the wingwall constructed below. The wingwall also measures 500mm thick and comprises a 225mm thick cast in-situ concrete core with up to 140mm facing stonework (including buried face) set in a random joint pattern and fixed using Ancon wall ties set into channels cast into the concrete wall. The total inside length of the curved parapet/ wingwall extends 2000mm to a joint that separates the curved section of the wall from the straight section of wall that extends over the bridge.

The curved parapet wall is partly demolished over a length of 1300mm including 4 No. copings stones (predrilled for dowelling) which are lying both on the embankment and the watercourse below some of which appear to be intact. The remainder of the curved section of parapet wall is largely in disrepair with loose/displaced masonry and displaced copings and random joint separation cracking noted. Some joint separation cracking was also observed above/below the top course of masonry below the copings extending some 700mm past the separation joint into the straight section of wall. Loose sections of mortar were noted between 4 No. copings extending over a length of 1200mm past the separation joint. An area of masonry facings measuring 0.5m2 has been dislodged from the internal face of the wingwall below exposing the concrete core and with protruding ends of the cast in channels partially damaged. The masonry wall debris largely lies on the adjoining river embankment with some masonry debris lying in the watercourse below. The debris appears to have flattened some trees growing at the foot of the embankment and which are lying in the watercourse. Crash debris was also observed lying in the watercourse below notably plastic and litter. Some minor localised crash debris was noted lying on the embankment.

Photos of damage attached. Photo pre impact to wall also included.

Outline Scope of Permanent Works:

- Remove 12m² of masonry debris from embankment. Remove 3m2 of debris from watercourse below. Remove 5m2 of vegetation from watercourse.
- Rebuild north east damaged curved parapet wall to full height and reinstate 6 No. profiled stone masonry copings (pre-drilled for dowelling), all to match existing.
- Rebuild damaged top course of wall to section of straight section of wall (extending past separation joint) and reinstate 4No. profiled copings (pre-drilled for dowelling) on top where mortar between units is loose, all to match existing.
- Reinstate separation joint sealant to repaired sections of wall.
- Reinstate masonry facings fixed to area of exposed concrete core to wingwall.
- Reinstate Structure ID.

The damaged wall is to be deconstructed to stable material, and then fully reconstructed using hand tools to tie in with the existing wall utilising the existing non-defective stone masonry facings salvaged from the embankment and watercourse, or if not possible, new locally sourced stone masonry to match existing wall, and lime mortars. The re-construction of the parapet wall is to match existing construction. The mortar for stone masonry facings will be mixed away from the structure to prevent contamination of the watercourse. All damaged masonry sections not suitable for re-use and other debris resulting from the damage to be disposed off-site. Measures should also be implemented to prevent materials from entering the watercourse during the works. Precautionary silt fencing to control and prevent any pollution of the watercourse should be erected at the edge of the works to intercept any runoff that might arise from the construction works. However, any such material would flow away from Owenduff/Nephin Complex SAC / SPA and not into it.

Ecological Characteristics.

Bangor Erris Bridge is located on the N59 on the boundary of Owenduff/Nephin Complex SAC (000534) and Owenduff/Nephin Complex SPA (004098). The bridge crosses a small stream that flows westwards to enter Tullaghan Bay. This is part of Blacksod Bay/Broadhaven SPA (004037).

The qualifying interests of Owenduff/Nephin Complex SAC are (see https://www.npws.ie/protected-sites/sac/000534): -

- Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
 [3110]
- Natural dystrophic lakes and ponds [3160]
- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]
- Northern Atlantic wet heaths with *Erica tetralix* [4010]
- Alpine and Boreal heaths [4060]
- Juniperus communis formations on heaths or calcareous grasslands [5130]
- Blanket bogs (* if active bog) [7130]
- Transition mires and quaking bogs [7140]
- Salmo salar (Salmon) [1106]
- Lutra lutra (Otter) [1355]
- Saxifraga hirculus (Marsh Saxifrage) [1528]
- Hamatocaulis vernicosus (Slender Green Feather-moss) [6216]

