## **O1 Introduction**



North Ayrshire Council is proposing to replace part of the existing seawall in Largs Bay, Largs. This part runs along the northern seaward section of Largs Bay, for approximately 300 metres between Aubery Crescent and the existing RNLI slipway (Image 1).

The existing seawall protects the coastline from wave action and coastal erosion. It also retains Largs promenade and protects the shore side buildings and infrastructure (Image 2).

The replacement of the existing seawall is essential to ensure that it continues to provide optimum protection. The proposal will also involve resurfacing part of the promenade and replacing the steps to the beach, to improve accessibility and enhance the overall amenity value of the area.

### Why are we consulting?

The Council is preparing an application for a marine licence which will seek consent from Marine Scotland to construct the replacement seawall below the Mean High Water Springs



### (MHWS).

A planning application is also being prepared to seek consent from North Ayrshire Council Planning Department for the proposed works above the Mean Low Water Springs (MLWS).

As part of the preparation process there is a statutory requirement to gather views and comments from the local community, environmental groups, and stakeholders on the proposed development. This consultation provides the local community and stakeholders with an opportunity to view the draft proposals, raise queries directly with the Council and RPS, and communicate feedback before any formal application is submitted.



**Image 2 - Site Location** 

# **02 Project Background**



## Why are we doing this?

The existing seawall is in a state of disrepair and needs to be upgraded. It was originally constructed in the 1970s as a replacement facing for an older seawall, and it has deteriorated over time due to repeated exposure to seawater. North Ayrshire Council want to ensure that the seawall continues to provide optimum protection and support against wave activity and coastal erosion. The best design solution is to replace/encapsulate the existing seawall.

## What are the problems with the existing wall?

Recent surveys have shown that the existing seawall structure is deteriorating in several ways:

- The protective concrete facing (known as 'gunite') has deteriorated and has become detached from the main structure (Image 4).
- High levels of chloride in the seawater have infiltrated the seawall. This has corroded and exposed the steel reinforcement within the concrete structure, resulting in concrete loss along sections of the seawall (Image 3).
- The seawall is being undermined by wave action in certain areas exposing its base (or 'toe'), which can lead to instability of the main seawall structure and subsidence/unevenness along the promenade surface behind the seawall (Images 5 and 6).
- The existing steps are currently unsafe for public use (Image 7).



exposing and corroding the internal steel reinforcement.



Image 4 - Failing 'gunite' has been removed from the majority of the seawall.



Image 6 -Wave action has exposed the toe of the seawall and caused undermining of the structure.



Image 5 - Localised subsidence on the Promenade

Image 7 - Deterioration of the concrete wall

## **03 The Proposals**



## What is the proposal?

The proposal involves the construction of a new replacement concrete seawall, directly in front of and encapsulating the existing seawall. The new seawall will be the same height as the existing structure and will be similar in shape and profile. Images 8 - 11 are computer generated images showing what the new seawall will look like.

The main elements of the replacement seawall proposal include:

- Rectangular concrete base units installed at depth along a small narrow section of beach along the front of the existing seawall.
- Filling of these concrete base units with granular fill.
- Placement of curved faced precast concrete sections on top of the concrete base units and grouted together.
- Infilling of area between new wall and existing wall with graded granular material.
- Surfacing of infilled area to create an extension to the promenade, available for public use.
- Resurfacing of the existing promenade with asphalt and red chipping to improve the appearance and usability of the space.
- Placement of cobbles and boulders (similar in size to current beach material) directly in front of new seawall to
  protect against undermining and erosion.

