REVIEW OF ENVIRONMENTAL FACTORS

Main Beach Carpark Emergency Access Ramp, Byron Bay

NOTE: This Review of Environmental Factors (REF) is for projects that have minor and predictable impacts, and require a Division 5.1 assessment under the EP&A Act 1979.

Instruction to users of this template:

Where requested to Click here to enter text and no response is required, please enter 'NA'.

TABLE OF CONTENTS

FIGURES

APPENDICES

INTRODUCTION

Project name:	Main Beach Carpark Access Ramp, Byron Bay	**Project number:**	NA

Project budget: $80,000 (upper limit estimate of costs)

Work order number: GL 4835.306

Project manager: Chloe Dowsett / Jim Roberts

CONSTRUCTION WORK MUST NOT COMMENCE UNLESS:

- The person completing this REF has signed the completed document, verifying that each of the steps has been satisfied and no further assessment or investigation is required; AND
- The Determining Officer has signed the completed document to verify that the assessment has been adequately completed, the conclusion as to the likely environmental impact of the project is reasonable, and the project can proceed subject to relevant control measures and conditions in any approval, licence or permit; AND
- Prior to the project commencing the required approvals, licences and permits have been obtained as outlined in Section 5; AND
- All relevant construction personnel are aware of:
  - The project details in Section 1
  - The project's environmental impacts in Section 6
  - The project's specific control measures in Section 6
  - The conditions in any approval, licence or permit in Section 5
  - Their responsibilities detailed in this REF.

NOTE: If any environmental issue is identified or if any environmental control measure is required, the following is to occur:

- Where a construction drawing is prepared as part of the construction work pack, the environmental control measures should be listed in the schedule on that drawing and/or the CEMP
- For more complicated projects the environmental control measures should be included in a project-specific construction and environmental management plan.

NOTE: If any approval, licence or permit is required then copies of these MUST be included in the construction work pack that is submitted to the Construction Manager for the project.

NOTE: Projects may require a more detailed assessment of particular issues (eg a specialist ecology or heritage report). In these cases, this document should accompany this REF as an appendix, and the findings should be considered in the assessment and identification of control measures.

NOTE: Some minor projects are exempt development. There is a separate checklist to be completed if you think your project is exempt. Where the project meets the exempt criteria and the exempt criteria checklist has been completed, a REF is not required.

NOTE: Projects requiring a Part 4 planning approval require a Statement of Environmental Effects and approval from Council. DO NOT USE this REF template for these matters. For further details of assessing whether a project is exempt development or requires approval under Part 4, refer to relevant flow charts.

Section 1 PROJECT DETAILS

NOTE: Prior to completing this REF a site inspection is to be undertaken by the officer completing the assessment.

1.1 Site inspection

A site inspection was undertaken by the person completing this REF	☒ Yes	16/02/2024	Click here to enter time.

1.2 Location of activity

Please attach a locality plan, map, photographs, diagrams and a site plan (as necessary) showing the location and layout of the proposed activity, and provide the following details of the location of the proposed activity site. If Council land, is it Community or Operational land?

Site commonly known as *(if applicable)*	Wreck Beach, Byron Bay (west of Main Beach) part of the Jonson Street coastal protection works structure – Beach Access # 2.			
Street address *(if applicable)*	*No:* Enter number.	*Street name:* N/A		
	Town, village or locality:	Byron Bay		
Title reference	*Lot and deposited plan (or strata plan):*	Lot 18 DP1269368		
Site reference	*Easting: (6 digits)* 559802	*Northing: (7 digits)* 6831707		
	Nearest cross street or streets:	Jonson Street		
	Site owner and tenure:	Crown Land – Reserve 82000		
	Land classification (Community or Operational, if applicable):	N/A (Council Managed Crown Reserve)		

Site map or aerial image

The location, land ownership and management arrangement of the project site is shown in Figure 1 and Figure 2.

Figure 1: ***Image – approximate works area shown in blue dash line = western access to Belongil Beach, Byron Bay***

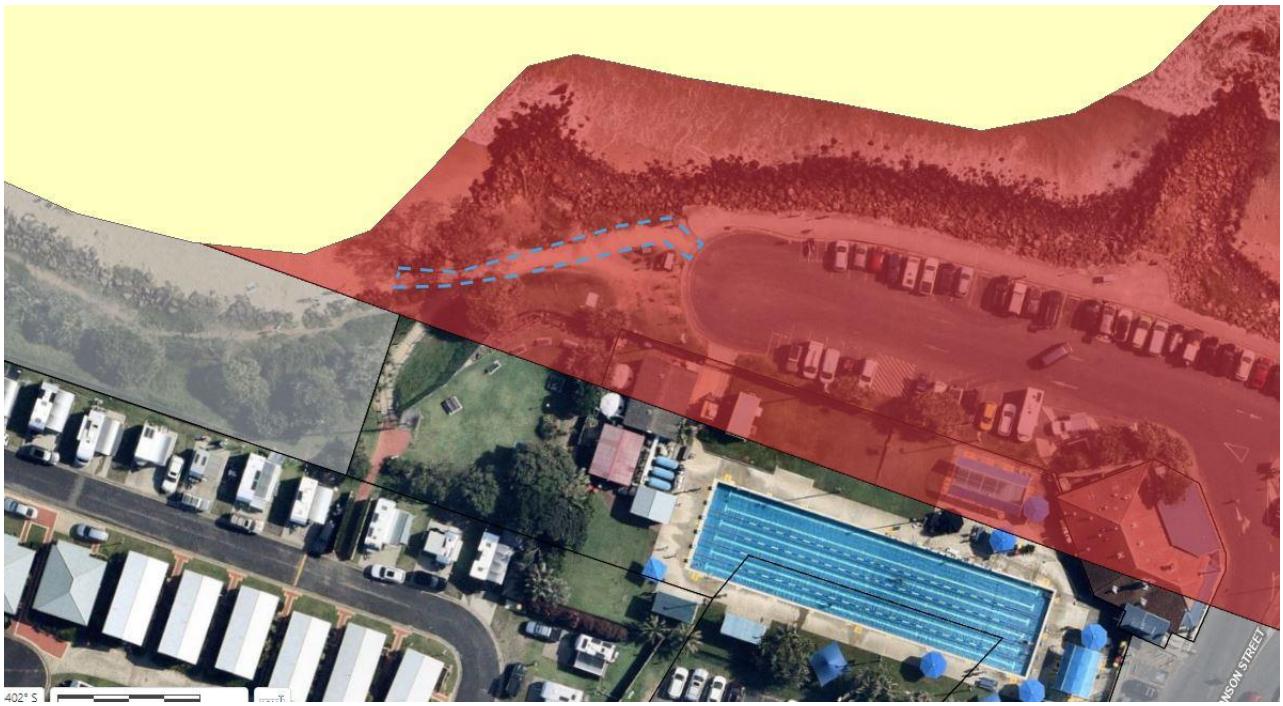


Figure 2: ***Works area and land tenure. Red area = Council Managed Crown Reserve. Grey area is Council Road Reserve, yellow area is Habitat Protection Zone of the Cape Byron Marine Park, and the blue dash line is the proposed works area.***

1.3 Description of the proposed activity

Description of the proposed activity – include pre-construction, construction, operation and remediation

Introduction

Due to coastal erosion and wave events within the Byron Bay embayment, the existing access point on the western side of the coastal protection works at Jonson Street, Byron Bay (also known as the Jonson Street Protection Works/JSPW) has been damaged and is unusable (**Figure 5**).

The access is allocated as **Access #2 – 'Main Beach Carpark – Belongil Access**' in Council's Beach Access Restoration Plan, 2021 (refer Figure 3).

1 First Sun Caravan Park – no action
2 Main Beach Carpark – Belongil Access – enhance with hardened protection
3 Surf Club Vehicle Access - monitor
4 Surf Club Pedestrian Access - monitor
5 Dening Park Peace Pole Access – upgrade geobags
6 Middleton Street Access – upgrade geobags
7 Dening Park West Access - close
8 Dening Park East Access - close
9 Lawson Street Access (40 Lawson) – repair and harden access.
10 Lawson Street Access (50 Lawson) - close
11 Cowper Street Access – harden access
12 Emergency Vehicle Access (62 Lawson) – harden access
13 Disabled Access – harden access
14 Clarkes Café Access – close

Figure 3: ***Map of beach access ways (Beach Access Restoration Plan, 2021).***

This has led to the Byron Surf Life Savers and emergency services being unable to reach the beach with vehicles during emergencies. The issue of emergency access was raised with Council's General Manager by key stakeholders (SLSC, SLS Lifeguards) during consultation on a separate Council project. Given the rising number of incidents, and recent first fatality at the location Council has prioritised the repair of the access way and requested Soil Conservation Service (SCS) to construct a concrete ramp and gravel pathway. This ramp will facilitate both vehicular access and safe pedestrian passage to the eastern end of Belongil Beach (also known as Wreck Beach).

The aim of the project is to:

- facilitate a safe and robust access point to Belongil Beach for both vehicles/machines and pedestrians; and
- improve the public's beach safety, access and amenity.

Project objectives are as follows:

1. Identify an appropriate planning pathway to facilitate the work and assess potential environmental impacts of the project.
2. Design and construct an access ramp that:
    a. Is constructed with durable materials and design features to withstand coastal erosion processes i.e. wave run-up, wave overtopping, beach profile lowering.
    b. Facilitates vehicle and pedestrian movements from the car park to the beach.
    c. Allows for a reasonable change is beach height without compromising the structure.
    d. Reduces the risk of accidents and injury when accessing the beach.
    e. Seamlessly integrates with the existing rock revetment (JSPW), ensuring structural stability and minimising impacts on the revetment's effectiveness.
    f. Complete the ramp construction in a timely manner without impacting public amenity or safety.
3. Link the ramp back to the car park with a gravel track.

Background

Coastal erosion has been a challenging issue for the Council and the Byron Bay community for many decades. Since the 1950s, 60s and 70s, cyclones and east coast lows have caused extensive damage to the Byron Bay coastline, with these events most likely to occur during summer and autumn months.

After a period of relative calm, since 2016, and rapidly increasing since mid-2019, Clarkes Beach and Main Beach in Byron Bay became subject to significant coastal erosion which resulted in significant loss of sand from the beach and frontal dune; damage and subsequent closure of beach access ways; and significant loss and damage of dune vegetation. Several erosion events caused by sand supply deficit, storm wave attack, combined with elevated water levels during large spring tides resulted in significant dune scarping along the majority of the dune system within the reserve.

In 2021, a large volume of sand returned to the Byron Bay embayment, assisting in the partial recovery of the eroded beaches. In November 2022, Council implemented the Main and Clarkes Beach Dune Recovery Project to the east of the proposed works area, which involved restoration and rehabilitation of the coastal dunes and repair of beach access ways. The project comprised a 5-day beach scraping campaign along a 750m extent between the Clarkes Beach Café and the Main Beach Surf Lifesaving Club. Excavated sand was reprofiled to form an incipient dune and swale and beach access ways were restored. The project was funded by Council and the State Government.

Council has recently been successful in obtaining further State Government funding through the Coast and Estuary Grants Program to undertake a similar (though smaller/reduced scope which excludes beach scraping) project along Cavvanbah and Belongil Beach to improve dune health by vegetation management along with fencing and restoration of beach access ways. This project is presently being scoped for works and costings. The Cavvanbah and Belongil Beach Dune Recovery Project involves only a 'light touch' on repairs to beach access ways and as such the proposed scope of works for construction of the concrete emergency access ramp is not included. **Due to the urgency of the works for emergency access, the works have been prioritised for implementation.**

Restoration of Access 2 – Main Beach Carpark – Belongil Access

As outlined in Council's Beach Access Restoration Plan (2021) Council has attempted to maintain an access point from the Main Beach Carpark to Belongil Beach after coastal erosion events. The access gets used by the Australian Lifeguard Service and Byron Surf Lifesaving Club to access the beach for patrol and nipper programs, as well as being heavily used by pedestrians. Recent attempts to restore the access have involved repositioning rocks, covering the area with gravel and small rock fill. The access was rebuilt after the December 2020 wave event (refer Figure 4) and subsequently impacted in January 2021 after material was washed out and smaller rock removed.

Figure 4: ***Access #2 rebuilt after December 2020 erosion event (Beach Access Restoration Plan, 2021).***

The current status of the access is shown in **Figure 5**.

Figure 5: ***Photo of access take 16 February 2024.***

The Jonson Street Protection Works (JSPW)

The coastal protection works between the First Sun Holiday Park and the Byron Bay SLSC are referred to as the Jonson Street Protection Works (JSPW). The JSPW are a public asset that provides a significant role in protecting the town centre from coastal erosion and inundation.

Coastal protection works at this site date back to the original timber jetty that stood here from 1888 to 1930's. The main rock revetments, which later became known as the JSPW, were repaired and extended in the early 1960's (**Figure 6**).

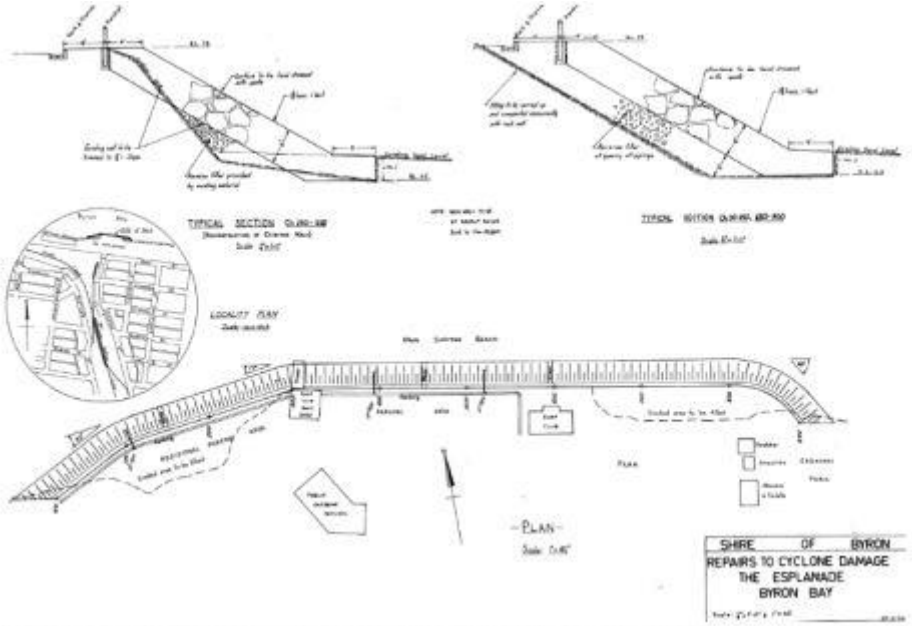


Figure 8: (top) 1964 designs for repairs and extension of the JSPW (WorleyParsons, 2014) and (bottom) 1966 aerial photograph of the constructed rock protection works (source: NSW Government).

Figure 6: ***Figure from Bluecoast (2021) Baseline Assessment for the Main Beach Shoreline Project.***

In 1975 upgrades to the JSPW included the construction of three groynes, the main central groyne and two smaller spur groynes (**Figure 7**) and extension of the rock revetment in front of First Sun Caravan Park.

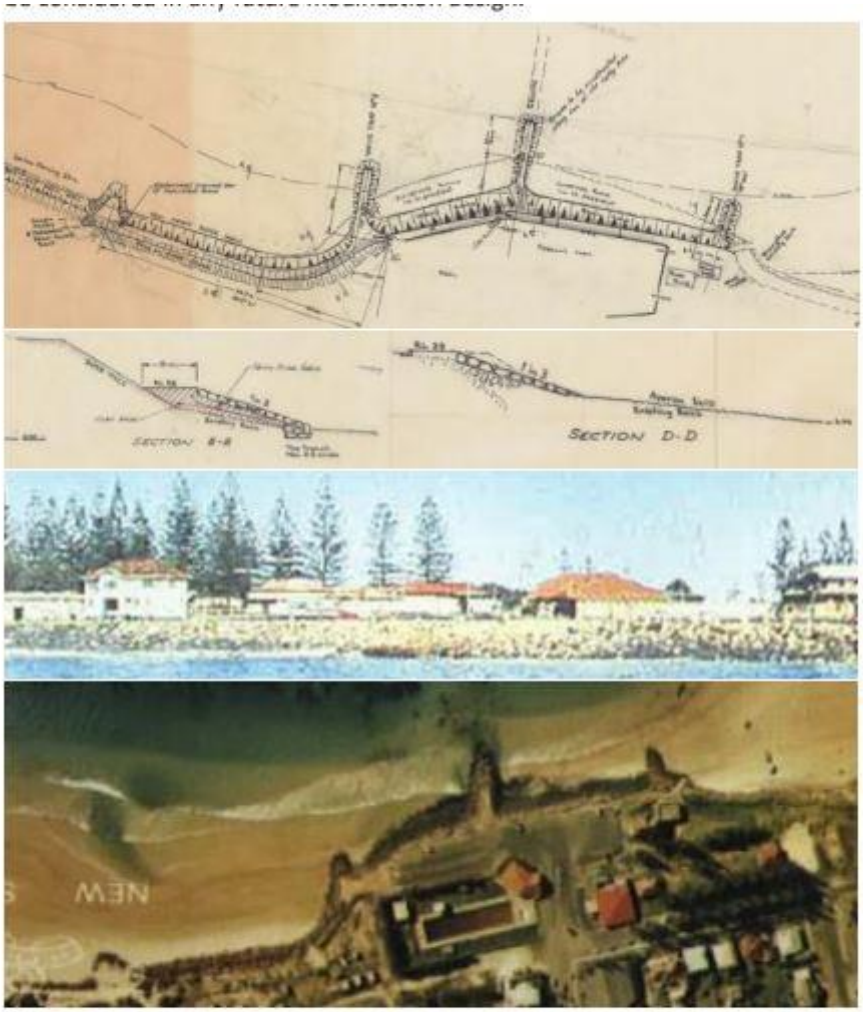


Figure 11: 1975 design of the JSPW upgrade and post-construction photographs (source: BSC; PWD, 1978).
Note: The photograph of the works viewed from the water appears to show newer 'heavy' rock (lighter colour) placed on the upper slope above the pre-existing rock (darker colour). The older rock apron can also be clearly seen in the aerial photograph.

