

<b>Project:</b>	Donegal County Council Dredging Permits						
<b>Client</b>	Donegal County Council						
<b>Subject</b>	Maritime Usage Licence Application – Proposed Maritime Usage						
<b>Appendix</b>	3.1						
<b>Orig. by</b>	DM	<b>Appr. by</b>	AA	<b>Date</b>	26/03/2026	<b>Doc. Ref:</b>	C1087-AYE-ZZ-XX-TN-MA-0001

### 3.1 Proposed Maritime Usage

Maintenance dredging is proposed for Buncrana Pier to maintain navigable depth around the Pier. The Pier is prone to siltation from the Owenkillew River, and historically maintenance dredging maintained the navigational depth since 2011.

The RNLI have a designated berth with pontoons, piles and access structures at the location shown in Figure 1 (RNLI Berth) to provide a sheltered berthing location. From this berth the RNLI launch the rescue vessels during emergency call outs. The RNLI Berth location causes the Owenkillew River mouth to discharging directly into the same area causing significant sediment deposition in this area.

Furthermore, a Roll-On-Roll-Off (RO-RO) ferry service exists between Rathmullan and Buncrana which operates during the summer months from the slipway (refer to Figure 1). The area is also used by leisure boats with the Fahan Marina to the south of the facility.



Figure 1: Proposed Site Location (Google Earth).

A Maritime Usage License (MUL) is sought from the Maritime Area Regulating Authority (MARA) for the maintenance dredging in combination with a Dumping at Sea (DaS) permit from the Environmental Protection Agency (EPA).

### 3.1.1 Dredging Need

Sands/gravels that have accumulated due to shifting sand bars, storm driven sediment movement or infill from river flood events have caused a build-up of sediment which requires maintenance dredging to keep the pier operational for the RNLI and local craft.

It is essential to keep the RNLI service operational to ensure that the lifesaving coverage within Lough Swilly and the Western Approaches (extending to Arranmore Island to the West and Portrush/Ratlin Island to the East) is not interrupted. On average the RNLI service is launched 20 times per year for emergency call outs, as well as an additional 65 times per year for training purposes. The proposed maintenance dredging minimises the risk to life caused by operational downtime of the RNLI from sediment deposition.

Consultations with the RNLI & Lough Swilly Ferry was undertaken during a site visit on the 1<sup>st</sup> of April 2025. Formal letters of support for the necessity of the continued dredging operations were sought from both the RNLI and the Lough Swilly Ferry operator, and these have been included in Appendix A.

The RNLI stated that continued and regular dredging of the pier is critical for maintaining 24/7 operational availability. Without dredging, the Lifeboat must be moved to an exposed mooring point leading to operational delays, increased launch times, and significant safety risks to volunteer crews. These risks arise during the transfer of personnel from the pier to the exposed mooring point using a secondary boat, an operation that becomes particularly hazardous during storms when wave heights increase and the RNLI services are typically needed most. Such conditions also lead to periods when the Lifeboat is taken off service for several hours, reducing lifesaving coverage. The RNLI highlights that dredging greatly reduces these risks, enabling the vessel to remain alongside the pier for all but the lowest spring tides.

Lough Swilly Ferry emphasised that adequate water depth at Bunrana Harbour is essential for the safe and reliable operation of the ferry service between Bunrana and Rathmullan. The slipway is subject to significant winter sand accumulation, and without annual dredging the ferry cannot operate. On one occasion when dredging had not occurred, over 60 scheduled sailings were lost due to insufficient depth, directly affecting service reliability and local connectivity. Ongoing dredging is therefore considered critical for safe berthing, consistent tidal access, and the overall viability of the route.

Both organisations confirm that maintenance dredging is essential for safe operations, emergency response capability, and regional connectivity. Their letters underscore the importance of continuing the dredging programme to avoid service disruptions, safety hazards, and reduced accessibility for emergency and transport operations.

