NSW NATIONAL PARKS & WILDLIFE SERVICE

Review of Environmental Factors:

Somersby Falls Precinct Upgrade

Department of Planning and Environment, www.environment.nsw.gov.au
EES 2022/0294; February 2022, update July 2022

Contents

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Document control

Version	Date	Author/Modified by	Approved by
V1 – Prelim Draft	14/11/22	Laurie Pasco/ Rachel Kempers	Rachel Kempers
V2 – Final	20/11/22	Laurie Pasco	

Executive Summary

Somersby Falls Picnic Area is located at the end of Somersby Falls Road, Somersby in Brisbane Water National Park on NSW Central Coast west of Gosford, 1hr north of Sydney.

The picnic area is located within a forest setting, with visitor facilities including parking, picnic tables, toilets, information shelters, and a short walking track leading to a cascading waterfall. Elevated timber walkways, steps and a natural surface walking track leads visitors from the top falls to the mid and lower falls.

Due to its proximity to the M1, Gosford and Sydney, visitation levels have been consistently increasing with over 110,000 visitors recorded in 2021. Park Use fee (PUF) data from Nov 21 to Nov 22 shows over 4700 day passes alone sold at Somersby Falls parking station, with peaks during school holyday periods. The highest pass sales were recorded in January 2022.

The existing facilities and associated infrastructure are inadequate and outdated, resulting in increased maintenance liabilities and limited capacity to meet both current and future demand.

Visitor facilities are failing to meet visitor capacity expectations; drainage and erosion control measures are degraded and underperforming; inadequate facilities pose a potential risk to visitor safety; there are community concerns around vehicle congestion and access issues and there is limited accessibility for disabled visitors.

The proposed upgrade of outdated asset components of the Somersby Falls Precinct aims to enhance the visitor experience, safety and revenue through improved layout and amenities, whilst maintaining the natural features and character of the Somersby Falls Picnic Area and associated assets, within an allocated budget, and meeting community expectations.

The goal will be achieved by:

- Decommissioning the existing wastewater septic system, replacing it with an increased capacity compliant system.
- Decommissioning existing amenities facilities, replacing it with a new 8 stall accessible amenities structure, including rainwater collection for sustainable flushing of toilets.
- Replacing the single existing BBQ with 6 new gas BBQs.
- Constructing an outdoor education/group area.
- Constructing an increased capacity carpark and small bus turning bay/drop off zones.
- Improving restricted mobility access to/within the precinct by providing considered disabled access provisions – walking tracks, new viewing platforms and amenities.
- Protecting sensitive cultural sites located adjacent to the proposed upgrade works.

Below is a summary of key components to be upgraded

Item	Current/existing	Proposed
Car parking	22	60
Disabled car parking spaces	0	4
Amenities	4	8
Wastewater capacity	5,000L	30,000L
Rainwater tank	0	10,000L
BBQ (gas)	1	6
Picnic Tables	6	10
Bins	6	12
Viewing platforms	0	1

The construction plans have been prepared by a qualified and experienced landscape architect, civil plans by an engineer, an ecologist provided ecological assessment input and an archaeologist has led the Aboriginal heritage impact assessment for the proposed works.

The project is funded under the Improving Access to National Parks Program (IANP) with a total budget over 4 years of $2,048,000.

1. Brief description of the proposed activity

Proposal name and brief description	The Somersby Falls Precinct upgrade includes the construction of a new carpark, new amenities, upgrade landscaped picnic area, new accessible viewing platform to improve visitor safety and inclusive access.
Location of activity	Somersby Falls Picnic Area. See Figure 1 and Figure 2
Name of NPWS park or reserve	Brisbane Water National Park
Description of any unreserved land	Crown Land Road Reserve
NPWS Area	Central Coast Area, Hunter Central Coast Branch
Council	Central Coast Council
NSW State electorate	Gosford
Estimate capital cost of project*	$2,048,000
Estimated duration of project	3 years +: 2 years – design/approvals/procurement 6 months - construction 6 months – defects Ongoing – management and maintenance
Proposed commencement date	January 2023 – construction commences
Proposed completion date	Dec 2023 – construction and defects completed

* Publication of the Review of Environmental Factors is required for proposals with a capital investment value of >$5 million and which commence after 1 July 2022.