Figure 7: ***Figure from Bluecoast (2021) Baseline Assessment for the Main Beach Shoreline Project.***

In the 1990s emergency protection works at Cavvanbah/Belongil Beach directly west of the JSPW comprising of two rows of boulders (median diameter between 500 and 1,000mm) were laid at the toe of the embankment at First Sun Holiday Park (3m AHD crest level).

The footprint of the current access is nestled within the section of the JSPW that was constructed as part of the upgrade in 1975 prior to the commencement of the *Coastal Protection Act 1979.*

With limited maintenance since the 1990's, the works are in poor condition and have been previously identified as being degraded and not comply with contemporary coastal engineering standards. **Figure 8** below indicates that the access is located between the 'First Sun Holiday Park Revetement' which is identified as '**fair'** and the '3rd Spur Groyne' which is identified as '**poor'**.

Figure 3: Structural condition rating for structure based on visual and drone inspection on 28th October 2019.

Figure 8: ***Condition assessment of the JSPW (Bluecoast, 2020).***

Recent condition assessments of the structure have been undertaken (Bluecoast, February 2020 & Bluecoast, March 2021) with the March 2021 report being commissioned after the December 2020 coastal erosion event. The below comments were made on the condition of the JSPW during assessments.

1.8 - 3rd Spur Groyne:

Feb 2020 Assessment Report

- The armour rocks are significantly undersized and the structure has very low crest elevation of approximately 2m AHD.
- The eastern connection to the adjacent revetment has steepened due to displaced armour rocks.
- Based on visual inspection in 2012, Worley Parsons (2013) assigned this segment a '**poor'** condition rating and used a detailed risk assessment to assign a design standard of approximately 1-year ARI.
- The condition rating assigned here is '**poor'**.
- This segment does not meet contemporary design standards for coastal protection structures.

March 2021 Assessment Report

- Evidence of wave overwash and erosion of ground behind the structure crest.
- Large amount of debris deposited on top and landward of spur groyne.

1.9 - First Sun Holiday Park Revetment:

Feb 2020 Assessment Report

- This structure comprises toe rock only with several access paths throughout structure and multiple displaced armour rocks.
- Several drifters were identified 2-3 metres seaward from the toe rock structure.
- A relatively densely vegetated dune system extends on the shoreward side of this structure. This suggests that it currently provides some protection from wave impacts.

- Some dune erosion behind one of the access paths through the structure was evident at one of the access paths.
- Based on visual inspection in 2012, Worley Parsons (2013) assigned this segment a '**poor'** condition rating and used a detailed risk assessment to assign a design standard of approximately 1-year ARI.
- The condition rating assigned here is '**fair**.
- This segment does not meet contemporary design standards for coastal protection structures.

March 2021 Assessment

- Evidence of wave overwash and erosion of dune toe landward of rock protection
- Debris line landward of rock protection providing evidence of wave runup to approximately 3.3m AHD.
- Inadequate surface water drainage results in erosion of path on landward side of rock protection.
- Moderate erosion of dune/upper beach at western end of rock protection.

Repairs and maintenance

Council is seeking to repair an area of the JSPW that was originally constructed as part of the 1975 upgrade, prior to the commencement of the *Coastal Protection Act 1979.* This area has been assessed to be in poor to fair condition due to the significantly undersized nature of the rocks, low crest elevation which leads to frequent exposure of the structure displacement of material and rocks.

There is no definitive threshold to classify various degrees of seawall repair in New South Wales legislation. In 2018 JBP Scientists and Engineers provided technical advice to Council as per the below:

The Local Government Act 1993 defines coastal protection works, the "making and levying of annual charges for coastal protection services" (496B) and generally introduces the notion of post-storm repair.

To assist with the management of such levies, the Office of Environment and Heritage 'Coastal Protection Service Charge Guidelines' (CPSC, 2010) proposed the development of a bespoke Asset Management Plan to manage seawall repair activities. The guideline outlines that Council should not accumulate more than 25% of the estimated replacement cost of a seawall without the agreement of all liable landowners to carry out future emergency repairs in an External Fund Reserve.

In that context, 25% is the threshold for maintenance activities. This is in parallel with the Queensland legislation. The Queensland Department of Environment and Heritage Protection provides a guideline for 'excluded works from coastal development'. The guideline outlines provisions for coastal structure maintenance where 20% of an approved seawall can be replaced or rebuilt without a new Development Application

Council provides the following descriptions of maintenance, renewal and new/capital that it uses generally for Council assets.

1. **Maintenance** is work performed on an asset that just keeps it in a useable condition. Examples include:
    - filling potholes,
    - replacing guideposts,
    - repairing broken stormwater pipes,
    - grading a gravel road
    - tightening screws on a timber bridge.

2. **Renewal** is work performed on an asset to bring it back to a good or fair condition. It can include both simply **repairing** an existing asset (like for like) or repairing and upgrading or enhancing an existing asset. Renewal replaces existing components or parts of an asset to retain capacity or performance capability. Examples include:

- resealing a sealed road,
- reconstructing a portion of road segment
- replacing a whole section of stormwater pipe
- putting new gravel on a gravel road
- replacing posts, planks or rails on a timber bridge.
-

Enhancement or upgrade is included as **renewal** as it enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, e.g., widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility, widening footpath from 1m to 3m wide to meet future demands.

3. **New (sometimes called 'capital')** is work performed to create a new asset or additional work performed on an existing asset to provide more than what is currently there. Examples include:

- building a new roundabout or a new road;
- constructing stormwater pipes where there currently aren't any;
- sealing an existing gravel road.
- replacing a one-lane timber bridge with a two-lane concrete bridge.

In context of the above descriptions Council considers that the proposed works fall within the definition of '**repair**' to coastal protection works being simply repair and maintenance of a small portion of an existing asset (JSPW) to a like for like situation. Repairs to the rock revetment adjacent the concrete ramp will be undertaken only where necessary, replacing rocks from the beach back on to the revetment (refer Figure 10). The proposed works do not include upgrade or enhancement of the asset (i.e. improvement of the design standard of the JSPW). In consideration of the beach access, the proposed works are renewal (enhancement) of the access as it will provide a better level of service of the asset beyond which it had originally. As such, the proposed works seek to provide an interim solution to access for up to 5 years.

Pre-construction:

- Site inspections and contractor engagement
- Completion of this REF and any risk assessments, safety paperwork
- Consultation with agencies and stakeholders
- Obtaining permits/licences (if required)
- Pre-beach monitoring of the beach condition and sand levels subject to works.
- Erect pedestrian barriers and work signage

Construction:

- Pre-project briefing with project team, contractor/s
- Daily pre-work inspections and implementation of WHS controls
- Using a 14t excavator, construct a rock ramp (to minimum 0m AHD toe level) and realign displaced revetment adjacent to the ramp.
- Repair any damages to path with gravel or crushed granite.
- Install bollards to restrict vehicle access to SLSC and emergency vehicles

Post-construction:

- Stabilise disturbed areas near car park with turf.
- Remove pedestrian barriers and work signage.
- Quarterly or bi-annual inspections, particularly after large storm events.
- Maintenance tasks i.e., repairing cracks, replenishing sand around the ramp base prior to storms/high tides, re-aligning displaced rocks after large events, replenish gravel etc.

Size of the proposed activity footprint

Areas of the approximate proposed activity footprint is shown in Table 1.

Concrete Ramp	**Area of concrete ramp**	14m long x 3m wide	42m2
Rock Revetment (north)	**Area adjacent the concrete ramp where rocks will be repaired (only where necessary)**	13m long x 5m wide	65m2
Rock Revetment (south)	**Area adjacent the concrete ramp where rocks will be repaired (only where necessary)**	19m long x 2m wide	38m2
Track	**Area of gravel track from carpark to concrete ramp**	33m long x 3m wide	99m2 wide
		Total	**244m2**

Table 1*: Approximations of proposed activity footprint*

Figure 9 shows the works area is predominantly contained within the Council Managed Crown Reserve (red area) (R82000) with a small portion of rock repair (where necessary) undertaken in the Council Road Reserve (grey area). No works are proposed to occur within the Cape Byron Marine Park – Habitat Protection Zone (yellow area) apart from machine work repairing the rocks (only where necessary) within the rock revetment north and south of the concrete ramp (refer Figure 10).

Council has a routine maintenance permit for works in the Cape Byron Marine Park which is intended to cover approval of a machine working within the marine park. Consultation with Marine Parks has occurred as part of REF development to understand any concerns or issues associated with the proposed works.

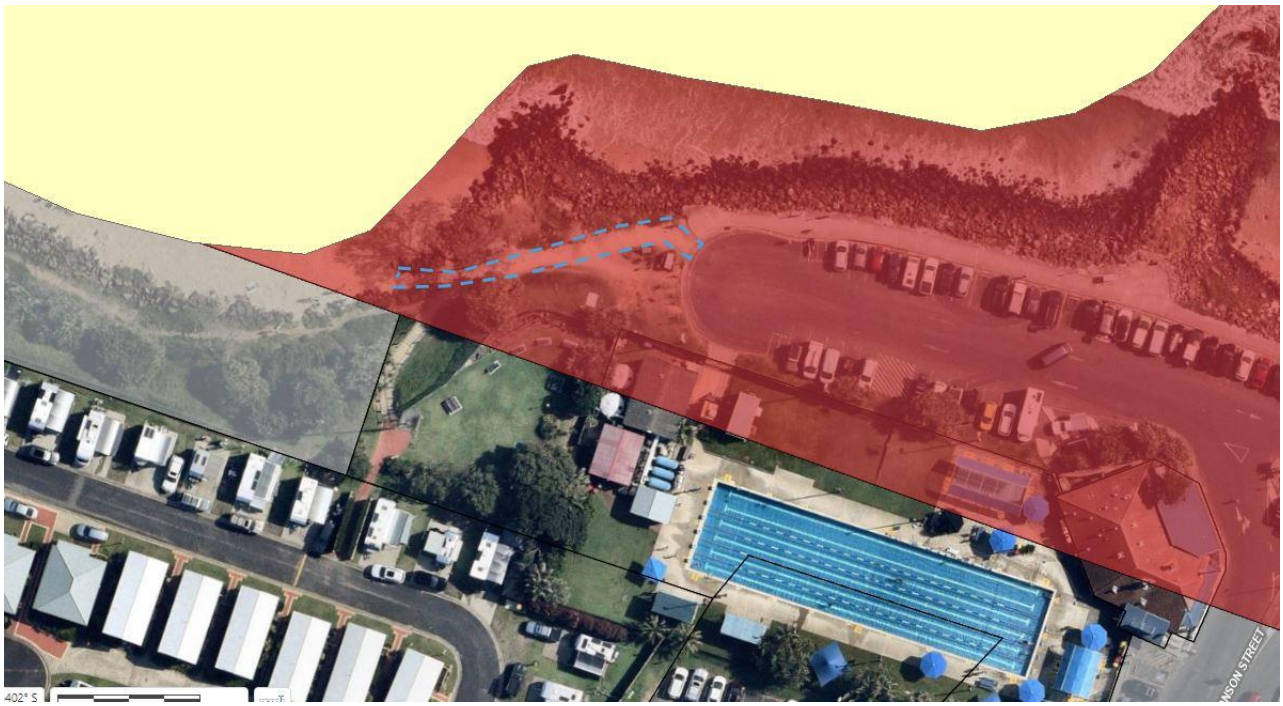


Figure 9: *Works area and land tenure.*

Ancillary activities, such as advertising or other signage (including any temporary sign, banner or structure promoting an event or sponsorship arrangement), roads, infrastructure, bushfire hazard reduction

New signage will be installed to promote the use of the formal beach access.

Temporary signage will be erected during works for public safety, i.e. closure of the area and access way and/or temporary barrier fencing while works are being undertaken.

Proposed construction methods, materials and equipment

Methodology:

The proposed Concept Plan is shown in Figure 10 (and also provided in Appendix A).

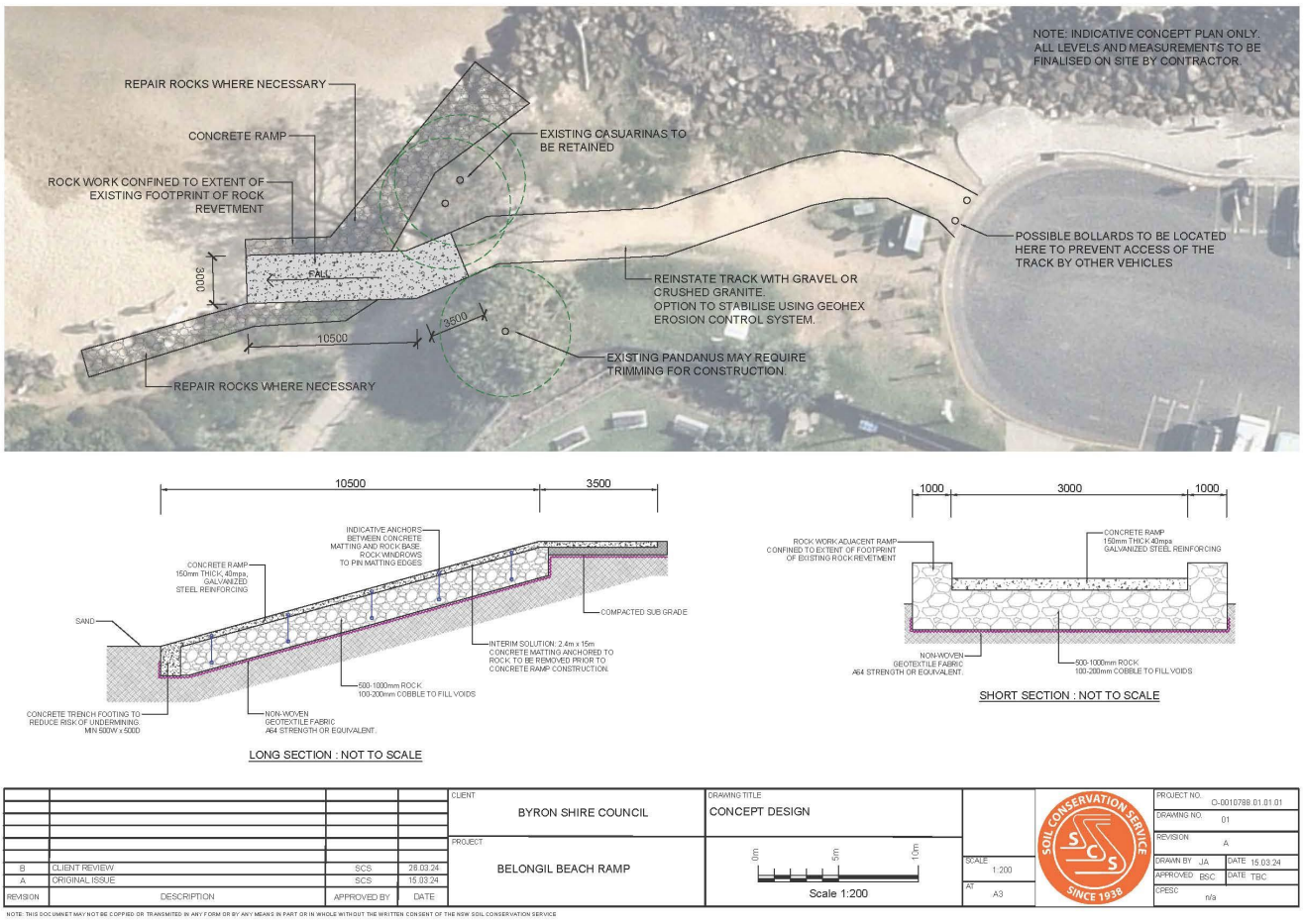


Figure 10: ***Concept Plan for the works.***

Works will focus on days when the tides are neap with high tide conditions not reaching or overtopping the rock revetment. Safety (pedestrian) spotter will manage the works area to ensure people management.

