HEALTH INFRASTRUCTURE

Review of Environmental Factors – Soil Conservation Works

Princes Highway, Moruya

11/01/2023

Version 3



Version Control

Version	Date	Author	Description	Reviewed by	Approved by
1	13/12/2022	KL / EC	Draft REF	CFo	CFo
2	20/12/2022	EC	Final REF	CFo	CFo
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Declaration

This Review of Environmental Factors (REF) has been prepared for NSW Health Infrastructure (HI) and assesses the potential environmental impacts which could arise from soil conservation works and construction of an ancillary road at the site legally described as Lot 2 DP 1281576 on Princes Highway, Moruya.

This REF has been prepared in accordance with the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EPA Act), the *Environmental Planning and Assessment Regulation 2001* (EPA Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment. It addresses to the fullest extent possible, all the factors listed in clause 171(1) of the EPA Regulation and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC ACT).

On the basis of the information presented in this REF it is concluded that by adopting the recommended mitigation measures it is unlikely there would be any significant environmental impacts associated with the activity. Consequently, an Environmental Impact Statement (EIS) is not required.

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Appendices

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A	Section 10.7 Certificate	Eurobodalla Shire Council	PL1152/23
В	Site Survey	LTS Lockley	Rev C
С	Civil Justification and Design	Meinhardt Bonacci	12/12/2022
E	Preliminary Site Investigation	JK Environmental	14 December 2022
F	Desktop Contamination Assessment	JK Environmental	14 December 2022
G	Detailed Site Investigation	JK Environmental	14 December 2022
Н	Preliminary Salinity Assessment	JK Environmental	14 December 2022
1	Noise and Vibration Assessment	Arup	8 December 2022
J	Construction Traffic and Pedestrian Management Plan	Bitzios Consulting	8 December 2022
К	Arboricultural Impact Assessment	Abel Ecology	13 December 2022
L	Statement of Heritage Impact	Comber Consultants6.2.5	B.2022
М	Bushfire Report	Abel Bushfire	13 December 2022
Ν	Historical Archaeological Assessment	Comber Consultants	B.2022
0	Aboriginal Archaeological Assessment	Comber Consultants	B.2022
Ρ	Geotechnical Report	JK Environmental	9 December 2022
Q	Prescribed Environmental Actions Report	Abel Ecology	13 December 2022

Abbreviations

Abbreviation	Description
AEC	Area of Environmental Concern
AHD	Australian Height Datum
AHIP	Aboriginal Heritage Impact Permit
AHIMs	Aboriginal Heritage Information Management System BC Regulation
AMG	Australian Map Grid
BC Act 2016	Biodiversity Conservation Act 2016
BC Act 2017	Biodiversity Conservation Act 2017
BC Regulation	Biodiversity Conservation Regulation 2017

BAM Biodiversity Assessment Method CA Certifying Authority CE Chief Executive CM Act Coastal Management Act 2016 CMP Construction Management Plan CWC Connecting with Country CRA Conservation Risk Assessment DPC Department of Premier and Cabinet DPIE Department of Planning and Environment EIS Environmental Impact Statement EMP Environmental Management Plan EES Environmental Management Plan EES Environmental Management Plan
CE Chief Executive CM Act Coastal Management Act 2016 CMP Construction Management Plan CWC Connecting with Country CRA Conservation Risk Assessment DPC Department of Premier and Cabinet DPIE Department of Planning and Environment EIS Environmental Impact Statement EMP Environmental Management Plan EES Environment Plan EPA Environment Protection Authority
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DPCDepartment of Premier and CabinetDPIEDepartment of Planning and EnvironmentEISEnvironmental Impact StatementEMPEnvironmental Management PlanEESEnvironment, Energy and ScienceEPAEnvironment Protection Authority
DPIE Department of Planning and Environment EIS Environmental Impact Statement EMP Environmental Management Plan EES Environment, Energy and Science EPA Environment Protection Authority
EIS Environmental Impact Statement EMP Environmental Management Plan EES Environment, Energy and Science EPA Environment Protection Authority
EMP Environmental Management Plan EES Environment, Energy and Science EPA Environment Protection Authority
EES Environment, Energy and Science EPA Environment Protection Authority
EPA Environment Protection Authority
EPA Act Environmental Planning and Assessment Act 1979
EPA Regulation Environmental Planning and Assessment Regulation 2021
EPBC Act (Cwth) Environment Protection and Biodiversity Conservation Act 1999
EPI Environmental Planning Instrument
EPL Environment Protection Licence
Eurobodalla LEP Eurobodalla Local Environmental Plan 2012
FM Act Fisheries Management Act 1994
Ha Hectares
HHIMS Historic Heritage Information Management System
HI NSW Health Infrastructure
LEP Local Environmental Plan
LGA Local Government Area
MPS Multipurpose Service
MNES Matters of National Environmental Significance
NPW Act National Parks and Wildlife Act 1974
NPW Regulation National Parks and Wildlife Regulation 2009
NPWS National Parks and Wildlife Service (part of EES)
NT Act (Cth) Commonwealth Native Title Act 1993
OEH (Former) Office of Environment and Heritage

Abbreviation	Description
РСМР	Preliminary Construction Management Plan
Planning Systems SEP	State Environmental Planning Policy (Planning Systems) 2021
Proponent	NSW Health Infrastructure
REF	Review of Environmental Factors
RF Act	Rural Fires Act 1997
RFS	Rural Fire Service
Resilience and Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
SEPP	State Environmental Planning Policy
SIS	Species Impact Statement
TISEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
WM Act	Water Management Act 2000

Executive Summary

The Proposal

This Review of Environmental Factors (REF) relates to the undertaking of soil conservation works at a site on Princes Highway, Moruya that is legally described as Lot 2, DP 1281576. The works will facilitate the ongoing management of the greenfield lot. The proposed activity comprises the following:

- Construction of three erosion and sediment basins, ranging between 507m² and 990m² in area.
- · Construction of an ancillary road into the site to facilitate construction access into the site.

Need for the Proposal

Given the site is no longer being used for pastural grazing, regular maintenance through mowing and slashing will be undertaken on the property which will result in a different erosion risk profile, which will be present until the future use and development of the site is resolved. As a result, the proposed works will provide protection in the event that prolonged periods of nil or minimal rainfall and/or the further reduction of vegetation occurs across the site. The works seek to manage this event which would then leave the site in a state where it had the potential to pollute, with unprotected areas subject to erosion risk. The proposed basins are located to capture site runoff from as much of the site as possible.

The proposed construction of a site laydown area, and a construction vehicle access road to the laydown and work areas is also necessary to accommodate the soil conservation works given that construction workers cannot park their vehicles along the Princes Highway and there is currently no other vehicle access to the proposed basins. Accordingly, this will help to avoid, manage or mitigate the effects of erosion.

Proposal Objectives

The primary objective of the proposal is to facilitate the ongoing management of the greenfield lot until such time as the future use and development of the site is resolved. Ultimately, the overall objective of the proposal is to avoid, manage and mitigate the potential effects of erosion.

Options Considered

Three options were considered, as summarised below.

- Option 1 Take no actions to address the issue of erosion and top soil loss.
- Option 2 Seek approval to undertake the soil conservation works, without the construction of an internal vehicle access road from the Princes Highway entrance to the site laydown areas and proposed basins.
- Option 3 Seek approval to undertake the soil conservation works along with the ancillary internal vehicle access
 road. This option is considered to be the most appropriate as it will both address the potential issue of erosion and
 top soil loss through the construction of the erosion and sediment basins, whilst ensuring the construction works do
 not result in their own erosion impacts. This option also mitigates other environmental impacts by ensuring
 construction vehicles only traverse dedicated parts of the site.

Site Details

The REF will occur on a site located along the Princes Highway, Moruya which is legally described as Lot 2 DP 1281576 and is owned by the Health Administration Corporation. The site has an approximate area of 21.94 hectares and currently comprises vacant greenfield land.

Planning Approval Pathway

The site is zoned part R2 Low Density Residential zone and part RU1 Primary Production zone under the Eurobodalla Local Environmental Plan 2012. However, it is noted that all soil conservation works and the ancillary vehicle access will only be undertaken within the area of the site zoned R2.

The proposed soil conservation works are permitted to be undertaken by any public authority on any land without consent under Section 2.133 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021*.

Furthermore, the proposed provision of an ancillary unsealed, gravel road across the site to provide access to the construction areas for the soil conservation works is also permitted to be undertaken by any public authority on any land without consent under Section 2.109 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021*.

Accordingly, the works can be undertaken by Health Infrastructure as a public authority as 'Development without consent'. As per Part 5 of the *Environmental Planning and Assessment Act* (EP&A Act), the proposal is identified as an 'activity' and is therefore subject to an environmental assessment (REF) as presented in this report.

Statutory Consultation

There is no statutory requirement for consultation to be undertaken under the relevant sections of the TISEPP. Notwithstanding this, consultation with the community and Eurobodalla Shire Council has been ongoing for several months in relation to the future operation of the site and will continue throughout the process of undertaking these works.

Environmental Impacts

This REF considers the requirements of Part 5 of the EP&A Act, as well as clause 171(1) of the *Environmental Planning and Assessment Regulation 202*1. **Section 6.1** outlines the potential impacts of the works on the environment, including traffic management, biodiversity and ecology, and heritage impacts.

The environmental impacts from the proposed development are considered to be temporary and / or negligible. Mitigation measures, included in **Section 6.3**, outline the appropriate measures to manage and minimise potential impacts arising from the development.

Justification and Conclusion

This REF describes the proposed development and has fully examined all possible matters affecting or likely to affect the environment as a result of the works. Potential impacts can be reasonably mitigated and managed where necessary through the adoption of suitable site practices and adherence to accepted industry standards.

The proposed activity can be justified as it responds to an existing need to appropriately manage potential impacts of erosion of the greenfield lot until such time as it is developed. By undertaking these soil conservation works, the impacts of erosion can be adequately avoided, managed or mitigated. The works comply with all legislation, plans and policies, will have minimal environmental impacts and incorporates adequate mitigation measures where necessary. Given the planning merits and compliance of the proposed works, the development warrants approval.

