RE: Re. MO-N59-042.10 (Burrishoole Farm Access Bridge)

O'Malley Vincent
Tue 2/2/2021 1:19 PM
To: Chamberlain Greg CC: Nea Christian

Greg,

Having reviewed the content of the email and the accompanying attachments related to the proposed repairs to the Burrishoole Farm Access Bridge from Atkins, I am happy to accept the reasoned determination as set out below.

Sincerely Vincent

From: Chamberlain Greg

Sent: Tuesday 2 February 2021 11:04

To: O'Malley Vincent

Cc: Nea Christian

Subject: FW: Re. MO-N59-042.10 (Burrishoole Farm Access Bridge)

Vincent

Having reviewed Paul's email below and having regard to the very minor 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 2nd of February, 2021, and entitled 'Re. Reactive Maintenance works at, MO-N59-042.10 (Burrishoole Farm Access Bridge) 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: Chamberlain, Greg

Sent: Tuesday 2 February 2021 10:34

To: Chamberlain Greg

Subject: FW: Re. MO-N59-042.10 (Burrishoole Farm Access Bridge)

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From: O'Donoghue, Paul
Sent: 01 February 2021 14:33

To: Chamberlain, Greg

Cc: Nea Christian Sweeney, Niamh

Subject: Re. MO-N59-042.10 (Burrishoole Farm Access Bridge)

Greg

Re. MO-N59-042.10 (Burrishoole Farm Access Bridge)

MO-N59-042.10 (Burrishoole Farm Access Bridge) is located on the N59 to the northwest of Newport, Co. Mayo. It is a small underpass located on the eastern shore of the Burrishole tidal channel as it is crossed by the N59. At the time of survey by the engineers a small flow of water was noted in the underpass. The underpass adjoins Clew Bay Complex SAC (001482). The southwestern entrance to the underpass is outside the SAC; the north-eastern side is within the SAC. The location of the underpass is shown (Purple pin) on Plate 1, below.

To the west the main channel is crossed by Burrishoole Bridge - MO-N59-042.00.

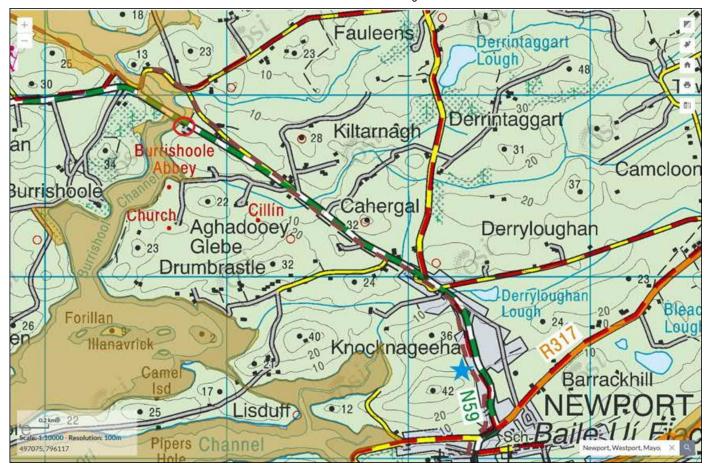


Figure 1. Location of MO-N59-042.10 (Burrishoole Farm Access Bridge) (circled in red). [Source: NBDC.ie].



Plate 1. Location of MO-N59-042.10 (Burrishoole Farm Access Bridge) (Purple pin). [© Bing Maps].

Parapet wall repairs:

Aa section of the north-eastern concrete parapet wall to MO-N59-042.10 (Burrishoole Farm Access Bridge) has been damaged; refer also attached photos.

The open area of impact damage where a section of the concrete wall has dislodged and fallen into the drainage channel below measures a maximum of 1500mm in length by 690mm high above top of stable concrete just above top of rubbing strip level. The measured wall thickness varies 430mm thick at the top to 450mm thick at the base. The top of the existing wall is rounded. The total impact damage that warrants the section of wall to be rebuilt measures 0.5m3.

The section of damaged wall is to be fully reconstructed in mass concrete from stable material to tie in and match the existing parapet wall construction. The sections of existing parapet wall that have fallen into the watercourse below are to be removed and disposed off-site in accordance with all relevant legislative requirements. No works shall be allowed take to place from the watercourse due to its environmentally sensitive nature apart from the requirement to remove the sections of damaged wall lying in the watercourse. Measures should also be

implemented to prevent materials from entering the watercourse during the works – of particular note is measures taken during any reconstruction of the wall over the watercourse.

Proposed Works:

Environmental: -

- Works will involve concrete to protect the stream the back shutter is erected first all prep work to be completed after the erection of the back shutter.
- The broken section of wall is to be removed by a HiAb with operatives entering the stream to install the web slings to remove the existing wall sections.
- All prep work, cutting, drilling concreting are not to be carried out until the back shutter to fixed in position.