- Site set-up and implementation of WHS and Environmental Controls i.e. traffic control, safety fencing, pedestrian management. The area will be closed to pedestrians, who will be provided another access around the works area to the beach.
- The 14t excavator will work from the beach side of the rock revetment and repair rocks where necessary. Any displaced rocks will be dug out and placed back onto the revetment into the void areas and within the existing structure footprint. Minimal excavation of beach sand around rock revetment will be undertaken only where necessary to repair revetment.

Construct rock ramp base using imported rock and cobble to infill for the voids. Install formwork and galvanised steel reinforcing.

- Contractor to pour concrete ramp during appropriate tides. Ramp toe to be to at least 0m AHD. Ramp surface to be textured or stamped to reduce slippage.
- Strip formwork, backfill and compact around ramp with gravel or crushed granite.
- Reinstate site prior to demobilisation – backfill ramp and repair any damages to path with gravel or crushed granite.
- Install bollards to restrict vehicle access to SLSC and emergency vehicles.

Materials to be used:

- 24 tonnes of 500-1000mm rock for the ramp base.
- 12 tonnes of 100-200mm cobble to infill voids.
- Two rolls of concrete matting (2.4m x 15m) and appropriate fixings.
- Concrete volume = 6 cubic metres
- Galvanized steel reinforcing

Equipment:

- 14 tonne Excavator
- 4WD ute
- Concrete agitators and concrete pump
- Temporary barriers
- Temporary signage

Receivables, storage and on-site management of materials used in construction (eg stockpiles and lay-down areas)

Machinery will be stored within the Council Managed Crown Reserve at Main Beach. (Figure 11). The machine will access the beach from the car park and track down the access to the beach. No machinery will be left on the beach due to public safety and possible impact of swell or tides on machinery. Imported rock will be placed directly at the works area for use on each day.

At the Main Beach carpark, a few parking spaces will be commandeered adjacent to the Memorial Pool daily for contractors. The roundabout/turning circle at the Main Beach carpark will be needed on the morning of the concrete pour (concrete trucks + pump truck). Traffic control will be on site.

Figure 11: ***Main Beach car park, machine access to beach (red arrows), approximate storage area (yellow circle) and Pandanus tree (green circle).***

Earthworks or site clearing, including extent of vegetation to be removed

General earthworks:

Earthworks are limited to:

- the moving around of beach sand to relocate displaced rocks back onto the rock revetment.
- clearing the existing track of small rock, smoothing out for ramp preparation

Vegetation assessment:

No native vegetation is planned to be removed. The existing Pandanus tree on the south side of the track will require trimming to allow machine access.

Waste material to be reused or discarded

Waste type:

Removal of any old rubbish uncovered. Waste removal is expected to be minimal. Small amounts of packaging on sundries etc. Concreters to recycle their formwork & pegs.

Volume:

Minimal.

Disposal or reuse location:

Collected by machine or in 4WD and transferred to the Council resource waste facility at Myocum.

Sustainability measures, including choice of materials (such as recycled content) and water and energy efficiency

Machines will be turned off when not in use to save diesel and limit fumes.

Environmental safeguards and mitigation measures

Potential area of impact	Safeguards or mitigation measures	Comments (if applicable)
Erosion and sediment control	Site compound will be as small as possible to reduce ground disturbance.	Click here to enter text.
Waterways	Prestart daily checks of plant to check for fuel and hydraulic leaks prior to commencing work each day. All machines will be refueled at the site compound (off the beach). Spill kits to be onsite (within site compound) and one on beach when machinery is in use. All plant will be washed down at the site compound to ensure no contaminants enter the Marine Park.	Click here to enter text.
Noise and vibration	Construction equipment will be turned off when not in use. Notification to nearby stakeholders about the possibility of vibration & noise impacts. Review work and noise mitigation if impacts are beyond reasonable / complaints are received.	Click here to enter text.
Air quality	Construction equipment will be turned off when not in use. Stop work if windblown sand is a problem.	Click here to enter text.
Non-Aboriginal heritage	NA	Click here to enter text.
Aboriginal heritage	Stop Work procedure should shell middens or Aboriginal artefacts be identified onsite. A Cultural Site monitor will be onsite during certain phases (i.e.beach works only).	Click here to enter text.

Potential area of impact	Safeguards or mitigation measures	Comments (if applicable)
Biodiversity	Operators are proficient in this work and operation of machinery within the beach/dune area. A declaration will be completed by the plant operators prior to floating to document the plant was clean upon arrival. Implement a stop work policy when fauna enter the immediate work site where injury is possible. All plant to be washed down daily to ensure no weeds enter the Marine Park. Completion of daily site checks and timing of the works to avoid key shorebird activity and turtle nesting periods. A pre-project inspection of the dune and completion of daily pre-site checks. Any nest sites will be marked and works will avoid the nest. Timing of the works to avoid key shorebird activity and turtle nesting periods.	Click here to enter text.
Trees and vegetation	No native plants or trees are planned to be removed. The large Pandanus tree will be trimmed for machine access.	Click here to enter text.
Traffic, transport and parking	Pedestrians will be managed by an on-site Spotter/Safety person. The project area will be restricted to the general public. Pedestrians will have a number of open access ways they can use as an alternative. Signs will be installed at the closed access points. Barriers will be used as required. Delivery of machines on floats will be managed through traffic control staff.	
Socio-economic	Timing of works not to coincide with school holidays and (where possible) not on weekends or public holidays. Timing of works will best try to avoid key events and large activities. Event proponents will be alerted to the project works and timing. Contact will be made with directly affected businesses/stakeholders. Pedestrians will have alternative access available to the beach. Delivery of machines on floats will be managed through traffic control staff. Beach users will be managed by an on-site Spotter/Safety person. The project area will be restricted to the general public during works.	Long-term impacts to the community are **expected to be positive** as the project will provide public safety, amenity and access for emergency services to the beach.

Potential area of impact	Safeguards or mitigation measures	Comments (if applicable)
Waste	All machines will be refueled at the site compound (off the beach). No re-fueling to occur on the beach. Spill kits to be onsite if any leaks occur. Only the minimum amount of fuel will be onsite each day to run the machines. Plant operators to document the plant is clean upon arrival prior to works commencing. Prestart daily checks of plant to check for fuel and hydraulic leaks prior to commencing work each day. All waste will be removed from site.	Click here to enter text.
Visual amenity		Long-term impacts to the community are **expected to be positive** as the project will provide public safety, amenity and access for emergency services to the beach.
Land contamination	Implement Stop Work procedure and further investigation if any contaminated soil is thought to be encountered (i.e. different smell or looks different colour).	Click here to enter text.
Soils and geotech	NA	Click here to enter text.
Miscellaneous	Long-term impacts to the community are **expected to be positive** as the project will provide public safety, amenity and access for emergency services to the beach. Ramp surface is to be textured (or stamped) to reduce likelihood of pedestrians slipping. Install lockable bollards to restrict vehicle access to SLSC and emergency vehicles. Impacts on coastal processes are considered negligible as the structure footprint remains as is.	Click here to enter text.

Construction timetable and staging hours of operation.

Hours of work (including delivery of materials to and from the site) shall be restricted as follows:

Between 7am and 6pm – Monday to Friday. Works are estimated to be completed over a 1 week timeframe. Work during neap low tide conditions will dictate the bulk of the work hours. There is a likelihood that work may extend past 6pm in the event of favourable tides. There is also the possibility that work will occur on the weekend, including Sundays if weather or ocean conditions necessitate it.

Estimated commencement date: **13 May 2024**

Estimated completion date: **17 May 2024**

Estimated timeline to complete works:

- Day 1: re-align rock revetment, build rock ramp, reinstate access with gravel, stockpile small amount for backfilling.
- Day 2: Concreters form ramp and steel.
- Day 3: Pour concrete.
- Day 4: Strip formwork, backfill around ramp with gravel & compact.

NOTE: If the activity involves building or infrastructure works, it may require certification to Building Code of Australia or Australian Standards prior to commencement.

1.4 Reasons/objectives for the activity and consideration of alternatives

Provide details of the reasons/objectives for the activity (need for the activity)

Alternatives

Option 1:	**Do nothing** – If Council were to take no action and not repair the beach access, this would significantly impact the ability of emergency services to undertake beach rescues and respond in a timely manner. This option is not suitable.
Option 2:	**Basic maintenance -** Council could take action to try to keep the access usable for the for emergency services in the interim, however this has been undertaken over the years and is subject to wash out from wave events. Basic maintenance may only provide usable access in the short-term and provides no confidence for emergency services or the Surf Club. This option is not suitable.
Option 3:	**Wait and align works with the Main Beach Shoreline Project –** beach access design and works will be undertaken as part of implementation of the preferred design solution for modification of the JSPW. The preferred option is not yet known. As such, construction works may be 2-3 years away. This option is not suitable.
Option 4:	**Preferred option –** There is an immediate need for pedestrian and vehicular access at the location for the safety of beach users and to allow access for emergency services.

Justification for preferred option

Option 4:

The western beaches of the Byron Bay embayment are becoming busier and very popular among locals and visitors to Byron Shire. Improved safety of the current access for pedestrians is needed along with allowing vehicular access for SLS equipment for patrols and nipper programs.

Already, 2024 has seen multiple beach emergencies and direct access to the incident has not been available for emergency services. Vehicular access to Belongil Beach is available only via the Old Jetty Site, 2kms to the north at Belongil. This reduces response time and ability of first responders to provide timely care for beach users. Some situations have resulted in the MediVac helicopter being called to site to assist. There will be improved benefit for the Byron Bay community and this 'Preferred' option is considered the most desirable in the current circumstances. These works are being elevated internally by Council for urgent delivery.

1.5 Relationship with other projects, programs and plans

Coastal Management Programs

Council is currently preparing Coastal Management Programs (CMPs) for its coastline. A CMP is an action plan for Council and other authorities. It helps us to:

- address coastal hazard risks
- preserve habitats and cultural uses
- encourage sustainable agricultural, economic and built development in the coastal zone
- maintain or improve recreational amenity and resilience
- adapt to emerging issues such as population growth and climate change.

Coastal Management Programs are developed under the NSW Government's coastal management framework. The project area lies within the CMP for the Open Coast (Shire-wide). Preparation of a CMP is a four staged process, with Council currently finalising Stage 2 and commencing Stage 3 of the process.

Main Beach Shoreline Project

In 2019 Council engaged Bluecoast Consulting Engineers to investigate options for the modification of the JSPW to improve coastal protection, public safety and access and use of the foreshore. The aim of the project is to provide suitable public amenity, aesthetics, public safety outcomes for area. Three shortlisted options have been endorsed to progress further to detailed assessment and evaluation.

The Main Beach Shoreline Project is a key coastal project being considered and treated as part of the overall CMP process within the CM Act regime. Selecting a preferred option to carry forward for detailed design, seeking approvals and implementation will be undertaken in Stage 3 of the LGA-wide Open Coast Coastal Management Preparation. The timeframe to complete the final stages of CMP development including Ministerial certification is 1-2 years away. The sourcing and allocation of funding for detailed design and construction of the modification of the works may be up to 5 years away.

A more permanent solution to the access will be formalised as part of the Main Beach Shoreline Project which will include incorporation of public beach access (pedestrian and vehicular) design, however, due to the need for emergency access at the location, waiting for construction (up to 5 years) is not in the interest of public safety. As such, the proposed works seek to provide an interim solution to provide access for up to 5 years.

Section 2 CONSULTATION

Consultation is not compulsory for all REFs but it may be advisable. Specify the details of any consultation, including who was consulted, how, when and the results of the consultation.

Consider whether advice/feedback from any State agencies should be sought/might be beneficial.

If the works are located on land (or water) subject to a determined Native Title claim or an Aboriginal land claim, have you consulted with the Aboriginal traditional owners, eg Bundjalung of Byron Bay Aboriginal Corporation (Arakwal), Jali LALC, Tweed Byron LALC, Ngulingah LALC? Any response to be included as an appendix.

The project is being delivered cross-directorates between Open Spaces and Coast & Estuary staff.

The issue of emergency access was raised with Council's General Manager by key stakeholders (SLSC, SLS Lifeguards) during consultation on a separate Council project. Given the rising number of incidents, and recent first fatality at the location the urgent request for action from key stakeholders has been prioritised by Council.

Internal consultation with management is being held every few days due to the urgent request for works to be completed.

Key stakeholders and agencies have been consulted as part of the REF preparation:

- Australian Lifeguard Service
- Byron Bay Surf Lifesaving Club
- Department of Planning and Environment
- Crown Lands
- Arakwal
- DPI Fisheries – Cape Byron Marine Park

Feedback has been incorporated into the scope and this REF.

The Byron Bay Surf Lifesaving Club, Australian Lifeguard Service and NSPW Police support the works going ahead (Refer Appendix B).

The works area is not within the Marine Park and Council has a routine maintenance permit for minor activities within the marine activities which appears to the be suitable for any rock repair work (if needed). Consultation is on-going with Marine Parks to confirm.

The Department of Planning and Environment (DPE) provided preliminary advice on the planning pathway for repair works to existing coastal protection works.

A meeting was held on 27/03/24 with staff from the Department of Crown Lands to confirm that Council as the Crown Land Manager does not require a Licence from the Crown for the works.

Arakwal will be notified of the works due to works in a landscape where Aboriginal cultural heritage is known to be close by. An on-site Arakwal site monitor will be considered for beach works (rock repair and minor sand excavation).

Section 3 STATUTORY FRAMEWORK

3.1 Description of relevant environmental planning instruments

This could include SEPPs or LEPs and, if necessary, the relevant zoning, clause, provision or schedule.

3.1.1 State Environmental Planning Policies (SEPPs)

SEPP (Transport and Infrastructure) 2021

Briefly document the relevant part of this SEPP that places your activity in Part 5 of the EPA Act 1979.

Section 2.165 of SEPP (Transport and Infrastructure) permits foreshore management activities without consent on any land when undertaken by a public authority. The relevant sections of the SEPP are as follows:

Division 25 Waterway or foreshore management activities

2.164 Definition

In this Division—

waterway or foreshore management activities means—

(a) riparian corridor and bank management, including erosion control, bank stabilisation, resnagging, weed management, ***revegetation and the creation of foreshore access ways,*** *and*

(b) instream management or dredging to rehabilitate aquatic habitat or to maintain or restore environmental flows or tidal flows for ecological purposes, and

(c) coastal management *and beach nourishment, including erosion control, dune or foreshore stabilisation works, headland management, weed management, revegetation activities* ***and foreshore access ways****, and*

(d) salt interception schemes to improve water quality in surface freshwater systems, and

(e) installation or upgrade of waterway gauging stations for water accounting purposes.

2.165 Development permitted without consent

(1) Despite clause 129A, development for the purpose of waterway or foreshore management activities may be carried out by or on behalf of a public authority without consent on any land.

(2) To avoid doubt, subsection (1) does not permit the subdivision of any land.

(3) In this section, a reference to development for the purpose of waterway or foreshore management activities includes a reference to development for any of the following purposes if the development is in connection with waterway or foreshore management activities—

(a) construction works,

(b) routine maintenance works,

(c) emergency works, including works required as a result of flooding, storms or erosion,

(d) environmental management works.

A REF is being undertaken under Part 5 of the EPA Act 1979 to ensure that all aspects of the project are covered by an environmental assessment.

It should be noted that clause 2.7 of this SEPP explains the relationship between SEPP Transport and Infrastructure and SEPP Resilience and Hazards.

2.7 Relationship to other environmental planning instruments

(1) Except as provided by subclause (2), if there is an inconsistency between this Policy and any other environmental planning instrument, whether made before or after the commencement of this Policy, this Policy prevails to the extent of the inconsistency.

(2) Except as provided by subclauses (3) and (4), if there is an inconsistency between a provision of this Policy and any of the following provisions of another environmental planning instrument, the provision of the ***other instrument prevails*** *to the extent of the inconsistency—*

(a) clauses ……and ***2.16 of State Environmental Planning Policy (Resilience and Hazards) 2021,***

Foreshore access ways are therefore permitted without consent under SEPP (Transport and Infrastructure) 2021. This aspect of the SEPP is consistent with SEPP (Resilience and Hazards) 2021. An REF is required.

Section 2.16 of SEPP Resilience and Hazards is discussed below.

SEPP (Resilience and Hazards) 2021

If you intend to clear, fill or drain in a SEPP Coastal Wetland or SEPP Littoral Rainforest you cannot use this REF template. Part 4 of the EPA Act 1979 applies. If work (other than the above) is proposed in or near (within 100 metres of) a wetland or littoral rainforest, seek professional assistance.

Part 2.3 Miscellaneous

2.16 Coastal protection works

Note—

Section 4 (1) of the Coastal Management Act 2016 defines coastal protection works to mean—

(a) beach nourishment activities or works, and

(b) activities or works to reduce the impact of coastal hazards on land adjacent to tidal waters, including (but not limited to) seawalls, revetments and groynes.

