



RED WHARF BAY SEA DEFENCE WALL FBC,

METHOD STATEMENT

CPF 6991



YGC
Council Offices
Shirehall Street
Caernarfon
LL55 1SH

Document Control Sheet

Document Author:	Jason Humphreys
Project Manager:	Jason Humphreys

Revision History

Date	Version No.	Summary of Changes
	0.01	First Draft
	0.02	Final Draft

Approvals

Approved by	Signature	Date	Version
Owen Angus Duncan	Senior Engineer	18/05/2021	0.02

Distribution

Name	Title	Date	Version
Bethan Moseley	Technical Assistant	19/05/2021	0.02

© 2020 Gwynedd Council / YGC. All Rights Reserved.

Copyright in any or all of this documentation belongs to Gwynedd Council / YGC of Council Offices, Shirehall Street, Caernarfon, Gwynedd, LL55 1SH (the 'Owner') and may not be used, sold, transferred, copied or reproduced in whole or in part, in any manner of form or on any media to any person other than in accordance with the terms of the Owner's agreement or otherwise without the prior written consent of the Owner.



ISO9001:2008
FS526386



ISO14001:2004
EMS 526388



ISO18001:2007
OHS 526389

Contents

1.0	Introduction	4
2.0	Methodology	4
3.0	Standard Practice	5
4.0	Emergency Procedures	5
5.0	Emergency Contacts	6

1.0 Introduction

This document has been prepared by YGC on behalf of Anglesey County Council to compile a full business case into the provision of an increased protection level to the existing sea defence wall. (Grid Ref 259919,380989).

At the early design stages, it has been determined that the scheme be split into six sections. The first two sections will involve installing new precast concrete section on a cast in situ concrete base. The remaining four sections will involve raising the level of the existing wall, however this will involve significant pointing and grouting of voids. Works are expected to commence before March/April 2022. Proposals details and location are shown in drawing 6991 included as supporting documents.

The purpose of this document is to outline the methods which will be adopted to undertake the works whilst safeguarding the aquatic and riparian habitat either side of the structure. Compliance with these measures will form a condition of the contract on appointment of the successful contractor for the works.

2.0 Methodology

1. Establish site compound. Provide traffic management and erect diversion signs (if required)
2. The working area is to be securely fenced off using protective barriers to prevent any unauthorised persons entering the work area. Warning signs shall be erected advising others to 'Keep Out'.
3. Locate and mark out existing services, erect suitable protective measures.

Section 1 and 2 – Pre Cast Concrete Section.

4. General Site Clearance. Remove existing tree at section 1 if required.
5. Excavation:

The proposed wall at Section 1 has been set back to avoid working on the beach / area highlighted as Special Area of Conservation (SAC). All material is to remain on site.

Section 2 will involve removal of existing gabions and excavation on the beach front. It is required to carry out the works on section 2 during spring tides to allow sufficient opportunities between springs and neap tides.

Unacceptable excavated material will be disposed responsibly off site (made up ground, bituminous material from car park etc).

6. Formwork and Casting of Proposed Concrete Base:

Cast in situ proposed new concrete base to provide fixing for the precast concrete sections.

Contractors will be required to assess and work around the tidal conditions to this site.

Precautions and temporary works will be required to avoid any risk of contamination.

Imported concrete required.

7. Delivery of pre-cast concrete sections (multiple).

8. Position the precast concrete sections onto the concrete base and fix down using bolts. At vertical joints between sections it will be required to seal all gaps using adequate sealant.

All external masonry finishes to precast sections to be carried out in moulding process off site. This will reduce the construction whilst working in the SAC.

Works will possibly involve grouting or mortar bedding and additional sealant to avoid water penetration on the external face.

9. Masonry cladding to internal (rear) of existing wall by constructing a cast in-situ concrete base and dwarf masonry wall.

10. Reinstatement / Backfilling:

Backfill to Structure – Install back of wall drainage, apply waterproofing and backfill with Class 6N imported material.

Reinstate Car Park – Full carriageway construction will involve importing bituminous material. Road markings to be put down upon completion of the scheme.

Landscaping – Remove from store all acceptable material and backfill / landscape the area behind section 2 wall. Additional topsoil may be required therefore additional import of material.

