

# Review of Environmental Factors

## Natural Area Program: Restoration Works and Bushcare/Dunecare Works



### MM Beach, Boilers Point and Hill 60 Natural Area Restoration, Port Kembla

This document provides the outcome of the Review of Environmental Factors (REF) for Natural Area Restoration Works and Bushcare/Dunecare Works by Council Natural Area Management staff, contractors and volunteers on Council owned or controlled land.

The proposed activities listed in the scope of works have been assessed against the SEPP (Transport and Infrastructure) 2021, and does not require consent under Chapter 2 Division 17 Roads and road infrastructure facilities and Division 25 Waterway or foreshore management activities, which permit environmental management works in parks and reserves and waterways and foreshores without consent.

As the proposed activity does not require development consent, the environmental impacts have been considered in accordance with the environmental assessment requirements of Part 5, Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). In accordance with the requirements of Part 5 of the EP&A Act, the factors listed in Clauses 170 and 171 of the *Environmental Planning and Assessment Regulation 2021* have been taken into account in the consideration of the likely impacts of the proposed activity on the environment.

The assessment has been undertaken through impact identification and a risk management assessment. This report documents the outcomes of the assessment and identifies the environmental safeguards that must be implemented in conjunction with the proposal.

The proposed activity has been discussed with Carly Boag and Joel Thompson, and does not require any further assessment, approvals or consents under any other relevant legislation.

**The results of the REF indicate that the proposed activity will have no significant environmental impacts, provided the safeguards identified in this report are strictly implemented.**

**If the scope of works or work methods described in this report change significantly, additional environmental assessment must be undertaken by an Environmental Strategy Officer.**

**Works are to commence, and be substantially completed, within 3 years of the REF sign off date. Any substantial works to be undertaken outside this period will require a review of the REF.**

**Safeguards relating to no ground disturbance in some work areas must be strictly implemented. See safeguards relating to Aboriginal Heritage and Appendix D and E.**

**See over page for sign off.**

**Publication Requirements:**

The EP&A Regulation (clause 171(4)) requires the REF to be published prior to works commencing (if possible, otherwise within a month) if the activity involves:



- a capital investment value of more than \$5 million or,
- an approval or permit for activity that requires approval under:
  - *Fisheries Management Act 1994* sections 144, 201, 205 or 219, or
  - *Heritage Act 1977* section 57, or
  - *National Parks and Wildlife Act 1974* section 90 or
  - *Protection of the Environment operations Act 1997* sections 47-49 or 122, or
- if the determining authority considers it to be in the public interest.

The application did require publication in accordance with EP&A Regulation (clause 171(4)) as an AHIP (#4544) is currently in place for the works at this site.

**REF Preparation Sign Off**

<b>Date of Assessment:</b>	4 July 2023	<b>Review of the REF due:</b>	July 2026
----------------------------	-------------	-------------------------------	-----------

I, the undersigned, certify that I have reviewed and endorsed the contents of this REF document and, to the best of my knowledge, it is in accordance with the EP&A Act, the EP&A Regulation and the Guidelines approved under clause 170 of the EP&A Regulation, and the information it contains is neither false nor misleading.

	<b>Name</b>	<b>Sign</b>	<b>Date</b>
<b>REF Preparation Sign Off:</b>	Amanda Schipp Environmental Strategy Officer		4/7/23
<b>REF Review Sign Off:</b>	Jenna Andrews Environmental Assessment Officer		4/7/23

Natural Area Management Team and Contractors accepts that this REF is for the environmental assessment component only, and is responsible for all other project risks associated with the project management components. The information in this document is not considered sufficient to address any other project management requirements and safety/risk approvals, such as services investigations; consultation; cost estimate; traffic and site management; project risk assessment (etc).

	<b>Name</b>	<b>Sign</b>	<b>Date</b>
<b>Natural Areas Officer Sign Off:</b>			
<b>Contractor Sign Off:</b>			

## Contents

1. Project Details .....	4
2. Generic Natural Area Program Scope of Works .....	5
3. Consultation .....	5
4. Legislation and Approvals .....	6
5. Site Checklist of Environmental Factors .....	6
6. Environmental Safeguards .....	10
Appendix A: Project maps .....	15
Appendix B: Compliance with Legislation .....	17
Appendix C: Coastal Management Areas Assessment.....	21
Appendix D: Aboriginal Heritage Assessment.....	24
Appendix E: Hill 60 Reserve – Unexpected Finds Protocol .....	27
Appendix F: Incident Management Spills in Watercourses or Drains Procedure .....	32

## 1. Project Details

<b>Project Name</b>	Port Kembla Coastal Natural Area Restoration (including Boilers Point)
<b>Project Location/s</b>	Project sites at MM Beach, Boilers Point, Hill 60. See maps in Appendix A.
<b>Lot and DP/s</b>	MM Beach - Lot 7048 Crown DP 1052504, Lot 7050 Crown DP 1061649, Lot 7009 Crown DP 1059827, Lot 7049 Crown DP 1061648, Lot 7008 Crown DP 1059827 Boilers Point - Lot 7010 CROWN 1059827, Lot 1 DP 531524 Hill 60 - Lot 3 DP 531524, Lot 1 DP 614555, Lot Y DP 31009
<b>NAM unit/s</b>	MM Beach - 278 Boilers Point - 286 Hill 60 - 286
<b>LEP 2009 Zone/s</b>	RE1 Public Recreation
<b>Community Land</b>	CLM number/s (if known): MM Beach - 542 Boilers Point - 684 Hill 60 - 684  Categories (check applicable): <div> <input checked="" type="checkbox"/> Park <input type="checkbox"/> Natural Area Escarpment <input type="checkbox"/> Sportsground <input type="checkbox"/> Natural Area Watercourse <input type="checkbox"/> Cultural Significance <input type="checkbox"/> Natural Area Wetland <input type="checkbox"/> Natural Area Bushland <input type="checkbox"/> Natural Area Foreshore <input type="checkbox"/> General Community Use </div>
<b>Crown Land</b>	<input checked="" type="checkbox"/> Appointed Land <input checked="" type="checkbox"/> Devolved Land Crown Reserve Number/Name: 97344 - Hill 60, 71040 - North Beach (devolved)
<b>Project Background and Description</b>	<p>The primary objectives of the Port Kembla Coastal project include:</p> <ul style="list-style-type: none"> <li>To improve native resilience in coastal plant community types</li> <li>To stabilise dune systems and prevent coastal erosion</li> <li>To reduce the area of WCC LGA natural areas impacted by invasive weeds</li> <li>To monitor works progress/completion using visual and/or quadrat-based documentation</li> </ul> <p>The primary objective of the Boilers Point project are as follows:</p> <ul style="list-style-type: none"> <li>Employment - ILALC's Environmental Services Team directly employs Aboriginal people to carry out bush regeneration works.</li> <li>Job Training - ILALC provides training to young Aboriginal community members which capacity builds and upskills Aboriginal people ensuring future employment in this field.</li> <li>Caring for Country – This project will ensure that cultural obligations to care for Country are fulfilled.</li> </ul> <p>Restoration of ecosystems - Restoration and Regeneration of ecosystems helps restore the natural equilibrium and directly benefit native flora and fauna, including the green and gold bell frog, coastal birds, reptiles, and small mammals.</p> <ul style="list-style-type: none"> <li>Beautification – Restoration and regeneration of this area will enhance visitors and residents' experience and use of this place. This will include an appreciation of the nature of school children located across the road.</li> </ul>
<b>Document Record References</b>	<ul style="list-style-type: none"> <li>Port Kembla Coastal project Workplan - Document Set ID: 23843335</li> <li>Boilers Point project Workplan - Document Set ID 24347069.</li> <li>Ngaraba-Aan Educational Trail Environmental Restoration Project Stage 1 (2006) - Document Set ID: 18369057</li> <li>Vegetation Management Plan – Hill 60 – Port Kembla (2009) - Document Set ID: 18369177</li> <li>MM Beach Vegetation Management Plan (2017) - Document Set ID: 18487166</li> </ul>
<b>Project Timing</b>	July 2023 – June 2026
<b>Work Equipment &amp; Machinery</b>	Handheld bush regeneration tools and equipment, chainsaw, whipper snipper/brush cutter, winch, truck, chipper
<b>Proposed work hours</b>	Between 7.00am and 6.00pm Monday to Friday

	<p>Between 8.00am and 1.00pm Saturdays</p> <p>Bushcare groups may undertake work during their scheduled hours as listed in their Bushcare Site Plan.</p> <p>(Refer to Safeguards section in this REF)</p>
<b>Site Description, including summary of key environmental features (vegetation type, EECs, threatened species)</b>	<p>The Hill 60 area represents one of the major remaining large sand dunes in the Illawarra, most have been removed in the past as part of the development process. There is a strong local Aboriginal and modern heritage link to the site which is listed on the State Heritage Register.</p> <p>MM Beach is mapped as Coastal Rock Platforms, Sand and Dunes. Boilers Point is mapped as weeds and exotics, with patches of natives located in between Banksias, Leptospermum, Lomandra, and Themeda. Military Rd Hill 60 is mapped as Coastal Headland Banksia Scrub.</p>
<b>Is the project scope of works within the list shown in Section 2?</b>	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

## 2. Generic Natural Area Program Scope of Works

The scope of works considered in this REF are as follows and all assessments are based on these activities. Any proposed activities beyond this list will be subject to specific assessment, seek advice from an Environmental Strategy Officer.