Section 27 of the Coastal Management Act 2016 also contains provisions dealing with the granting of development consent to development for the purpose of coastal protection works.

(1) Coastal protection works by person other than public authority. Development for the purpose of coastal protection works may be carried out on land to which this Chapter applies by a person other than a public authority only with development consent.

Note—

See clause 8A of Schedule 7 to State Environmental Planning Policy (State and Regional Development) 2011, which declares certain development for the purpose of coastal protection works to be regionally significant development for which a Sydney district or regional planning panel is the consent authority.

(2) Coastal protection works by public authority. Development for the purpose of coastal protection works may be carried out on land to which this Chapter applies by or on behalf of a public authority—

(a) without development consent—if the coastal protection works are—

(i) identified in the relevant certified coastal management program, or

(ii) beach nourishment, or

(iii) the placing of sandbags for a period of not more than 90 days, or

(iv) routine maintenance works or repairs to any existing coastal protection works, or

(b) with development consent—in any other case.

The proposed works include a gravel access track, concrete ramp and repairs to an existing beach access way to improve public safety. Council considers that the current access is within a section of rock wall that was constructed as part of the upgrade to coastal protection works in 1975 prior to the commencement of the Coastal Protection Act 1979 and prior to the EPA Act 1979. It is therefore a lawfully erected structure.

As the beach access lies within the existing coastal protection works this project includes works that are considered to include ***routine maintenance works or repairs to any existing coastal protection works***. In accordance with the SEPP (Resilience and Hazards) 2021 routine maintenance works or repairs may be carried out by or on behalf of a public authority on any land without development consent.

An REF is required.

Coastal Environment Area:

The works are entirely located in the Coastal Environment Area but the controls contained in this SEPP do not apply to works under Part 5 of the EP A Act, 1979.

Coastal Use Area:

The works are entirely located in the Coastal Use Area but the controls contained in this SEPP do not apply to works under Part 5 of the EP A Act, 1979.

3.1.2 Byron Local Environmental Plan 2014 (and/or Byron LEP 1988)

Zoning

Check the defined uses in the LEP Dictionary. Check the zones on e-view, confirm it is a Part 5 matter.

The coastal area of the Byron Bay embayment falls within the Coastal Land Zone No 7 (f1) under the Byron Local Environmental Plan (1988). Beach and coastal restoration works are permitted with Council consent in this zone. In this case, SEPP (Transport and Infrastructure) 2021 and SEPP (Resilience and Hazards) 2021 override Byron LEP 1988 and the works can be undertaken under Part 5 of the EPA Act, 1979**.**

Local provisions

Do clauses 5.1 to 5.13 and clauses 6.1 to 6.11 apply?

Is the site Community or Operational land (LEP Schedule 4)? Check Byron Council Land Register.

Is the site listed in LEP Schedule 5 Environmental Heritage – Part 1 (Heritage items)?

Is the site affected by LEP Schedule 5 Environmental Heritage – Part 2 (Heritage conservation areas)?

Clause 33 of LEP provides matters for consideration for development in the 7(f1) zone. These do not apply to works under Part 5 of the EPA Act, 1979.

3.2 Description of any relevant plan of management, policy or procedure

A Plan of Management for Crown Reserve R82000 is not required unless there is going to be a change in the nature and use of the reserve. Council will consider developing a PoM for the reserve once Council has made a decision on the alignment of the coastal protection works / Main Beach foreshore as part of the Main Beach Shoreline Project and CMP preparation. The decision of alignment of the coastal protection works influences other related work along the foreshore and within the reserve which will also influence the preparation of a PoM for this area.

There is no relevant, certified 'coastal management program' in place for the location, prepared under Part 3 of the *Coastal Management Act 2016*. Council is presently preparing a Coastal Management Program (CMP) for this part of the coastline and is currently in Stage 2 of the 4-stage process.

The Cape Byron Marine Park extends from the mean high water mark (MHWM) seaward to the three nautical mile limit of NSW waters from Brunswick Heads to Lennox Head including tidal lands and waters adjacent the project footprint. The marine park is managed in accordance with the provisions of the Marine Estate Management Act 2014 and its Regulations and management strategies and actions identified in the Cape Byron Marine Park Operational Plan (Marine Parks Authority, 2010).

Tidal lands and tidal waters surrounding the works area are deemed Habitat Protection zone while waters in this area which are greater than 150m seaward of the MHWM, are within the Byron Bay Sanctuary Zone. Any development within the Marine Park requires approval under Marine Estate Management legislation.

NOTE: Many Council activities can be considered under Part 5 of the EPA Act 1979. There are some exceptions (see flow charts). If in doubt, consult with Council's planners. Where the project cannot be considered under Part 5, this template should not be used.

Section 4 EXISTING ENVIRONMENT

4.1 Description of the existing environment

The works area falls predominantly within Crown Land administered under the *Crown Land Management Act 2016* within Crown Reserve R82000 for public recreation managed by Council.

The primary site works area is to the west of the Byron Bay Surf Club within the footprint of the existing coastal protection works. A small part of the works area falls within the Council Road reserve.

The project works area covers approximately 244m2.

4.2 Topography

The soil landscapes for the beach are mainland and barrier beaches and associated foredunes and hind dunes on Quaternary (Holocene) sands. Beach plains with relief up to 5 m, slopes <3%; foredunes with relief to 10 m and slopes 20–50%; hind dunes that have been disturbed.

The present topography of the beach is quite flat due the eroded profile. The beach at the proposed works abuts an engineered structure rather than a natural dune. The dune behind the low crested structure is ~ 2.5m AHD crest height. Images are provided below from Near Maps in 2021 and 2024 which show the condition of the beach and sand at the location can change relatively fast depending on coastal process and wave conditions.

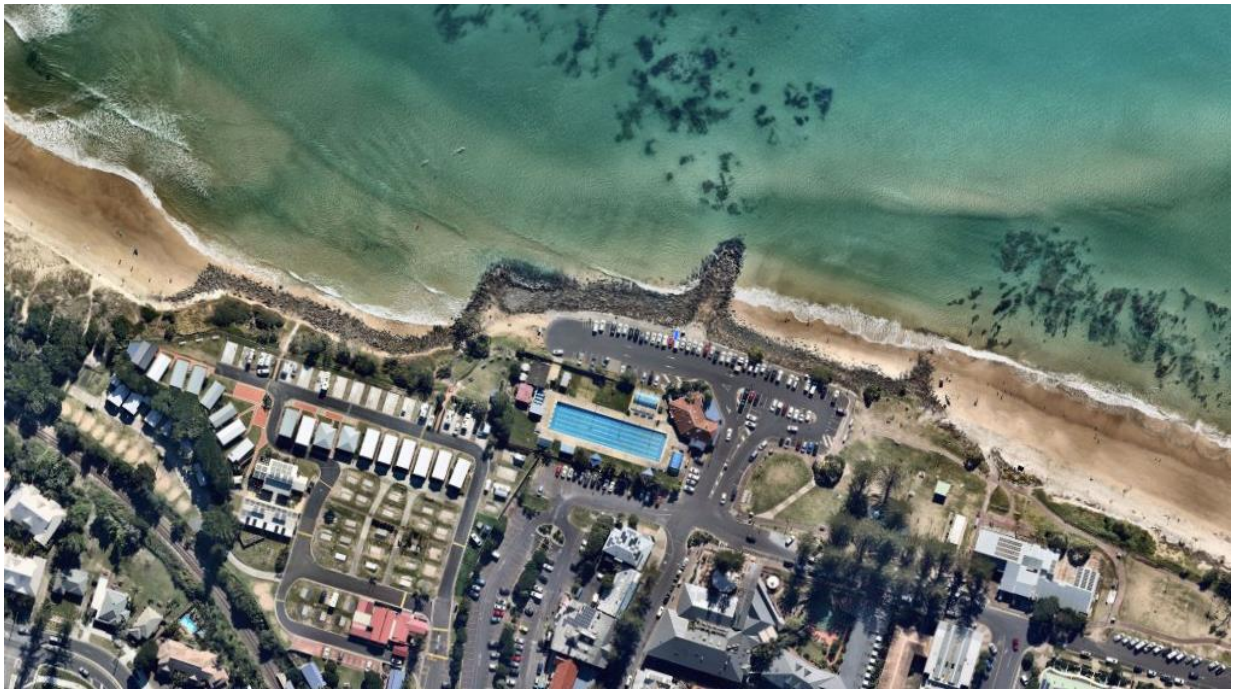


Figure 12: Near maps image of the location July 2021

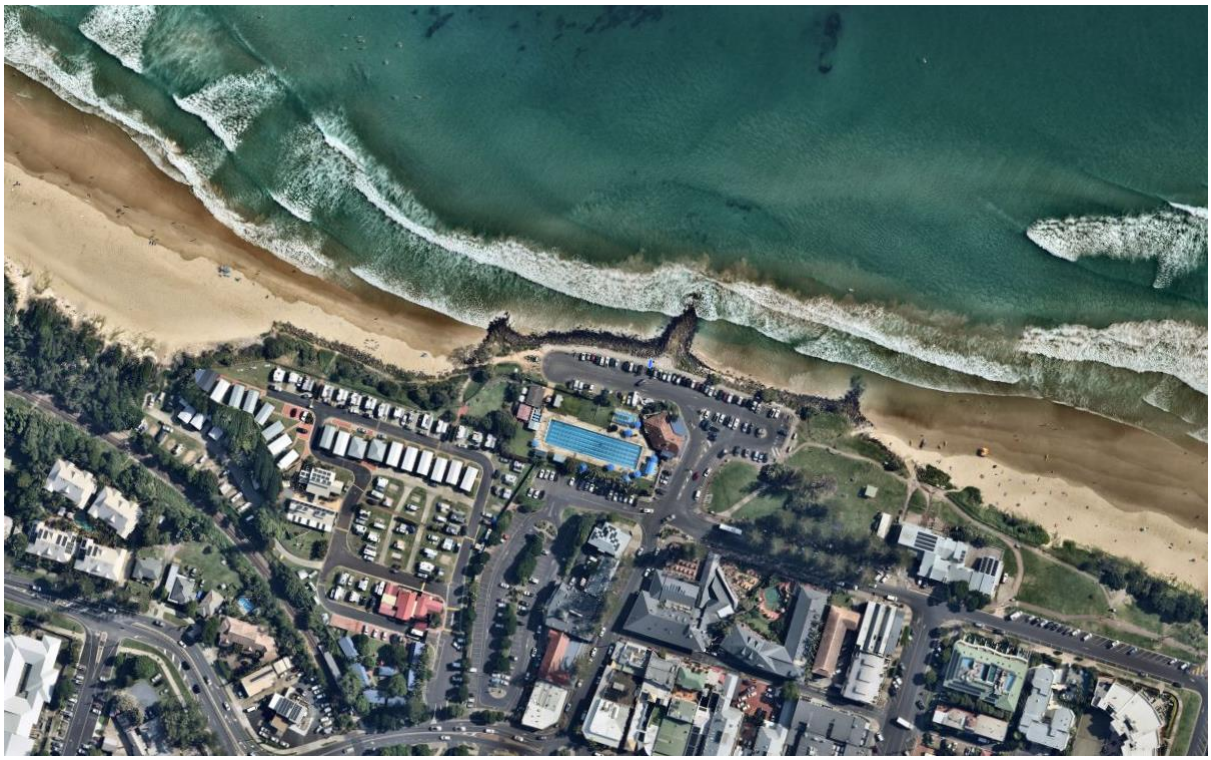


Figure 13: Near Maps image of location February 2024.

Beach levels at the location can fluctuate and vary considerably as shown in Figure 14 which outlines up to a 2m variation in beach levels at this location between 2019 and 2022.

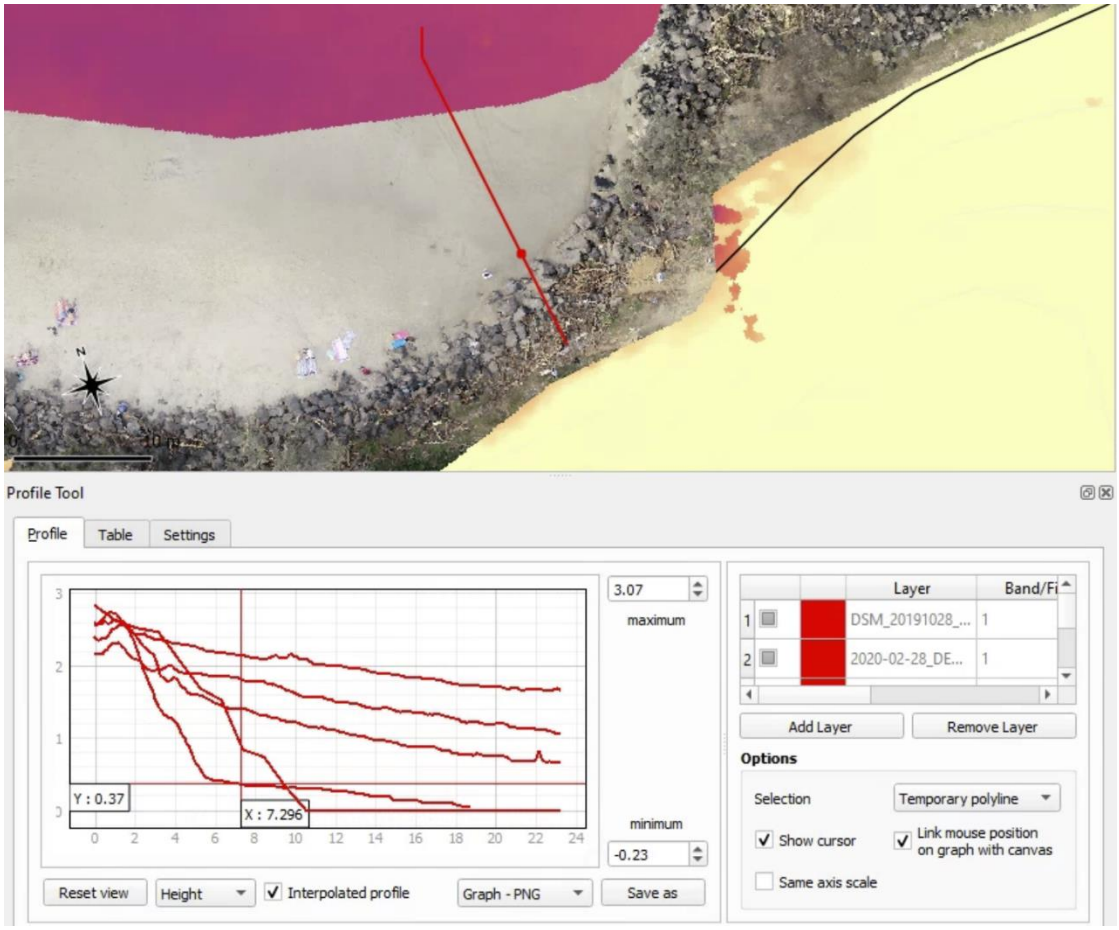


Figure 14: Beach level profiles between 2019 and 2022.

4.3 Surrounding land uses

How far away are the nearest dwellings, school, bus stops, etc?

The surrounding land uses consist of car park, parks, commercial premises (Café and Caravan Park), the Byron Surf Lifesaving Club, green-space, residential and holiday premises. The closest street is Jonson Street to the southeast. There is a large car park to the east of the site with pedestrian pathways which connects to the works area.

The foreshore and adjacent reserve are an important and popular public space, used for mainly passive recreational beach activities, including swimming, walking, surfing, and related commercial operations such as dining and overnighting. The reserve and foreshore area is used for carparking, walking, picnicking, BBQs, monthly markets, and is the site of the Byron Bay Surf Lifesaving Club, Memorial Pool and the First Sun Caravan Park. Amenities include ablution blocks, carpark area, picnic chairs and tables, BBQ's, waste bins, footpaths.

The safety and amenity of the foreshore area and beach access has been impacted by erosion and presents public safety risk. This project will restore beach access, beach amenity and public safety.

4.4 Geology/Geomorphology

Is the site slip-prone or unstable?

The sand that has formed the beaches and dune systems surrounding the site is essentially mature marine sand derived from the continental shelf, not contemporaneously derived fluvial sand. The sand dune barrier unit within the Byron Bay embayment comprises younger Holocene outer barrier dunes that abut un-conformably seaward of (or overlie in the case of Holocene transgressive wind drift) the Pleistocene deposits. At this location much of the Holocene sand is now missing and with much older (Pleistocene) dune systems (i.e. indurated sands and "sandrock") commonly outcropping in the beach and surfzone.

Bedrock is generally in excess of 10 metres below the beach. The coastal plain extends around two kilometres from today's shoreline and comprises mainly marine sediment and is highly erodible in the active beach zone. There are bedrock and coffee rock reefs and outcrops within the embayment that influence wave propagation, sand movements, shoreline dynamics and surfzone morphology. Further, the embayment's extensive reefs reduce the volume of sand that can be stored (Bluecoast, 2023).