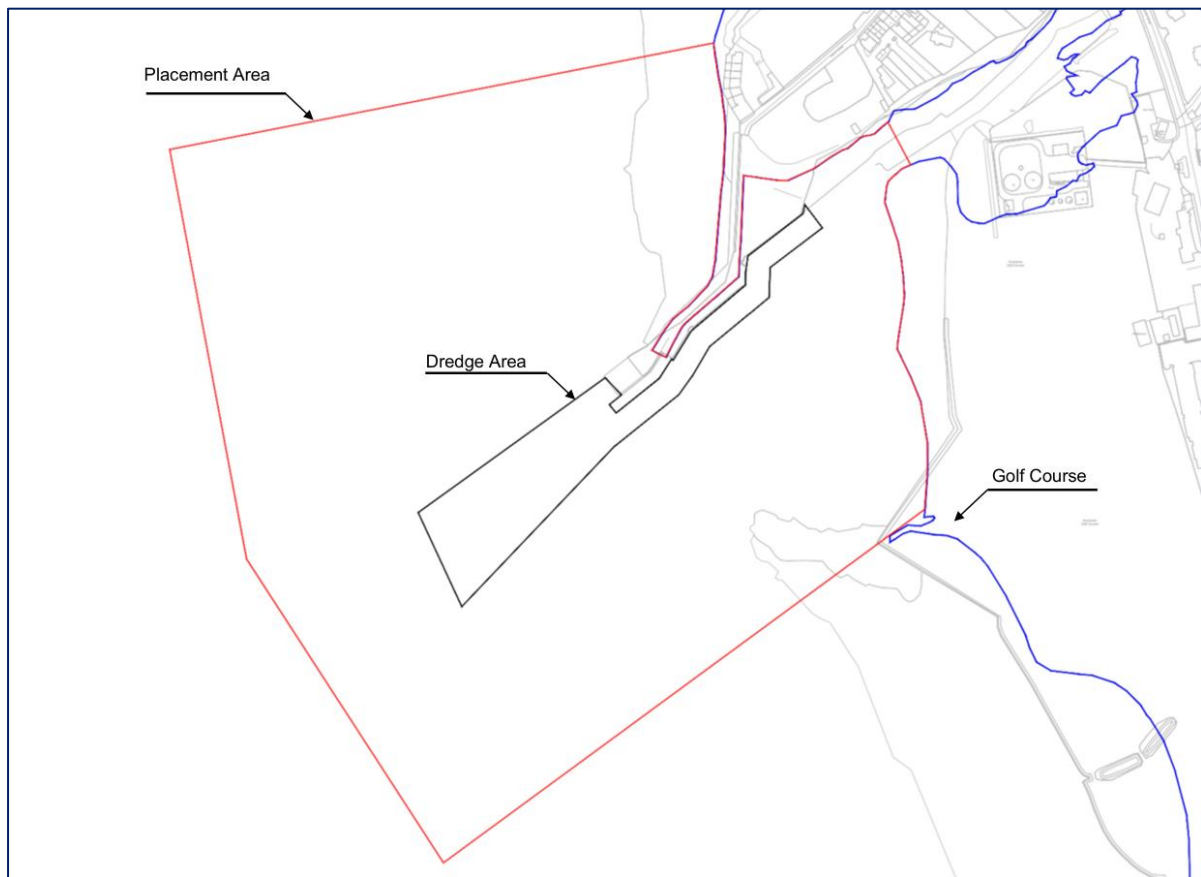
### 3.1.2 Works Breakdown

Maintenance dredging was proposed over a duration of 8 years, with the re-positioning of sediment in the region of 12,000m<sup>3</sup> on an annual basis (1<sup>st</sup> January 2027 – 31<sup>st</sup> December 2034) across two dredge campaigns. Each dredging campaign is expected to take place over seven (7 No.) to ten (10 No.) days to complete and is tide and weather dependent. An indicative programme is included as Attachment 3.3 (Ref. C1087-AYE-ZZ-XX-PP-0001). The proposed maritime usage aligns with the historical targeted maintenance dredging depths around the Pier of -2m CD and encompass an area of approximately 18,900m<sup>2</sup>. The total area including the placement site is approximately 274,500m<sup>2</sup>.

The current methodology that is envisaged for the maintenance dredging is plough dredging to move sediments from the shallower areas around the pier to the deeper sections of Lough Swilly.

In shallow areas inaccessible to the plough dredger, an excavator will be deployed either from the pier deck or, at lower tides, from the seabed to remove the material from the site. Dumper trucks will transport the dredged material from the dredge site to above the high-water mark on the golf course adjacent to the beach under an existing Article 27 license. Figure 2 indicates the placement area, dredge area and the adjacent golf course.

Since flooding of the Owenkillew River washes silts into the harbour during the winter months, the proposed dredging shall be carried out in the spring/summer months of the year to remove the winter sediment build-up.



**Figure 2: Proposed Dredge and Placement Areas (red line) – Ref. CORE1-AYE-XX-DR-MA-1001.**

### 3.1.3 Historical Dredging Campaigns

Maintenance dredging has been carried out at Bunrana Pier on several occasions since 2011 to address ongoing siltation from the Owenkillew River and the natural movement of sediment within Loughshinny. These dredging campaigns were undertaken with a Dumping at Sea (DaS) Permit (Ref No. S0011-03) issued by the Environmental Protection Agency (EPA). As part of the license conditions, Annual Environmental Reports (AER's) were submitted to the EPA documenting the works completed, including the volumes of material dredged and the target depths of the campaigns. Several historical campaigns successfully restored navigational depth around the pier. Figure 3 shows the historical bathymetric surveys undertaken at Bunrana Pier during 2017 and 2020.