1. Introduction

1.1 Proposal Identification

The proposed development comprises soil conservation works, and the ancillary construction of an unsealed, gravel road around the site to facilitate construction access. The soil conservation works will comprise the construction of three erosion and sediment basins on the site, ranging between 507m² and 990m² in area, and located to capture runoff from as much of the site as possible. These works are classified as development without consent and are consistent with sections 2.133 and 2.109 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP).

1.2 Site Location

The REF will occur on a site located along the Princes Highway, Moruya which is legally described as Lot 2, DP 1281576 and is owned by the Health Administration Corporation. The site has an approximate area of 21.94 hectares and currently comprises vacant greenfield land which was previously used for unrestricted farm uses/grazing.

1.3 Purpose of the Report

This Review of Environmental Factors (REF) has been prepared by Ethos Urban on behalf of NSW Health Infrastructure (HI) to determine the environmental impacts of the proposed soil conservation works and provision of associated vehicle access around the site. For the purposes of these works, HI is the proponent and the determining authority under Part 5 of the EPA Act.

The purpose of the REF is to describe the proposal, to document the likely impacts of the proposal on the environment and to detail protective measures to be implemented to mitigate any potential impacts.

The description of the proposed works and associated environmental impacts have been undertaken in the context of clause 171(1) of the EPA Regulation and the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The assessment contained within the REF has been prepared having regard to:

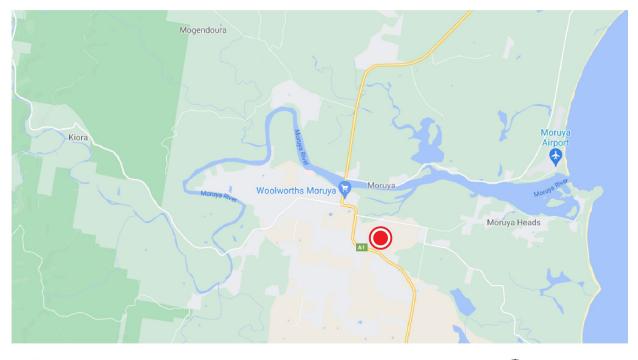
- whether the proposed activity is likely to have a significant impact on the environment and, therefore, the necessity for an EIS to be prepared and approval to be sought from the Minister for Planning under Part 5.1 of the EPA Act; and
- the potential for the proposal to significantly impact Matters of National Environmental Significance (MNES) on Commonwealth land and the need to make a referral to the Australian Government Department of Environment and Energy for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.

The REF helps to fulfil the requirements of section 5.5 of the EPA Act, which requires that HI examine, and take into account to the fullest extent possible, all matters affecting, or likely to affect, the environment by reason of the proposed activity.

2. Site Analysis and Description

2.1 The Site and Locality

The site where the soil conservation works are proposed to be undertaken is within the southern NSW coastal town of Moruya, located within the Eurobodalla Shire Local Government Area. The site is approximately two kilometres south east of the Moruya town centre, approximately 200 kilometres south of Nowra and 300 kilometres south of Sydney. The proposed locational context of the site is shown at **Figure 1**.



🔘 🛛 The Site

NOT TO SCALE

Figure 1: Locational Context

Source: Nearmap & Ethos Urban

The site is located along the Princes Highway, Moruya. The site is legally described as Lot 2, DP 1281576 and is owned by the Health Administration Corporation. The site has an approximate area of 21.94 hectares and currently comprises vacant greenfield land.

An aerial photograph of the site is shown at Figure 2.



The Site

Figure 2 Aerial Photograph

Source: Nearmap & Ethos Urban

2.1.1 Existing Development

Topography and Vegetation

The site is a large, vacant allotment. A large portion of the site is cleared for historic grazing purposes, with some existing natural vegetation on the sloping portion to the south-east of the site.

The topography of the site extends from the lowest point of approximately RL 1.5 at the north west up to approximately RL 55 at the south east of the site. Whilst the site is large, this constitutes a total change in level of more than 50 metres. The area identified as usable and appropriate for development is towards the north-east corner of the site.

A significant gully feature extends from east to west on the site and acts as a natural watercourse through the site. The high point is at the base of the south-east ridge at RL 19 and the gully extends west into a flood zone. The low point of the gully on the western boundary is approximately RL 2.0 (see Figure 3).



Figure 3 Topography of the site

Source: Conrad Gargett

<u>Bushfire</u>

The site is mapped as being within a designated bushfire prone area by the NSW Rural Fire Service. Notwithstanding this, the overall risk of a bushfire on site is considered to be low.

Contamination

The site has historically been used for agricultural purposes since at least 1961. Contamination documentation (**Appendix E-G**) has confirmed the presence of polycyclic aromatic hydrocarbons (PAHs) on site.

Geotechnical Conditions

Based on the results of site investigations, the ground conditions on the majority of the site comprises topsoil and residual clay overlying shallow weathered granite bedrock. Bedrock levels vary throughout the site between 1.8m and 20.15m below surface level. Groundwater was encountered during the borehole investigations, with observations made between 2.6m and 15.2m below surface level.

Flooding

The site is located largely outside of Moruya's known flood area, with only a small portion western edge of the site identified on the Probable Maximum Flood (PMF) plan. The flood impact of the site is shown at **Figure 4**.

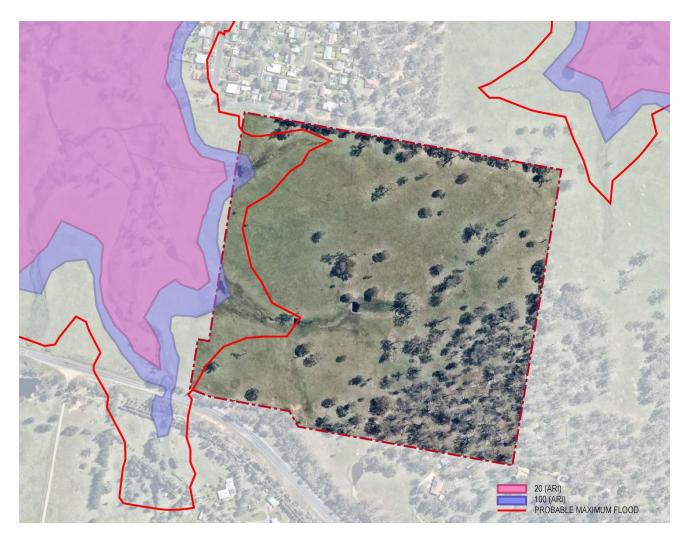


Figure 4 Flood Impact

Source: Conrad Gargett

Transport and Access

Informal vehicle access to the site is provided via both Albert Street and the Princes Highway via locked metal gates. It is noted that a new roundabout is planned for the Princes Highway entrance which was approved under a separate REF. No car parking is provided on site, given that it currently comprises a greenfield site.

There are no active transport facilities directly surrounding the site. Notwithstanding this, there are several active transport facilities within the vicinity of the site. To the north, a pedestrian footpath services the local residential streets and connects with the pedestrian spine on South Head Road which connects to the Moruya Town Centre. To the east, the TAFE NSW campus is serviced by a 3.0m wide shared path which connects to the Moruya Town Centre. A number of future shared and pedestrian paths are also proposed under the Eurobodalla Pathways Strategy.

The site currently comprises a greenfield site and, therefore, is not supported by any existing public transport services. A bus stop is located at the adjacent TAFE NSW campus, servicing the 860 route, travelling between Moruya and Batemans Bay.

2.1.2 Site Considerations and Constraints

Section 10.7 Planning Certificate No.PL1152/23 dated 13 December 2022 identifies that the site is located partly within the R2 Low Density Residential zone and partly within the RU1 Primary Production zone under the Eurobodalla Local Environmental Plan 2012.

Table 1: Section 10.7 Planning Constraints

Affectation	Yes	No
Critical habitat		\checkmark
Conservation area		\checkmark
Item of environmental heritage		\checkmark
Proclaimed to be in a mine subsidence district		\checkmark
Affected by a road widening or road realignment		\checkmark
Affected by a planning agreement		\checkmark
Affected by a policy that restricts development of land due to the likelihood of landslip		\checkmark
Affected by bushfire, tidal inundation, subsidence, acid sulphate or any other risk	\checkmark	
Affected by any acquisition of land provision		\checkmark
Biodiversity certified land or subject to any bio-banking agreement or property vegetation plan		\checkmark
Significantly contaminated		\checkmark
Subject to flood related development controls	✓	

2.2 Surrounding Development

The site is surrounded by the following development:

- To the north of the site is a low density residential subdivision called Mynora Estate. Beyond this is agricultural, greenfield land and the Moruya River.
- Moruya Town Centre is located approximately 1.5km northeast of the site. It comprises a series of retail stores, commercial office space, community facilities and recreational spaces. The Princes Highway is the main thoroughfare that runs through the Moruya Town Centre.
- To the south of the site is the Princes Highway, which is a classified road that runs all the way down the eastern coast of NSW from the south of Sydney. Further agricultural and greenfield land is also located to the south.
- To the east of the site is greenfield and agricultural land, extending between the site and the coastline, with a mixture of sparse and dense bushland.
- Directly to the west of the site is agricultural land and the Moruya TAFE campus which contains a number of buildings and at grade car parking.
- To the west and northwest of the site is the agricultural land and the Moruya TAFE, which contains low density residential housing, the Moruya Showground and various retail and service tenancies.

Photographs of the site and the surrounding development is shown in **Figure 5** to **Figure 10** below.