Figure 1 Regional Position of Study Area

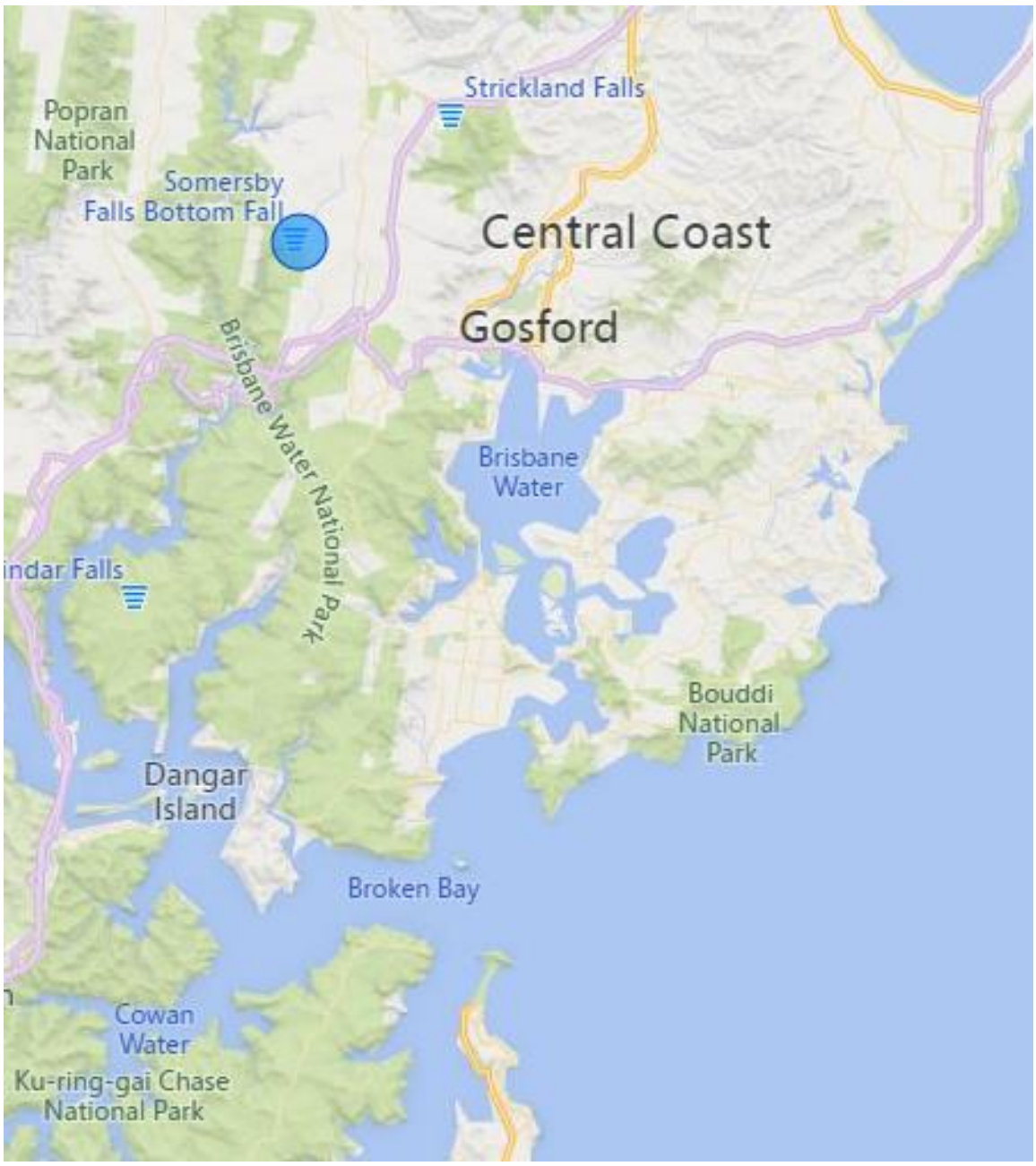


