



South Mollymook Coastal Protection Works

Initial Community Consultation

March/April 2022



Planning and
Environment



advisian.com

Project Background

Shoalhaven City Council recently engaged the consultancy team of Advisian Pty Ltd to commence the design development of coastal protection improvements at South Mollymook Beach. This engagement involves the development of concept and detailed designs to a level suitable for construction tender for the replacement and upgrade of the existing coastal protection infrastructure at South Mollymook Beach.

The primary purpose of the improvements are to mitigate current and projected coastal hazards risking impacts on public and private assets at South Mollymook and to ensure cost-effective long-term coastal protection. Where feasible, the coastal protection design will also consider improving the recreational amenity of the area by providing seating and beach access.



March/April 2022 Consultation

The purpose of the initial consultation is to understand the community's key issues of concern that may affect the environmental, social, cultural, and economic values from the proposed coastal protection infrastructure and provide opportunity for feedback prior to design development. A community drop-in session has been scheduled to:

- provide detail on the environmental, technical, and funding considerations
- assess community support levels for the concept design and address project clarifications
- provide an opportunity for community feedback
- enable analysis of feedback prior to design development.

Community feedback is being sought on this initial concept option is to inform the development of the Draft Design. The Draft Design will be placed on public exhibition and the community consulted again prior to development of the Final Design. The Final Design will also be placed on public exhibition for community feedback.



South Mollymook Existing Coastal Protection Infrastructure

130 m gabion revetment protecting the Golf Club and adjacent sewage pump station

- Inadequate for 50 year protection

60 m sandstone block wall at corner of Golf Ave and Ocean Street

- Not designed to resist major storm wave attack, although foundations are reported to be tied into stiff clay
- Settlement of wall and loss of backfill has occurred
- Stormwater pipe segments have separated, stormwater aggravates erosion
- Unknown amount of void filled with concrete to prevent further subsidence

60 m concrete seawall, ramps and steps in front of the SLSC

- Not designed to resist major storm wave attack
- Toe designed to be resting on old sandstone wall footing

75 m buried stone seawall in front of the SLSC

- Not designed to resist major storm wave attack, although foundations are reported to be tied into stiff clay



Historic Erosion Events



Rock protection in front of the Golf Club to counter erosion from 1974 Storm



Aftermath of 1974 Storm



Late 2015 showing major erosion and exposure of gabion revetment toe

Initial Concept Option

An initial concept option was developed based on the review of the 2016 Concept Options and incorporating current ideas to include the following:

- Remove the buried gabion revetment in front of the sewer pump station and Mollymook Golf Club, and **construct a rock revetment**, cover with sand and vegetate. This would look similar to what currently exists. Consider extending coastal protection further south to southern beach access ramp.
- Remove the sandstone block wall in front of the road, and **construct a stepped concrete wall** that provides beach access and seating.
- **Reinforce and provide erosion protection to existing concrete seawall, ramps and steps** in front of SLSC, or consider a rebuild of the area.
- **Reinforce and provide erosion protection of existing buried sandstone seawall** in front of SLSC, or consider a rebuild of the area similar to the existing adjacent landscaped area.



Proposed Rock Armour Revetment Examples



Rock Revetment at Belongil Beach

Note: the proposed rock revetment upgrade at Mollymook would look similar to the existing buried gabion revetment shown bottom left.