Bluecoast Consulting Engineers recently completed a detailed and comprehensive assessment of coastal hazards for the entire Byron Shire coastline (Bluecoast, 2023) with key outcomes relevant to the location as outlined below:

- Headland bypassing around Cape Byron results in a highly variable sand supply to the Byron Bay embayment and when coupled with the wave propagation characteristics of the embayment, the variable sand supply leads to a highly variable shoreline.
- Existing coastal structures, including the Jonson Street Protection Works and Belongil seawalls interact with the embayment's natural sand movements, with the level of interaction (over the medium to long-term) largely controlled by the amount of sand in the embayment, which in turn is a function of headland bypassing and wave climate.

4.5 Soil types and properties

Is the site affected by acid sulfate soils and at what depth?

The soil landscapes for the beach are mainland and barrier beaches and associated foredunes and hind dunes on Quaternary (Holocene) sands. The project area sits within the Point Danger to Cape Byron secondary sediment compartment. Over thousands of years of sea level changes, sand has moved shoreward from marine sources originating from the continental shelf and formed today's beaches and dunes.

The project area is mapped as Class 5 in Council's acid sulfate soils (ASS) mapping classification. Class 5 land within 500m (on land <5m AHD) of adjacent Class 1, 3 or 4 land. The closest land is Class 3 near Lawson Street to the south. This project does not involve any works on adjacent ASS land nor works that involve excavation or dewatering and/or lowering the water table. ASS are unlikely to be encountered and no further assessment is warranted.

Known sediment size for the location is based on a detailed study completed in 1978 (PWD, 1978) where they analysed 370 surface samples and drilled 50 boreholes along the beach. Inner nearshore surface sediment/sand is light fawn, well to very well sorted, fine-medium grained and composed of well-rounded to sub angular grains of quartz and minor shell.

A review in 2006 (Patterson Britton, 2006) of a limited set of sediment samples in the study area determined the sand can be classified as 'fine sand' with the following mean grain diameters:

- intertidal area – 0.23mm;
- berm – 0.24mm; and
- foredune – 0.24mm

4.6 Waterways

How close are the works to the waterway, and is it a drinking water catchment?

The project area is part of the open coastal beach, protected in the lee of Cape Byron within the Habitat Protection Zone of the Cape Byron Marine Park. The site is within the beach fluctuation zone and the influence of coastal processes, including direct wave action and tidal cycle. The present beach profile at site is moderately eroded and may be subject to further beach profile lowering depending on wave height, wave direction and tidal cycles from future storm events.

The location of the access is within the western extent of the existing coastal protection works and is subject to coastal processes. The level of interaction that the proposed works (which lie within the extent of the existing structure) will have with coastal processes and the embayments sand movements is largely controlled by the amount of sand in the embayment, which in turn is a function of headland bypassing and wave climate.

The impact on water quality from the proposed works at the beach is not expected as the works will be conducted from the dry beach.

4.7 Flora (including flora of conservation significance)

Check Council's GIS.

Complete a search of the threatened species database in cases where vegetation is to be impacted/removed.

The wider project locality comprises coastal dunes, littoral rainforest and heathlands. Under Council's vegetation mapping (2021) the project site lies outside any mapped vegetation.

Figure 15: Vegetation mapped surrounding the proposed works.

The works area is generally devoid of any vegetation. As the access is regularly traversed by members of the public and thereby constantly used, growth of vegetation within the area is restricted. There is a large Pandanus tree next to the works area which will be trimmed for machine access. The works are not expected to disturb any surrounding vegetation communities.

4.8 Fauna (including fauna of conservation significance)

Check Council's GIS.

Complete a search of the threatened species database in cases where habitat is to be impacted/removed.

Council completed a desk-top BioNet search for threatened fauna which identified the below fauna species recorded in close proximity to the works area:

- Green Turtle (*Chelonia mydas*)
- Bush Stone Curlew (*Burhinus grallarius)*
- Great Knot *(Calidris tenuirostris)*
- Eastern Osprey *(Pandion haliaetus cristatus)*

The project area is a moderately disturbed environment and therefore highly unlikely to represent habitat for these listed threatened species. The shorebird species are known to inhabit and nest further west at the entrance of Belongil Creek. The existing rocks make it unsuitable for turtle nesting. The project location is a high use visitation area with ongoing disturbance of the beach through foot traffic and the occasional dogs (noting they are prohibited). Due to the small footprint of the works within the existing hard landscape of the rock revetment and short-duration of the works the likely impact to threatened species and biodiversity is considered low.

Timing of the works in April may reduce potential conflict with nesting shorebirds, such as Pied Oystercatchers, Little Terns and Beach Stone Curlews, as well as other bird species that may utilise the surrounding area for nesting, for example Rainbow Bee Eaters and Pardalotes.

4.9 Biodiversity values mapping

Check State Government mapping online.

The Biodiversity Values (BV) Map identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing (Figure 16). The map forms part of the Biodiversity Offsets Scheme Threshold which is one of the triggers for determining whether the Biodiversity Offset Scheme (BOS) applies to a clearing or development proposal. The map is prepared by the Department of Planning and Environment under Part 7 of the Biodiversity Conservation Act 2016 (BC Act). Biodiversity Values have not been mapped in the vicinity of the project.

The project involves no clearing of native vegetation. No works are proposed in any area mapped as having high biodiversity value mapping.

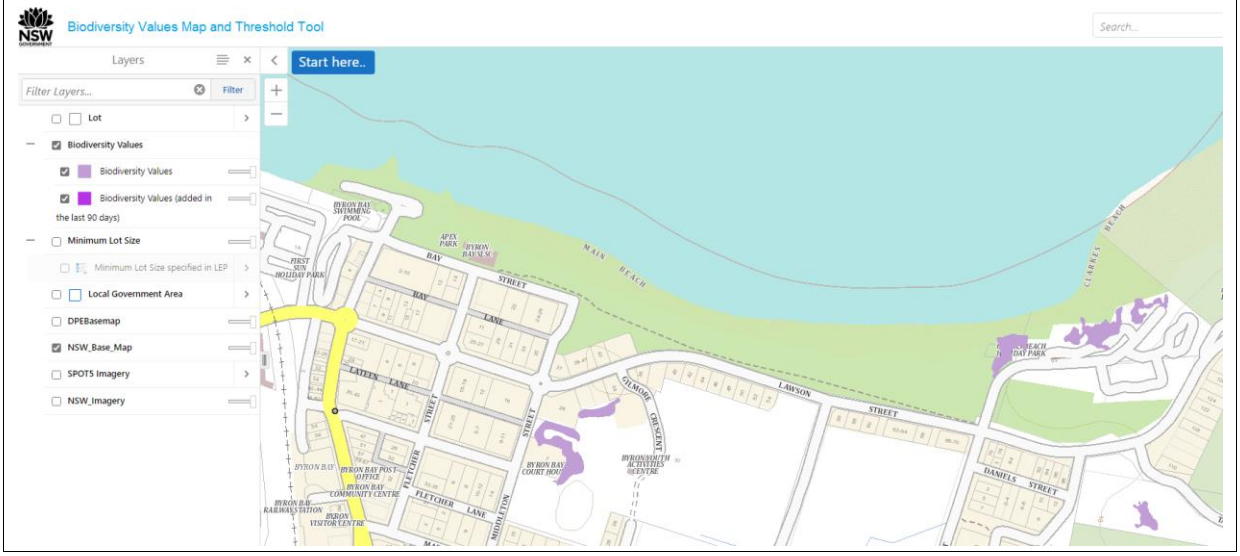


Figure 16: ***Biodiversity Values (BV) Map for the project location.***

4.10 Test of significance – threatened species and endangered ecological communities

Consider the following for the purposes of determining if the proposed activity is likely to significantly affect threatened species, endangered ecological communities or their habitats. If there is potential impact on threatened species (eg vegetation clearing, substantial changes in hydrology, new night lighting) specialist assistance from an ecologist or environmental scientist is necessary to address this section and may require more detailed assessment.

Matter	Comment
(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction	It is not likely that any threatened flora or fauna species use the works area on a regular basis. It is, therefore, unlikely that any species will be adversely affected by this proposal such that a viable local population of the species is likely to be placed at risk of extinction.

Matter	Comment
(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity— (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction	Endangered ecological communities are not present in the locality. With no native vegetation to be removed, the proposed works will not have an adverse effect on any EECs. The works will not adversely modify the composition of any EECs and no risk of extinction is likely.
(c) in relation to the habitat of a threatened species or ecological community— (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality	No threatened species are known or likely to inhabit the works area. No habitat of threatened species or communities will be removed or modified, fragmented or isolated.
(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly)	The works site does not contain areas of high biodiversity values. No adverse effects on areas of high biodiversity are anticipated.
(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process	The proposed development does not contribute to any listed threatening process.

4.11 Aboriginal cultural heritage

Undertake an AHIMS search and check Council's GIS.

Check Native Title claim maps and NSW Aboriginal land claim data, and identify traditional owners.

There are a variety of culturally significant areas located in the Byron Bay Embayment that includes pathways, middens, stone arrangement, stone resource sites, ceremonial sites and burials. Some of the sites are listed on the Aboriginal Heritage Information Management Service (AHIMS) site and are a significant distance from the project area (Appendix C). These culturally significant objects, resources and areas are at risk of loss due to natural coastal processes and are of great significance to the Arakwal People.

The closest (known) sites are the recently discovered shell middens within the Reflections Holiday Park to the east of the project area, and the middens at Palm Valley (The Pass) also to the east. Both of these middens are well outside of the proposed works area of this project. There is also a site to the west at Kendall/ Border St, Belongil which is listed on AHIMS.

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (2010) (the Code), was used to inform the initial assessment of the environmental impacts of the activity to Aboriginal heritage. The Code assists organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects and to determine whether a consent in the form of an Aboriginal Heirtage Impact Permit (AHIP) should be applied for. If it is found through this initial assessment process that Aboriginal objects will or are likley to be harmed, then further investigation and impact assessment is required to prepare information about the types of objects and the nature of the harm.

The primary consideration in this project is the disturbance of the ground surface and activities occuring in a landscape which is often associated with Aboriginal objects. Sand dunes and the beach (within 200m of waters) are landscape features that indicate the likely existence of Aboriginal objects. As outlined above, there are known middens in close proximity to the project location.

The project works are located within the existing rock revetment and foreshore area adjacent the carpark which is dominated by fill and concrete. There will be minor shallow excavation of highly mobilsed sand within the beach system, i.e. sand that has been transported recently by waves in the swash zone around the rock revetment to realign rocks. Restoration of the beach access will involve minor excavation and removal of waste within an existing and already disturbed footprint that has been excavated in the past.

Working through the due diligence assessment, it is considered unlikely that cultural heritage objects will be impacted by this project and an AHIP is not necessary. The Code advises that the project may proceed with caution, and that if any Aboriginal objects are found, enact the stop work procedure.

Notwithstanding this, Arakwal, as Native Title holders hold the belief that all land and waterways in the area are essential to culture, and their conservation must be held in very high regard. Therefore it is the Arakwal community's belief that any external interference of any and all waterways, must be done with sensitivity and respect to the traditional custodians of the country. Engagement of an Arakwal Aboriginal Cultural Heritage monitor to be on-site for part of the project works will be considered (such as when works on the beach are occurring repairing rocks within the revetment.

Due diligence process step	Comment
Will the activity disturb the ground surface or any culturally modified trees?	Yes. Shallow excavation of beach accesses. Shallow excavation of highly mobilsed sand with the beach system for rock repair.
Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?	Yes. Closest sites are approximately 1km (plus) to the west (Kendall/Border St) and east (Reflections Holiday Park and at The Pass). Both of these middens (to the east) are well outside of the proposed footprint of this project.
Are there any other sources of information of which a person is already aware?	Yes. The EIS's produced for coastal protection works at Reflections and Clarkes Beach.

Due diligence process step	Comment
Are there any landscape features that are likely to indicate the presence of Aboriginal objects?	Yes. Within 200m of waters and located within a sand dune system.
If after completing steps above and no information indicates site importance, it is reasonable to conclude that there are no known Aboriginal objects or a low probability of objects occurring in the area of the proposed activity, you can proceed with caution. If the answer to any of the above questions is yes then the following three questions must be answered.	
Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?	No harm to listed AHIMS sites can occur through this work. No disturbance of any Aboriginal objects expected. The location cannot be modified as this is where the access has existed in the past.
Does a desktop assessment and visual inspection confirm that there are Aboriginal objects on the site or that they are likely to be there?	Visual assessment and desktop assessment did not identify any Aboriginal objects in the proposed work area.
Is further investigation and impact assessment warranted?	No.

4.12 Native Title and Crown land management

If Crown land, confirm reserve purpose and address Native Title through Council's Native Title Manager.

Several applications for a Native Title Claim within Byron Shire have been lodged over Crown Land including beaches and coastal waters. The Native Title Claims lodged under the *Aboriginal Land Rights Act 1983* (NSW) must be considered when actions are proposed on Crown land and any works must comply with the Native Title Act 1993.

Since 2001, voluntary Indigenous Land Use Agreements (ILUA) have been registered and apply for the area between Broken Head and Belongil Beach by the Bundjalung People of Byron Bay (Arakwal) People who are recognised as the Traditional Owners of the area.

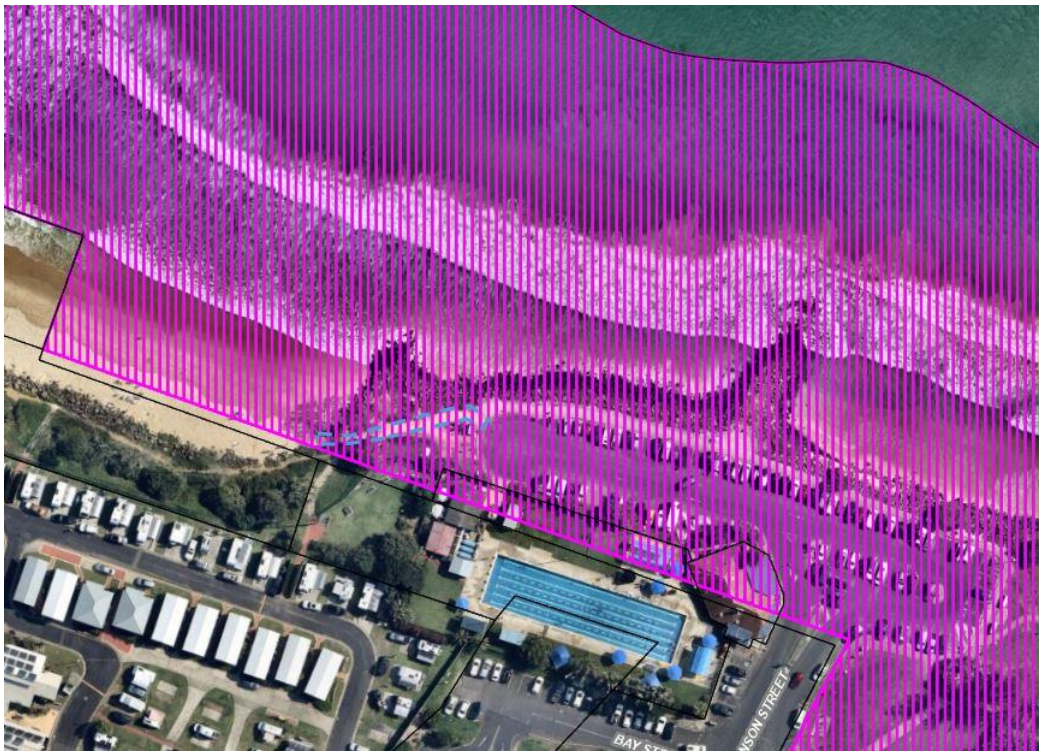


Figure 17: ***Image of Council's mapping system showing Native Title search and ILUA registered area.***

The works lie within Land that is Crown reserve R82000 known as Byron Bay Beach. Council is the Crown Land Manager under the *Crown Lands Management Act 2016* (CLM Act). The reserve is set aside for the purpose of public recreation. The CLM Act requires Council to get native title manager advice for certain acts it does on Crown land like the reserve:

8.7 When advice of native title manager required

(1) A responsible person for relevant land cannot do any of the following unless the person has first obtained the written advice of at least one of the person's native title managers that it complies with any applicable provisions of the native title legislation—

(a) grant leases, licences, permits, forestry rights, easements or rights of way over the land,

(b) mortgage the land or allow it to be mortgaged,

(c) impose, require or agree to covenants, conditions or other restrictions on use (or remove or release, or agree to remove or release, covenants, conditions or other restrictions on use) in connection with dealings involving the land,

(d) approve (or submit for approval) a plan of management for the land that authorises or permits any of the kinds of dealings referred to in paragraph (a), (b) or (c).

<u>Native Title Manager Advice</u>

- The Land is surrendered land under schedule G of the Indigenous Land User Agreement Bundjalung People of Byron Bay dated 20 December 2006 (shown below).