Works have been described in the following Vegetation Management Plans:

- Jennifer Neil Treecreeper Indigenous Land Management, 2006. Ngaraba-Aan Educational Trail Environmental Restoration Project Stage 1. Prepared for the Illawarra Aboriginal Corporation Community Development Employment Project and Wollongong City Council.
- Illawarra Bushland Restoration, 2009. Vegetation Management Plan – Hill 60 – Port Kembla. Prepared for Wollongong City Council.
- Good Bush Pty Ltd, 2017. MM Beach Vegetation Management Plan. Prepared by Marcus Burgess for Wollongong City Council.

The approved activities under these VMPs include:

- Primary weed control targeting woody weeds using non-ground penetrating 'cut and paint' and 'drill and frill' methods.
- Removal of weed trees at the root level (will require ground disturbance) where required.
- Secondary weed control within primary treated areas to address weed re-growth.
- Installation of erosion control measures where necessary using Jute matting and coir logs.
- Revegetation of the dune and sea cliff communities using appropriate local native plant species.

**Note some areas have limited activities in accordance with the Aboriginal Heritage Impact Permit #4544 (AHIP). See Section 6 Safeguards.**

## 3. Consultation

Natural Area Officers will notify the following of works:

- Parks Coordinators
- Relevant Bushcare groups at contractor sites
- Illawarra Local Aboriginal Land Council
- Heritage NSW

#### 4. Legislation and Approvals

The proposed activities listed in the scope of works have been assessed against the following planning and environmental legislation.

- *Environmental Planning and Assessment Act 1979 (NSW)*
- *State Environmental Planning Policy (Transport and Infrastructure) 2021 (NSW)*
- *Wollongong Local Environment Plan 2009 (Local)*
- *Local Government Act 1993 (NSW)*
- *Crown Lands Management Act 2016 (NSW)*
- *Biodiversity Conservation Act 2016 (NSW)*
- *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*
- *Local Land Services Act 2013 (NSW)*
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021 (NSW)*
- *Fisheries Management Act 1994 (NSW)*
- *Biosecurity Act 2015 (NSW)*
- *Water Management Act 2000 and Water Management (General) Regulation 2018 (NSW)*
- *Pesticides Regulation 2017 (NSW)*
- *Coastal Management Act 2016 (NSW)*
- *State Environmental Planning Policy (Resilience and Hazards) 2021 (NSW)*
- *Coastal Crown Lands Policy (NSW)*
- *National Parks and Wildlife Act 1974 (NSW)*
- *Aboriginal Land Rights Act 1983 (NSW)*
- *Native Title Act 1993 (Commonwealth)*
- *Protection of the Environmental Operations Act 1997 (NSW)*

Appendix B includes details of how the works comply with each piece of legislation and identifies where further site-specific assessment has been required to reach this conclusion.

#### 5. Site Checklist of Environmental Factors

This section identifies site specific constraints that may trigger further assessments and/or the inclusion of specific safeguards or controls.

Risk area	Y/N	Comment
<b>Biodiversity</b>		
Is the work area within a Vegetation Community identified in NP PCT Vegetation Layer?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	771 Coast Banksia - Coast Tea-tree low moist forest on coastal sands and headlands, Sydney Basin Bioregion and South East Corner Bioregion Ensure safeguards relating to <b>Flora, Fauna &amp; Ecosystems</b> are strictly applied.
Is the work area within a Habitat Model?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Green and Golden Bell Frog, Regent Honeyeater, Swift Parrot, Powerful Owl Ensure safeguards relating to <b>Flora, Fauna &amp; Ecosystems</b> are strictly applied
Is the work area within Key Fish Habitat?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Adjacent to ocean. Ensure safeguards relating to <b>Flora, Fauna &amp; Ecosystems</b> are strictly applied
Are there any Endangered Ecological Communities or threatened species mapped on or adjacent to the work area?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	Green and Golden Bell Frog, White-bellied Sea-eagle, Sooty Oystercatcher, Sooty Tern.

		<p>Are the EECs/threatened species included in the Generic Biodiversity Assessment for Natural Area Management Activities (Z20/167450)?</p> <p><input checked="" type="checkbox"/> Yes</p> <p>The proposed activities in the scope of works have been assessed for any significant impact on all EECs mapped as occurring on natural area work sites within the LGA. Provided the environmental safeguards identified are strictly implemented, the proposed works are not likely to significantly affect any threatened species, populations or ecological communities listed under the <i>Biodiversity Conservation Act 2016</i>, or their habitats, and the preparation of a Species Impact Statement or Biodiversity Development Assessment Report is not warranted.</p> <p>Similarly, the proposed works are not likely to significantly affect any threatened species, populations or ecological communities listed under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>, or their habitats, and a Referral to the Commonwealth Minister for the Environment for a decision on a 'controlled Action' is not warranted.</p> <p><input type="checkbox"/> No</p>
Is the work area on land identified as the Escarpment Management Plan Area?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	<p>Ensure safeguards relating to <b>Flora, Fauna &amp; Ecosystems</b> are strictly applied.</p>
Is the work area on land that is subject to a Biodiversity Stewardship Agreement in accordance with Part 5, Division 2 of the <i>Biodiversity Conservation Act 2016</i> ?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
<b>Coastal Zone</b>		
Is the work area within any management areas defined by SEPP (Resilience and Hazards) 2021? - coastal vulnerability area - coastal environment area - coastal use area - coastal wetlands and littoral rainforest buffer	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>The proposed activities listed in the scope of works have been assessed in the Coastal Zone Assessment in Appendix C and are compliant with the matters of considerations in the SEPP (Resilience and Hazards) 2021 and can proceed if the safeguards in this REF are strictly applied.</p>
Is the work area within the coastal wetland or littoral rainforest management areas defined by SEPP (Resilience and Hazards) 2021?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
<b>Heritage</b>		
Is there any Aboriginal Heritage within or close proximity to the work area?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>Ensure safeguards relating to <b>Aboriginal Heritage</b> are strictly applied.</p>
Is there any European Heritage listed on the current LEP within the work area?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>State Heritage Register Item 01492 - Hill 60/Illohra Battery          As the works are for low impact restoration works that avoid ground disturbance, to conserve the natural and Aboriginal heritage values of the heritage item, the works will not adversely impact the heritage significance of Hill 60, The works will not be undertaken within or directly adjacent to European Heritage items or archaeological heritage items therefore are unlikely to, impact on the fabric of the European Heritage items within the project area.</p> <p>General item 61043 - Hill 60, Fisherman's Beach, Boilers Point and MM Beach          As the works are for low impact restoration works to conserve the natural and Aboriginal heritage values of the heritage item, the</p>

		<p>works will not adversely impact the heritage significance of Hill 60, Fisherman's Beach, Boilers Point and MM Beach.</p> <p>General item 6417 – Gun Emplacement Connected &amp; Isolated Concrete Bunkers, Red Point/Hill 60.</p> <p>Works should not impact on heritage item due to the distance, nature and isolation of the works.</p> <p><b>Ensure safeguards relating to European Heritage are strictly applied.</b></p>
Is the work area within a Crown Reserve?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>Aboriginal Land Claims have been lodged over all Crown Reserves in the Wollongong LGA. As the proposed works will change the physical condition of the land, works are intended to restore the land to its former natural state, and it is unlikely the claimants would object to such works. The proposed works can proceed without further risks being assessed (see Z17/90507).</p> <p>The proposed acts are valid 'future acts' for the purposes of the <i>Native Title Act 1993</i> (Cth). The relevant subdivision under which the acts are validated is Subdivision J (Activities pursuant to reservations). There are no procedural requirements to comply with for native title purposes and the non-extinguishment principle applies. Should native title be determined to exist, at some future date, Council may be liable for compensation under the provisions of the <i>Native Title Act 1993</i> (Cth) for the effect on native title rights and interests by the proposed act.</p>
<b>Water Quality</b>		
Are the works to be conducted within 40m of watercourses or any other type of natural water body?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>Ensure safeguards relating to <b>Water Quality, Use of Herbicides, Erosion and Sediment Control</b> and <b>Flora, Fauna &amp; Ecosystems</b> are strictly applied.</p>
Do the works involve the use or storage within the work areas of fuels or other chemicals (other than fuels contained within the work vehicles)?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
<b>Soils/Landform</b>		
Are there acid sulfate soils mapped in the LEP as occurring on this site/s?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>All sites mapped as class 5.</p> <p>Ensure safeguards relating to <b>Acid Sulfate Soils</b> are strictly applied.</p>
Will the works create areas of unprotected soil or loose surface for more than 24 hours?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>Ensure safeguards relating to <b>Water Quality</b> are strictly applied.</p>
Could the works result in disturbance of contaminated land or contaminated material?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>Contaminated land is mapped adjacent to MM Beach.</p> <p>Ensure safeguards relating to <b>Contaminated Land</b> are strictly applied.</p>
Will the waste generated by the works include hazardous substances (such as lead, asbestos or other substances designated as hazardous by the National Occupational Health and Safety Commission)?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	<p>Unlikely</p>
<b>Miscellaneous</b>		
Are the works located within an area or adjacent to land uses that may be highly sensitive to dust, odours, work machinery emissions or traffic?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	<p>Recreational and residential areas.</p> <p>Ensure safeguards relating to <b>Air Quality and Energy</b> and <b>Traffic and Access</b> are strictly applied.</p>
	<input checked="" type="checkbox"/> No	