Figure 2 Location of the activity

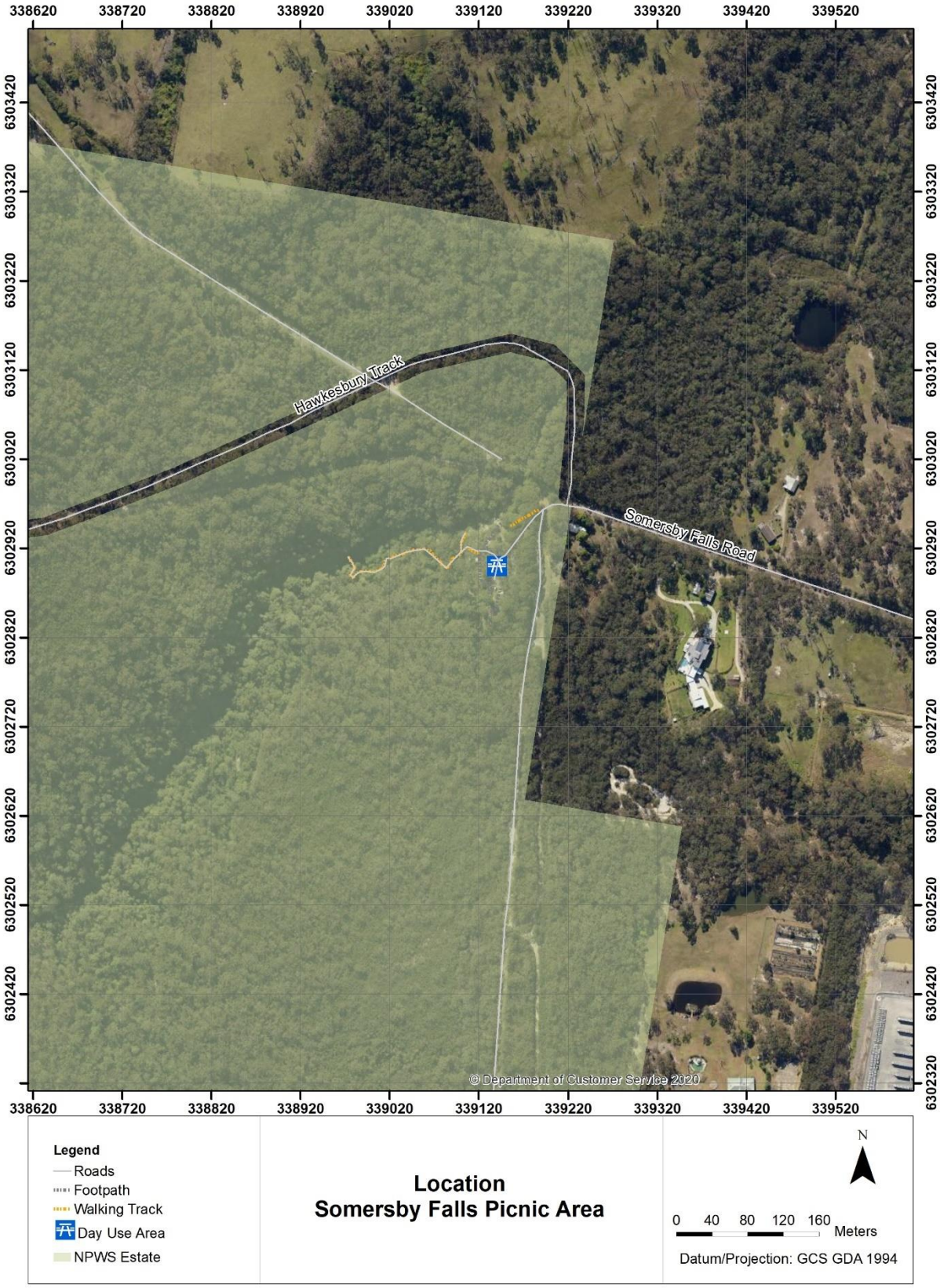
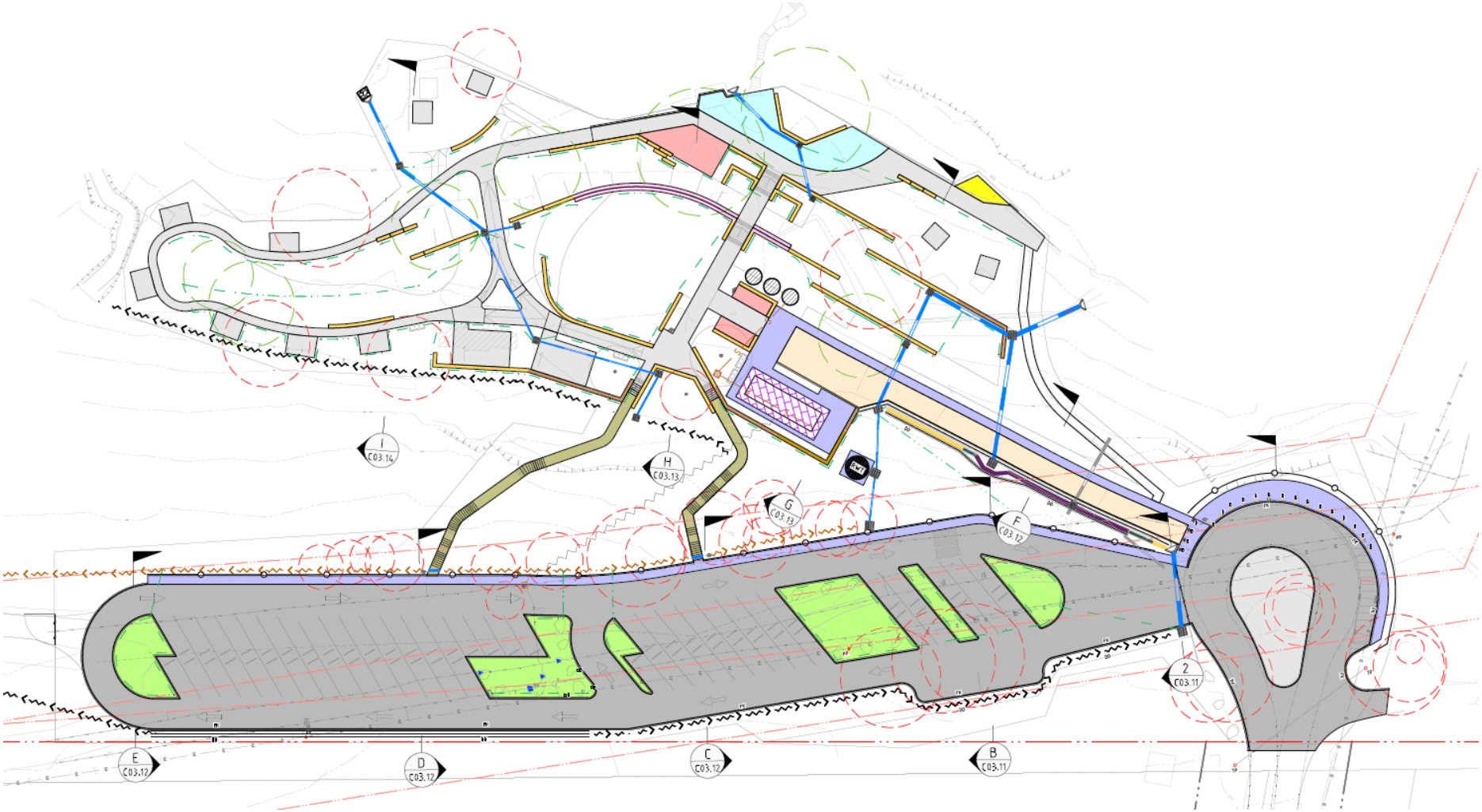


Figure 3 Site plan



Proposed project upgrades (civil design package DD_C01.21)