Schedule G: "Surrendered Lands"

COLUMN 1 ID AREA	COLUMN 2 IDENTIFIERS/ DESCRIPTORS OF LAND IN WHICH NATIVE TITLE (IF ANY) IS SURRENDERED	COLUMN 3 WHEN SURRENDER OF NATIVE TITLE (IF ANY) TAKES EFFECT
2 3 4 11 12 15 16 A B 5 C D E 155 F 143 144 145 M 141 142	Lot 407 in DP729057 Lot 408 in DP729057 Lot 10 in DP1049827 Lot 392 in DP728539 Allotment 1 Section 23 in DP 758207 Lot 457 in DP 1087879 Lot 383 in DP728202 Lot 384 in DP728503 Lot 11 in DP249282 Lot 410 in DP729062 Lot 159 in DP755695 Lot 306 in DP755695 Lot 400 in DP728187 Lot 230 in DP755695 Lot 7016 in DP 1106620 Lot 8 in DP248668 Lot 8 in DP112111 Lot 404 in DP728256 Red Devils Encroachment. Lot 3 in DP248009 Lot 4 in DP248009	The date on which this Agreement is Registered.
18 214 N	Lot 438 in DP729107 Broken Head Caravan Park Land as described in Schedule L. Broken Head Caravan Park Land Encroachment as described in Schedule M.	The date on which the transfer of the land (or part of the land) to the Corporation or a third party under the *Real Property Act 1900 (NSW)* is registered.

- Part 8 of the CLM Act, native title manager advice is not required for dealing in relation to Excluded Land.
- Land that has been surrendered under a registered Indigenous Land Use Agreement (as defined by the Native Title Act) is Excluded Land for the purpose of Part 8 of the CLM Act.
- At the date of the Agreement the Land was Lot 10 DP1049827. The Land was subsequently subdivided for the Byron Memorial Pool and Beach Café into Lot 18 DP1269368. Proposed works are within Lot 18 DP1269368.
- Lot 18 DP1269368 is Excluded Land for the purpose of the CLM Act.

The road reserve is not subject to Native Title.

The more recent ILUA from 2020 also covers the project area and a lot of the Shire. Council is not a party to this ILUA and is unfamiliar with the content of the agreement. It is assumed that this ILUA is between Arakwal and Crown Lands only.

Discussion was held with the Department of Crown Lands (27/03/24) in regard to Council's proposed works. Crown lands staff reconfirmed that Council as the Crown Land Manager of the reserve doesn't require a Licence for the works from the Crown.

4.13 Non-Aboriginal heritage item or place or heritage conservation area

Check LEP, State Government Heritage Register and National Heritage List.

There are no listed non-Aboriginal heritage items within the project area. The closest heritage item is White's Cottage, located on Lot 410 / DP72962 and managed by the NSW Crown Holiday Parks Land Manager, Reflections Holiday Park. Built in 1953, Whites Cottage has local heritage significance with information and inventory sheet in the 2008 Community Based Heritage Study but is not listed on the Byron LEP 1988 or 2014. It will not be impacted by the proposed works.

4.14 Interests of external stakeholders (e.g. adjoining landowners, lease holders)

Internal

- Councillors
- Executive Team
- Relevant council staff

External

- Byron Bay Surf Lifesaving Club
- Australian Lifeguards – volunteer and paid.

Agencies/Authorities/NGO's:

- Arakwal Corporation
- First Sun Caravan Park
- Memorial Pool
- Department of Planning and Environment (DPE) – Environment, Energy and Science
- DPI Fisheries (Marine Parks)
- DPE Crown Lands
- NSW Police
- NSW Ambulance

Relevant stakeholders have been consulted or will be advised of works in due course.

4.15 Hazards mapping

Is the site affected by bushfire hazard?

Is the land subject to contamination?

Is the site flood prone?

Other

All of the proposed works are within the Immediate Impact Zone as mapped by Council in DCP 2010 Figure 18.

Council's recently adopted Coastal Hazard Assessment (Bluecoast, 2023) provides an assessment of coastal hazards impacting the Bryon Shire coastline and provides a summary of the outcomes of a comprehensive study of the regional and local coastal processes operating on the Byron Shire coastline.

Key outcomes of the study include:

- The Shire's geomorphic structure, including bedrock and coffee rock reefs and outcrops influence wave propagation, sand movements, shoreline dynamics and surfzone morphology. Further, the embayment's extensive reefs reduce the volume of sand that can be stored in the southern embayment.
- Existing coastal structures, including the Jonson Street Protection Works and Belongil seawalls interact with the embayment's natural sand movements, with the level of interaction (over the medium to long-term) largely controlled by the amount of sand in the embayment, which in turn is a function of headland bypassing and wave climate.
- Along the Shire's northern coastline, contemporary changes in sand volumes and shoreline position have been minimal with some sections of beach trending towards an accretionary behaviour.
- The probabilistic coastal erosion and recession hazard assessment suggests that built public and private assets are located within the immediate hazard extent at Clarkes, Main and Belongil beaches. By 2120, the hazard extents would affect a considerably larger number of

additional public and private assets and foreshore area at Clarkes to Main Beach and Belongil Beach.

The immediate erosion hazard at the project location is provided in Figure 19 which is based on the assumption that the JSPW is non erodible as it is proposed to be maintained/upgraded to required engineering standard to withstand all erosion events (i.e. Main Beach Shoreline Project).

All of the proposed works will be designed to be affected by coastal processes.

As they include maintenance and repairs to coastal protection works that have existed for many years it is not anticipated that coastal process will be impacted in other locations.

Figure 18: ***Image of Council's Development Control Plan (2020) impact line map.***

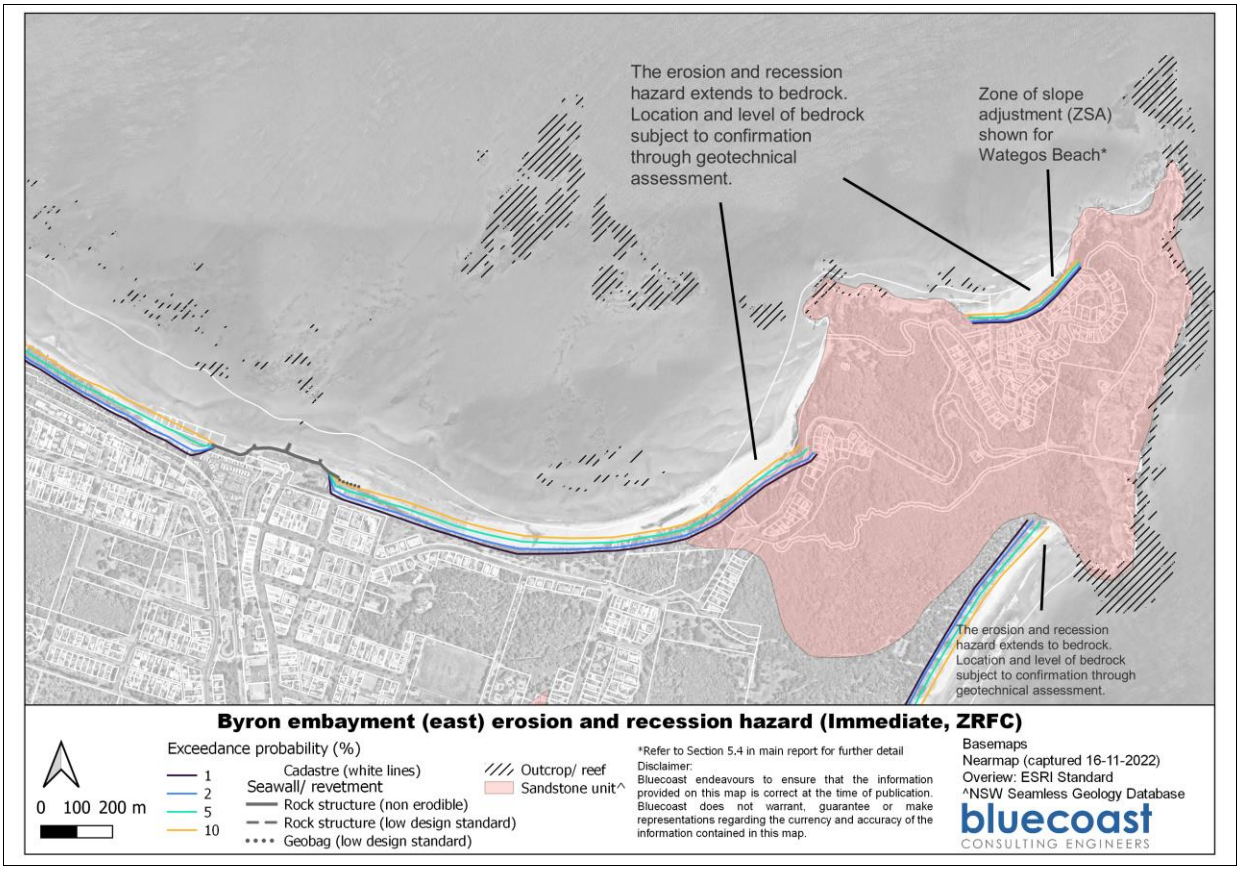


Figure 19: ***Immediate erosion and recession hazard at the project location (Bluecoast, 2023).***

Section 5 APPROVALS, LICENCES and PERMITS

Item	Locations that may trigger an external approval, licence or permit	*Check one*	
5.1	Working in an area containing endangered, threatened, vulnerable or protected species, populations, ecological communities or critical habitat (flora and fauna) – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)* – *Department of Primary Industries—Fishing (DPI–Fishing)*	☐ Yes	☒ No
5.2	Working on land reserved under the National Parks and Wildlife Act (eg National Park, Nature Reserve, Aboriginal area, wilderness area, conservation area or wild river) – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)*	☐ Yes	☒ No
5.3	Working in an area of national environmental significance (Ramsar wetlands, threatened species, migratory birds, World Heritage, National Heritage, nature reserve, etc) or on Commonwealth land or marine area – *Department of Agriculture, Water and the Environment (Commonwealth)*	☐ Yes	☒ No
5.4	Working within an area that is subject to any conservation agreement entered into under the *National Parks and Wildlife Act 1974* – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)* – *Relevant LALC*	☐ Yes	☒ No
5.5	Working within an area that is subject to any plan of management under the *National Parks and Wildlife Act 1974* – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)* – *Relevant LALC*	☐ Yes	☒ No
5.6	Working within an area that is subject to any joint management agreement under the *National Parks and Wildlife Act 1974* – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)* – *Relevant LALC*	☐ Yes	☒ No
5.7	Working in an area subject to a joint management agreement entered into under the *Threatened Species Conservation Act 1995* – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)*	☐ Yes	☒ No
5.8	Working in an area subject to a biobanking agreement entered into under Part 7A of the *Threatened Species Conservation Act 1995* that applies to the whole or part of the land to which the activity relates – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)*	☐ Yes	☒ No
5.9	Working in an aquatic reserve or in marine vegetation such as seagrass, mangroves, saltmarsh, etc – *Department of Primary Industries—Fishing (DPI-Fishing)* – *Department of Primary Industries—Marine Parks (DPI–Marine Parks)* – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EES Group)*	☐ Yes	☒ No

Item	Locations that may trigger an external approval, licence or permit	*Check one*	
5.10	Working in a Marine Park declared under the Marine Parks Act – *Department of Primary Industries—Marine Parks (DPI–Marine Parks)*	☐ Yes	☒ No
5.11	Dredging or reclamation of water. (Note that councils do not need approval for a controlled activity under the *Water Management Act 2000*) – *Department of Primary Industries—Fishing (DPI–Fishing); and/or* – *NSW Water* – *Transport for NSW*	☐ Yes	☒ No
5.12	Enlarge, deepen or sink a new water bore – *NSW Water*	☐ Yes	☒ No
5.13	An activity that will pollute water (eg dewatering) – *Department of Planning and Environment—Environment, Energy and Science Group (DPE–EPA Group)*	☐ Yes	☒ No
5.14	Working within the curtilage of a 'Heritage Place' or 'Heritage Item' identified on the Byron LEP Heritage Schedule, the State Heritage Register or the National Heritage List – *Australian Heritage Council* – *Heritage NSW* – *Heritage Council of NSW* – *Byron Shire Council*	☐ Yes	☒ No
5.15	Working within a 'heritage conservation area' identified in Byron LEP Schedule 5 Environmental Heritage – Part 2 – *Byron Shire Council*	☐ Yes	☒ No
5.16	Working where a 'Relic' is likely to be discovered (eg Archaeological Zoning Plans) – *Heritage Council of NSW; or* – *Heritage NSW*	☐ Yes	☒ No
5.17	Working near Aboriginal relics or places where an Aboriginal Heritage Impact Permit (AHIP) may be required; working on land or water successfully claimed by traditional owners – *BoBBAC (Arakwal), Jali LALC, Tweed Byron LALC, Ngulingah LALC* – *Heritage NSW*	☐ Yes	☒ No
5.18	An activity comprising a fixed or floating structure in or over a navigable waterway – *Transport for NSW*	☐ Yes	☒ No
5.19	An activity comprising work on Crown land not subject to a plan of management – *Department of Planning and Environment—Crown Lands (DPE–Crown Lands)*	☒ Yes	☐ No
5.20	Working at sites at which asbestos or asbestos-containing materials exist. (Determine if a licence or exemption will be required) – *SafeWork NSW*	☐ Yes	☒ No

Are any permit(s) required? ☐ Yes ☒ No

If **Yes**, please indicate what permit(s) are required:

		Check box if required
A	Fisheries Permit	☐
B	Marine Park Permit	☐
C	Other:	☐

If **Yes**, but no permits are required, please indicate why not:

Council as a Land Manager of the project area does not require a CL Licence for the works in reserve R82000.

NOTE: If you have checked any ☒ **Yes** in the table above then you must do one of the following:

3. Attach a copy of the approval, licence or permit to the final REF, OR
4. Detail who is responsible for obtaining the approval, licence or permit, OR
5. Explain why the project is exempt.

NOTE: If you have checked ☒ **Yes** at any item in the table above, a referral to the relevant authority may still be required under the Transport and Infrastructure SEPP, even if a permit or approval is not required. A period of 21 days is allowed for response. All responses are to be considered and included in this assessment.

Section 6 ENVIRONMENTAL IMPACT ASSESSMENT

If an impact is predicted, place a **1**, **2** *or* **3** *in columns 7, 8 and 9. Multiply these three scores to obtain the environmental score in column 10.*

For each of columns 7, 8 and 9: 1 = *Minor* 2 = *Moderate* 3 = *Major*

Projects with any HIGH environmental score (greater than or equal to 10) will require specialist advice to assess environmental issues or re-evaluation of the project options or mitigation measures. It is recommended that there is consultation with your supervisor to determine the most appropriate course of action. Where the project is modified, a revised REF will be required.