Will the works result in a reduction of the aesthetic and/or recreational qualities of the area or restrict the beneficial uses of the area in the future?	<input type="checkbox"/> Yes	
Will the works cause excess noise?	<input type="checkbox"/> No	
	<input checked="" type="checkbox"/> Yes	Possible temporary noise if large equipment/plant in use. Ensure safeguards relating to <b>Noise &amp; Vibration, Air Quality and Energy</b> and <b>Traffic and Access</b> are strictly applied.

## 6. Environmental Safeguards

The following safeguards must be incorporated as conditions of any contract or work specification for the project. The safeguards must also be incorporated into any project-specific risk assessment. The completed risk assessment must be reviewed by a WCC Natural Areas Officer before commencement of the works.

The REF must be revised immediately if any changes to the scope of works or work methods occur after initial endorsement. All changes to the REF must be reviewed and endorsed by a WCC Environmental Strategy Officer.

<b>Acid Sulfate Soils</b>
<p>The <i>Wollongong Local Environmental Plan 2009</i> Acid Sulfate Soils Map has identified that this property may be affected by Classes 4 or 5 Acid Sulfate Soils. The Acid Sulfate Soils Map is an indication only and acid sulfate soils may be encountered during works.</p> <p>Class 4: Acid sulfate soils in a class 4 area are likely to be found beyond 2 metres below the natural ground surface. Any works that extend beyond 2 metres below the natural ground surface, or works which are likely to lower the water table beyond 2 metres below the natural ground surface, will trigger the requirement for assessment and may require management.</p> <p>Class 5: Acid sulfate soils are not typically found in Class 5 areas. Areas classified as Class 5 are located within 500 metres on adjacent class 1, 2, 3 or 4 land. Works in a class 5 area that are likely to lower the water table below 1 metre AHD on adjacent class 1, 2, 3 or 4 land will trigger the requirement for assessment and may require management.</p> <p>For any excavation on the site greater than 2m below natural ground level, acid sulfate soil management will be required.</p> <ul style="list-style-type: none"><li>Any acid sulfate soil material exposed from the slumping works must be neutralized with commercial lime (calcium bicarbonate) by the addition of 10 kilograms of lime per 1 cubic metre of spoil material before it is disposed of or re-used on-site.</li><li>Lime is to be added by evenly distributing over all exposed surface areas.</li></ul>
<b>Erosion and Sediment Control</b>
<p>The proposed works have the potential to create soil erosion and sediment pollution. The basic principles of erosion and sediment control are summarised below:</p> <ul style="list-style-type: none"><li>Assess likely soil and water implications at planning stage.</li><li>Plan for erosion and sediment control concurrently with engineering and landscaping design.</li><li>Install erosion and sediment control measures as a first step in the works program to any areas to be disturbed, including access points, prior to any works being carried out.</li><li>Concentrate on source controls.</li><li>Control water flow. Divert upslope waters around works and limit slope length to 80m on disturbed lands if rainfall is expected.</li><li>Minimise onsite traffic movements.</li><li>Rehabilitate disturbed lands quickly.</li><li>Maintain all sediment controls in an effective condition throughout the duration of works.</li></ul>
<b>Use of Herbicides</b>
<p>Herbicides may only be used in accordance with the following conditions:</p> <ul style="list-style-type: none"><li>Herbicides must be used in accordance with the <i>Pesticides Regulation 2017</i>, <i>Pesticides Act 1999</i>, and <i>Protection of the Environment (Operations) Act 1997</i> and the directions on the herbicide container label.</li><li>All herbicides used must be recorded for each site in the WCC daily work diary.</li><li>A Pesticide Notification Plan must be available and implemented when required.</li><li>Current (less than 5 years) Safety Data Sheets for all herbicides must be available on site at all times.</li><li>Bushcare/Dunecare volunteers to be trained by Council on safe use and handling of herbicides.</li><li>Herbicides not in use must be stored in a locked container.</li><li>When transporting herbicides they must be kept secure and must not occupy the same airspace as vehicle occupants, food, fertilizer or plants.</li><li>Users must not store, use or dispose of any herbicide that contravenes the instruction for that product.</li><li>Users must not, without a reasonable excuse, keep a herbicide in a container without an approved label attached to the container.</li><li>Users must not use a herbicide in a manner which risks injury to any other person or the property of another person.</li><li>Users must not use a herbicide in a manner which harms any non-target plant.</li><li>Users must not dispose of herbicide waste in a manner that risks injury to the environment, including water bodies.</li><li>Users must not allow herbicides to leak, spill or otherwise escape in a manner that risks injury to the environment including water bodies.</li><li>A spill kit must be on site at all times.</li></ul>

<ul style="list-style-type: none"> <li>See below controls regarding use of herbicide in proximity to Green and Golden Bell Frog Habitat</li> </ul>
<b>Water Quality</b>
<ul style="list-style-type: none"> <li>All waste water is to be contained and removed off site for disposal at an approved facility.</li> <li>Waste water is not allowed to enter any stormwater drain or waterway.</li> <li>At no time shall any material, soluble or non-soluble, be allowed to enter the waterway.</li> <li>A fully equipped spill kit is to be kept on site at all times and, if used, restock spill kit (Refer to Incident Management Procedure in Appendix F).</li> <li>All chemicals and fuels will be stored in suitable bunded areas away from waterways and stormwater pits.</li> <li>Bunded area capacity will be at least 120% of the largest container within the storage area.</li> <li>The stored containers will be identified with appropriate labels.</li> <li>The relevant Material Safety Data Sheets (MSDS) will also be kept on site.</li> <li>Where possible compounds will be located on previously disturbed areas away from waterways.</li> </ul>
<b>Flora, Fauna &amp; Ecosystems</b>
<ul style="list-style-type: none"> <li>All native birds, reptiles, amphibians and mammals, except the dingo, are protected in NSW.</li> <li>Consider ground cover/bush regeneration sites/proposed future use of the site.</li> <li>Trees within or adjacent to the work sites must be protected from accidental damage by temporary fencing or barricades.</li> </ul> <p><b>Access within vegetation</b></p> <ul style="list-style-type: none"> <li>All vehicular access to sites will be restricted to formed roads.</li> <li>Access route to avoid mature trees and be chosen to minimise vegetation and soil disturbance.</li> <li>All equipment and materials will be carried through the bushland from existing vehicular access tracks, by hand or trolley.</li> </ul> <p><b>The following actions are required for restoration works undertaken within or near to Green and Golden Bell Frog habitat:</b></p> <ul style="list-style-type: none"> <li>Works around the Green and Golden Bell Frog pond site should only be done in accordance with the VMP by Jennifer Neil Treecreeper Indigenous Land Management, 2006. <i>Ngaraba-Aan Educational Trail Environmental Restoration Project Stage 1</i>. Prepared for the Illawarra Aboriginal Corporation Community Development Employment Project and Wollongong City Council.</li> <li>When working within or near Green and Golden Bell Frog habitat, maintain a refuge along habitat corridor.</li> <li>Within or near Green and Golden Bell Frog habitat, work should be done when frogs are active September-April.</li> <li>Breeding sites (ephemeral ponds) cannot have work done during breeding time (between March-April).</li> <li>Do not use herbicides or machinery within or near potential Green and Golden Bell Frog habitat, work is to be done by hand only.</li> </ul> <p><b>The following actions are required for restoration works undertaken within endangered ecological communities or where threatened species are present:</b></p> <ul style="list-style-type: none"> <li>All workers carrying out bush regeneration and associated works will be supervised by a trained and experienced co-ordinator who has completed a recognised bush regeneration course or a minimum of 2 years bush regeneration experience.</li> <li>All activities by workers will be regularly checked and approved by the co-ordinator.</li> <li>All workers will be informed of any threatened species or endangered ecological communities known from the area or which may occur in the area and the potential impacts of activities on these species/communities.</li> <li>Workers will be familiar with the identifying features of threatened flora that are known or likely to occur in the project area. Where threatened species known from the area are similar to weed species, the distinguishing features between these will be understood prior to commencing the work.</li> <li>Prior to any works being undertaken, the presence or absence of threatened flora will be determined by a thorough walking search of the area.</li> <li>All threatened flora will be tagged with highly visible flagging tape before work commences. If a number of individuals occur in a clump, the area should be marked out with flagging tape, unless there is the possibility of malicious damage or vandalism.</li> <li>Cutting or damaging of threatened flora will be avoided.</li> <li>All plants will be positively identified before they are removed.</li> <li>Weed removal within 2m of a threatened species will be undertaken by hand.</li> <li>All workers will be aware of any threatened fauna that are known or likely to occur on site, and the potential impacts of the proposed activities on those species.</li> <li>The habitat and refuge potential of weeds and rubbish will be considered prior to removal.</li> <li>Weeds will be removed gradually in areas where an infestation is extensive.</li> <li>Disturbance to, and removal of rocks, logs and other potential refuge sites will be avoided.</li> <li>A herbicide registered for use near waterways will be used within 5m of waterways.</li> <li>Herbicide spraying will be restricted to a distance greater than 5 metres from watercourses where threatened frogs are known or likely to occur and within a 10m radius of records of threatened frogs.</li> </ul>