Gabion Revetment Mollymook – proposed upgrade would be buried and be of similar appearance



Rock Revetment at Warilla Beach

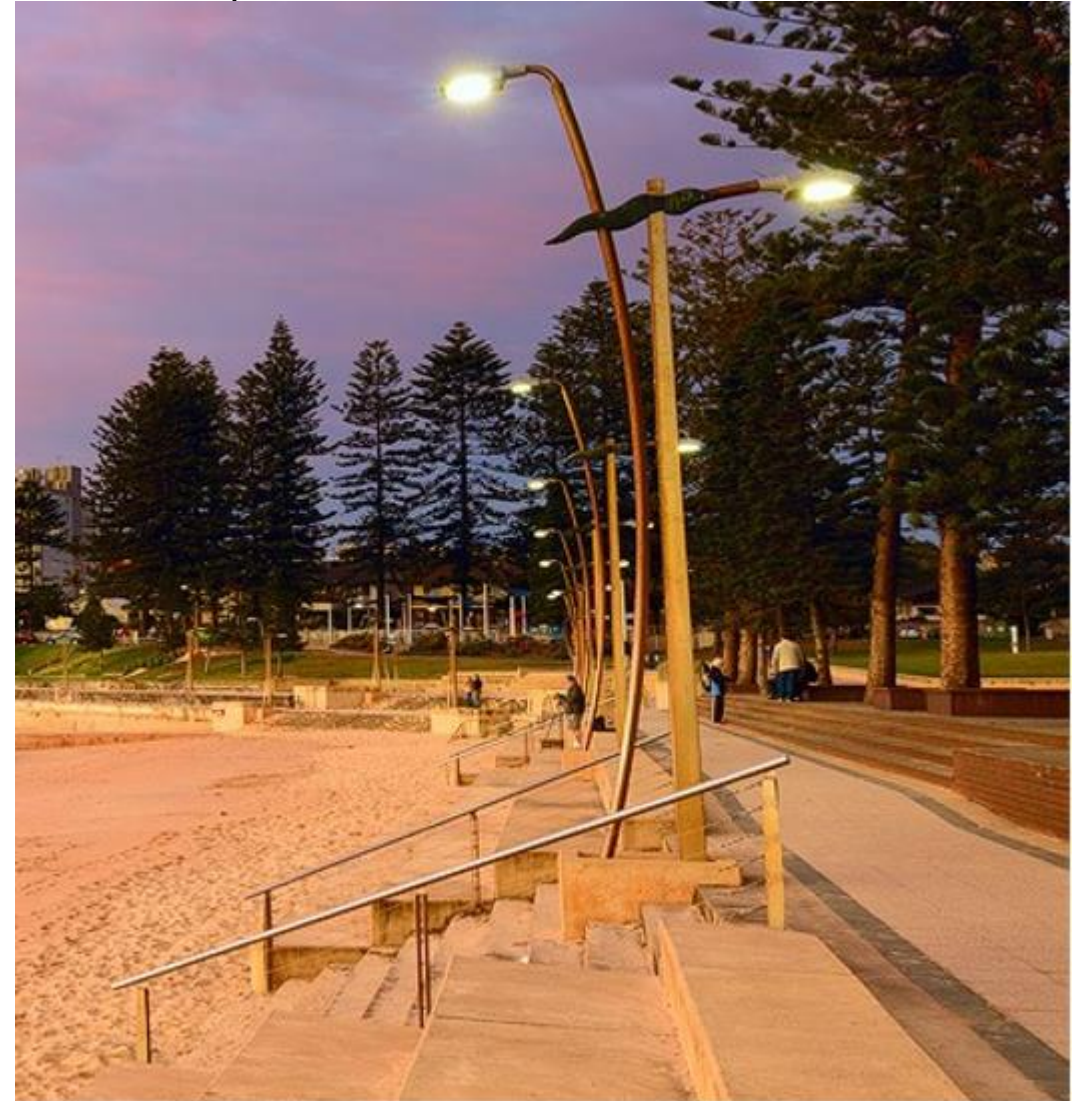
Proposed Concrete Stepped Wall Examples



Sandy Bay Concrete Stepped Wall



Manly Concrete Stepped Wall



Dee Why Concrete Stepped Wall – note concrete coloured to match sand colour

Potential Arrangement of Concrete Stepped



Concept is a potential option to provide the community with perspective and assist with providing comments.

The concept is not drawn to scale and at this stage has had limited design input.