Repair Works:

- After the Traffic Management Plan is in place, the hi ab is to position itself facing Newport ensuring riggers are not positioned on the structure.
- The blocks are to be pre-slung by the operatives.
- 1 Operative is to stay on the top level to ensure traffic is segregated from the riggers of the hi ab.
- The second operative will enter the stream wearing waders and floatation jacket; the operative is to be tied off to the Hiab or bridge structure for safety.
- The operative will attach the web sling to the hi ab. The sling will have been pre-slung by appropriately trained operatives with the web sling in a choke connection. [The blocks will be lifted onto the hi-ab and brought to a tip. (weight of each block = 2 x 1x 0.3 x 2.4 = 1.7t) 1.7 / 0.8 = 2.16t therefore 3t Slings required (choke 80% sling capacity) 6m radius for Hiab. Load 3t. Hiab selected should have a 10% min spare capacity].
- Once the broken sections are removed, the operatives will make the timber shutters. Shutters are to be made of 18mm ply with 4x2 timber bearers at 300mm centres with 6x3 soldiers at 0.75m centres. Tie bars at to be located 100mm from the bottom, 750mm up and at the top above the pour (2 tie bars required). Shutters are to be 3.6m long (300mm overlap on either side) and 1.2m high (300mm freeboard). 2 nr shutters are required.
- The operatives are to drill holes in the existing wall and feed the divvy bar through the structure. Soldiers will be drilled with a 20mm bit at the correct centres as per the sketch. The shutter will be lifted into place by the operatives. The shutter is 86.1kg when assembled so use HiAb to lift in over the water. Roadside shutter can be a 2 man lift.
- When the back shutter is in place, the exposed edges are to be saw cut and broken back as required to sound concrete. 25mm dowels will be drilled into the face and set in using the Fischer injection mortar. All dust and loose particles to be cleaned off.
- Once the face prep is complete, the second shutter will be lifted into place over the tie bars and tightened using waler plates and nuts. Spacers (dog bones) to be spaced at top of shutter to maintain correct thickness.
- Concrete to be placed into the shutter from the shoot of the truck. Fill the shutter slowly and evenly in 300mm layers compacting in 400mm centres with a 2" poker.
- Finish top of wall with stell trowel and form a bull nose at the edges.
- Once concrete is cured. Remove shutters by dismantling in situ until light enough for two men to lift away onto the pickup. No material is to be thrown into the stream.
- Ensure all tie bar holes are sealed up using plugs and Fosroc HB45.
- Remove all material and traffic management

Ecological Characteristics:

The bridge is on the boundary of / within Clew Bay Complex SAC (001482). The adjoining Burrishole channel takes water from Furnace Lough under the N59 to Clew Bay. At this location the channel is tidal in character. There appears to be a small flow of water in the underpass. The site is also designated as Clew Bay Complex pNHA (001482).

The Clew Bay Complex SAC (001482) is designated for: -

- Mudflats and sandflats not covered by seawater at low tide [1140]
- Coastal lagoons [1150]
- Large shallow inlets and bays [1160]
- Annual vegetation of drift lines [1210]
- Perennial vegetation of stony banks [1220]
- Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]
- Embryonic shifting dunes [2110]
- Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]
- Machairs (* in Ireland) [21A0]
- Old sessile oak woods with *llex* and *Blechnum* in the British Isles [91A0]
- Vertigo geyeri (Geyer's Whorl Snail) [1013]
- Lutra lutra (Otter) [1355]
- Phoca vitulina (Harbour Seal) [1365]

To the west of the nort-heastern side of the Farm Underpass adjoining semi-natural habitat is classified as potential Atlantic salt meadow / Mediterranean salt meadow mosaic. However, this habitat is not located adjoining the damaged parapet.

Otter was recorded in 2011 on the Burrishole upstream of the Burrishole Bridge / Farm Underpass - L966961R275360 (Source: NBDC; Atlas of Mammals in Ireland 2010-2015); as well as widely through Clew Bay. Works will not prevent otter continuing to move upstream / downstream along the main Burrishole channel.

There are no records of *Vertigo geyeri* (Geyer's Whorl Snail) from the works area (Source: NBDC map viewer). Neither Burrishoole Farm Access Bridge (MO-N59-042.00) nor Burrishoole Bridge (MO-N59-042.00) were assessed as having potential to support bats. The area of parapet to

be repaired does not offer suitable roosting opportunities for bats.

None of the other habitats or species for which Clew Bay SAC has been designated are located at the Farm Underpass.

There are no records of Japanese knotweed (Fallopia japonica), Giant hogweed (Heracleum mantegazzianum), Indian balsam (Impatiens glandulifera) or Giant-rhubarb (Gunnera sp.) from the environs of the works area (Source: NBDC).

The main risk relates to the pouring of concrete. A step-by-step description of the approach to shuttering and the concrete pour is presented above. Negative impacts on Clew Bay SAC are as a result of these measures not anticipated. Furthermore, the proposed works will be carried out from the road; the exception being the recovery of the broken masonry and limited access by workers.

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

Principal Ecologist Ireland

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