- A buffer of 1m along other watercourses will be maintained in which no herbicide will be sprayed.
- Care will be taken to minimise disturbance to shy or cryptic species.
- Care will be taken to minimise disturbance to the leaf litter layer.
- Plantings will be sourced from stock of local provenance.
- A buffer of 5 metres will be maintained around all threatened plant specimens. Planting will only be undertaken outside this buffer.
- Care will be taken to ensure that mulch does not introduce weeds or impede natural regeneration at the site.
- Care will be taken to ensure that weeds and/or phytophthora are not introduced to a site from pots of cultivated plants.
- Consideration will be given to the possible impacts of plantings on the ecological requirements of threatened species at the site.
- Species will be planted within their natural habitat and range. Plantings will be guided by the plants' local habitat preferences.
- A buffer of 2m will be maintained around all threatened plant specimens. Herbicide use will only be undertaken outside this buffer.
- Herbicide use will cease where there are any signs of threatened species being affected by herbicide.
- All herbicide spray operators will be capable of undertaking precise and effective weed control.
- Spray will be directed away from threatened flora.
- Herbicide will only be sprayed in suitable weather conditions when the impact of spray drift (windy) or run-off (wet) on threatened flora is minimised.
- Marker dyes e.g. white field marker' will be mixed with herbicide before use.
- Any new records of threatened species will be provided within three months to NPWS. These records will be in a format appropriate for entry into the Wildlife Atlas once identification of a threatened species is confirmed by a recognised authority.

#### **Tree removal**

- If the tree is structurally sound retain all hollow bearing trees. Options for selective pruning and/or retaining as a habitat stag should be explored.
- Prior to tree removal/pruning, the Arborist must inspect any dense foliage, bark and/or trunks of trees for bats/birds/reptiles/mammals. If fauna is present and should there be the need to assess animal condition, obtain advice from WIRES on 1300 094 737.
- When removing a tree containing a hollow, someone with suitable ecology skills should be present to assess animal condition if tree is felled.
- All native trees are to be retained and must be protected from damage to trunks and root systems and soil build up around tree base with the provision of temporary protective fencing if necessary.
- Tree to be removed must be felled so as to fall away from other trees so as to minimise any disturbance to other vegetation.
- Where the branches are dangerous and overhanging a road/building or an adjoining property Council's Arborist will determine the amount of pruning permitted to address any public nuisance issue.
- Reuse cut section of hollow bearing tree for nesting or place on the ground for reptiles or frogs.
- Cut and paint methods may require the use of a chainsaw for larger weed stumps. All chainsaw operators hold national accreditations in tree felling and cross-cut activities.

#### **Air Quality & Energy**

Machinery chosen is to have been well maintained and is to be operated in a proper and efficient manner and to minimise fumes.

#### **Aboriginal Heritage**

Council has obtained a section 90 Aboriginal Heritage Impact Permit under NSW National Parks and Wildlife Act 1974 for vegetation management works across Hill 60 Reserve, MM Beach and Fisherman's Beach.

For all areas:

- The Registered Aboriginal Parties for the Hill 60 AHIP and Heritage NSW are to be notified 7 days prior to works commencing.
- All staff, contractors and volunteers working on the site are to participate in a Cultural Heritage Induction by the AHIP manager prior to works commencing.
- The contractor must ensure that an Aboriginal Site Officer is to be present on-site during ground disturbing works.
- If any unexpected archaeological site, or intact cultural material is impacted during the course of any works or activities associated with the proposal on the advice of the Aboriginal Site Officer, works should cease in the vicinity of that site, object or artefact and the area cordoned off. Illawarra Aboriginal Land Council and Council's Heritage Staff should be contacted immediately.
- Cultural material such as shell may be impacted, however the Site Officer is responsible for collecting the material for reburial on site as per the Care and Control Agreement (Niche, 2020).
- Weeding and tree planting is to be by hand only.

<p>An unexpected finds procedure is attached as Appendix E.</p> <p>For Boilers Point Area:</p> <ul style="list-style-type: none"> <li>Vegetation management in the Boilers Point Management Area must not involve ground disturbance.</li> <li>Vehicles must not be driven on or in the immediate vicinity of an Aboriginal Site or within the Boilers Point Management Area described in Schedule B7 of the AHIP (see Appendix D)</li> <li>Plant, equipment or any materials including fill, must not be stored on any part of the Boilers Point Management Area and referred to in Schedule B7.</li> </ul>
<p><b>European Heritage</b></p> <p>The following items are located within the work area.</p> <ul style="list-style-type: none"> <li>State Heritage Register Item 01492 - Hill 60/Illohra Battery</li> <li>General item 61043 - Hill 60, Fisherman's Beach, Boilers Point and MM Beach</li> <li>General item 6417 - Gun Emplacement Connected &amp; Isolated Concrete Bunkers, Red Point/Hill 60.</li> </ul> <p>The works are in the vicinity of European Heritage items including elements of the WWII Illohra Battery including the Hill 60 Tunnels and Gun Emplacements. Council has obtained a Section 60 approval under NSW Heritage 1977 for vegetation management works.</p> <p>Works should not be undertaken within or directly adjacent to any European Heritage items or the archaeological remnants of such without first seeking advice from Council's Heritage Officer.</p> <p>If any unexpected historic archaeology is impacted works should cease in the area and Council's Heritage Staff be contacted.</p> <p>An unexpected finds procedure is attached as Appendix E.</p>
<p><b>Noise &amp; Vibration</b></p> <ul style="list-style-type: none"> <li>If there is to be any significant noise impacts, neighbouring residents are to be notified.</li> <li>The machinery chosen is to have been well maintained and is to be operated in a proper and efficient manner to minimise noise.</li> </ul> <p>Recommended NSW Office of Environment and Heritage standard hours for works:</p> <ul style="list-style-type: none"> <li>Normal construction - Monday to Friday 7 am to 6 pm, Saturday 8 am to 1 pm.</li> <li>No work on Sundays or public holidays.</li> </ul>
<p><b>Traffic &amp; Access</b></p> <p>Appropriate traffic management plan should be implemented and available for audit, including:</p> <ul style="list-style-type: none"> <li>A traffic route for all site vehicles is to be nominated.</li> <li>Public safety for access around the site is to be ensured.</li> <li>Well-defined work compound must be secured to prevent public access.</li> </ul>
<p><b>Material Removed Off-site / Waste Generation</b></p> <p>In addition to the requirements of the Materials Handling Process, the following specific controls are applicable:</p> <ul style="list-style-type: none"> <li>After dewatering is completed (if required), classify the materials and treat/remove as per classification.</li> <li>Any waste generated, including excavated materials, should be removed from the site and disposed of appropriately, according to waste classification.</li> <li>General waste (rubbish) is not to be allowed to lie or accumulate on the site. Provide appropriate receptacles (bins) to store all general wastes generated from the works. The receptacles are to be emptied immediately at works completion. Consideration is to be given to the source separation of recyclable and re-useable materials.</li> <li>All dockets/receipts for waste management/disposal are to be kept by the contractors' site coordinator and copies forwarded to the WCC Natural Areas Officer as proof of disposal for environmental audit purposes.</li> <li>Material/waste is not to be stored in any transit locations.</li> </ul>
<p><b>Imported Fill Material</b></p> <ul style="list-style-type: none"> <li>Only Virgin Excavated Natural Material (VENM) can be imported on site. VENM is natural material (clay, gravel, sand, soil or rock fines) that has been excavated or quarried from areas that are not contaminated. A Classification Docket with chemical assessment should be undertaken or requested from the supplier prior to importing the fill.</li> <li>Where excavated material cannot be classified as VENM it may be eligible for reuse on site if it is accompanied by appropriate documentation (from a qualified technician) confirming it does not contain any acid sulfate soils, asbestos and/or other potential contaminants.</li> <li>Documents/records of the transport and use of material imported onto site are to be kept by the contractors' site coordinator and copies forwarded to the WCC Natural Areas Officer as proof of correct waste management practices and for environmental auditing purposes.</li> </ul>