The historical AER's have been included as further supporting information in Appendix B.

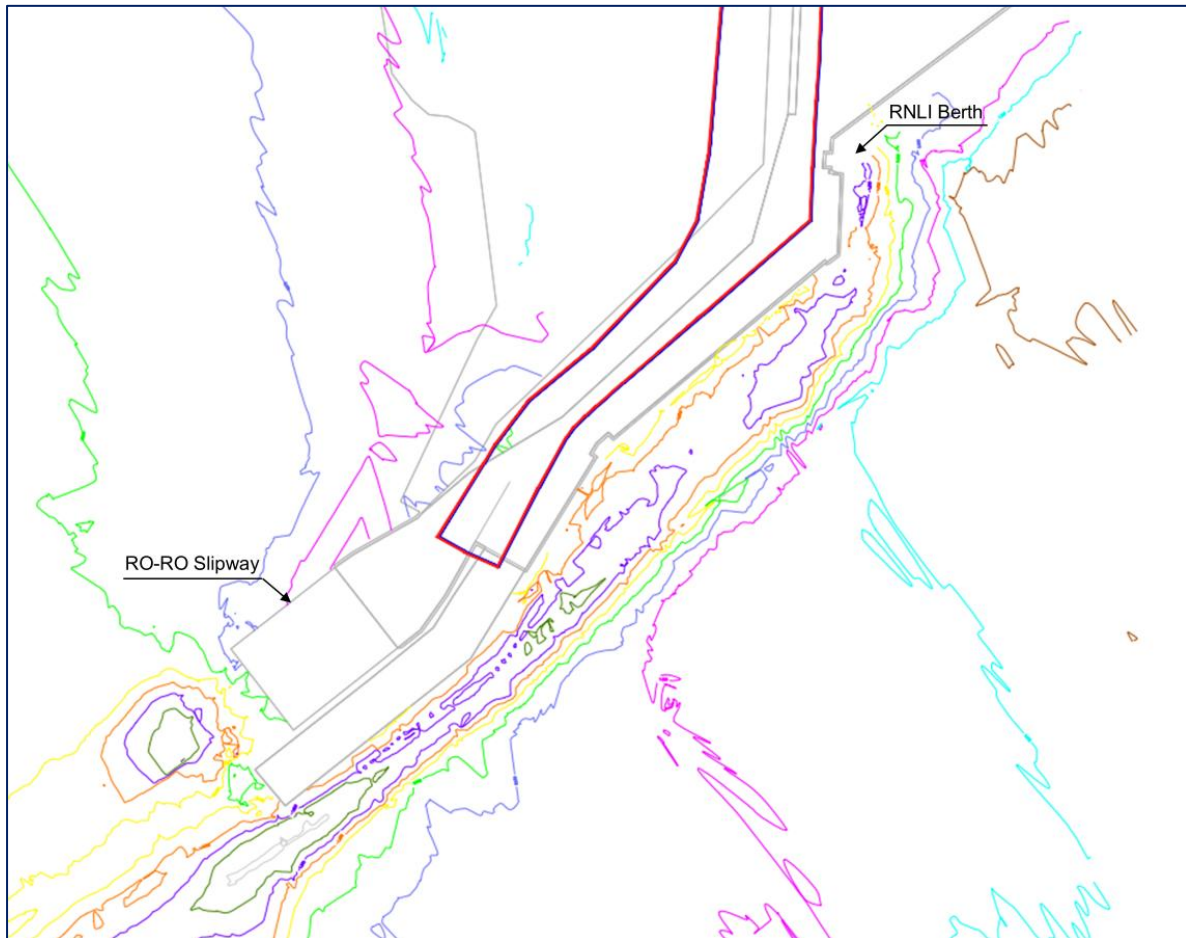


Figure 3: Historical Site Location Bathymetry – Ref. CORE1-AYE-XX-DR-MA-1003.

## Appendix A: Letters of Support



Ayesa Ireland

27/01/26

**Re: Donegal County Council Dredging Permits**

Dillan, a chara,

Lough Swilly Ferry wishes to formally express its strong support for the continued dredging of the Bunrana Harbour, which is essential to the safe, reliable, and efficient operation of our ferry service. The Lough Swilly Ferry operates a ferry service between Bunrana and Rathmullan, Co. Donegal. This service provides a vital transport link for local residents and tourists during the summer months and plays an important role in supporting connectivity and economic activity in the area.

To operate the service safely and efficiently, the harbour at Bunrana must have adequate water depth which is critical to maintaining safe access for our vessel. Ongoing dredging is necessary to improve navigational access, allow for consistent berthing, and ensure the ferry can operate across a wider range of tidal conditions. The primary function of the ferry is to transport cars and passengers across Lough Swilly, which requires reliable access to the slipway for the safe loading and unloading of vehicles and passengers.