11. SuDS – Scheme to undergo a full sustainable drainage design during the detailed design stage.

Section 3 to 6 – Pressure pointing and Grouting of Voids.

12. Erect temporary working platform / scaffold to contractor's design. Contractor to assess and consider tide times, heights and ground stability.
13. Take down existing fencing / vrs and parapet wall (masonry). All materials except for masonry to be disposed of responsibly off site.
14. Before the commencement of the pointing works of the wall can commence, it will be necessary to remove all existing Mortar vegetation from the wall joints, whilst any loose masonry mortar will be removed by jet wash and air lance.
15. Carry out pointing work to external masonry wall.
16. 50mm plastic pipes will be placed in the wall in a 1.5m diamond grid to accommodate the Grouting of the inner wall where specified or used as weep pipes.
17. Following the completion of the above steps, the pressure pointing / grouting works can be commenced, works will generally start at the base of the wall working along and then up the wall in a systematic manner ensure that all sections of the wall are suitably pointed. The above operation is repeated until the entire wall has been successfully re-pointed.
18. At the end of each day and upon completion of the works, remove all rubbish, scrap and waste materials/packaging from the premises and dispose of appropriately within the site skips. Thoroughly clean through the area and all transit routes leaving the site in a clean and tidy state.
19. Remove working platform / scaffold and netting once work is completed on the outer face of the wall.
20. Excavate behind wall and infill any significant voids. The previous process of pointing and grouting will alleviate any risk of contamination.
21. Construct proposed new wall to the desired height. Staging or working platform will be required on the external phase to carry out this exercise. Work to be determined by tidal calendar.
22. Backfill and Reinstate Carriageway and Car Park with road markings where required.
23. SuDS – Scheme to undergo a full sustainable drainage design during the detailed design stage.

List of Drawings:**6991/LP/1000****6991/GA/1001 - 1006**

3.0 Standard Practice

1. During all phases of work good working practices in accordance with PPG5, should minimise the risk of hazardous material entering watercourse directly or as runoff
2. No materials or refuelling plants are to be stored within 10m of the sea front / beach.
3. All fuel storage tanks will be bunded and spill kits are to be available on site. Personnel trained to use the kit and deal with oil/diesel and clean-up will be available on site.
4. Any water that comes into contact with wet concrete must be treated as contaminated and must not be allowed to discharge into the watercourse.
5. All precautions are to be taken to prevent sedimentation of the watercourse, should discolouration occur, work is to be stopped and working practices reviewed.
6. No dewatering water shall be discharged to any watercourse without first receiving sufficient settlement to settle out all solids
7. Any waste excavation material or building waste generated in the course of this work must be disposed of satisfactorily and in accordance with Section 34 of the Environment Protection Act 1990
8. Any in river works should not excessively disturb the riverbed and cause silting of the watercourse
9. The work should be completed during October to March when the terns (Morwenoliaid Ynys Môn SPA) are not present. If it is not possible to complete the works during Autumn to Winter then further on site mitigation would need to be in place. This includes temporary screening between the works and the sea area where practicable to lower any visual disturbance from site personnel and the works. Noise screens could also be used to lower any noise pollution.
10. Site personnel should follow good practice guidelines and be briefed with a toolbox talk on the ecological issues relevant to the site to ensure they comply with environmental protocols.
11. Plant to use biodegradable oils.
12. The contractor will have a designated company, which they use to deal with accidental spillages – this forms part of their emergency plan.
13. NRW emergency help line (0300 065 3000) will be contacted in the case of an emergency spill.

4.0 Emergency Procedures

The weather will be monitored constantly throughout the contract and the following procedures put into place should there be a risk of flooding:

1. Should circumstances dictate, it is possible to remove the coffer dam or culvert headwalls from the river and stored within the compound
2. All sandbags will be checked and adequately sealed to prevent potential washout should the coffer dam be overtopped
3. All works made secure and surplus or loose materials removed
4. Pump on standby at all times when cementitious material is being used

5.0 Emergency Contacts

NRW incident hotline: 0300 065 3000

HSE hotline: 0845 3009923

Jason Humphreys (Project Manager YGC): 07877826896

Bethan Moseley (Ecologist YGC): 07799 845 982