Figure 5 The site, viewed from the south (Pacific Highway Entrance) looking north



 $\label{eq:Figure 6} \begin{tabular}{ll} Figure 6 \end{tabular} The site, viewed from the north of the site, looking south west \end{tabular}$

Source: Ethos Urban

Source: Ethos Urban



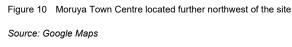
Figure 7 Residential development located to the north of the site Source: Ethos Urban



Figure 8 Princes Highway located to the south of the site, looking west
Source: Ethos Urban



Figure 9 Moruya TAFE campus located to the west of the site



Source: Google Maps

3. Proposed Development, Need and Alternative

3.1 The Proposal

This REF relates to the undertaking of soil conservation works at a site on Princes Highway, Moruya that is legally described as Lot 2 DP 1281576, to facilitate the ongoing management of the greenfield lot until such time as its redeveloped for another use. The proposed activity comprises the following:

- Construction of three erosion and sediment basins, ranging between 507m² and 990m² in area.
- Construction of an ancillary road into the site off Princes Highway to facilitate construction access into the site.

3.1.1 Options Considered

Three options were considered, as summarised below.

- Option 1 Take no actions to address the issue of erosion and top soil loss. This option has the potential to result in adverse environmental impacts, and as such was not considered to be an appropriate option.
- Option 2 Seek approval to undertake the soil conservation works, without the construction of an internal vehicle
 access road from the Princes Highway entrance to the site laydown area and the proposed basins. This option
 would address the potential effects of erosion, however, would cause its own erosion and ecological impacts due to
 uncontrolled construction access around the site (for example, from heavy machinery traversing sensitive parts of
 the site).
- Option 3 Seek approval to undertake the soil conservation works along with the ancillary internal vehicle access road. This option is considered to be the most appropriate as it will both address the potential issue of erosion and top soil loss through the construction of the erosion and sediment basins, whilst ensuring the construction works do not result in their own erosion impacts. This option also mitigates other environmental impacts by ensuring construction vehicles only traverse dedicated parts of the site.

3.1.2 Preferred Option Justification

The preferred option has been identified as being most suitable to addressing the potential issue of erosion and top soil loss at the site. The proposed vehicle access (in the form of an unsealed, gravel road) around the site and laydown areas are also essential to provide controlled access around the site during construction.

The proposal is consistent with the four accepted principles of ESD:

- The precautionary principle;
- Intergenerational equity;
- · Conservation of biological diversity and ecological integrity; and
- · Improved valuation and pricing of environmental resources.

The proposal has integrated short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long-term implications can be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this REF.

3.2 Construction Activities

The works are short term (approximately 5 months).

Table 2: Project Timeframes and Construction Activities

Commencement Date	Estimated commencement date: February 2023.		
	Estimated completion date: June 2023.		
Work Duration/Methodology	5 months		
Work Hours and	Monday to Friday: 7am – 6pm		
Duration/Construction	Saturday: 8am – 1pm		
	No work on Sundays or public holidays		
Plant Equipment	Details of the construction noise equipment / plant to be used is not known at this time so assumptions have been made based on sources normally found on construction sites similar to the proposed development.		
	Table 16 of the Noise and Vibration Assessment prepared by Arup (Appendix I) provides an assessment of the equipment used in a worst case construction scenario and the anticipated airborne noise levels of this indicative plant equipment.		
Earthworks	Earthworks will be required for the construction of three erosion and sediment basins, ranging between 507m ² and 990m ² in area.		
	Total cut volume = $7,310m^3$		
	Total fill volume = 955m ³		
Ancillary works	Construction of an access road, site laydown area, and associated tree removal within the works area.		
Source and Quantity of Materials	The source and quantity of materials will be identified and procured by the Principal Contractor following their appointment. The contractor will be required to recycle and reuse materials where possible. The contractor will be required to arrange for the sorting and recycling of waste materials and packaging to ensure maximum recycling is achieved. The contractor will be committed to achieving compliance with the EP&A guidelines. All packaging is to be removed before materials are delivered to site to minimise waste generation on site. Refer to the Preliminary Construction Traffic and Pedestrian Management Plan at Appendix J .		
Affected by a planning agreement	No		
Traffic Management and Access	Traffic management and access will be addressed through the implementation of a Construction Traffic and Pedestrian Management Plan, which has been prepared by Bitzios Consulting and provided at Appendix J and will be refined as necessary in consultation with the nominated contractor, Transport for NSW and Eurobodalla Shire Council.		

3.3 Ancillary Facilities

Site laydown / meeting areas will be established in the south western corner of the site and at the top of the hill, near the location of the soil conservation works. A vehicle access off Princes Highway (in the form of an unsealed, gravel road) to the site laydown area and around the site will also be constructed. These are essential to the soil conservation works as there is currently no vehicle access to the proposed basins and uncontrolled access around the site has the potential to result in adverse environmental impacts.

A site amenities compound will also be erected at the site laydown / meeting area during the works. The compound is proposed to accommodate lunch, bathroom and change facilities for the duration of the works. This will be organised and managed by the Principal Contractor.

3.4 Tree Removal

An Arboricultural Impact Assessment has been prepared by Abel Ecology and is attached at **Appendix K**. The report notes that a total of thirty-seven (37) trees will require protection from root and structural damage, a total of thirteen (13) hollow-bearing fauna habitat trees and associated un-damaged hollow sections will need to be relocated, and five

(5) non-hollow bearing trees will be removed. In total, fifty-five (55) trees will be impacted by the proposal. Appropriate mitigation measures, including 3:1 offset tree replacement, are recommended and detailed in **Section 6.3**.

4. Statutory Framework

4.1 Planning Approval Pathway

Section 4.1 of the EPA Act states that if an EPI provides that development may be carried out without the need for development consent, a person may carry the development out, in accordance with the EPI, on land to which the provision applies. However, an environmental assessment of the development is required under Part 5 of the Act.

State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) aims to facilitate the effective delivery of the soil conservation works across the State. The following sections of the TISEPP relate to the following works:

- Section 2.109 outlines the approval requirements for general road and infrastructure facilities.
- Section 2.133 outlines the approval requirements for soil conservation works.

Development for the purposes of road facilities and soil conservation works may be carried out by or on behalf of a public authority without consent on any land.

The proposal involves the undertaking of soil conservation works and the construction of an unsealed, gravel road to a laydown / meeting areas and in the vicinity of the soil conservation works, which is classified as development without consent as the proposed activity is consistent with sections 2.109 and 2.133 of the TISEPP.

However, the project becomes an 'activity' for the purposes of Part 5 of the EPA Act and is subject to an environmental assessment (REF). The proposal is considered an 'activity' in accordance with clause 5.1 of the EPA Act because of the land use and carrying out of work.

There is no statutory requirement for consultation to be undertaken under the relevant sections of the TISEPP. Notwithstanding this, consultation with the community and Eurobodalla Shire Council has been ongoing for several months in relation to the future operation of the site and will continue throughout the process of undertaking these works.

Division and Section within TISEPP	Description of Works
Division 17, Section 2.109	In accordance with section 2.109 of the TISEPP, development for the purposes of road or any road infrastructure facilities can be undertaken as development without consent by a public authority, on any land. The proposed construction of vehicle access from Princes Highway and around the site falls under the categories of road or road infrastructure facilities, and therefore can be carried out by HI NSW as 'development without consent' in accordance with section 2.109 of the TISEPP.
Division 19, Section 2.133	In accordance with section 2.133 of the TISEPP, development for the purposes of soil conservation works can be undertaken as development without consent by a public authority on any land. The proposed soil conservation works for the purpose of addressing the issue of erosion and top soil loss can therefore be carried out by HI NSW as 'development without consent' in accordance with section 2.109 of the TISEPP.

4.2 Environmental Protection and Biodiversity Conservation Act 1999

The provisions of the EPBC Act do affect the proposal as it is not development that takes place on or affects Commonwealth land or waters. Further, it is not development carried out by a Commonwealth agency, nor does the proposed development affect any matters of national significance. An assessment against the EPBC Act checklist is provided at **Table 4**.

Table 4: EPBC Checklist	
Consideration	Yes/No
The activity will not have any significant impact on a declared World Heritage Property?	No
The activity will not have any significant impact on a National Heritage place?	No
The activity will not have any significant impact on a declared Ramsar wetland?	No
The activity will not have any significant impact on Commonwealth listed threatened species or endangered community?	No
The activity will not have any significant impact on listed migratory species?	No
The activity does not involve nuclear actions?	No
The activity will not have any significant impact on Commonwealth marine areas?	No
The activity will not have any significant impact on Commonwealth land?	No
The activity does not relate to a water resource, a coal seam gas development or large coal mining development?	No

4.3 Environmental Planning and Assessment Act 1979

Duty to Consider Environmental Impact

Part 5 of the EP&A Act applies to activities that are permissible without consent and are generally carried out by a public authority. Activities under Part 5 of the EP&A Act are assessed and determined by a public authority, referred to as the determining authority. Health Infrastructure is a public authority and is the proponent and determining authority for the proposed works.

For the purpose of satisfying the objects of the EP&A 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 the Act or the provisions of any other Act or of any instrument made under the EP&A Act 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 (refer to sub-section 1 of section 5.5 of the EP&A Act).

Section 171(1) of the EP&A Regulation defines the factors which must be considered when assessing the likely impact of an activity on the environment under Part 5 of the EP&A Act. Section 7.1 specifically responds to the factors for consideration under section 171(1).

Table 5 below demonstrates the effect of the proposed development activity on the matters listed for consideration in sub-section 3 of section 5.5 of the EP&A Act.

Table 5: Matters for consideration under sub-section 3, Section 5.5 of the EP&A Act

Matter for Consideration	Impacts of Activity
<i>Sub-section 3:</i> Without limiting subsection 1, a determining authority shall consider the effect of any activity on any wilderness area (within the meaning of the <i>Wilderness Act 1987</i>) in the locality in which the activity is intended to be carried on.	No wilderness area is located on the site. Therefore, this is not applicable.

4.4 Environmental Planning and Assessment Regulation 2021

Section 171 of the EP&A Regulation provides a list of factors that must be taken into account for an environmental assessment under Part 5 of the EP&A Act. These requirements are considered at **Section 6.1** of this REF.