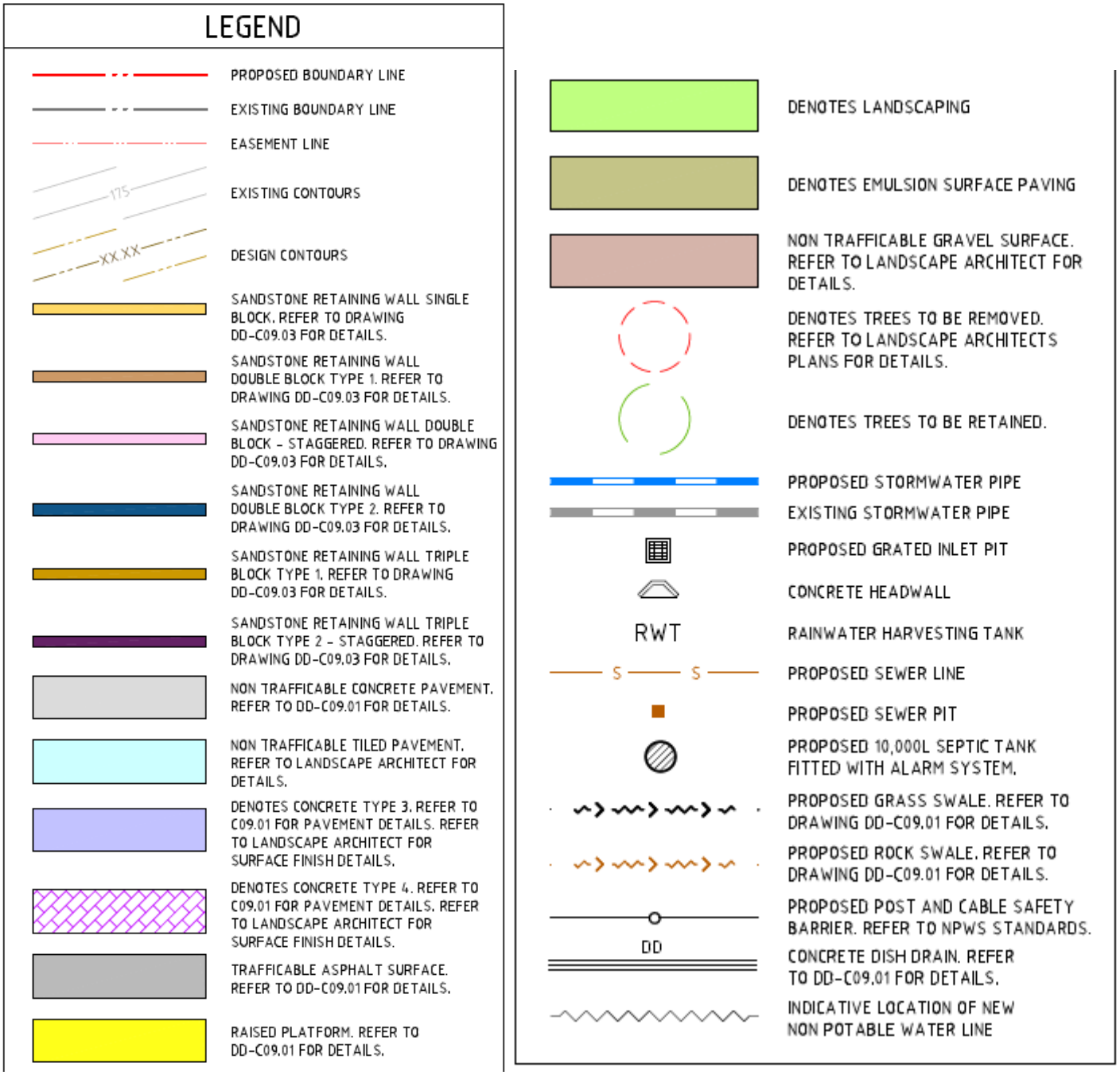
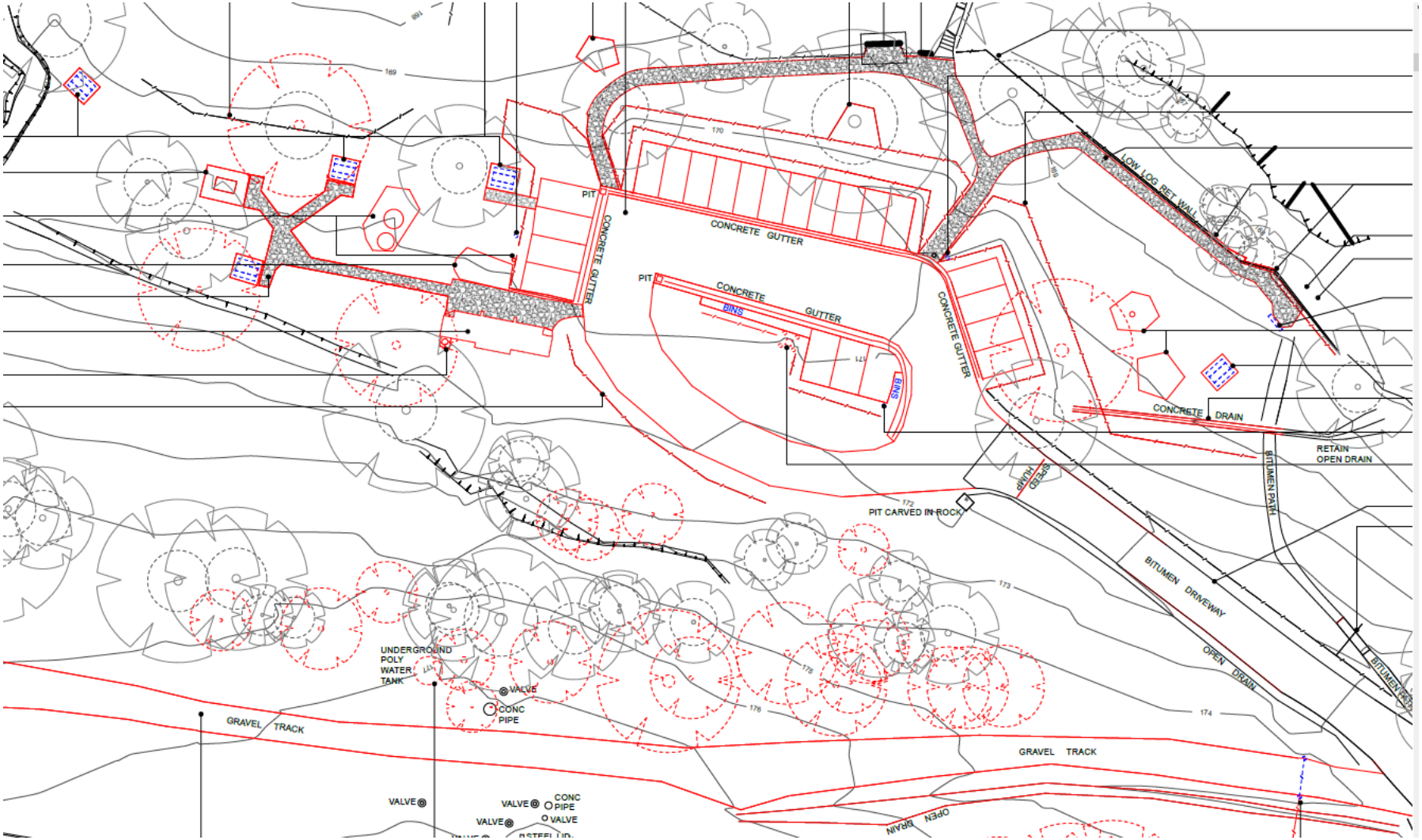