<b>In-Situ Waste Classification Summary</b>
<p>All works are to be carried out in accordance with the following procedures (or equivalent if works being undertaken by a contractor):</p> <ul style="list-style-type: none"> <li>• City Works &amp; Services Procedure for Waste Classification &amp; Transportation</li> <li>• Unexpected Finds Procedure – Council Owned Land/Worksites</li> </ul> <p>Potential contaminants or contamination indicators that should be monitored and reported include asbestos containing material; coal tar; oils; and other chemicals causing discolouration and/or emitting strong odours.</p>
<b>Contaminated Land</b>
<p>While there are no identified contamination issues on site, site personnel should be made aware of this potential and if unusual colours, odours or materials are noted during excavations a Council Environmental Officer should be notified.</p> <p>Material excavated from the site should be disposed of at a waste disposal facility and not re-used on this or any other site.</p>
<b>Visual Environment</b>
<p>During the work period, the site should be maintained in a neat and tidy condition.</p>



## Appendix A: Project maps

### MM Beach



### Boilers Point



Boilers Point, Port Kembla  
WCC Bush Regeneration Grant Project

0 0.03 0.05 0.1 Kilometers



## Hill 60





## Appendix B: Compliance with Legislation

This appendix provides a brief summary of how the proposed activities listed in the scope of works comply with relevant planning and environmental legislation and identifies where further assessment may be required on a site-specific basis. Completion of the checklist in Section 5 may trigger the additional assessment and consideration of additional safeguards, controls or work exclusion zones.

### *Environmental Planning and Assessment Act 1979 (NSW)*

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) provide the framework for development and environmental assessment in NSW.

As Council is the proponent, the works have been assessed as 'development permissible without consent' under Part 5 of the EP&A Act. Therefore, the activity has been assessed in accordance with Sections 5.5, 5.6 and 5.7 of that Act by examining and taking into account to the fullest extent possible all matters which are likely to affect the environment. Environmental Planning Instruments made under the EP&A Act 1979 may also be relevant and are addressed below.

### *State Environmental Planning Policy (Transport and Infrastructure) 2021 (NSW)*

The proposed activities listed in the scope of works have been assessed against the State Environmental Planning Policy (Transport and Infrastructure) 2021, and do not require consent under Division 12 Parks and other reserves and Division 25 Waterway or foreshore management activities, which permit environmental management works in parks and reserves and waterways and foreshores without consent.

### *Wollongong Local Environment Plan 2009 (Local)*

- Natural Area Program activities occur mainly on land zoned R2 Low Density Residential, RE1 Public Recreation, C2 Environmental Conservation, C3 Environmental Management, C4 Environmental Living, W1 Natural Waterways and W2 Recreational Waterways. The proposed activities listed in the scope of works are consistent with the objectives of LEP zones. Where works occur on natural areas in the following zones, which do not specifically include objectives relating to the environment, the works are compatible with the objectives of that zone: Zone E3 Productivity Support, Zone E4 General Industrial, SP1 Special Activities, SP2 Infrastructure, SP3 Tourist.
- Where the proposed activities listed in the scope of works are located on land mapped as Natural resource sensitivity—biodiversity, they are consistent with the objectives of clause 7.2: Natural resource sensitivity—biodiversity.
- Where the proposed activities are on land mapped as riparian land, they are consistent with the objective of clause 7.4: Riparian Lands.
- Where the proposed activities listed in the scope of works are located on land mapped as Illawarra Escarpment Area Conservation, they are consistent with the objectives of clause 7.8: Illawarra Escarpment Area Conservation.

### *Local Government Act 1993 (NSW)*

Where the proposed activities listed in the scope of works are located within Council owned Community Land under Council control covered by a Plan of Management for community land, the proposed activities are consistent with the objectives of the Plans of Management categories: Park, Sportsground, Cultural Significance, Natural Area Bushland, Natural Area Escarpment, Natural Area Watercourse, Natural Area Wetland and Natural Area Foreshore and General Community Use.

### *Crown Lands Management Act 2016 (NSW)*

Where the proposed activities listed in the scope of works are located on Crown Land under care and control of Council, Council is to manage the Crown land as if was public land within the meaning of the *Local Government Act 1993* and as if it were community land under the *Local Government Act 1993* in accordance with section 3.22 of the *Crown Lands Management Act 2016*. As noted above, the proposed activities are consistent with the objectives of Plans of Management for community land.

#### *Biodiversity Conservation Act 2016 (NSW)*

All ecological communities that occur on natural area work sites within the Wollongong Local Government Area have been identified and are listed in the document: Generic Biodiversity Assessment for Natural Area Management Activities (Z20/167450). Assessments of Significance for the TECs and threatened species that have records mapped within or adjacent to natural area work areas are also included in this document.

Provided the environmental safeguards in this REF are implemented, the activities listed in the scope of works are not likely to significantly affect any threatened species, populations or ecological communities listed under the *Biodiversity Conservation Act 2016*, or their habitats, and the preparation of a Species Impact Statement or Biodiversity Development Assessment Report is not warranted.

All native birds, reptiles, amphibians, and mammals, except the dingo, are protected in NSW, as listed in Schedule 5 of the *Biodiversity Conservation Act 2016*.

Council can enter into Biodiversity Stewardship Agreements in accordance with Part 5, Division 2 of the *Biodiversity Conservation Act 2016*. Works and activities on land to which these agreements apply are subject to the specific conditions within the agreement.

#### *Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)*

All ecological communities that occur on natural area work sites within the Wollongong Local Government Area have been identified and are listed in the document: Generic Biodiversity Assessment for Natural Area Management Activities (Z20/167450). Assessments of Significance for the TECs and threatened species that have records mapped within or adjacent to natural area work areas are also included in this document. Provided the environmental safeguards in this REF are implemented, the activities listed in the scope of works are not likely to significantly affect any threatened species, populations or ecological communities listed under the *Environment Protection and Biodiversity Conservation Act 1999*, or their habitats, and a Referral to the Australian Government Minister for the Environment for a decision on a 'Controlled Action' is not warranted.

#### *Local Land Services Act 2013 (NSW)*

In the case that the proposed activities listed in the scope of works are on regulated land under the *Local Land Services Act 2013*, section 600(b)(ii) of the Act sets out that clearing of native vegetation in a regulated rural area is authorised if it is carried out by a determining authority within the meaning of Part 5 of the *Environmental Planning and Assessment Act 1979* after compliance with that Part. This REF meets the requirements of this clause.

#### *State Environmental Planning Policy (Biodiversity and Conservation) 2021*

This SEPP requires certain approvals from either Council or the Native Vegetation Panel prior to clearing of certain vegetation. Clause 2.7 provides that authority to clear vegetation is not required under this Policy if it is clearing of a kind that is authorised under section 600 of the *Local Land Services Act 2013* (LLS Act). As this proposal is authorised under s600(b)(ii) of the LLS Act, being [an activity carried out by a determining authority within the meaning of Part 5 of that Act after compliance with that Part], consent under the Biodiversity and Conservation SEPP is not required.

#### *Fisheries Management Act 1994 (NSW)*

The proposed activities listed in the scope of works do not involve dredging or reclamation works, obstructing fish passage, using explosives and other dangerous substances or harming marine vegetation. The activities do not require a licence under Part 7 the *Fisheries Management Act 1994*.

#### *Biosecurity Act 2015 (NSW)*

Under the Biosecurity Act 2015, all plants, including weeds are regulated with a general biosecurity duty to prevent, eliminate, or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable. The *Biosecurity Act 2015* and Regulations provide specific legal requirements for high risk activities and State level priority weeds. The State level priority weeds and associated legal requirements relevant to the region are outlined in the *South East Regional Strategic Weed Management Plan 2017-2022* together with the high-risk priority weeds from the regional prioritisation process. As such, any

priority weeds in the work areas would be assessed and controlled to fulfil the General Biosecurity Duty and minimise biosecurity risks, through implementing the safeguards in this REF.

*Water Management Act 2000 and Water Management (General) Regulation 2018 (NSW)*

Section 91E of the Act establishes an approval regime for controlled activities within waterfront land. However, clause 41 of the *Water Management (General) Regulation 2018* provides an exemption for public authorities in relation to all controlled activities on waterfront land. Therefore, approval under the WM Act is not required.