The qualifying interests of Owenduff/Nephin Complex SPA are (see https://www.npws.ie/protected-sites/spa/004098): -

- Merlin (*Falco columbarius*) [A098]
- Golden Plover (*Pluvialis apricaria*) [A140]

Both Merlin and Golden Plover designated as qualifying interests for their breeding populations in the SPA. Both species favour isolated parts of the bog complex to breed within; not areas adjoining public roads. The proposed bridge works would not affect these species. Blacksod Bay/Broadhaven SPA is located at its closest ca. 5km to the west. It is designated for a group of wintering waders and wildfowl, as well as breeding Sandwich Tern (*Sterna sandvicensis*) [A191] and Dunlin (*Calidris alpina schinzii*) [A466] (see https://www.npws.ie/protected-sites/spa/004037). The bridge and immediate environs does not support habitat that would be used by these species.



Plate 1 Damage to Bridge parapet.

The damaged parapet is above the riverbank adjoining the river; not directly over the stream itself. It is adjoined by grassland on both the road and river side (see Plate 1). There are no bog, heath or mire habitats at the proposed works area. None of the lake habitats for which the SAC has been designated are located at the bridge (i.e. habitat 3110 or 3160; refer to Map 3 of NPWS, 2017). Debris which has fallen into the stream would be removed by hand.

With respect to species for which the SAC has been designated there are no records of Slender Green Feather-moss in the environs of the bridge (Map 4 of NPWS, 2017) or of Marsh Saxifrage (Map 5 of NPWS, 2017). The small stream under the bridge does not provide suitable habitat for salmonids; when checked by the engineers it was also found to contain quite a lot of rubbish and crash debris which will be removed (see accompanying photographs). Otter were recorded in 2011 as part of the Ballycroy Bioblitz in the townland of Muingnahallona (F8520) within which the bridge is located, so Otter are likely to occur in the wider catchment.

The bridge is not in a *Margaritifera* sensitive area. There are no records of Freshwater pearl mussel (*Margaritifera margaritifera*) from the stream on which the bridge is located (Source: NPWS records). There are no records of white-clawed crayfish (*Austropotamobius pallipes*) in watercourses connected to the bridge (Source: NBDC).

There are no records of invasive plant species, such as Japanese knotweed (*Fallopia japonica*); or Himalayan balsam (*Impatiens glandulifera*), Giant hogweed (*Heracleum mantegazzianum*) or Giantrhubarb (*Gunnera* asp.) from the bridge location or nearby (Source: NBDC). Giant-rhubarb (Gunnera tinctorial) has, however been recorded downstream of the bridge (F848205 in 2011) and on the N59 approximately 1km to the north (F852213; in 2015). As can be seen in some of the accompanying photographs *Rhododendron ponticum* is present close, but not directly adjoining the bridge (see Plate 1).

The bridge parapet proposed for repair is not suitable for supporting roosting bats.

References

NPWS (2014). Conservation Objectives: Blacksod Bay/Broad Haven SPA 004037. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2017). Conservation Objectives: Owenduff/Nephin Complex SAC 000534. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2021). Conservation objectives for Owenduff/Nephin Complex SPA [004098]. Generic Version 8.0. Department of Housing, Local Government and Heritage.

Atkins Findings -

This Screening for Appropriate Assessment is based on the best available scientific information. It is concluded that the proposed project poses no likely significant effects on Natura 2000 sites, either alone or in combination with other projects. Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment.

Findings of TII Appropriate Assessment -

Can you please provide a Reasoned Determination?

Paul O' Donoghue BSc PhD CEnV MCIEEM Associate Director, Ecology Ireland

Paul O' Donoghue BSc PhD CEnV MCIEEM Associate Director, Ecology Ireland

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