Due to its location, Bunrana pier and slipway are particularly susceptible to significant sand accumulation over the winter months. This build-up regularly renders the slipway unusable unless annual dredging works are carried out. Without these dredging operations, the ferry service cannot operate effectively. On one occasion when the service attempted to operate without prior dredging, over 60 scheduled sailings were lost as the vessel was unable to access the slipway due to insufficient depth. This resulted in reduced capacity during peak periods and had a negative impact on service reliability, leading directly to a loss of business.

If dredging works do not continue, these challenges are expected to intensify. Further buildup will likely lead to increased operational downtime, reduced service frequency, and potential safety risks. Over time, this may undermine the viability of the ferry service, negatively affect regional connectivity, and place additional pressure on alternative transport routes. It is therefore essential that dredging of the harbour is completed in advance of the ferry service commencement each season.

Is mise, le meas,

  
Dominic Sweeney  
Director

From:  
RNLI Ireland,  
Airside, Swords,  
Co. Dublin,  
K67WA24

1<sup>st</sup> February 2026

*Ref: Dredging at Bunrana Pier, Co Donegal and associated RNLI Berth*

To Whom it may concern

I write to support the application for a dredging licence for ongoing maintenance dredging at Bunrana Pier/harbour.

The RNLI operates a Shannon Class All Weather Lifeboat (ALB) from Bunrana Pier, this asset provides essential lifesaving cover for an extensive, normal area of operation that not only includes Lough Swilly itself but the Western approaches extending around to Arranmore Island to the West and Portrush/Ratlin Island to the East. However, the asset is capable of a range of 250 miles and could be tasked to assist incidents outside its normal operating area.

To maintain 24/7 availability of this service the continued dredging of the pier area at Bunrana is critical for several safety and operational reasons as outlined below.

- The continued and regular dredging campaign at the pier allows our asset to remain moored in its alongside berth for all but the lowest spring tides that might be infrequently experienced.
- A lack of dredging at the pier presents several risks to both the availability of service and safety of the volunteer crews. Any lack of available depth of water at both the berth and the head of the pier (bar build up) means the Lifeboat must be moved to an exposed mooring out in the Lough.
  - Delayed launch time – With the ALB on the mooring a boarding boat(4mtr inflatable boat) must be used to transfer the crew from the pier to the vessel, this increases the launch time by on average 10 minutes.
  - Weather conditions - Moderate – with the ALB on the mooring, any wind more than force 6 from any kind of westerly direction presents additional risk to the crew and boarding boat operations, this is due to the sea conditions created at the head of the pier where the onshore wind produces breaking waves over the shallow bar. This means the crew are both wet and cold prior to launching on service but also raises risk of capsizing of the boarding boat particularly when trying to return to the pier from the mooring. In addition to this the physical boarding on to the ALB from the boarding boat is a risky evolution.

From:  
RNLI Ireland,  
Airside, Swords,  
Co. Dublin,  
K67WA24

- Weather conditions – Severe- whilst boarding boat operations are possible in moderate conditions the conditions are risk assessed for boarding boat operations, and when the conditions both wind and sea are forecast to be outside the limits for safe operations of the boarding boat, the ALB is brought in from the mooring at high tide and moored back in the berth, the ALB will then be placed off service for a number of hours over the low water period, normally this would be at least 2 hrs either side of LW. This Off Service period is declared to Irish Coastguard, and the lifeboat cannot be tasked to an incident during this time.
- The continued and regular dredging that DCC carry out at Buncrana pier ensures that the scenarios as described previously and the associated risks they present to both service availability and to the safety of the volunteer crews is kept to a minimum. Without the dredging the time that the ALB is having to be on the exposed mooring increases to at least 50% of a calendar month and on occasion more than this depending on the range of tides that experienced. The dredging reduces this to nominal number of days over spring tides and not at all over neap tides.
- The ALB at Lough Swilly launches on service on average over 20 times per year assisting around 20 to 30 people as an outcome of these launches. Whilst the service calls are the reason the service is there, to be able to do this the crew have to train regularly, and the ALB would launch on exercise an average of 65 times per year. Obviously, the restrictions on available depth and the impact this has, has an impact on available training opportunities.

Please do not hesitate to get in contact if you require any further information.

Best Regards

**Martin Phillips** | Area Operations Manager | Area IR6

*Supporting Lough Swilly, Arranmore, Bundoran, Sligo Bay, Ballyglass, Enniskillen & Carrybridge lifeboat stations & Regional Resilience Coxswain/Mechanic team*

Mobile: +353 (0)874934249 | Email: [martin\\_phillips@rnli.org.uk](mailto:martin_phillips@rnli.org.uk)

## Appendix B: Historical AER's