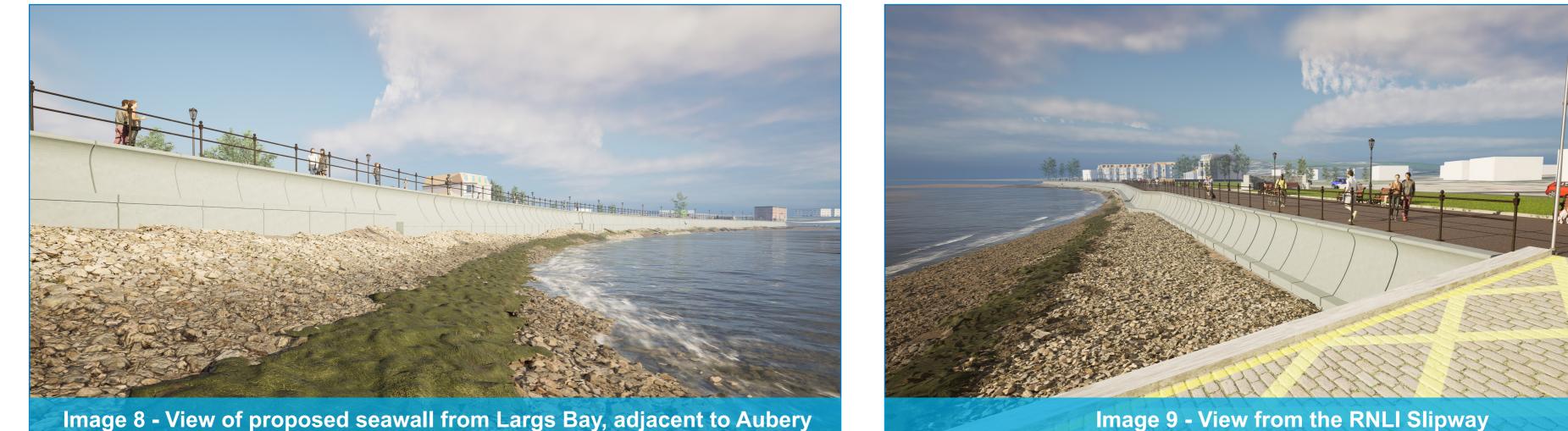


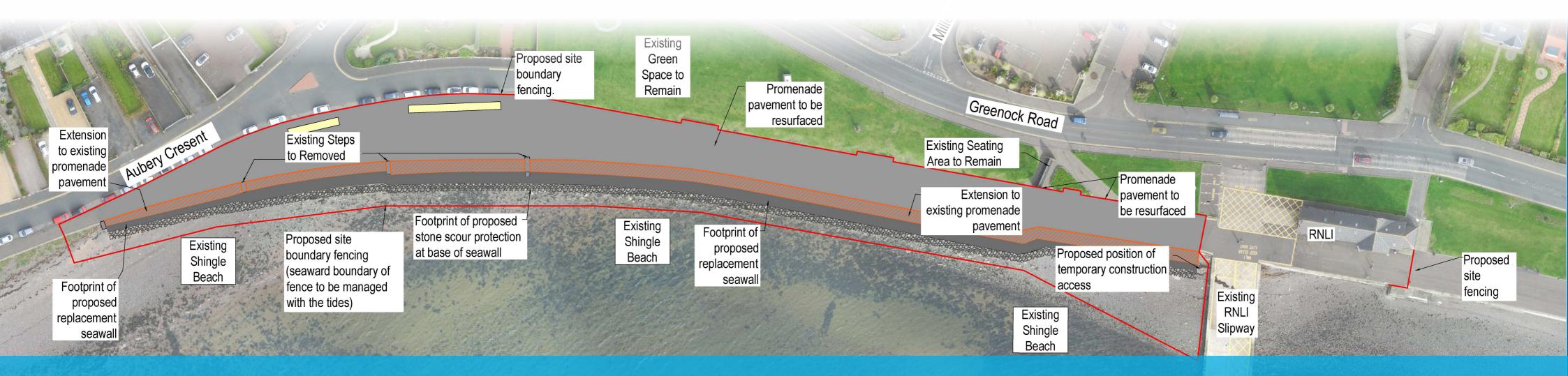
Image 8 - View of proposed seawall from Largs Bay, adjacent to Aubery Crescent





Image 10 - Newly surfaced and extended promenade

Image 11 - View of the proposed seawall from the beach adjacent to the RNLI Slipway