4.5 State Environmental Planning Policies

Table 6 lists the relevant State Environmental Planning Policies to the proposed activity.

Table 6: Assessment against State Environmental Planning Policies

Comment	Relevant? Yes/No
S	
This SEPP applies to the site as the Eurobodalla LGA is within the South Coast Koala management area, and the site is identified as potential koala habitat. However, only one koala has been recorded within 2km of the site in the last 18 years, and there is no evidence of koalas on the site. It is therefore unlikely that the site is used by koalas, and as a result it is not considered core koala habitat.	Yes
The site is also located within a coastal environment area under section 2.10 of the Biodiversity and Conservation SEPP The proposed works relate to soil conservation works in an area previously used for unrestricted farm uses/grazing. It is not anticipated that there will be any impact on any coastal processes or coastal environmental values.	
In accordance with section 4.6 of the Resilience and Hazards SEPP, a Preliminary Site Investigation, Desktop Contamination Assessment and Detailed Site Investigation has been prepared by JK Environmental at Appendix E-G . This Contamination Assessment concludes that based on the historical land uses and potential sources of contamination, the site is suitable for the proposed soil contamination works.	Yes
 The proposed development is consistent with the aims of the TISEPP (as outlined in Section 2.1 of the TISEPP), in that it: Utilises the development without consent pathway to facilitate soil conservation works to prevent erosion of the greenfield site. Has considered the environmental impacts of the development and all necessary matters for consideration as outlined in the TISEPP. Will facilitate access for the purpose of the soil conservation 	Yes
	 S This SEPP applies to the site as the Eurobodalla LGA is within the South Coast Koala management area, and the site is identified as potential koala habitat. However, only one koala has been recorded within 2km of the site in the last 18 years, and there is no evidence of koalas on the site. It is therefore unlikely that the site is used by koalas, and as a result it is not considered core koala habitat. The site is also located within a coastal environment area under section 2.10 of the Biodiversity and Conservation SEPP The proposed works relate to soil conservation works in an area previously used for unrestricted farm uses/grazing. It is not anticipated that there will be any impact on any coastal processes or coastal environmental values. In accordance with section 4.6 of the Resilience and Hazards SEPP, a Preliminary Site Investigation, Desktop Contamination Assessment and Detailed Site Investigation has been prepared by JK Environmental Appendix E-G. This Contamination Assessment concludes that based on the historical land uses and potential sources of contamination works. The proposed development is consistent with the aims of the TISEPP (as outlined in Section 2.1 of the TISEPP), in that it: Utilises the development without consent pathway to facilitate soil conservation works to prevent erosion of the greenfield site. Has considered the environmental impacts of the development and all necessary matters for consideration as outlined in the TISEPP.

4.6 Local Environmental Plans

Table 7 lists the relevant provisions of the *Eurobodalla Local Environmental Plan 2012* (Eurobodalla LEP) to the proposed activity.

Table 7: Assessment against Eurobodalla Local Environmental Plan 2012

Legislation	Comment	Relevant? Yes/No
Eurobodalla Local Environm	iental Plan 2012	
2.2 Land Use Zone Part R2 Low Density Residential	The works proposed are permitted without consent in any zone.	Yes
& part RU1 Primary Production	The works are consistent with the objectives of the R2 Low Density Residential.	
	It is noted that there is a very small portion of the site located within the RU1 Primary Production, however no works will occur in this portion of the site.	
5.10 Heritage Conservation	A Statement of Heritage Impact has been prepared by Comber Consultants (refer Appendix L) which notes that the site is not listed on either the State Heritage Register	Yes

	and is not identified as containing a heritage item or being located within a heritage conservation area. This is discussed further at Section 6.2.9 . Further, the site is identified as containing Aboriginal archaeological heritage items, as per the Aboriginal Heritage Impact Management System (AHIMS). This is discussed further at Section 6.2.10 .	
5.21 Flood Planning	The site is partially identified as being flood prone land. A Civil Technical Report Note prepared by Meinhardt Group (refer Appendix C) concludes that the impact on flood affection in the PMF event due to the construction of the basins will be insignificant, and there would not even be a minor impact on flood patterns as the loss of flood storage across the floodplain extent as a result of basin construction is negligible.	Yes
6.3 Acid Sulfate Soils	A very small portion of the site is identified as containing Class 2 acid sulfate soils. Mitigation measures are included at Section 6.3 .	Yes
6.7 Riparian Lands and Watercourses	There is one mapped "Riparian Category 3" watercourse on the site as per the Eurobodalla LEP, and the PEAR prepared by Abel Ecology (Appendix Q), two first order Strahler watercourses are mapped on the western part of the site. These 'mapped watercourses' are tributaries of Racecourse Creek. Racecourse Creek flows into the Moruya River. The drainage lines on the site do not display in general the typical features of a structured watercourse. There is no obvious "bed and banks", and there is no aquatic vegetation in the drainage lines that is a defined riparian community. The vegetation along the majority of the drainage lines is similar to nearby pasture. The two ephemeral drainage lines, which structurally form two broad swales, carry overland flow to the western boundary and feed a band of wetland vegetation connecting the swales. On the basis of those criteria there is no "river" on the site.	
	In line with Clause 6.7, the works will have very minimal impacts on these watercourses. An assessment in line with clause 6.7 of the Eurobodalla LEP is provided below:	
	 (3)(a)(i) Since the watercourse is a grassy swale it has a natural mitigation function. Water quality and water flows are not relevant considerations for this drainage line. The proposed works as proposed will capture flows and mitigate peak volume and flow rate, thus enhancing the function of the swale. 	
	 (3)(a)(ii) Since there are no "aquatic and riparian species, habitats and ecosystems" within the swale drainage line there can be no adverse impacts on such features. 	
	 (3)(a)(iii) Since there are no structural features of bed, shore or banks present within the drainage swale, the stability of the bed, shore and banks of a watercourse is not a relevant consideration. 	
	 (3)(a)(iv) Since there is no watercourse, the free passage of fish and other aquatic organisms within or along a watercourse is not a relevant consideration. 	
	 (3)(a)(v) Since there are no structural features of a watercourse consideration of any future rehabilitation of the watercourse and riparian areas is not a relevant consideration. 	
	 (3)(b) Since the works are erosion and sediment basins with no permanent storage there will be no extraction from the watercourse. 	
	 (4)(a) The works are placed to avoid significant ecological values and avoid the woodland. 	
	 (4)(b) Since the works achieve avoidance of significant impact there is no need to consider the "minimise" criterion. 	
	 (4)(c) Since the works achieve avoidance of significant impact there is no need to consider the "mitigate" criterion. 	
	Therefore, there is no expected impact to the operation of this watercourse or riparian land.	

4.7 Other Relevant Legislation

Table 8 lists any additional legislation that is required to be considered if it is applicable to the proposed activity.

Legislation	Comment	Relevant? Yes/No
State Legislation		
Rural Fires Act 1997	The site is identified as bushfire prone. This is discussed further at Section 6.2.5 and at Appendix M .	Yes
Biodiversity Conservation Act 2016	The proposed works comprise the removal of a very small portion of vegetation on the site. A Prescribed Ecological Actions Report has been prepared by Abel Ecology (Appendix Q), which confirms that the extent of clearing is minimal and does not make up a portion of an ecological community. On this basis, the proposed works are unlikely to have a significant effect on the threatened species and therefore, a Biodiversity Development Assessment Report is not required.	Νο
Water Management Act 2000	There is a watercourse on the site, and the proposed REF is seeking works within 40 metres of this land, therefore the works are proposed on 'waterfront land'. However, it is noted that as a public authority, Health Infrastructure do not require approval under the Water Management Act 2000.	Νο
Contaminated Land Management Act 1997	The site is not listed on the register of contaminated sites.	No
Heritage Act 1977	The Heritage Act 1977 is the principal Act for the management of NSW's environmental heritage. It establishes the State Heritage Register (SHR) and includes provisions for Interim Heritage Orders, Orders to Stop Work and archaeological relics (both on land and underwater). It also requires government agencies to maintain a Heritage Conservation Register under Section 171(1). Comber Consultants have prepared a Statement of Heritage Impact (Appendix L) which confirms the site is not listed on the State Heritage Register and this assessment has identified that it is highly unlikely that relics will exist within the study area and	No
	therefore, the Heritage Act 1977 does not apply.	
National Parks and Wildlife Act 1979	An Aboriginal Archaeological Assessment (AAA) has been prepared by Comber Consultants and is included at Appendix O which identifies that there are five Aboriginal sites within the study area which contain Aboriginal objects. Under the National Parks and Wildlife Act 1979, Aboriginal objects are protected, and as such it is an offence to harm such objects. It will be necessary to apply for an Aboriginal Heritage Impact Permit (AHIP) to undertake the proposed works as avoidance of potential impacts on Aboriginal objects cannot be achieved. This will require archaeological salvage of the site to be undertaken in consultation with the local Aboriginal community. The remaining recommendations from this report are provided in the Mitigation Measures at Section 6.3 .	Yes
Roads Act 1993	The proposed activity includes works to Pacific Highway, which is a classified road and, therefore, and will trigger the need for consent under the Roads Act 1993 under Section 139.	Yes

5. Consultation

There is no statutory requirement for consultation to be undertaken under the relevant sections of the TISEPP. Notwithstanding this, consultation with the community and Eurobodalla Shire Council has been ongoing for several months in relation to the future operation of the site and will continue throughout the process of undertaking these works.

It is noted that Health Infrastructure have ongoing bimonthly meetings with Eurobodalla Shire Council regarding development of the site and local government area more generally.