*Pesticides Regulation 2017 (NSW)*

This Regulation has provisions which deal with the use of pesticides, including licensing, record keeping, training and notification, which is part of the proposed activities listed in the scope of works. The relevant requirements for bush regeneration contractors and volunteers are included in the safeguards section of this REF.

*Coastal Management Act 2016 (NSW)*

Where the proposed activities listed in the scope of works are located in the coastal zone, covered by the *Coastal Management Act 2016*, they are consistent with the objects of the act and the management objectives of each of the management areas: coastal wetlands and littoral rainforest, coastal vulnerability area, coastal environment area and coastal use area.

*State Environmental Planning Policy (Resilience and Hazards) 2021 (NSW)*

Where the proposed activities listed in the scope of works are located in the coastal zone, as mapped in the *SEPP (Resilience and Hazards) 2021*, they have been assessed against the assessment criteria for each coastal management area and any relevant controls are included in the Safeguards section of this REF. Where the proposed activities listed in the scope of works are located in land mapped specifically as coastal wetlands and littoral rainforest in the *SEPP (Resilience and Hazards) 2021*, additional assessment will be triggered to determine if development consent is required (see Appendix C).

*Coastal Crown Lands Policy (NSW)*

This Policy applies to all coastal Crown lands within one kilometre landward and three nautical miles seaward from the low water mark. The objectives of the Policy include:

- Conserve and maintain the intrinsic environmental and cultural qualities of coastal Crown lands.
- Optimise public access and use of coastal Crown lands.
- Provide Crown lands, as appropriate for recreation, tourism, residential and commercial coastal development with due regard to the nature and consequences of coastal processes.
- Encourage the rehabilitation of degraded Crown lands.

The scope of works meets all the relevant objectives.

*NSW Heritage Act 1977*

This Act for the identification and registration of items of State significance. The Act seeks to protect and conserve items of State significance through the operation and establishment of the Heritage Council of NSW and its associated functions. Hill 60/Illowa Battery is a listed State Heritage Item (SHR: 01492)

Two separate Section 60 Approvals have been obtained under the Act for the Hill 60 Reserve Master Plan Area. Works must be in line with the Stage 1 and 2-4 approvals.

*National Parks and Wildlife Act 1974 (NSW)*

This Act regulates the control and management of all national parks, historic sites, nature reserves, and Aboriginal areas. Where works will disturb Aboriginal objects, an Aboriginal Heritage Impact Permit (AHIP) is required.

An AHIP has been issued for Hill 60 Reserve Master Plan (AHIP # 4544). In accordance with the AHIP, activities must be compliant with the AHIP and subject to safeguards in Section 6. Include relevant safeguards/conditions from AHIP in section 6 and details in Appendix D.

*Aboriginal Land Rights Act 1983 (NSW)*

Aboriginal Land Claims have been lodged over all Crown Reserves in the Wollongong LGA. Where the proposed activities listed in the scope of works are within a Crown Reserve subject to an Aboriginal Land Claim, the works

are intended to restore the land to its former natural state and it is unlikely that claimants would object to such works (see Z17/90507).

*Native Title Act 1993 (Commonwealth)*

The proposed acts are valid 'future acts' for the purposes of the *Native Title Act 1993* (Cth). The relevant subdivision under which the acts are validated is Subdivision J (Activities pursuant to reservations). There are no procedural requirements to comply with for native title purposes and the non-extinguishment principle applies. Should native title be determined to exist, at some future date, Council may be liable for compensation under the provisions of the *Native Title Act 1993* (Cth) for the effect on native title rights and interests by the proposed act.

*Protection of the Environment Operations Act 1997 (NSW)*

The *Protection of the Environment Operations Act 1997* (POEO Act) is the principal environmental protection legislation for NSW. It defines 'waste' for regulatory purposes and establishes management and licensing requirements for waste. It defines offences relating to waste and sets penalties. Should it be necessary to remove any material from the work site (including sediment), it is considered waste, and must be classified by an appropriate officer, as per Division 1 Waste Classifications of the POEO Act. Waste may be classified as: Special waste, Liquid waste, Hazardous waste, Restricted solid waste, General solid waste (putrescible), General solid waste (non-putrescible). If it is not possible to separate wastes, the whole waste must be classified according to the highest class of waste. All Waste must be disposed of at an appropriately licenced waste facility as landfill.

## Appendix C: Coastal Management Areas Assessment

<b>Matters for Consideration under the State Environmental Planning Policy (Resilience and Hazards) 2021</b> For maps refer to <a href="http://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP_CoastalManagement">http://webmap.environment.nsw.gov.au/PlanningHtml5Viewer/?viewer=SEPP_CoastalManagement</a>	<b>Comments</b>
<b>Is the proposal within the Coastal Wetlands and Littoral Rainforests Area?</b>	No
SEPP (Resilience and Hazards) 2021, Division 1, cl 2.7. Environmental protection works on land identified as “coastal wetlands” or “littoral rainforest” on the Coastal Wetlands and Littoral Rainforests Area Map may be carried out by or on behalf of a public authority without development consent if the development is identified in: (a) the relevant certified coastal management program, or (b) a plan of management prepared and adopted under Division 2 of Part 2 of Chapter 6 of the <i>Local Government Act 1993</i> , or (c) a plan of management approved and in force under Division 3.6 of the <i>Crown Land Management Act 2016</i> . A consent authority must not grant consent for development referred to in subsection (1) of Division 1, cl 2.7, unless the consent authority is satisfied that sufficient measures have been, or will be, taken to protect, and where possible enhance, the biophysical, hydrological and ecological integrity of the coastal wetland or littoral rainforest.	N/A
<b>Is the proposal within the Proximity to Coastal Wetlands and Littoral Rainforests Area?</b> SEPP (Resilience and Hazards) 2021, Division 1, cl 2.8. Development consent must not be granted to development on land identified as “proximity area for coastal wetlands” or “proximity area for littoral rainforest” on the Coastal Wetlands and Littoral Rainforests Area Map unless the consent authority is satisfied that the proposed development will not significantly impact on:	Yes
(a) the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or	This REF has considered the impacts of the proposal on the adjacent wetland area, and a range of safeguards relating to erosion, sediment control, water quality, flora, fauna and ecosystems and weed management must be applied to minimise impact on adjacent wetlands. It is unlikely that the project will negatively impact on any threatened communities or habitat for threatened species.
(b) the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.	It is unlikely that the water quality in the adjacent wetland will be adversely impacted. Appropriate erosion and sediment control measures will be implemented during the works to prevent sediment entering the creek.
<b>Is the proposal within the Coastal Vulnerability Area?</b> SEPP (Resilience and Hazards) 2021, Division 2, cl 2.9. Development consent must not be granted to development on land that is within the area identified as “coastal vulnerability area” on the Coastal Vulnerability Area Map unless the consent authority is satisfied that:	Coastal Vulnerability Area is not mapped yet, so these factors must be considered in all SEPP Coastal Management areas until mapping is completed.
(a) if the proposed development comprises the erection of a building or works—the building or works are engineered to withstand current and projected coastal hazards for the design life of the building or works, and	N/A
(b) the proposed development: (i) is not likely to alter coastal processes to the detriment of the natural environment or other land, and	This project will not alter coastal processes. The works are temporary and will be limited to the ground surface.

(ii) is not likely to reduce the public amenity, access to and use of any beach, foreshore, rock platform or headland adjacent to the proposed development, and	This project will not impact on access and will improve public amenity through weed control and rubbish removal.
(iii) incorporates appropriate measures to manage risk to life and public safety from coastal hazards, and	N/A
(c) measures are in place to ensure that there are appropriate responses to, and management of, anticipated coastal processes and current and future coastal hazards.	N/A
<b>Is the proposal within the Coastal Environment Area?</b> SEPP (Resilience and Hazards) 2021, Division 3, cl 2.10. (1) Development consent must not be granted to development on land that is within the coastal environment area unless the consent authority has considered whether the proposed development is likely to cause an adverse impact on the following:	Yes
(a) the integrity and resilience of the biophysical, hydrological (surface and groundwater) and ecological environment,	This REF has considered the impacts of the project on the environment, including coastal, riparian and wetland vegetation. The project aims to improve the integrity and resilience of the environment. A range of safeguards relating to erosion, sediment control, water quality, flora, fauna and ecosystems and weed management are in the REF and must be applied to minimise impact on the environment. It is unlikely that the project will affect any threatened communities or habitat for threatened species.
(b) coastal environmental values and natural coastal processes,	The project will not have an adverse impact on environmental values and coastal processes. The project will improve the condition of the vegetation communities.
(c) the water quality of the marine estate (within the meaning of the <i>Marine Estate Management Act 2014</i> ), in particular, the cumulative impacts of the proposed development on any of the sensitive coastal lakes identified in Schedule 1,	It is unlikely that the water quality in the adjacent lagoon will be adversely impacted. Appropriate erosion and sediment control measures will be implemented during the works to prevent sediment entering the creek.
(d) marine vegetation, native vegetation and fauna and their habitats, undeveloped headlands and rock platforms,	This project aims to improve the vegetation communities. It is unlikely that the proposal will affect any threatened communities or habitat for threatened species.
(e) existing public open space and safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	This project will not cause access restrictions during works.
(f) Aboriginal cultural heritage, practices and places,	An Aboriginal Heritage Impact Permit has been issued for works within the sites. See Appendix D
(g) the use of the surf zone.	N/A
(2) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that: (a) the development is designed, sited and will be managed to avoid an adverse impact referred to in subsection (1), or (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.	The project is for temporary works only and there is unlikely to be significant impacts.
<b>Is the proposal within the Coastal Use Area?</b> SEPP (Resilience and Hazards) 2021, Division 4, cl 2.11 Development consent must not be granted to development on land that is within the coastal use area unless the consent authority:	Yes
(a) has considered whether the proposed development is likely to cause an adverse impact on the following: (i) existing, safe access to and along the foreshore, beach, headland or rock platform for members of the public, including persons with a disability,	This project will not cause access restrictions during works.