**Proposals on Aerial Mapping** 

## **04 The Construction Works**



### How will the replacement seawall be constructed?

The key stages in constructing the proposal are shown below:

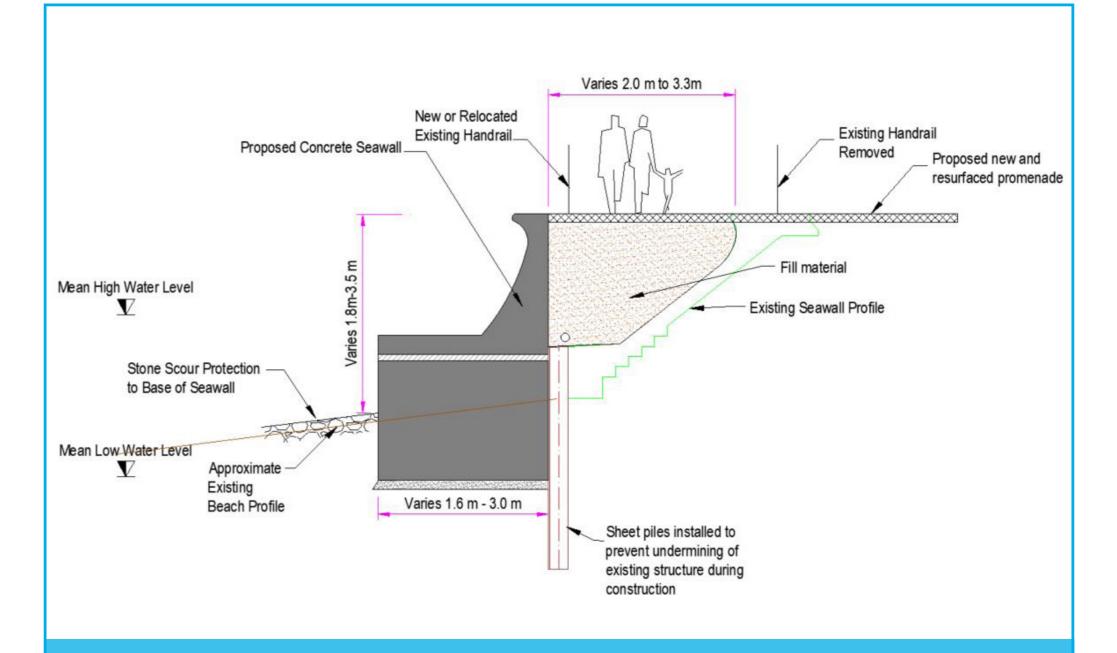
#### **Temporary Construction Compound**

The Contractor will set up a temporary site compound on the promenade to accommodate the construction vehicles and temporary storage of materials for the duration of the works. The existing handrail on the promenade will be removed and stored.

#### **Removal of Steps & Piling**

An excavator with a rock breaker attached will operate from the beach to breakdown and remove the existing sets of stone steps. This will create some short term noise.

Sheet piles will be installed using a digger with a vibratory hammer (Image 14) along the base of the existing wall to help stabilise it during the construction works. This is also likely to create some short term noise.



#### **Excavation**

Beach material will be removed by an excavator at low tide along the line of the sheet piles and existing wall to facilitate the installation of the concrete base units (Image 15).

#### **Seawall Installation**

The concrete base units will be placed in the excavated area in front of the existing wall by a small crane or telehandler and filled with granular material. The curved faced precast concrete units (Image 16) will be placed on top and grouted together to form the new wall (Image 17). The space remaining behind the new units will be back filled with granular material and compacted by an excavator working from the promenade, before being surfaced.

#### **Scour Protection**

A band of stones will be placed by an excavator along the base of the new seawall on the beach. The stones will be similar in size to the existing stones / shingle on the beach and will help protect against erosion and undermining of the new structure.