5.1 Government Agency and Other Stakeholder Consultation

	Itation with Council – section 2.10 – Council related infrastructure or services	Yes	No
ill the	activity:		
a.	Potentially have a substantial impact on stormwater management services provided by the Council?		✓
b.	Be likely to generate traffic that will strain the capacity of the road system in the LGA?		\checkmark
C.	Involve connection to, and have a substantial impact on, the capacity of any part of a sewerage system owned by Council?		\checkmark
d.	Involve connection to and use a substantial volume of water from any part of a water supply system owned by Council?		~
e.	Involve the installation of a temporary structure on, or enclosing of, a public place that is under the Council's management or control that is likely to cause a disruption to pedestrian or vehicular traffic that is not minor or inconsequential?		\checkmark
f.	Involve the excavation that is not minor or inconsequential of the surface of, or a footpath adjacent to, a road for which the Council is the roads authority under the <i>Roads Act 1993</i> (if the public authority that is carrying out the development, or on whose behalf it is being carried out, is not responsible for the maintenance of the road or footpath).		✓
onsul	tation with Council – section 2.11 local heritage	Yes	No
	ly that the activity will have an impact, that is not minor or inconsequential, on a local heritage item nan a local heritage item that is also a State heritage item) or a heritage conservation area?		✓
onsul	tation with Council – section 2.11, local heritage	Yes	No
yes to e Cou	cl 14(1) above, has a copy of the Heritage Impact Statement and a scope of works been provided to ncil?		
onsul	tation with Council – section 2.12, flood liable land	Yes	No
ill the	works be located on flood liable land and will they alter flooding patterns more than to a minor extent?		\checkmark
onsul Ible la	tation with State Emergency Service— section 2.13 development with impacts on flood and	Yes	No
	ctivity located on flood liable land and greater than minor alterations or additions to, or the demolition of, ng, emergency works or routine maintenance?		\checkmark
	tation with councils—section 2.14 development with impacts on certain land within the zone	Yes	No
	ctivity on land that is within a coastal vulnerability area and is inconsistent with a certified coastal ement program that applies to that land?		✓
neul	tation with public authorities other than councils – section 2.15	Yes	No

Will the activity be located:

g.	on or adjacent to land reserved under the National Parks and Wildlife Act 1974?	\checkmark
h.	adjacent to a marine park declared under the Marine Parks Act 1997?	\checkmark
i.	adjacent to an aquatic reserve declared under the Marine Estate Management Act 2014?	√
j.	in the foreshore area within the meaning of the Sydney Harbour Foreshore Authority Act 1998?	✓
k.	In association with development comprising a fixed or floating structure in or over navigable waters?	\checkmark
I.	In association with development for the purposes of a health services facility – in an area that is bush fire prone land (as defined by the Act)?	\checkmark
m.	In association with development that may increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map—the Director of the Observatory,	\checkmark
	Note. The dark sky region is land within 200 kilometres of the Siding Spring Observatory.	
n.	development on defence communications facility buffer land within the meaning of clause 5.15 of the Standard Instrument—the Secretary of the Commonwealth Department of Defence,	\checkmark
	Note. Defence communications facility buffer land is located around the defence communications facility near Morundah. See the Defence Communications Facility Buffer Map referred to in clause 5.15 of <i>Lockhart Local Environmental Plan 2012, Narrandera Local Environmental Plan 2013</i> and <i>Urana Local Environmental Plan 2011</i> .	
0.	development on land in a mine subsidence district within the meaning of the <i>Mine Subsidence Compensation Act 1961—the Mine Subsidence Board.</i>	\checkmark

6. Environmental Impact Assessment

6.1 Environmental Planning and Assessment Regulation 2021 – Assessment Considerations

As part of its obligations under section 5.5 of the EPA Act, HI is required to take into account, to the fullest extent possible, all matters likely to affect the environment. The determining authority is required by clause 171 of the EPA Regulation to give consideration to a number of factors, as listed in the table below.

Table 10: Summary	v of Environmental	Factors Reviewed	in Relation to f	he Activity

Relevant Consideration	Response/Assessment		
a) any environmental impact on a community	The likely impacts upon the community will be limited to minor construction-related noise and traffic impacts.	~	-ve
Does the proposal have any natural or man-made	These will be able to be suitably managed through		Nil
impact on the Health Service Facility, or the broader residential or business community?	detailed management plans to be prepared by the nominated contractor. These will be living documents regularly refined or updated as needed to address emerging or new environmental management issues as they arise.		+ve
(b) transformation of a locality	The works will not result in the transformation of the locality. The works are confined within the former		-ve
Prompt only: Does the proposal significantly change	farmland site and do not result in any built form changes.	✓	Nil
the nature of the locality?	onanges.		+ve
(c) any environmental impact on the ecosystem of the locality	The works have a limited impact on vegetation through the impact to 55 trees. No significant ecosystem or	✓	-ve (short term)
locality	biodiversity impacts will result from the proposed works.	✓	Nil (long term)
It is noted that all trees proposed to be removed will be replaced by new tree planting in the south-west corner of the site.	replaced by new tree planting in the south-west corner		+ve
d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality.	The works are wholly civil related, and no built form works are proposed. The works are required to facilitate the ongoing management of the land, and do not seek to reduce or impact the aesthetic, recreational, scientific or other environmental quality of the site.		-ve
		✓	Nil
			+ve
e) Any effect on locality, place or building having aesthetic , anthropological, archaeological,			-ve
architectural, cultural, historical, scientific, or social significance or other special value for present or future		v	Nil
generations.	will not impact upon any archaeological or cultural values on the site. No other aesthetic, anthropological, historic, scientific or social significance has been identified on the site.		+ve
(f) Any impact on the habitat of protected fauna (within			-ve
the meaning of the BC Act 2016).	or their habitats. All trees proposed to be removed are proposed to be replaced, and 13 habitat or hollow	✓	Nil
	bearing trees are proposed to be relocated.		+ve
(g) Any endangering of any species of animal, plant or	There will be no significant impacts upon any species of		-ve
other form of life, whether living on land, in water or in the air	animal, plant or other form of life, whether living on land, in water or in the air.		Nil
			+ve
(h) Any long term impacts on the environment	There are no anticipated long-term effects upon the		-ve
	environment given the modest nature of the works.	\checkmark	Nil

		+ve
Relevant Consideration	Response/Assessment	
(i) Any degradation of the quality of the environment	environment during either the construction or the operation. Mitigation measures will manage any	-ve
Prompt only: Does the proposal reduce the quality of		✓ Nil
the natural environment?	potential impacts. The existing site has already been largely changed from its natural form.	+ve
j) Any risk of safety of the environment	There is no risk to the safety of the environment.	-ve
		✓ Nil
		+ve
(k) Any reduction in the range of beneficial uses of the environment	The works will not reduce the beneficial use of the environment.	-ve
environment	environment.	✓ Nil
		+ve
(I) Any pollution of the environment	Minor localised air quality impacts during the works are suitably addressed and will be mitigated by the detailed	-ve
	Construction Management Plan and its anticipated co-	✓ Nil
	related management plans (Noise and Vibration Management; Dust, Sediment and Erosion Control measures; and the Construction Traffic Management Plan). No further polluting impacts are likely to result for the works.	+ve
(m) Any environmental problems associated with the disposal of waste	Disposal of any waste material will need to be appropriately classified and disposed of. No unusual circumstances are envisaged in this respect and typical waste handling policies will apply.	-ve
		✓ Nil
		+ve
n) Any increased demanded on resources (natural or otherwise) that are, or are likely to become, in short	There is no impact of the works upon any natural resources in short supply.	-ve
supply	·	✓ Nil
		+ve
(o) Any cumulative environmental effects with other existing or likely future activities.	The proposed works will not result in any cumulative impacts on any existing or future activities.	-ve
	·····	✓ Nil
		+ve
(p) Any impact on coastal processes and coastal hazards, including those under projected climate	Given their location, the works will have no impact upon coastal process or contribute to coastal hazards.	-ve
change conditions.		✓ Nil
		+ve
 q) applicable local strategic planning statements, regional strategic plans or district strategic plans 	The proposed works will have no bearing on the implementation of strategic plans.	-ve
made under the Act, Division 3.1,	implementation of strategic plans.	✓ Nil
		+ve
r) any other relevant environmental factors'.	other relevant environmental factors'. There are no other relevant environmental impacts as a result of these works.	-ve
	✓ Nil	
		+ve

6.2 Identification of Issues

6.2.1 Soils and Geology

Questions to consider	Yes	Νο
Will the works require land disturbance?	Yes	
Are the works within a landslip area?		No
Are the works within an area of high erosion potential?		No
Could the works disturb any natural cliff features, rock outcrops or rock shelves?		No
Will the works result in permanent changes to surface slope or topography?		No
Are there acid sulphate soils within or immediately adjacent to the boundaries of the work area? And could the works result in the disturbance of acid sulphate soils?	Yes	
Are the works within an area affected by salinity?		No
Is there potential for the works to encounter any contaminated material?		No

A Geotechnical Investigation Report has been prepared by JK Geotechnics for the proposed works and is included in **Appendix P**. This report finds that the site is suitable for the proposed works from a geotechnical perspective, subject to the geotechnical recommendations in the report being followed as per **Section 6.3**

The site is very marginally impacted by Class 2 Acid Sulfate Soils (ASS). The works will not be impacting upon the area identified as containing ASS, however, it is recommended that an ASS Management Plan is prepared to accompany the works. This is included in the mitigation measures included at **Section 6.3**.

6.2.2 Hazardous Materials and Contamination

Questions to consider	Yes	No
Is there potential for the works to encounter any contaminated material?		No
Will the works involve the disturbance or removal of asbestos?		No
Is the work site located on land that is known to be or is potentially contaminated?	Yes	
Is a Remediation Action Plan required?		No
Is the work category 2 works under the Resilience and Hazards SEPP?		No

A Detailed Site Investigation (DSI) has been undertaken by JK Environmental and is included at **Appendix G**. JK Environmental have identified that based on the scope of works, there is considered to be a low potential for unexpected, contamination-related finds. JK Environmental consider that any associated risks from unexpected finds can be easily mitigated via the development and implementation of an unexpected finds protocol. These mitigation measures are included at **Section 6.3**.

