

Method Statement

Stromness harbour dredging

Project Title: Dredging Operations at Stromness harbour

Applicant: Orkney Islands Council – Marine Services and Transportation

Location: Stromness, Orkney Islands

Date: Feb-March 2026 (predicted)

1- Introduction

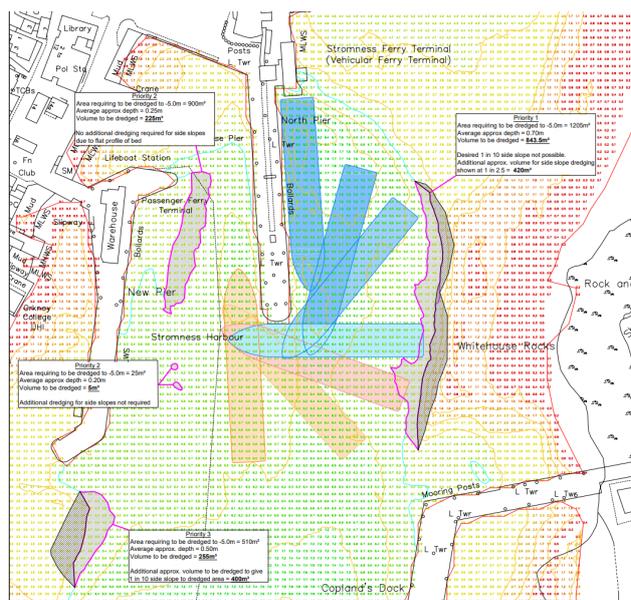
This method statement outlines the proposed dredging operations (probably backhoe dredging) to deepen the Stromness access channel and adjacent to the piers. The primary purpose is to enable the ferries to have a safe navigation through the harbour. This is a critical safety requirement highlighted by the ferries. The dredging will be carried out using a dredger, with the objective of achieving the required depth in the berth pocket and surrounding water area while maintaining the stability of the pier and protecting the surrounding marine environment.

2- Scope of Works

- Mobilisation of a properly maintained dredger with evidence of checks to ensure that the risk of spillage is minimised.
- Dredging material from the seabed of the harbour
- Transfer and transport of dredged material to a designated area
- Implementation of safety procedures and environmental mitigation measures in accordance with local regulations.

3- Area of interest

The dredging operations will be carried out the Stromness harbour to increase the berth depth to the required level.



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Whole area to be dredged is 2150 m² and the approx. dredge volume is 4000 m³

4- Equipment and Resources

- Dredger and barge/vessel for dredged material.
- Hydrographic survey equipment (for pre- and post-dredge monitoring).
- Site crew, plant operators, and environmental monitors.

5- Sequence of Operations

5-1- Pre-Dredging Activities

- Conduct hydrographic surveys of the proposed dredging zone to verify design levels and detect obstructions.
- Conduct a toolbox talk and safety briefing with all personnel regarding method, hazards, and emergency response.

5-2- Mobilisation

- Pre- Operation Checks including Notice to Mariners in place, Site Access Permit / Permit to Work, Weather Forecast Review and Weather Window Confirmed, Documentation Approved by the client, ensure all equipment has been inspected and is fit for purpose
- Equipment preparation and Check
- Equipment loading

5-3- Dredging Operations

- Vessel positioning
- dredger set- up and installation
- Dredging Ops
- Material Handling:

Most of the dredged material consists of sand , silt and Clay. It is intended to transport it to the dumping area at Stromness C (FI045), suitable carriers are required.

- Process Control:

Constant monitoring to prevent undercutting of quay foundations or exceeding of slope tolerances.

- Survey Checks:

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Conduct frequent bathymetric measurements to confirm progress and compliance with design levels.

5-4- Post-Dredging Activities

- Remove dredger and temporary facilities from site.
- Conduct a final hydrographic survey to confirm dredging is completed to the specified depth and extent.
- Complete reinstatement of any disturbed areas.

6- Dumping area

According to the OSPAR Commission's annual reports on the dumping of wastes at sea, Stromness C **FI045** is a designated marine disposal site located in **Scapa Flow**, Orkney, Scotland. This site has been utilized for the disposal of dredged material, primarily originating from local harbours and their approaches, to maintain navigability. The site code FI045 is consistently referenced in OSPAR's reports, indicating its ongoing use for this purpose. Based on the BPEO result it is intended to use this area as the dumping area

7- Safety & Environmental Controls

- Maintain oil spill response kits and containment booms on-site.
- Halt operations if quay wall stability is in doubt or turbidity levels exceed acceptable limits.
- Comply with all Marine Licence or environmental permit conditions for dredging and in-water works.
- Ensure safe access and egress for site personnel and visiting vessels throughout the project

8- Task Hazards

The following hazards listed below have been identified during the preparation of this procedure. This list may not represent ALL hazards associated with this task.

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|----------------------|--------------------|
| • Lifting Operations | • Swinging loads |
| • Access to Deck | • Manual Handling |
| • Man Overboard | • Winch Operations |
| • Dredge Ops | • Heavy Loads |

9- Quality Assurance and Record Keeping

- Retain all pre- and post-dredge survey data for verification and reporting.
- Keep detailed daily records including:
 - Operating hours

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- Quantity of material dredged
- Weather conditions
- Any incidents or near-misses
- Conduct final inspection and obtain sign-off from responsible authority before demobilisation.