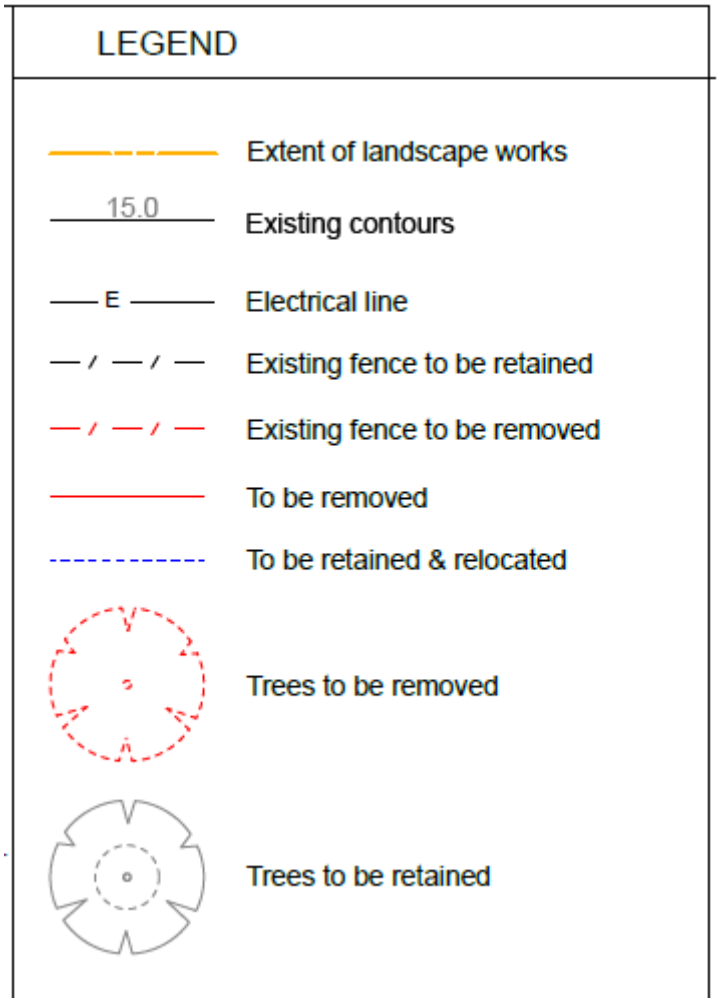