It is noted that there are no hazardous materials on the site related to building or construction.

6.2.3 Hydrology, Flooding and Water Quality

Questions to consider	Yes	No
Are the works located near a natural watercourse?	Yes	
Are the works located within a floodplain?	Yes	
Will the works intercept groundwater?		No
Will a licence under the Water Act 1912 or the Water Management Act 2000 be required?		No

A Civil Technical Report Note has been prepared by Meinhardt Group for the proposed works and is included in **Appendix C**. This notes that the site is shown as flood affected on the Eurobodalla Council planning maps, and that the proposed basins will be located outside the 1% AEP flood extent but will encroach on land affected by the PMF.

The Civil Technical Report Note concludes that the impact on flood affection in the PMF event due to the construction of the basins will be insignificant, and it is considered that there will be no impact on flood patterns as the loss of flood storage across the floodplain extent as a result of basin construction is negligible. It is noted that given the work will not impact flood patterns in any way, there is no need to notify Council under section 2.12 of the Transport and Infrastructure SEPP.

There is a watercourse on the site, however as discussed at **Section 4.6**, the watercourse does not display any typical features of a structured watercourse, and the proposed works are not anticipated to have any impact on the operation of the watercourse.

6.2.4 Ecology

Questions to consider	Yes	No
Could the works affect any Environmental Protection and Biodiversity Conservation Act 1999 (Cth) listed threatened species, ecological community or migratory species?		No
 Is it likely that the activity will have a significant impact in accordance with the Biodiversity Conservation Act (2016)? In order to determine if there is a significant impact REF report must address relevant requirements of clause 7.2 of the BC Act: Clause 7.2 (a) - Test for significant impact in accordance with clause section 7.3 of the BC Act. Clause 7.2 (c) it is carried out in a declared area of outstanding biodiversity value. 		No
Could the works affect a National Park or reserve administered by EES?		No
Is there any important vegetation or habitat (i.e. Biodiversity and Conservation SEPP) within or adjacent to the work area?		No
Could the works impact on any aquatic flora or habitat (i.e. seagrasses, mangroves)?		No
Are there any noxious or environmental weeds present within the work area?		No
Will clearing of native vegetation be required?	Yes	

Ecology

A Prescribed Ecological Actions Report (PEAR) has been prepared by Abel Ecology (**Appendix Q**) to assess the likely impacts of the proposed activities on species and ecological communities present in the area.

Given the site's history for use as farmland and pasture, the biodiversity value is well below the threshold that indicates an intact or recoverable vegetation community. Shrub diversity is moderate, but abundance is low and sparsely distributed. Lack of shrub cover is likely to account for low species diversity, particularly reptiles and small birds. Groundcovers mostly consist of grasses. The PEAR identifies that the weed species are present, given the site's history of being highly disturbed.

Given the above, the following objectives of avoid, minimise and offset have been incorporated:

Avoid: the works have been located away from the woodland area as much as possible.

- Minimise: the lies of the access road into the site have been designed so as to minimise impact on the watercourses and potential sedimentation effects. Furthermore, the nature and scope of the soil conservation works is designed to minimise potential downstream effects on receiving environments on site and adjoining lands.
- Offset: In view of the avoid and minimise considerations above, no biodiversity offset measures are required. As discussed further in the Tree Removal section below, trees removed will be replaced at a ratio of 3:1.

The PEAR concludes that there is no need for a detailed Species Impact Statement or a Biodiversity Development Application Report to be prepared to accompany this Review of Environmental Factors.

Arborist Report

An Arboricultural Impact Assessment has been prepared by Abel Ecology and is attached at **Appendix Q**. This report provides an assessment of all trees expected to be impacted by the proposed works. The report notes that a total of thirty-seven (37) trees will require protection from root and structural damage, a total of thirteen (13) hollow-bearing fauna habitat trees and associated un-damaged hollow sections will need to be relocated, and five (5) non-hollow bearing trees will be removed. In total, fifty-five (55) trees will be impacted by the proposal.

Given that the proposal will remove five trees, the proposal must include amelioration. Therefore, five new trees are proposed to be planted in the south-western corner of the site to offset the impact of the tree removal. Additional mitigation measures relating to tree removal and protection are included at **Section 6.3**.

6.2.5 Bushfire Prone Land

Questions to consider	Yes	No
Are the works located on bushfire prone land	Yes	
Do the works include bushfire hazard reduction work?		No
Is the work consistent with a bush fire risk management plan within the meaning of the <i>Rural Fires Act 1997</i> (RF Act) that applies to the area or locality in which the activity is proposed to be carried out?		N/A

A report has been prepared by Abel Bushfire and is attached at **Appendix M** which assesses the proposal for compliance against the requirements of the NSW RFS document 'Planning for Bushfire Protection 2019' (PBP 2019). This report confirms that the proposed works can meet the aim, relevant objectives and performance criteria of PBP 2019. As such, it is considered that the proposed works will not result in impacts on human life and property from the threat of bush fire.

6.2.6 Traffic, Access and Parking

Questions to consider	Yes	Νο
Will the works affect traffic or access on any local or regional roads?	Yes	
Will the works disrupt access to private properties?		No
Are there likely to be any difficulties associated with site access?		No
Are the works located in an area that may be highly sensitive to movement of vehicles or machinery to and from the work site (i.e. schools, quiet streets)?		No
Will full or partial road closures be required?		No
Will the proposal result in a loss of onsite car parking?		No
Is there onsite parking for construction workers?	Yes	

The site of the soil conservation works and ancillary road works is located on the northern side of Princes Highway in the town of Moruya. The proposed works will include the construction of an ancillary road onto and through the site to facilitate construction access for the soil conservation management works proposed in this REF. As such, a Traffic Impact Statement and a Construction Traffic and Pedestrian Management Plan (CTPMP) to support this REF have been prepared by Bitzios Consulting (included at **Appendix J**) to address any potential traffic impacts relating to the works, as well as outline any relevant mitigation measures needed to address construction traffic impacts. It is noted that the CTPMP will be refined in consultation with the nominated contractor, Transport for NSW, and Eurobodalla Shire Council.

The Traffic Impact Statement notes the following:

- In the worst-case scenario, vehicle movements are expected to be in the order of 200-240 movements per day based on the estimated haulage needs and number of workers. This level of vehicle movements is able to be accommodated on Princes Highway and its associated intersections.
- Traffic impacts of construction works will be managed by scheduling deliveries and staff shift changes outside of peak traffic periods and is not expected to warrant the need for any additional infrastructure or temporary overlay requirements to mitigate construction works operations.
- Right turn movements out of the site/construction areas will be priority controlled, with the exception of articulated vehicle movements which are
 to be managed under traffic control.
- The entry gate will be kept closed at all times, except to allow construction vehicles to enter the site and a gateman will be present during construction hours to open and close the gate as required to manage ingress of vehicles.

Having regard to the above, it is considered that Princes Highway can accommodate the expected volume of construction traffic and that any traffic impacts of the works can be adequately managed and mitigated through the implementation of the CTPMP. These mitigation measures are included at **Section 6.3**.

6.2.7 Noise and Vibration

Questions to consider	Yes	No
Are there residential properties or other sensitive land uses or areas that may be affected by noise from the proposal during construction? (i.e. schools, nursing homes, residential areas or native fauna populations)?	Yes	
Will any receivers be affected by noise for greater than three weeks?	Yes	
Are there sensitive land uses or areas that may be affected by noise from the proposal during operation?		No
Will the works be undertaken outside of standard working hours?		
Monday – Friday: 7am to 6pm		No
Saturday: 8am to 1pm		No
Sunday and public holidays: no work		
Will the works result in vibration being experienced by any surrounding properties or infrastructure?		No

A Noise and Vibration Assessment has been prepared by Arup and is included at **Appendix I**. This report considers the acoustic impact of construction and operation of the soil conservation works and ancillary construction access on adjacent sensitive receivers, and recommends relevant mitigation measures required to address and mitigate these impacts.

All construction works will be carried out within the standard construction hours. Therefore, these construction hours have been applied in the assessment of noise and vibration impacts.

The key sensitive receivers to the soil conservation works are the residential properties at 2945 Princes Highway, Moruya (Receiver R1) and at 36 Keightley Street, Moruya (Receiver R2).

The main acoustic impact expected from the proposal is the construction noise impact. There are no operational noise sources expected as a result of the proposed soil conservation works. The results of the acoustic assessment note that construction noise for the works are predicted to exceed the relevant noise management levels at the nearest most affected receivers. Receiver R2 (residences at 36 Keightley Street, Moruya) is expected to be considered as a 'Highly noise affected' receiver during some activities, due to the proximity of the receiver to the construction area. It is however important to note that the assessment represents a 'worse case scenario' of all construction machinery operating continuously and concurrently, which is not expected to occur in practice.

In general, however, construction works are temporary in nature, and therefore potential noise impacts on the community and surrounding environment will not be permanent or continuous.

Vibration impact to structures is not expected from the construction works. Exceedance of the human comfort criteria may occur at Receiver R2 (residences at 36 Keightley Street, Moruya) depending on the use and size of vibratory roller. The duration of impact is not, however, expected to be prolonged.

On the basis of the findings above where construction noise is expected to exceed the relevant noise management levels at the nearest most affected receivers, it is necessary to consider appropriate mitigation and management measures to ensure any noise impacts are acceptable. A detailed Construction Noise and Vibration Management Plan should be prepared, which includes mitigation measures to manage potential impacts on the surrounding residential receivers.

Any other relevant mitigation measures are included at Section 6.3.

6.2.8 Air Quality and Energy

Questions to consider	Yes	No
Could the works result in dust generation?	Yes	
Could the works generate odours (during construction or operation)	Yes	
Will the works involve the use of fuel-driven heavy machinery or equipment?	Yes	
Are the works located in an area or adjacent to land uses (e.g. schools, nursing homes) that may be highly sensitive to dust, odours, or emissions?		No
Have energy use considerations been included in the project design?		No

The future development works will be supported by a detailed Construction Management Plan prepared by the nominated contractor. This plan will specify the details of air quality, odour and energy. However, it is noted that the works are relatively minor and only relate to the undertaking of soil conservation works (including the construction of two bioretention basins with sediment basins), and therefore, the construction impacts will be able to be appropriately mitigated.