	Columns:		4	5	6	7	8	9	10
			Multiply the three scores:			*1–3*	*1–3*	*1–3*	=
Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.1	AIR	**Construction:** Dust generation (excavating, disturbing soil, stockpiling, trenching, erosion-prone sites, clearing of vegetation, transporting soil, etc). Fumes, odours and other air pollution from vehicles, equipment, machinery or other activities.	☐ **No impact** *If checked, go to next issue*	The plant and equipment will generate local exhaust as part of the works. Soil has the potential to become windborne and create a dust issue (i.e sand stockpiles, exposed earth). [Noting that sand is wet and unlikely to be a problem]. The activity involves short term use of machinery including driving the machine onto the beach. There will be standard emissions of diesel fumes during the activity. Risks: Excessive generation of exhaust during the works Windblown sand (dust) may be generated from the site compound and blow beyond the construction footprint	Construction equipment will be turned off when not in use. Site compound will be as small as possible to reduce ground disturbance. Stop work if wind-blown sand is a problem.	3	1	1	3
6.2		**Operation:** Fumes, odours and other air pollution from vehicles, equipment, machinery or other activities.	☒ **No impact** *If checked, go to next issue*			Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

		Columns:	4	5	6	7	8	9	10
			Multiply the three scores:			*1–3*	*1–3*	*1–3*	=
Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.3	WATER	**Construction:** Polluting waterways, wetlands, stormwater drains or groundwater (eg storing, transporting, handling or disposing of oils, fuels, pesticides, chemicals, pit/trench water or other liquids). Machinery related spills (eg fuel, oil, hydraulic fluid). Sedimentation of waterways, wetlands, stormwater drains or groundwater (eg excavating, disturbing soil, stockpiling, trenching, concrete cutting, access tracks, erosion-prone sites, etc).	☐ **No impact** *If checked, go to next issue*	Machinery will use diesel fuel and have hydraulic fluid and oils on board (i.e. minimal handling of oils etc necessary). Risks: Pollution may occur from mishandling of fuels or hydraulic leaks. Pollution may occur to the beach if these bags are exposed by an erosion event.	All machines will be refuelled at the site compound (off the beach). Spill kits to be onsite (beach and within site compound) if any leaks occur. All plant will be washed down at the site compound to ensure no contaminants enter the Marine Park.	1	1	3	3
6.4		**Operation:** Polluting waterways, wetlands, stormwater drains or groundwater (eg storing, transporting, handling or disposing of oils, fuels, pesticides, chemicals, pit/trench water or other liquids).	☒ **No impact** *If checked, go to next issue*			Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

		Columns:	4	5	6	7	8	9	10
			Multiply the three scores:			*1–3*	*1–3*	*1–3*	=
Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.5	NOISE & VIBRATION	**Construction**: Noise/vibration (eg rock breakers, concrete cutters, jackhammers, chainsaws, compressors, excavators, backhoes, trucks, vehicles, cranes, steel plate movements, generators, etc).	☐ **No impact** *If checked, go to next issue*	The operation of the earthmoving machines will generate noise and likely vibration. However, this is expected to be relatively minor. Risks: Construction equipment and trucks cause excessive noise Working may occur outside of normal construction hours (7am-5pm Mon-Fri)	Turn off machines when not in use. Notification to nearby stakeholders about the possibility of vibration & noise impacts. Review work and noise mitigation if impacts are beyond reasonable / complaints are received.	3	1	2	6
6.6		**Operation:** Noise/vibration (eg pumps, generators).	☒ **No impact** *If checked, go to next issue*	Click here to enter text.	Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

	Columns:		4	5	6	7	8	9	10
			Multiply the three scores:			*1–3*	*1–3*	*1–3*	=
Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.7	CONTAMINATION & WASTE	**Construction:** Disturbing contaminated soil (eg known contamination, ASS, old industrial site, previous landfill, etc). Disturbing old sand mining area or stockpile (radioactivity). Contaminating or polluting land (eg storing, handling or disposing of oils, fuels, pesticides, chemicals, pit/trench water or other liquids). Excavating public road material for reuse in the road reserve. Environmental problems caused by generating, storing, handling, transporting or disposing of waste (eg soils, building materials, oils, solvents, toilets, etc). Restricting current and potential activities associated with the land (eg amenity, buildings, parking).	☐ **No impact** *If checked, go to next issue*	The work involves shallow excavation of the beach of uncontaminated soil. The machinery to be used is most likely the use diesel fuel and have hydraulic fluid and oils on board (i.e. minimal handling of oils etc necessary). Risks: Pollution may occur from mishandling of fuels/hydraulic oil leaks etc on the machines	All machines will be refuelled at the site compound (off the beach). No re-fuelling to occur on the beach. Spill kits to be onsite if any leaks occur. Only the minimum amount of fuel will be onsite each day to run the machines. Plant operators to document the plant is clean upon arrival prior to works commencing. Prestart daily checks of plant to check for fuel and hydraulic leaks prior to commencing work each day. All waste will be removed from site. Implement Stop Work procedure and further investigation if any contaminated soil is thought to be encountered (i.e. different smell or looks different colour).	1	1	3	3

	Columns:	4	5	6	7	8	9	10
		Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.8		**Operation:** Contaminating or polluting land (eg storing, handling or disposing of oils, fuels, pesticides, chemicals, pit/trench water or other liquids). Environmental problems caused by generating, storing, handling, transporting or disposing of waste (eg soils, building materials, oils, solvents, etc). Restricting current and potential activities associated with the land (eg amenity, buildings, parking).	☒ **No impact** *If checked, go to next issue*	Click here to enter text.	Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9
6.9	TRANSPORT	**Construction:** Restricting or affecting transport (eg pedestrian, car, bus, train, airports, boats, river crossings, bus stops, public transport corridors and infrastructure, construction-related disturbances, property access, parking restrictions, etc).	☐ **No impact** *If checked, go to next issue*	The project area will be sectioned off from the public via closing of the beach accessway. Machines will be floated to the site and a small site compound set up. Impacts are considered manageable and low due to the short project duration. Risks: Interactions of construction plant / activities and community pedestrians Community members ignoring signs/fencing and using the beach access point anyway.	Pedestrians will be managed by an on-site Spotter/Safety person. Pedestrians will have an alternative access way they can use. Delivery of machines on floats will be managed through traffic control staff. Signs will be installed at the closed access points. Barriers will be used as required	3	2	1	6

Columns:	4	5	6	7	8	9	10
	Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.10		**Operation:** Restricting or affecting transport (eg pedestrian, car, bus, train, airports, boats, river crossings, bus stops, public transport corridors and infrastructure, construction-related disturbances, property access, parking restrictions, etc).	☒ **No impact** *If checked, go to next issue*	Click here to enter text.	Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

Columns:	4	5	6	7	8	9	10
	Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.11	FLORA & FAUNA	**Construction:** Clearing or modifying native vegetation (including trees, shrubs, grasses, roots, herbs or aquatic species). Clearing or modifying critical habitat. Clearing in a Biodiversity Value mapped area. In the case of threatened species, populations and ecological communities and their habitats, whether there is likely to be a significant effect on those species, populations or ecological communities, or those habitats. Introducing or spreading weeds (including noxious) or vermin. Introducing bushfire risk factors. Endangering any species of animal, plant or other form of life, whether living on land, in water or in the air (eg any danger to birds in the locality). Displacing, disturbing or damaging terrestrial or aquatic fauna (eg creating a barrier to fauna movement, clearing remnant vegetation or wildlife corridors, collisions, etc). Any other environmental impact on the ecosystems of the locality.	☐ **No impact** *If checked, go to next issue*	There are no planned impacts to flora and fauna as a result of the project. Minor tree pruning will be undertaken for machine access. Risks: Impacting native vegetation on the site by machines accidently or as part of the construction methodology Importing weeds and vermin when floating plant and gear to site. Native fauna may be impacted by the works (i.e struck by moving plant) or through disturbance (nesting, feeding).	Operators are proficient in this work and operation of machinery within the beach/dune area. A declaration will be completed by the plant operators prior to floating to document the plant was clean upon arrival Implement a stop work policy when fauna enter the immediate work site where injury is possible. All plant to be washed down daily to ensure no weeds enter the Marine Park. A pre-project inspection of the dune and completion of daily pre-site checks. Any nest sites will be marked and works will avoid the nest. Timing of the works to avoid key shorebird activity and turtle nesting periods. Implement a stop work policy when fauna enter the immediate work site where injury is possible.	3	1	2	6

	Columns:	4	5	6	7	8	9	10
		Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.12		**Operation:** Introducing or spreading weeds (including noxious) or vermin. Introducing bushfire risk factors. In the case of threatened species, populations and ecological communities and their habitats, whether there is likely to be a significant effect on those species, populations or ecological communities, or those habitats. Endangering any species of animal, plant or other form of life, whether living on land, in water or in the air (eg any danger to birds in the locality). Displacing, disturbing or damaging terrestrial or aquatic fauna (eg creating a barrier to fauna movement, clearing remnant vegetation or wildlife corridors, collisions, etc). Any other environmental impact on the ecosystems of the locality.	☒ **No impact** *If checked, go to next issue*		Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

		Columns:	4	5	6	7	8	9	10
			Multiply the three scores:			*1–3*	*1–3*	*1–3*	=
Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.13	SOCIAL	**Construction:** Creating a nuisance to the community (eg impact on amenity through noise, perceived risk of fires, explosions, property value devaluation, etc). Creating financial loss to members of the community (eg restricting access to commercial premises, changing land use, etc).	☐ **No impact** *If checked, go to next issue*	The proposed works will restrict pedestrian access within the project footprint. However any impacts are considered manageable and low due to the short project duration.	Timing of works not to coincide with school holidays and (where possible) not on Sundays or public holidays. Timing of works will best try to avoid key events and large activities. Pedestrians will have an alternative access way to use. Delivery of machines on floats will be managed through traffic control staff. Beach users will be managed by an on-site Spotter/Safety person.	3	1	2	6
6.14		**Operation:** Creating a nuisance to the community (eg impact on amenity through noise, perceived risk of fires, explosions, property value devaluation, etc). Creating quantifiable financial loss to members of the community (eg restricting access to commercial premises, changing land use, etc).	☐ **No impact** *If checked, go to next issue*	Any long-term impacts to the environment and community are **expected to be positive** as the project beach access, amenity and safety.	Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

	Columns:	4	5	6	7	8	9	10
		Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.15	HERITAGE	**Construction:** Affecting a locality, item, place or building having aesthetic, anthropological, archaeological, architectural, historical, scientific, cultural or social significance or other special value (eg visual effect on adjoining heritage buildings or items; disturb, move, excavate Aboriginal object) or working where heritage items could be found. Affecting any Aboriginal heritage (eg engravings, middens, carved trees, grinding grooves, paintings, burial sites, etc).	☐ **No impact** *If checked, go to next issue*	The project activities involve shallow excavation of highly mobilised sand within the beach system, i.e. sand that has been transported recently by waves in the swash zone. It is considered unlikely (low likelihood) that cultural heritage may be impacted by this project and an AHIP is not necessary. The code advises that project may proceed with caution, and that if any Aboriginal objects are found, enact the stop work procedure.	Stop Work procedure should shell middens or Aboriginal artefacts be identified onsite. A Cultural Site monitor will be onsite during certain phases (i.e.beach works only).	1	1	3	3
6.16		**Operation:** Affecting a locality, item, place or building having aesthetic, anthropological, archaeological, architectural, historical, scientific, cultural or social significance or other special value (eg visual effect on adjoining heritage buildings or items; disturb, move, excavate Aboriginal object) or working where heritage items could be found. Affecting any Aboriginal heritage (eg engravings, middens, carved trees, grinding grooves, paintings, burial sites, etc). Affecting land claimed by traditional owners.	☒ **No impact** *If checked, go to next issue*	Click here to enter text.	Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9

	Columns:	4	5	6	7	8	9	10
		Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*		Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
6.17	VISUAL & OTHER ENVIRONMENTAL ISSUES	**Construction:** The effect of an activity on any wilderness area (within the meaning of the *Wilderness Act 1987*) in the locality in which the activity is intended to be carried on. Changing the visual or scenic landscape (eg impacting or restricting views). Transforming a locality (eg significant earthworks).	☒ **No impact** *If checked, go to next issue*	Click here to enter text.	Click here to enter text.	Enter score	Enter score	Enter score	Multiply scores in columns 7,8,9
6.18		**Operation:** Any other risk to the safety of the environment (eg long-term effects on the environment as a result of waste emissions). Increasing demands on resources (natural or otherwise) that are or are likely to become in short supply (eg demand on water use). Changing the visual or scenic landscape (eg impacting or restricting views). Transforming a locality (eg significant earthworks). Any cumulative environmental effect with other existing or likely future activities. Reducing the range of beneficial uses of the environment (eg effect on surrounding land uses and considering response of affected land owners).	☐ **No impact** *If checked, go to next issue*	Any long-term impacts to the environment and community are **expected to be positive** as the project restores beach access and safety.	Click here to enter text.	3	1	1	3
6.19	OTHER	OHS for ramp users Non authorised vehicles accessing the beach	☐ **No impact** *If checked, go to next issue*	Pedestrians can slip on the concrete ramp Non authorised vehicles should not be on the beach	Ramp surface is to be textured (or stamped) to reduce likelihood of pedestrians slipping. Install lockable bollards to restrict vehicle access to SLSC and emergency vehicles	1	1	3	3

Columns:	4	5	6	7	8	9	10
	Multiply the three scores:			*1–3*	*1–3*	*1–3*	=

Item	Issue	Examples of impacts	Description of impacts AND causes *NOTE: Either check 'No impact' OR provide details*	Project-specific control measures	Likelihood	Extent	Sensitivity	Environmental score
				TOTAL ENVIRONMENTAL SCORE:				**42**

NOTE 1: For the purpose of attaining the objects of this Act relating to the protection and enhancement of the environment, a determining authority in its consideration of an activity shall, notwithstanding any other provisions of this Act or the provisions of any other Act or of any instrument made under this or any other Act, examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.

NOTE 2: In assessing the impacts on flora and fauna, Council must show that it has taken into account:

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

- is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
- is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

(c) in relation to the habitat of a threatened species or ecological community:

- the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and
- whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and
- the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality,

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly),

(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.

Section 7 ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2021, SECTION 171(2) CHECKLIST

In addition to the requirements of the "Is an EIS required?" guideline, the following factors listed in section 171(2) of the Environmental Planning and Assessment Regulation 2021 *must be considered to assess the likely impacts of the proposal on the environment.*

Compliance with section 171(2) of the EPA Regulation 2021

Environmental factor	IMPACTS:		Minor	Medium	Major
• Any environmental impact on a community? There will be short-term impacts to the community through limitation of access to the beach during the works. However any impacts are considered manageable and low due to the short project duration. Any long-term impacts to the environment and community are **expected to be positive** as the project restores safe beach access.	☐ Nil *If checked, go to next factor*	☒ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☒ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☒ Negative	☒ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any transformation of a locality? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Environmental factor	IMPACTS:		Minor	Medium	Major
• Any environmental impact on the ecosystems of a locality? There are no planned impacts to dune flora and fauna as a result of the project.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality? Any long-term impacts to the environment and community are **expected to be positive** as the project restores safe beach access.	☐ Nil *If checked, go to next factor*	☒ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☒ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present generations? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Environmental factor	IMPACTS:		Minor	Medium	Major
• Any impact on habitat or any protected fauna (within the meaning of the *Biodiversity Conservation Act 2016*)? There are no planned impacts to dune flora and fauna as a result of the project.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air? There are no planned impacts to dune flora and fauna as a result of the project.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any long-term effect on the environment? Any long-term impacts to the environment and community are **expected to be positive** as the project restores safe beach access.	☐ Nil *If checked, go to next factor*	☒ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☒ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Environmental factor	IMPACTS:		Minor	Medium	Major
• Any degradation of the quality of the environment? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any risk to the safety of the environment? Any long-term impacts to the environment and community are **expected to be positive** as the project restores safe beach access.	☐ Nil *If checked, go to next factor*	☒ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☒ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any reduction in the range of beneficial uses of the environment? There will be short-term impacts to the community through limitation of access to the beach. However any impacts are considered manageable and low due to the short project duration. Any long-term impacts to the environment and community are **expected to be positive** as the project restores safe beach access.	☐ Nil *If checked, go to next factor*	☒ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☒ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☒ Negative	☒ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Environmental factor	IMPACTS:		Minor	Medium	Major
• Any pollution of the environment? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any environmental problem associated with the disposal of waste? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any increased demand on resources, natural or otherwise which are, or are likely to become, in short supply? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Environmental factor	IMPACTS:		Minor	Medium	Major
• Any cumulative environmental effect with other existing or likely future activities? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any impact on coastal processes and coastal hazards, including those under projected climate change conditions? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any applicable local strategic planning statements or regional strategic plans or district strategic plans? Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Section 8 MATTERS OF NATIONAL ENVIRONMENTAL SIGNIFICANCE

Under the environmental assessment provisions of the Environment Protection and Biodiversity Conservation Act 1999*, the following Matters of National Environmental Significance are required to be considered to assist in determining whether the proposal should be referred to the Australian Government Department of Agriculture, Water and the Environment.*

Factor	IMPACTS:		Minor	Medium	Major
• Any impact on a World Heritage property? *State whether the proposal would impact on a World Heritage property. If yes, describe the extent of the impact. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any impact on a National Heritage place? *State whether or not the proposal would impact on a National Heritage place. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Factor	IMPACTS:		Minor	Medium	Major
• Any impact on a wetland of international importance? *State whether the proposal would impact on a Commonwealth-listed wetland of international importance. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any impact on a listed threatened species or community? *State whether the proposal would impact on a Commonwealth-listed threatened species or community. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Any impact on listed migratory species? *State whether the proposal would impact on a Commonwealth-listed migratory species. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Factor	IMPACTS:		Minor	Medium	Major
• Any impact on a Commonwealth marine area? *State whether the proposal would impact on a Commonwealth marine area. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Does the proposal involve a nuclear action (including uranium mining)? *State whether the proposal would involve a nuclear action. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
• Additionally, any impact (direct or indirect) on Commonwealth land? *State whether the proposal would impact (either directly or indirectly) on Commonwealth land. If impacts are likely, describe the nature and extent of the impacts.* Click here to enter text.	☒ Nil *If checked, go to next factor*	☐ Positive	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term
		☐ Negative	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term	☐ Short-term ☐ Medium-term ☐ Long-term

Section 9 CONCLUSION

9.1 Publishing the REF on the NSW Planning Portal

	Check one	
Does the activity have a capital investment value of more than $5 million?	☐ Yes	☒ No
Does the activity require an approval or permit in relation to:		
• Fisheries Management Act 1994 (sections 144, 200, 205, 219)?	☐ Yes	☒ No
• Heritage Act 1977 (section 57)?	☐ Yes	☒ No
• National Parks and Wildlife Act 1974 (section 90)?	☐ Yes	☒ No
• Protection of the Environment Operations Act 1997 (sections 47–49 or 122)?	☐ Yes	☒ No
Is it in the public interest to publish the REF?	☐ Yes	☒ No

If the answer to any of the above questions is **Yes** then the REF must be published on the Council website OR the NSW Planning Portal.