LEGEND
PROPOSED BOUNDARY LINE
EXISTING BOUNDARY LINE
EASEMENT LINE
EXISTING CONTOURS
DESIGN CONTOURS
SANDSTONE RETAINING WALL SINGLE BLOCK. REFER TO DRAWING DD-C09.03 FOR DETAILS.
SANDSTONE RETAINING WALL DOUBLE BLOCK TYPE 1. REFER TO DRAWING DD-C09.03 FOR DETAILS.
SANDSTONE RETAINING WALL DOUBLE BLOCK - STAGGERED. REFER TO DRAWING DD-C09.03 FOR DETAILS.
SANDSTONE RETAINING WALL DOUBLE BLOCK TYPE 2. REFER TO DRAWING DD-C09.03 FOR DETAILS.
SANDSTONE RETAINING WALL TRIPLE BLOCK TYPE 1. REFER TO DRAWING DD-C09.03 FOR DETAILS.
SANDSTONE RETAINING WALL TRIPLE BLOCK TYPE 2 - STAGGERED. REFER TO DRAWING DD-C09.03 FOR DETAILS.
NON TRAFFICABLE CONCRETE PAVEMENT. REFER TO DD-C09.01 FOR DETAILS.
NON TRAFFICABLE TILED PAVEMENT. REFER TO LANDSCAPE ARCHITECT FOR DETAILS.
DENOTES CONCRETE TYPE 3. REFER TO C09.01 FOR PAVEMENT DETAILS. REFER TO LANDSCAPE ARCHITECT FOR SURFACE FINISH DETAILS.
DENOTES CONCRETE TYPE 4. REFER TO C09.01 FOR PAVEMENT DETAILS. REFER TO LANDSCAPE ARCHITECT FOR SURFACE FINISH DETAILS.
TRAFFICABLE ASPHALT SURFACE. REFER TO DD-C09.01 FOR DETAILS.
RAISED PLATFORM. REFER TO DD-C09.01 FOR DETAILS.
DENOTES LANDSCAPING
DENOTES EMULSION SURFACE PAVING
NON TRAFFICABLE GRAVEL SURFACE. REFER TO LANDSCAPE ARCHITECT FOR DETAILS.
DENOTES TREES TO BE REMOVED. REFER TO LANDSCAPE ARCHITECTS PLANS FOR DETAILS.
DENOTES TREES TO BE RETAINED.
PROPOSED STORMWATER PIPE
EXISTING STORMWATER PIPE
PROPOSED GRATED INLET PIT
CONCRETE HEADWALL
RWT
RAINWATER HARVESTING TANK
S
S
PROPOSED SEWER LINE
PROPOSED SEWER PIT
PROPOSED 10,000L SEPTIC TANK FITTED WITH ALARM SYSTEM.
PROPOSED GRASS SWALE. REFER TO DRAWING DD-C09.01 FOR DETAILS.
PROPOSED ROCK SWALE. REFER TO DRAWING DD-C09.01 FOR DETAILS.
PROPOSED POST AND CABLE SAFETY BARRIER. REFER TO NPWS STANDARDS.
DD
CONCRETE DISH DRAIN. REFER TO DD-C09.01 FOR DETAILS.
INDICATIVE LOCATION OF NEW NON POTABLE WATER LINE