### Promenade Extension and Resurfacing

The new seawall provides the opportunity to extend the promenade seaward by approximately 3 metres. The newly extended promenade will be resurfaced between the RNLI slipway and Aubery Crescent, and a handrail installed.



Image 14 - Digger with a vibratory hammer



Image 15 - Mini excavator





Image 17 - Curved concrete units grouted together

### How will the construction works impact the local community?

- The construction of the new seawall is likely to take between 4 6 months, subject to weather and tidal restrictions.
- Works will take place during normal daytime working hours Monday Friday and Saturday morning.
- The promenade will be temporarily closed between the RNLI slipway and Aubery Crescent for the duration of the construction works. Pedestrians and cyclists will be temporarily diverted.
- Access to the beach at all states of tide will be restricted for the duration of the works.
- Access to the RNLI building, parking and slipway will be maintained at all times.
- There will be construction vehicles moving to / from and within the site, and some noise and dust will be generated during the works. Every effort will be made to minimise disruption to the local community during the construction

## **05 Further Considerations**



## Our aim is to construct the replacement seawall as efficiently as possible, with minimum inconvenience to the local community, and to work with all those who may be affected.

Care for the environment will also be a prime concern – we will work closely with the local public, community representatives, environmental specialists, and statutory organisations, where applicable, throughout the consenting and construction process.

You may have noticed activity in the area as we carry out ground investigations and environmental surveys. These are needed to inform the detailed design and environmental assessments for the project.

We are preparing the following assessments in support of our applications for planning and marine consent:

- Air Quality (Dust) Risk Assessment & Site Specific Dust Management Plan
- Noise Impact Assessment
- Marine Biodiversity Assessment
- Stage 1 Habitats Regulation Assessment Screening Report
- Site Waste Management Plan
- Outline Construction Environmental Management Plan

It is anticipated that the applications for the marine licence and planning permission will be submitted to Marine Scotland and North Ayrshire Council Planning Department in Autumn 2022.



Image 19 - A variety of molluscs on the underside of the existing seawall



Image 20 - Herring Gulls are common in the area





# **06 Have Your Say...**



We want to understand the views of the local community prior to finalising the design proposals and making a formal applications for consent, so we would welcome any comments you wish to make about the draft proposals. The plans, as presented here, may be refined further prior to submission to Marine Scotland and North Ayrshire Council Planning Department, and the community views are an important part of that process.

## How can I provide feedback / comments?

## An in-person public consultation event will take place on:

- Date: Monday 27th June
- **12 noon 7pm** • Time:
- Location: Brisbane House Hotel, 14 Greenock Road, Largs, KA30 8NE.

North Ayrshire Council and their agent, RPS will be available to talk through the proposals, answer any queries and collate feedback.

### An online / telephone consultation event will be held on:

- **Tuesday 28th June** • Date:
- **12 noon 7pm** • Time:

North Ayrshire Council and their agent, RPS will be available to talk through the proposals and answer any queries during this event. If you wish to join this event, please email: pacc@rpsgroup.com with your contact details, noting your preference for Zoom, MS Teams or telephone.

Further information on the proposals can be requested from RPS, by emailing: pacc@rpsgroup.com

You can also submit your comments and feedback using the accompanying feedback form, which should be forwarded by email or post to:

• Email: pacc@rpsgroup.com or

North Ayrshire Council c/o RPS, Elmwood House, 74 Boucher Road, Belfast BT12 6RZ. • Post:

All comments should be received on or before Friday 15th July 2022.

Please note that any comments or feedback are made to North Ayrshire Council as the prospective applicant, and are not representations to Marine Scotland and the Scottish Ministers, or North Ayrshire Planning Department. If the prospective applicant makes an application for a marine licence and planning permission, there will be an opportunity for representations to be made to the Scottish Ministers and North Ayrshire Council Planning Department (respectively) on the applications.

### What Next?

All comments received during the public consultation will be considered by the North Ayrshire Council and RPS. These will inform the final design proposals which will be submitted to Marine Scotland with the marine license application and the planning application to North Ayrshire Council Planning Department later this year.