Appropriate mitigation measures are included at Section 6.3.

6.2.9 Non-Aboriginal Heritage

Questions to consider	Yes	No
Are there any heritage items listed on the following registers within or in the vicinity of the work area? NSW heritage database (includes section 170 and local items) Commonwealth EPBC heritage list?		No
Will works occur in areas that may have archaeological remains?		No

A Statement of Heritage Impact has been prepared by Comber Consultants and is included at **Appendix L**. This report finds that the study area is not listed on the State Heritage Register, nor is it listed as a heritage item or identified as being within a heritage conservation area under the *Eurobodalla Local Environmental Plan 2012*. There are also no listed structures within the vicinity of the study area. As such, the proposed works are not expected to physically or visually result in any non-Aboriginal heritage impacts.

Notwithstanding the above, the Statement of Heritage Impact makes the following recommendations:

- Prepare and implement an Interpretation Plan and Strategy which details the Aboriginal and non-Aboriginal history of Moruya and the site.
- If Aboriginal objects or human remains are unexpectedly uncovered during the soil conservation works, all work must cease in the vicinity of the
 object / human remains and an area of at least one metre around the object / human remains must be secured and cordoned off. The
 archaeological consultant must then be immediately contacted. Works cannot recommence until advised by the consultant in the case of
 Aboriginal objects, or until suitable management procedures are in place in the case of human remains.

These mitigation measures are detailed in Section 6.3.

6.2.10 Aboriginal Heritage

Questions to consider	Yes	No
Will the works disturb any culturally modified trees?		No

Are there any known items of Aboriginal heritage located in the works area or in the vicinity of the works area (e.g. previous studies or reports from related projects)?		
Are there any other sources of information that indicate Aboriginal objects are likely to be present in the area (e.g. previous studies or reports from related projects)?		No
Will the works occur in the location of one or more of these landscape features and is on land not previously disturbed?		
Within 200m of waters.		
Located within a sand dune system.	Yes	
Located on a ridge top, ridge line or headland.		
Located within 200m below, or above a cliff face.		
• Within 20m of or in a cave, rock shelter or a cave mouth		

An Aboriginal Archaeological Assessment (AAA) has been prepared by Comber Consultants and is included at **Appendix O**. A search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken as part of this report, which identifies that there are five Aboriginal sites within the study area. These sites contain Aboriginal objects. Previous archaeological testing has been undertaken within the study area which revealed a high density of Aboriginal artefacts. It is noted that there is a mapped watercourse on the site (see **Section 6.2.2**), however it is not noted as a geographical feature of significance.

The AAA notes that the proposal has the potential to impact on five registered sites through direct and indirect impact as a result of the following:

- · Construction of three erosion and sediment basins;
- · Construction of an ancillary road into the site to facilitate construction access;
- · Contamination and geotechnical testing including drilling and excavating sampling pits;
- Movement of the drill rig over the site;
- Movement of vehicles and equipment needed to construct the erosion and sediment basin;
- Installation of a works compound;
- Tree planting.

The sites to be impacted are identified in the AAA as:

- 58-4-1104 direct impact
- 58-4-1317 direct impact
- 58-4-1318 direct impact
- 58-4-1319 direct impact
- 58-4-1320 indirect impact
- The three scarred trees will not be impacted.

As Aboriginal objects are protected under the *National Parks and Wildlife Act 1979*, it is an offence to harm such objects so it will be necessary to apply for an Aboriginal Heritage Impact Permit (AHIP) to undertake the proposed works given that avoidance cannot be achieved. This will require archaeological salvage of the site to be undertaken in consultation with the local Aboriginal community.

The AAA specifically makes the following recommendations for the works:

- Aboriginal consultation should be undertaken in accordance with Heritage NSW's Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 and an Aboriginal Cultural Heritage Assessment Report (ACHA) should be prepared for the works.
- Undertake Archaeological salvage in consultation with the Cobowra Local Aboriginal Land Council, the South Coast People who are the Native Title claimants and other Registered Aboriginal Parties.

- Apply for an AHIP to undertake archaeological salvage works and soil conservation works, as potential impacts on Aboriginal objects is unable to be avoided.
- · Implement appropriate measures to protect and monitor the health and longevity of the three scarred trees.
- · Develop and implement an Interpretation Strategy and Plan to showcase the Aboriginal history of Moruya and the site.

These mitigation measures are detailed in Section 6.3.

6.2.11 Visual Amenity

Questions to consider	Yes	No
Are the works visible from residential properties, or other land uses that may be sensitive to visual impacts?	Yes	
Will the works be visible from the public domain?		No
Are the works located in areas of high scenic value?		No
Will the works involve night work requiring lighting?		No

The works may be visible from the properties to the north of the site. However, the basins will be very marginal in nature and will not have a significant impact on the landscape. The visual impact of any construction site and works will be temporary in nature and are not anticipated to significantly impact any surrounding residents or sensitive receivers.

6.2.12 Land Uses and Services

Questions to consider	Yes	No
Will the works result in a loss of, or permanent disruption of an existing land use?		No
Will the works involve the installation of structures or services that may be perceived as objectionable or nuisance?		No
Will the works impact on, or be in the vicinity of other services?		No

6.2.13 Waste Generation

Questions to consider	Yes	No
Will the works result in the generation of non-hazardous waste?		No
Will the works result in the generation of hazardous waste?		No
Will the works result in the generation of wastewater requiring off-site disposal?		No

6.2.14 Cumulative Impact

Questions to consider	Yes	No
Has there been any other development approved within 500m of the site?	Yes	
Will there be significant impacts (for example, including but not limited to, construction traffic impacts) from other development approved or currently under construction within 500m of the site?		No

An REF determined by Health Infrastructure in mid-2022 approved a new roundabout to be located on the Princes Highway which is designed to provide access into the site. This roundabout will be constructed at a similar time to the proposed soil conservation management works, but is being constructed to facilitate the access into and management of the site. Therefore, given their relationship, it is not anticipated that there will be a significant cumulative impact resulting from both works.

6.3 Summary of Mitigation Measures

spect	Mitigation measure	Timing1
Construction noise and vibration	For all construction works, the contractor is to prepare a detailed Construction Noise and Vibration Management Plan (CNVMP). This plan should include but not be limited to the following:	Prior to Commencement of Works
	 Roles and responsibilities 	
	 Noise and vibration sensitive receiver locations 	
	 Areas of potential impact 	
	Mitigation strategy	
	Monitoring methodology	
	 Community engagement strategy. 	
	 Community engagement strategy. 	
	Ensure the appropriate choice of low-noise construction equipment and/or methods	Prior to Commencement of Works
	Adhere to the standard approved working hours as outlined in the Project Approval.	During construction/Undertaking of works
	If any extenuating circumstances require works to be undertaken outside of standard working hours, ensure limiting of noise.	During Construction/ Undertaking of Works
	Locate stationary plant (concrete pumps, air- compressors, generators, etc.) as far away as possible from sensitive receivers	During Construction/ Undertaking of Work
	Use site sheds and other temporary structures or screens/hoarding to limit noise exposure where possible.	During Construction/ Undertaking of Work
	Modify construction equipment or the construction methodology or programme if necessary. This may entail programming activities to occur concurrently where a noisy activity will mask a less noisy activity, or, at different times where more than one noisy activity will significantly increase the noise. The programming should also consider the location of the activities due to occur concurrently.	During Construction/ Undertaking of Work
	Carry out consultation with the community during construction including, but not limited to; advance notification of planned activities and expected disruption/effects, construction noise complaints handling procedures.	During Construction/ Undertaking of Works
	Regularly train workers and contractors (such as at toolbox talks) to use equipment in ways to minimise noise.	During Construction/ Undertaking of Works
	Site managers to periodically check the site and nearby residences for noise problems so that solutions can be quickly applied.	During Construction/ Undertaking of Works
	Avoid the use of radios or stereos outdoors.	During Construction/ Undertaking of Works
		- •

	Avoid shouting and minimise talking loudly and slamming vehicle doors.	During Construction/ Undertaking of Works
	Turn off all plant and equipment when not in use.	During Construction/ Undertaking of Works
	Comply with the recommended minimum working distances for vibration intensive plant as identified in the Noise and Vibration Management Plan prepared by Arup, dated 6 December 2022.	During Construction/ Undertaking of Works
Traffic management	A detailed Construction Traffic and Pedestrian Management Plan (CTPMP) is to be prepared and refined as appropriate in consultation with the nominated contractor, TfNSW and Eurobodalla Shire Council. This will address any potential traffic impacts relating to the works, as well as outline any relevant mitigation measures needed to address construction traffic impacts.	Prior to Commencement of Works
	Prepare and receive approval for a Traffic Control Plan which indicates the road worksite arrangements to ensure the safety of all road users as well as workers at the site.	Prior to Commencement of Works
	Engage the services of a qualified Traffic Control subcontractor to provide traffic control services, where necessary.	During Construction/ Undertaking of Works
	Ongoing inspections of the worksite and traffic management measures.	During Construction/ Undertaking of Works
	Monitoring and reporting of any incidences.	During Construction/ Undertaking of Works
Aboriginal Heritage	Undertake Aboriginal consultation and prepare an Aboriginal Cultural Heritage Assessment Report.	Prior to Commencement of Works
	Undertake Archaeological salvage in consultation with the Cobowra Local Aboriginal Land Council, the South Coast People and other Registered Aboriginal Parties.	Prior to Commencement of Works
	Apply for an AHIP to undertake the archaeological salvage and soil conservation works.	Prior to Commencement of Works
	Implement measures to actively manage and protect the three scarred trees.	Prior to Commencement of Works
	Develop and implement an Interpretation Strategy and Plan to showcase the Aboriginal history of Moruya and the site.	Prior to Commencement of Works
Non-Aboriginal Heritage	Prepare and implement an Interpretation Plan and Strategy which details the Aboriginal and non-Aboriginal history of Moruya and the site.	Prior to Commencement of Works
	If Aboriginal objects or human remains are unexpectedly uncovered during the soil conservation works, all work must cease in the vicinity of the object / human remains and an area of at least one metre around the object / human remains must be secured and cordoned off. The archaeological consultant must then be immediately contacted. Works cannot recommence until advised by the consultant in the case of aboriginal objects, or until suitable	During Construction/ Undertaking of Works