(ii) overshadowing, wind funnelling and the loss of views from public places to foreshores,	This project will not impact on overshadowing and the loss of views from public places to foreshores.
(iii) the visual amenity and scenic qualities of the coast, including coastal headlands,	This project will improve the scenic qualities by improving the condition of the vegetation communities and removing rubbish.
(iv) Aboriginal cultural heritage, practices and places,	An Aboriginal Heritage Impact Permit has been issued for vegetation management works within the Hill 60 Masterplan Area. See Appendix D
(v) cultural and built environment heritage, and	SA Section 60 Approval has been issued for works within the Hill 60 Master plan Area. Works as per the REF are approved under the Act.
<p>(b) is satisfied that:</p> <p>(i) the development is designed, sited and will be managed to avoid an adverse impact referred to in paragraph (a), or</p> <p>(ii) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or</p> <p>(iii) if that impact cannot be minimised—the development will be managed to mitigate that impact, and</p> <p>(c) has taken into account the surrounding coastal and built environment, and the bulk, scale and size of the proposed development.</p>	The project is for vegetation management works that will have a positive impact on the coastal environment.

## Appendix D: Aboriginal Heritage Assessment

### Port Kembla Hill 60

The works at Hill 60 is within the State Heritage Listed Hill 60/Illowra Battery (SHR - 01492).

Works are partially within the Stage 1 and Stage 2 of the Hill 60 Masterplan Area.

- Section 60 approval under NSW Heritage Act 1977 for Stage 1 - Z21/92589
- Section 60 Approval Stage 2-4 - Z20/177866
- Section 90 Aboriginal Heritage Impact permit under NSW National Parks and Wildlife Act 1974 - Z20/214447

### MM Beach

The works at MM beach are within the area known as Stage 3 of the Hill 60 Masterplan Area

- Section 60 Approval Stage 2-4 - Z20/177866
- Section 90 Aboriginal Heritage Impact permit under NSW National Parks and Wildlife Act 1974 - Z20/214447

### Boilers Point

The works at Boiler's Point are within the area known as Stage 4 of the Hill 60 Masterplan

- Section 60 Approval Stage 2-4 - Z20/177866
- Section 90 Aboriginal Heritage Impact permit under NSW National Parks and Wildlife Act 1974 - Z20/214447

The following activities approved under Tree Creeper Indigenous Land Management (2006), Good Bush (2017), and Illawarra Bushland Restoration (2009) vegetation management plans:

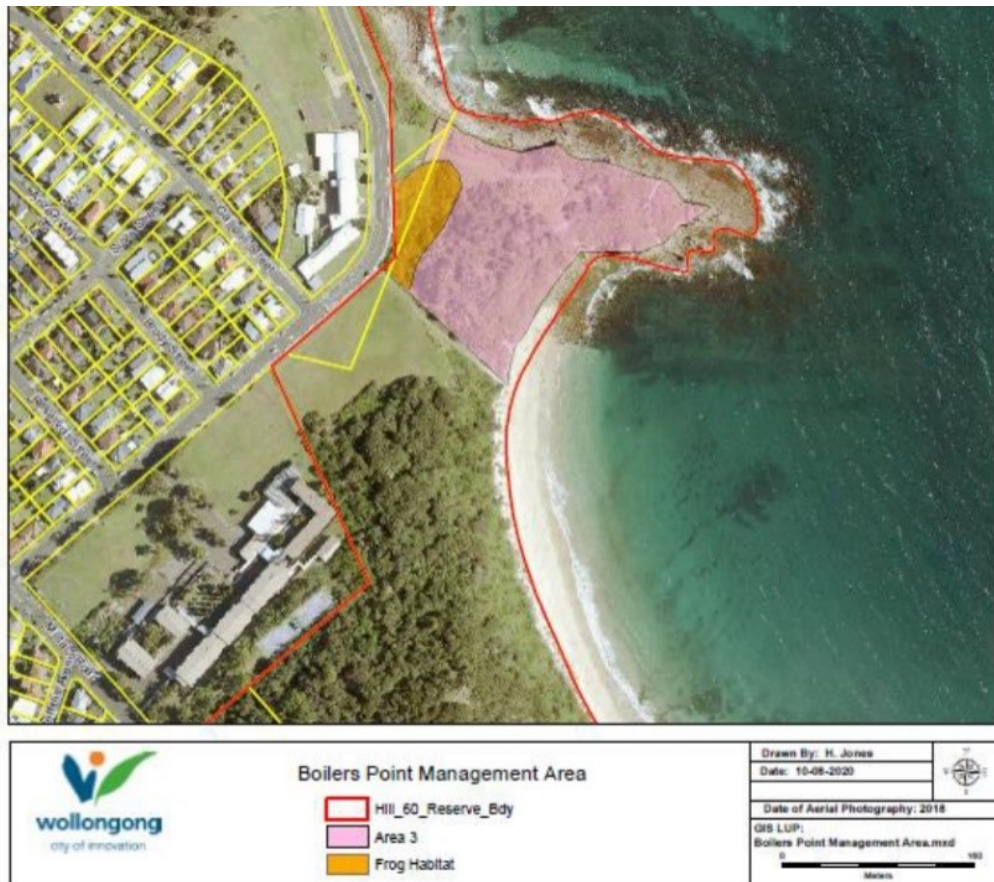
- Primary weed control targeting woody weeds using non-ground penetrating 'cut and paint' and 'drill and frill' methods
- Removal of weed trees at the root level (will require ground disturbance) where required.
- Secondary weed control within primary treated areas to address weed re-growth
- Installation of erosion control measures where necessary using Jute matting and coir logs
- Revegetation of the dune and sea cliff communities using appropriate local native plant species.

### Controls for all management areas:

- Notify Registered Aboriginal Parties and Heritage NSW 7 days before works commence
- All staff, contractors and volunteers working on the site are to participate in a Cultural Heritage Induction by the AHIP Manager prior to works commencing.
- The contractor must ensure that an Aboriginal Site Officer is to be present on-site during ground disturbing works.
- The works are to be in according with the Care and Control Agreement approved under the AHIP. Any Aboriginal Objects identified must be collected and reburied on site in accordance with the ACHAR prepared by Niche dated 09 July 2020.
- Works do not need to stop if expected finds of cultural material are identified such as shell material or objects, however works should stop if undisturbed middens, burials or other sites are identified on the advice of the Aboriginal Site Officer.
- *Any Aboriginal objects disturbed within the Subject Area (Figure 1) during the proposed activities will be collected and moved for reburial within an area agreed upon by the Wollongong City Council (WCC) and the Registered Aboriginal Parties (RAPs). The RAPs will be consulted if Aboriginal objects are located during construction and/or remediation works associated with the proposed activity.*
- The unexpected archaeological finds protocol is shown in Appendix E.



- An exclusion zone at Boilers Point management Area is shown in pink below, where no ground disturbance controls begin:



The above controls apply to Boilers Point with the following additional controls:

- Aboriginal Site Officer is required to be present for all works
- AHIP does not permit Ground Disturbance in Management Area Condition 13:

13. To ensure that the Aboriginal objects described in Schedule B7 are not harmed, the following measures must be implemented as soon as practicable and complied with:

- (a) The only works permitted in the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area** and referred to in Schedule B7, are vegetation management and conservation works, and only in accordance with the conditions of this AHIP.
- (b) Vegetation management in the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area** and referred to in Schedule B7, must not involve ground disturbance.
- (c) Vehicles must not be driven on or in the immediate vicinity of an Aboriginal object described in Schedule B7.
- (d) Plant, equipment or any materials including fill, must not be stored on any part of the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area** and referred to in Schedule B7.