9.2 Person who prepares this REF

I certify to the best of my knowledge that:

- I have completed this REF, and
- The assessment meets the requirements of sections 1.7, 5.5 and 5.7 of the EPA Act, section 171(2) of the EPA Regulation and other relevant legislation and guidelines, and
- The information contained in this REF is not materially misleading, and
- My assessment has been adequately completed, and
- My conclusion as to the likely environmental and community impact of the project is reasonable, and is likely to be ☒ **LOW** ☐ **MODERATE** ☐ **HIGH** *(check one)*, and
- I am satisfied that, subject to the inclusion of the mitigation measures included in this REF, the project will not have a significant impact on the environment during both the construction and operation phases, and
- An Environmental Impact Statement is not required, and
- A Species Impact Statement is not required, and
- The REF is not required to be published on the Council website or NSW Planning Portal.

Signature:		Date:	8/04/2024
Name *(print)*:	Chloe Dowsett		
Position:	Coast and Biodiversity Coordinator - Byron Shire Council		

Section 10 QUALITY ASSURANCE

10.1 Person who reviews this REF

I have reviewed this REF and agree with the conclusion in section 9.			
Signature:		Date:	8/04/2024
Name *(print)*:	Mike Svikis		
Position:	Mike Svikis Planning - Consultant		

Section 11 DETERMINATION

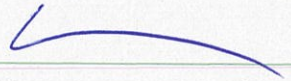
11.1 Determining officer – person who determines this REF

I certify that on behalf of Byron Shire Council I have reviewed the completed REF.

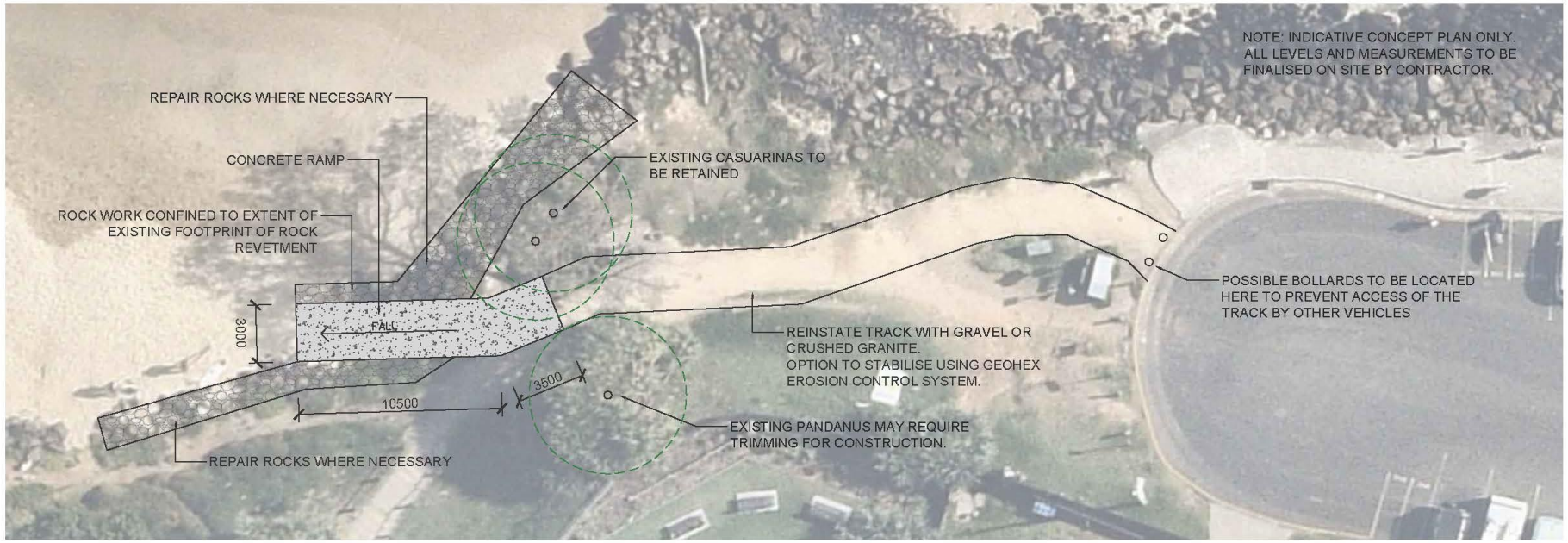
I conclude that the assessment has been adequately completed, the project has minor and predictable impacts, and the conclusion as to the likely environmental impact of the project is reasonable. I consider that an Environmental Impact Statement is not required and that a Species Impact Statement is not required.

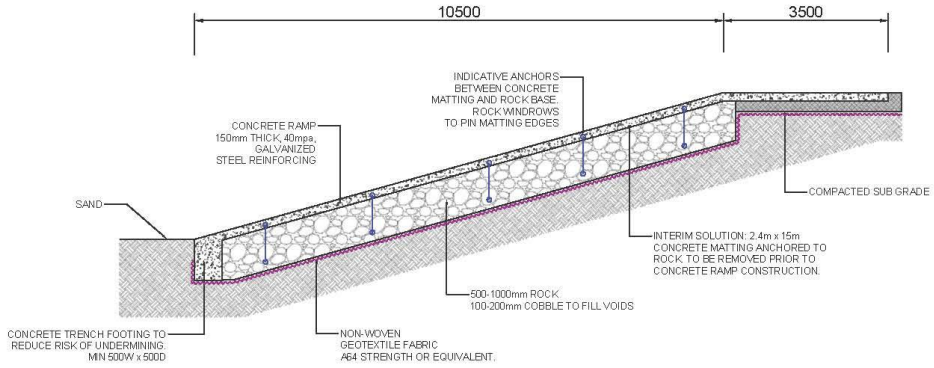
The project can proceed subject to the mitigation measures in this REF, as well as any approval, licence or permit. I agree with the conclusion in section 9.

I determine that the REF is not required to be published on the Council website or NSW Planning Portal.

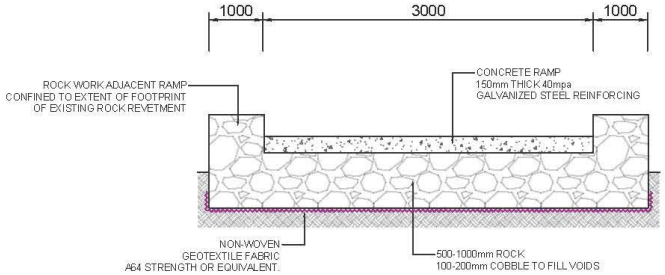
Signature:		Date:	8/04/2024
Name *(print)*:	Philip Holloway		
Position:	Director of Infrastructure Services		

APPENDIX A – Concept Plan





LONG SECTION : NOT TO SCALE



SHORT SECTION : NOT TO SCALE

REVISION	DESCRIPTION	APPROVED BY	DATE
B	CLIENT REVIEW	SCS	26.03.24
A	ORIGINAL ISSUE	SCS	15.03.24

CLIENT: BYRON SHIRE COUNCIL

PROJECT: BELONGIL BEACH RAMP

DRAWING TITLE: CONCEPT DESIGN

0m 5m 10m

Scale 1:200

SCALE 1:200

AT A3

SOIL CONSERVATION SERVICE SINCE 1938

PROJECT NO.	O-0010788.01.01.01
DRAWING NO.	01
REVISION	A
DRAWN BY JA	DATE 15.03.24
APPROVED BSC	DATE TBC
CPESC	n/a

APPENDIX B

Community/Agency Consultation Responses

From: Paul Pattison (Northern NSW LHD)
To: "Emergency SLSFNC Branch"; Roberts, Jim
Cc: Scott McCartney; Dowsett, Chloe; Mark&Maryanne SEWELL; Dan Andrew; Jimmy Keough; Joseph; secretary@byronbaysurfclub.org; president@byronbaysurfclub.org; Michael Gudgeon
Subject: RE: Beach Access and carparking at the surf club.
Date: Thursday, 21 March 2024 9:31:25 AM
Attachments: image001.png

Hi Jim,
Thanks Dave for chasing up.
Agree. Byron Bay SLSC supports the access.
Thanks again.
Cheers Paul

From: Emergency SLSFNC Branch <emergency@surflifesavingfnc.com>
Sent: Thursday, March 21, 2024 9:08 AM
To: Roberts, Jim <jroberts@byron.nsw.gov.au>
Cc: Paul Pattison (Northern NSW LHD) <Paul.Pattison@health.nsw.gov.au>; Scott McCartney <smccartney@australianlifeguards.com.au>; Dowsett, Chloe <cdowsett@byron.nsw.gov.au>; Mark&Maryanne SEWELL <markmaz4@bigpond.com>; Dan Andrew <dan@tweedcoastmarine.com.au>; Jimmy Keough <jimmy.keough@surflifesavingfnc.com>; Joseph <joeylampe@hotmail.com>; secretary@byronbaysurfclub.org; president@byronbaysurfclub.org; Michael Gudgeon <michael.gudgeon@gmail.com>
Subject: Re: Beach Access and carparking at the surf club.

Hi Jim

I have spoken to both Jimmy Keough and Scott McCartney overnight.

From a surf lifesaving emergency response perspective we support the location of the access ramp and the width of 3 metres.

Thanks for moving this important project along.

Kind Regards

David Rope
Director of Lifesaving

Surf Life Saving Far North Coast Branch Inc.
Ph: 0432217500 (Do not SMS due to call flow)
E: emergency@surflifesavingfnc.com
W: http://secure-web.cisco.com/1czV-DE2f9H3iDYQc6dWLPYFA2MM_AQwJifv6QVG3_ZS1CFmL_kNdHE24Uc_GVwcFkX6EKprBajRQqBqrnGR8uFnO1yG5kEEASC7Ys1JIN6C8asiHLnSI9PGo_W2oJoS5_b7IvurR1XwlCp6_IoBUimx0GE8_B5QN0O46kSrNj8xg1UossecBmH9skZGjjENS_GWzGOWWXlldId5d24I0jHiUHvFgBF9HnNUNlUuoU5PHosESFbXSI4MwdNoHePcZp_mJe7PvpMZbyxTosjArfbbMNpmWWK5Rpqb74DW_IdKgv_v4qae1H0KmNPsGG1QF6pbVGNNR07Ela_BTdbBCSLQf5uVjSgUxg0Qrjm8OlqeILll7JgtBXTPdzx29lPRsIfZ6xP8FNXRmky4Dd0egcD7zKh3ovH9aVJIL-CJPlv9cQjaqDtnONZa8Tb6QuD-

From:	Emergency SLSFNC Branch
To:	Roberts, Jim
Cc:	Paul Pattison (Northern NSW LHD); Scott McCartney; Dowsett, Chloe; Mark&Maryanne SEWELL; Dan Andrew; Jimmy Keough; Joseph; secretary@byronbaysurfclub.org; president@byronbaysurfclub.org; Michael Gudgeon
Subject:	Re: Beach Access and carparking at the surf club.
Date:	Thursday, 21 March 2024 9:10:41 AM
Attachments:	image001.png Concept Plan - Belongil Beach Ramp.pdf

Hi Jim

I have spoken to both Jimmy Keough and Scott McCartney overnight.

From a surf lifesaving emergency response perspective we support the location of the access ramp and the width of 3 metres.

Thanks for moving this important project along.

Kind Regards

David Rope
Director of Lifesaving

Surf Life Saving Far North Coast Branch Inc.
Ph: 0432217500 (Do not SMS due to call flow)
E: emergency@surflifesavingfnc.com
W: www.slsfnc.com.au

PO BOX 45
BALLINA NSW 2478

11 Shelly Beach Road
BALLINA NSW 2478

From: Roberts, Jim
To: Dowsett, Chloe
Subject: FW: Belongil Beach Emergency Access [SEC=OFFICIAL]
Date: Friday, 22 March 2024 3:06:21 PM

Fyi for ref

Jim Roberts | Acting Manager Open Space & Facilities | BYRON SHIRE COUNCIL
P: +61 2 6626 7055 | E: jroberts@byron.nsw.gov.au
Bundjalung Country, PO Box 219, Mullumbimby NSW 2482 | www.byron.nsw.gov.au
Find us on Facebook www.facebook.com/byronshire.council

Byron Shire Council acknowledges the Traditional Owners of this land, the Arakwal people, the Minjungbal people and the Widjabul people of the Bundjalung Nation, and pays our respects to Elders past and present.

From: Matthew Kehoe <keho1mat@police.nsw.gov.au>
Sent: Friday, March 22, 2024 2:53 PM
To: Roberts, Jim <jroberts@byron.nsw.gov.au>
Subject: RE: Belongil Beach Emergency Access [SEC=OFFICIAL]

Thanks Jim.

Looks good to me. It is an area that we often access, but usually on foot. Width is sufficient.

Cheers

Matt Kehoe
Detective Chief Inspector
Officer in Charge - Byron Bay Police Station
Tweed Byron Police District
2 Shirley St Byron Bay NSW 2481
Phone: (02) 6685 9423 E/N:63823 | Fax: (02) 6685 9411 | Mob: 0429 977367
Email: keho1mat@police.nsw.gov.au

From: Roberts, Jim <jroberts@byron.nsw.gov.au>
Sent: Thursday, March 21, 2024 12:15 PM
To: 'Anthony.zwegers@health.nsw.gov.au' <Anthony.zwegers@health.nsw.gov.au>; Matthew Kehoe <keho1mat@police.nsw.gov.au>
Cc: Dowsett, Chloe <cdowsett@byron.nsw.gov.au>
Subject: Belongil Beach Emergency Access

Hi Anthony and Matt,

I wanted to touch base and inform you of a Council project that is taking shape to formalise an emergency access point at Belongil Beach from Main beach carpark, Byron Bay. The request for the access has come from lifeguards and the Byron Bay surf club.

APPENDIX C

Aboriginal Heritage Information Management System Search and any Response from Traditional Owners

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : Search
Client Service ID : 877364

Byron Shire Council

Date: 27 March 2024

Station Street Mullumbimby
NSW New South Wales 2482
Attention: Chloe Dowsett

Email: chloe.dowsett@byron.nsw.gov.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 18, DP:DP1269368, Section : - with a Buffer of 50 meters, conducted by Chloe Dowsett on 27 March 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.

A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

2	**Aboriginal sites are recorded in or near the above location.**
0	**Aboriginal places have been declared in or near the above location. ***

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

Level 6, 10 Valentine Ave, Parramatta 2150
Locked Bag 5020 Parramatta NSW 2124
Tel: (02) 9585 6345

ABN 34 945 244 274
Email: ahims@environment.nsw.gov.au
Web: www.heritage.nsw.gov.au

APPENDIX D

Reference Documents

Acid Sulfate Soils Assessment Guidelines 1998, published by the Acid Sulfate Soils Management Advisory Committee

https://www.environment.nsw.gov.au/resources/soils/ASS-Manual-2-Assessment-Guidelines.pdf

Beach scraping as a coastal management option, Carley et al (2009)

Microsoft Word - James Carley full paper (burleighphysio.com.au)

Erosion and Sediment Control info and Blue Book

https://www.environment.nsw.gov.au/research-and-publications/publications-search/resource-guide-for-local-councils-erosion-and-sediment-control

RMS Code of Practice – Minor Works in NSW Waterways

https://www.rms.nsw.gov.au/documents/about/environment/code-practice-minor-work-nsw-waterways.pdf

Office of Water – Controlled Activities on Waterfront Land

https://www.industry.nsw.gov.au/water/licensing-trade/approvals/controlled-activities

Legislation website

https://www.legislation.nsw.gov.au

LEP/DCP

https://www.byron.nsw.gov.au/Services/Building-development/Plans-maps-and-guidelines

Development Design and Construction Manual

https://www.byron.nsw.gov.au/Services/Building-development/Plans-maps-and-guidelines/Development-Design-Manuals

Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW

https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Aboriginal-cultural-heritage/due-diligence-code-of-practice-aboriginal-objects-protection-100798.pdf

Byron Biodiversity Conservation Strategy

https://www.byron.nsw.gov.au/Services/Environment/Natural-environment

Guidelines for Ecological Assessment in Byron Shire
E201819547-FINAL-Guidelines-for-Ecological-Assessment.pdf

https://www.byron.nsw.gov.au/System-pages/Search-Results?dlv_OC%20CL%20Public%20Site%20Search=(keyword=e201819547)

Vegetation and tree removal in Byron Shire

https://www.byron.nsw.gov.au/Services/Building-development/Do-I-need-approval/Vegetation-and-tree-removal?BestBetMatch=tree%20removal|d13b95b2-5146-4b00-9e3e-a80c73739a64|4f05f368-ecaa-4a93-b749-7ad6c4867c1f|en-AU

Biodiversity Assessment and Solutions Pty Ltd (2021) Biodiversity Impact Assessment Temporary coastal protection works & infrastructure repair - Clarkes Beach, Byron Bay.

Byron Shire Coastal Hazard Assessment Study (Bluecoast, 2023).

Main Beach Shoreline Project:

- Condition Assessment (February 2020)
- Condition Assessment Technical Note (March 2021)
- Baseline Assessment (Bluecoast, July 2021)