	management procedures are in place in the case of human remains.	
Geotechnical	Further geotechnical sampling and laboratory testing is to be undertaken to assess the suitability of the existing site soils for use in water retaining embankments used in the sediment basin construction.	Prior to Commencement of Works
	Excavated spoil for off-site disposal needs to be suitably classified for waste disposal purposes.	Prior to Commencement of Works
	All temporary excavations are to be inspected by the geotechnical engineers at not greater than 1.5m depth intervals and if there is any concern about the stability of excavations. The geotechnical engineers can provide specific advice during excavation. Geotechnical inspection of excavations is essential to identify any adverse defects present and to provide advice on stabilisation measures where required.	Prior to Commencement of Works
	To avoid the need for completing engineered earthworks to construct the embankments for the sediment basins, basins should be designed as 'in-cut' only. Should embankments be required, these will need to be appropriately designed by the civil engineers or embankment designer, and the design must include earthworks and compaction recommendations, material types, and assessment of embankment stability. Further geotechnical and laboratory testing will be required to identify the suitability of existing site materials for embankment construction.	Prior to Commencement of Works
	All excavation is to be carried out with reference to the latest version of ' <i>Excavation Work</i> – Code of Practice' by SafeWork NSW.	During Construction/ Undertaking of Works
	Excavation of the soils and any extremely weathered granite should be achievable using conventional earthmoving equipment.	During Construction/ Undertaking of Works
	Excavation of granite bedrock or large core stones of low or higher strength will require rock excavation techniques.	
	Any seepage encountered during excavation should be controllable using conventional sump and pump techniques.	During Construction/ Undertaking of Works
	Surcharge loads such as construction traffic, site sheds etc. are to be no closer than 2H from the crest of any temporary batter, where H is the vertical height of the batter. Surface drainage should not be allowed to flow over the crest of temporary batters, and should be directed and discharged in a manner which avoids concentrated flows and erosion. Granitic materials can be particularly susceptible to	During Construction/ Undertaking of Works

	erosion and careful attention to surface drainage and surface protection of works to reduce the adverse effects of erosion is recommended.	
	Permanent batters through the residual soils and all bedrock up to and including very low strength should be battered at not steeper than 1 Vertical (V) in 3 Horizontal (H).	During Construction/ Undertaking of Works
	Permanent batters through low or higher strength bedrock should be battered at not steeper than 1V in 1H, although steeper permanent batters may also be feasible subject to specific inspection and mapping by the geotechnical engineers.	During Construction/ Undertaking of Works
	Any permanent batters will need to be fully protected from erosion, in the long term, by a suitable and approved erosion protection measure. Suitable measures would include revegetation or shotcrete. Where revegetation is being proposed, consideration should be given to flattening the permanent batters even further than recommended above to assist with initial vegetation and topsoil establishment, to reduce the risk of topsoil washing from the face during heavy rainfall, and to provide for ease of maintenance.	During Construction/ Undertaking of Works
	Subgrade should be appropriately prepared for the filling along the access road, as per Section 6.3.4 of the Geotechnical Investigation Report prepared by JK Geotechnics.	During Construction/ Undertaking of Works
	Rectify any deformation that occurs to the proposed pavement profile for the access road should be rectified by the contractor to ensure access is maintained.	During Construction/ Undertaking of Works
Contamination	Either an Intrusive ASS Investigation should be undertaken, or an ASS Management Plan should be implemented for the proposed soil conservation works, given that a small portion of the site is within an ASS risk area and this encroaches into the footprint of one of the sediment basins.	Prior to Commencement of Works
	Develop and implement an unexpected finds protocol by a suitably qualified contaminated land consultant prior to commencement of earthworks and implement the protocol during earthworks and construction.	Prior to Commencement of Works & During Construction/ Undertaking of Works
	The waste classification of any material to be disposed off-site should be confirmed.	Prior to Commencement of Works
	The fill/topsoil in the vicinity of BH26 and BH133 is classified as General Solid Waste (non- putrescrible) for off-site disposal purposes due to the detection of traces of hydrocarbons in these	

	areas. If excavation and removal of soil in these areas is required, further testing should occur to confirm this classification.	
Salinity	The aggressivity results of the soils and groundwater outlined in the Preliminary Salinity Assessment Result prepared by JK Environments should be reviewed and incorporated into the design of the proposal by the project team,	Prior to Commencement of Works
	In the event that the proposed development includes excavation, crushing and re-use of excavated bedrock as fill on site as part of the development, the salinity/aggressivity conditions within the bedrock should be checked so that findings can be considered in the context of the earthworks and the built form of the development.	Prior to Commencement of Works
Arboricultural	Engage an arborist to ensure and certify that tree protection measures are satisfactorily implemented and to provide advice as applicable. The arborist will inspect the site at least once every six months during construction, and once upon completion of construction.	Prior to Commencement of Works
	Construct tree protection fencing around trees prior to construction to prevent unnecessary root damage and keep in place until construction is completed.	Prior to Commencement of Works & During Construction/ Undertaking of Works
	Where root damage is expected within the tree protection zone of a retained tree, consider installing a 'floating' footpath or road over the impacted area of the tree protection zone to avoid any disturbance of the soil, thereby protecting the roots and health of retained trees.	Prior to Commencement of Works
	Exclude all site activity from Tree Protection Zones during demolition, construction and demobilisation phases.	Prior to Commencement of Works & During Construction/ Undertaking of Works
	Apply mulch around retained trees prior to construction to stimulate growth of absorbing roots. Reapply mulch annually to compensate for root loss.	Prior to Commencement of Works
	Water trees during periods of low rainfall to boost the vitality and adaptability of the trees.	During Construction/ Undertaking of Works
	Cleanly cut roots encountered during excavation to reduce damage to roots.	During Construction/ Undertaking of Works
	Engage a qualified ecologist to inspect hollow- bearing trees before they are removed.	Prior to Commencement of Works
	Potential habitat trees are to be inspected for hollows by a qualified ecologist before removal.	Prior to Commencement of Works

2	No construction work or vehicles are to be within 20 metres of the designated scar trees during demolition, construction and demobilisation ohases.	During Construction/ Undertaking of Works
I	All site activity must be excluded from the tree protection zones of retained trees during demolition and construction phases.	During Construction/ Undertaking of Works
t v	Route all trenching for underground services butside the tree protection zones of retained trees. If any installation of underground services will occur within tree protection zones, engage an arborist to supervise.	During Construction/ Undertaking of Works
	Crown pruning must comply with the appropriate class of pruning described in AS4373-2007 <i>Pruning of amenity trees</i> , and be undertaken by a qualified arborist in accordance with best practice.	During Construction/ Undertaking of Works
I	Advice must be sought by an arborist wherever roots over 40mm diameter are encountered during excavation.	During Construction/ Undertaking of Works
s 1	Any and all landscaping or gardening must use species that are native to the <i>Grassy Woodland</i> in the Southeast Corner Bioregon vegetation community.	During Construction/ Undertaking of Works
t v r	An environmental offset area must be established to ameliorate the impacts of the proposal. The vegetation planted within the offset must be native to the Lowland Grassy Woodland vegetation community. Specifications can be finalised with a Vegetation Management Plan.	Following Completion of Works
	Revegetate exposed soils with native pasture grasses	Following Completion of Works
	Planting of replacement trees for those removed at a rate of 3:1	Following Completion of Works
 	Conduct a pre-clearance survey for hollow- bearing trees to relocate resident fauna, and the hollows salvaged and relocated under the provisions of a Hollow Management Guideline document	Prior to Commencement of Works
:	Supervise works daily by an ecologist	During Construction/ Undertaking of Works
I	Preparation of a Vegetation and Fauna Management Plan, and implementation of the nitigation measures set out in it	Prior to Commencement of Works & During Construction/ Undertaking of Works

Ecology

6.4 Summary Impacts

Based on the identification of potential issues, and an assessment of the nature and extent of the impacts of the proposed development, it is determined that:

- The extent and nature of potential impacts are low, and will not have significant adverse effects on the locality, community and the environment;
- Potential impacts can be appropriately mitigated or managed to ensure that there is minimal effect on the locality, community; and
- Given the above, it is determined that an EIS is not required for the proposed development activity.

7. Justification and Conclusion

The proposed soil conservation works and construction of an ancillary road into and around the site to facilitate construction access at the site legally described as Lot 2 DP 1281576 on Princes Highway, Moruya is subject to assessment under Part 5 of the EPA Act. The REF has examined and taken into account to the fullest extent possible all matters affecting, or likely to affect, the environment by reason of the proposed activity.

As discussed in detail in this report, the proposed works will not result in any significant or long-term impact. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

As outlined in this REF, the proposed activity can be justified on the following grounds:

- It responds to an existing need within the community.
- It generally complies with, or is consistent with all relevant legislation, plans and policies.
- It has minimal environmental impacts.
- · Adequate mitigation measures have been proposed to address these impacts.

The environmental impacts of the proposal are not likely to be significant and, therefore, it is not necessary for an EIS to be prepared and approval to be sought for the proposal from the Minister for Planning under Part 5.1 of the EPA Act. On this basis, it is recommended that HI approve the proposed activity in accordance with Part 5 of the EPA Act and subject to the adoption and implementation of matters outlined in this report.

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