## B7 Other – Limited harm area

The land identified as 'Area 3' in **Appendix C: Boilers Point Management Area** is designated as a "limited harm area". To limit harm to Aboriginal objects in this area, the following measures must be implemented as soon as practicable and complied with:

- (a) The only works permitted in the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area** are vegetation management and conservation works and only in accordance with the conditions of this AHIP.
- (b) Vegetation management in the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area** must not involve ground disturbance.
- (c) Vehicles must not be driven on or in the immediate vicinity of an Aboriginal object in the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area**.
- (d) Plant, equipment or any materials including fill, must not be stored on any part of the area labelled 'Area 3' in **Appendix C: Boilers Point Management Area**.

The Limited harm area includes the following known Aboriginal objects, as identified on AHIMS (excluding any Aboriginal objects described in Schedule A):

Portion of Site (whole or part)	AHIMS Site ID	Site Feature	Site Name	Information access restriction? (Y/N)	Easting	Northing	Datum
Whole	52-2-0476	Shell, artefact	Red Point	N	308600	6181780	GDA
Whole	52-2-1289	Shell, artefact	North Beach 2	N	308600	6181700	GDA

## Hill 60 Reserve - Unexpected Finds Protocol

Wollongong City Council, December 2021

The document has been prepared to satisfy Condition 5 of the Stage 2-4 Section 60 Approval issued by Heritage NSW and Condition 4 of the Stage 1 Approval:

*The Applicant shall resubmit an unexpected finds protocol which is consistent with identification of historical archaeological relics and Aboriginal objects. It should include examples of typical relics and objects which may be found at this site, what to do in the scenario, who would assess the finds, clarification as to whether formal notification under s146 of the Heritage Act 1977 would be required and any modifications of the approval issued prior to works recommencing.*

### Unexpected Finds

An 'unexpected find' can be defined as any unanticipated archaeological discovery that has not been identified during a previous assessment or is not covered by an existing approval under relevant legislation including the NSW National Parks and Wildlife Act 1974 or NSW Heritage Act 1977.

There are three main types of unexpected finds:

1. "Relics" protected under the NSW Heritage Act 1977;
2. Aboriginal Sites and Objects protected under the NSW National Parks and Wildlife Act 1974; and
3. Human remains (which may trigger additional requirements)

The find may have potential cultural heritage value or archaeological research significance and impacts such as removal of the find or relocation required to continue the works as planned may trigger additional statutory requirements under the legislation.

There are a range of potential archaeological discoveries which may be encountered in the Hill 60 Reserve Area including (but not limited to):

- Aboriginal Sites and Objects including stone artefacts, shell middens and material, burial sites, engraved rock art and scarred trees
- Remains of military infrastructure and occupation including concrete footings, pads, underground tunnels, pipes, military equipment, guns, tools
- Remains of other infrastructure including sandstone or brick buildings, wells, cisterns, drainage services, conduits, old kerbing and pavement, bricks, metal sheeting, former road surfaces, timber and stone culverts, bridge footings and retaining walls
- Artefact scatters including clustering of broken and complete bottles, glass, ceramics, animal bones and clay pipes
- Human skeletal remains

*In sensitive areas in the Hill 60 Reserve Area, Council has committed to working with the local Aboriginal Community and engaging an Aboriginal Site Officer to be present during construction works that involve ground disturbance to ensure any Aboriginal Objects or Sites are identified.*

## Process for Reporting Unexpected Finds

### **In the event that an unexpected find is encountered on site, the following should take place:**

- The Contractor/Supervisor will stop all work immediately in the vicinity of where a suspected unexpected find is encountered
- The Contractor/Supervisor will cordon off area to avoid any further harm to the find
- The Contractor/Supervisor will contact Council's Heritage Staff in the first instance with a location of the find and photographs to begin formal notification process
- Council's Heritage Staff will provide expert advice to the Contractor's Environment Manager on find identification, significance, mitigation, legislative procedures and regulatory requirements
- Council's Heritage Staff will immediately contact and liaise with the appropriate branch of Heritage NSW and report the find to the Environment Hotline on 131 555
- Where the find requires additional assessment or investigation to determine its nature and significance, Council will engage a suitably qualified archaeologist to provide advice
- Heritage NSW will regulate the care, protection and management of relics. An additional approval under the NSW Heritage Act 1977 may be required prior to works recommencing
- Heritage NSW will regulate the care, protection and management of Aboriginal Objects. An additional approval under the NSW National Park and Wildlife Act 1974 may be required prior to works recommencing
- Where Aboriginal Cultural material that is unexpected and not covered by the existing approvals is encountered, Council's Heritage Staff will notify the Illawarra Aboriginal Land Council of the find immediately and ensure the Registered Aboriginal Parties are kept informed

*Where an unexpected find is encountered, work will not be recommenced until authorised in writing by Heritage NSW and advice to this effect is communicated to the Project Manager by Council's Heritage Staff*

### **In the event that suspected finds of human remains are uncovered the following process is to be followed:**

- If any suspected human remains are discovered during any works, all activity in the vicinity must cease immediately to ensure no further damage is caused to the remains
- The remains must be left in place and protected from harm or damage
- If human skeletal remains have been found, the Coroners Office and the NSW Police must be notified immediately
- Council's Heritage Staff should also be notified concurrently
- If the human remains are likely to be Aboriginal in origin, the find will be reported to The Environment Hotline and Heritage NSW by Council's Heritage Staff
- If the find is likely to be non-Aboriginal in origin and more than 100 years in age, the Heritage Council of NSW will be notified of the find under s.146 of the Heritage Act 1977 by Council's Heritage Staff

*Work will not be recommenced until authorised in writing by Heritage NSW and advice to this effect is communicated to the Project Manager by Council's Heritage Staff*

### **Contactor reporting obligation for unexpected finds:**



- Contractor's Environment Manager will notify Council's ESO of 'find' and manage incident reporting once completed by Contractor's Environment Manager
- The Contractor's Environment Manager will be required to complete an incident report and review the Construction Environmental Management Plan (CEMP) for any changes required. Propose amendments to the CEMP if any changes are required

#### Attachment 1: Examples of Aboriginal Sites and Objects



*Scarred Tree*



*Example of Exposed Midden Layers*



*Stone Objects*



*Rock Grooving, carving*



*Shell Objects*



*Rock Shelter*



## Attachment 2: Examples of Archaeological “Relics” and “Works”



*Bottle scatter uncovered at Mt Kembla*



*Cow bone at north beach surf club*



DSC04822



DSC04823



*Railway sleepers and brick paving at Wongawilli*



*Military Structure at Wollongong Public School*

## Appendix F: Incident Management Spills in Watercourses or Drains Procedure

### TITLE

Accidental oil spill in watercourses and drains

### PURPOSE

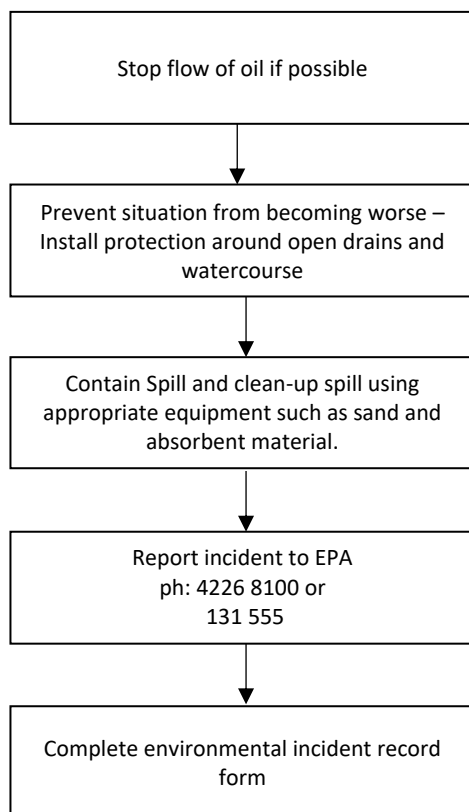
To ensure all practicable means are used to prevent oil spillage during construction or maintenance works near watercourses and drains.

### APPLICATION

This procedure applies to all watercourses including coastal water, rivers, lakes, dams, watercourses, artificial channels, ditches and gullies, and stormwater drains.

Site Contractor Co-ordinators to ensure all operators working near watercourses are trained in this procedure.

### PROCEDURE



### OPERATING CRITERIA

- Spill kit to be onsite at all times during operation
- Refuelling and storage to be undertaken at Depot
- Machinery not in use to be parked away from drains and watercourse banks in case of natural disaster or vandalism
- All staff and contractors to be trained

### REFERENCE

Incident database

### AUDIT CHECKLIST

Spill kit kept at site and kept in order  
All staff are aware of procedure