Figure 4 Demolition Plan



Demolition Plan (Car park and Picnic Tender Documentation LA101)


LEGEND
Extent of landscape works
15.0
Existing contours
E
Electrical line
Existing fence to be retained
Existing fence to be removed
To be removed
To be retained & relocated
Trees to be removed
Trees to be retained

2. Proponent's details

Contact name	Andrew Bayley
Position	Team Leader Rangers
Street address	59 Girrakool Road Somersby NSW 2250
Postal address (if different to above)	PO box 8086 Summerland Point NSW 2259
Contact numbers (both office and mobile numbers)	02 43204213 0438 621 160
Email	Andrew.bayley@environment.nsw.gov.au

NPWS/EHG proponents

Area Manager or Unit Manager	Steve Atkins

3. Permissibility and assessment pathway

3.1 Permissibility under NSW legislation

The following sections outline how the activity is permissible under applicable NSW legislation.

3.1.1 National Parks and Wildlife Act 1974 (NPW Act) and NPW Regulation

Objects of the Act (s.2A)

This activity is permissible as it is consistent with the Objects of the NPWS Act (s.2A) as follows:

- the proposal is consistent with Object (1)(c) as the upgraded facilities would foster public appreciation, understanding and enjoyment of nature and cultural heritage and their conservation
- the proposal is consistent with Object (1)(b)(ii) as it would contribute to the conservation of Somersby Falls, which is a place of social value to the people of NSW
- the proposal is consistent with Object (1)(d) as the upgraded facilities align with the management principles for national parks, as discussed below, and would allow NPWS to continue managing the site in accordance with those principles.

Reserve management principles (s.30E–30K)

Section 30E(1) of the NPW Act outlines the purpose for which national parks are reserved, and states that: "*The purpose of reserving land as a national park is to identify, protect and conserve areas containing outstanding or representative ecosystems, natural or cultural features or landscapes or phenomena that provide opportunities for public appreciation and inspiration and sustainable visitor or tourist use and enjoyment so as to enable those areas to be managed in accordance with subsection (2)*." The activity is permissible as it is consistent with this purpose, particularly as it would provide opportunities for public appreciation and inspiration and sustainable visitor use and enjoyment.

The activity is also permissible given it is consistent with the management principles for national parks listed in Section 30E(2), particularly given:

- the proposal would promote public appreciation and understanding of the national park's natural and cultural values
- the proposal would provide for sustainable visitor and enjoyment that is shown throughout this REF to be compatible with the conservation of the national park's natural and cultural values, particularly the new viewing platform and fencing that will stop visitors walking over the rocks of the top falls and protect aboriginal sites
- the proposal facilitates the sustainable use of existing facilities through their upgrade, having regard to the conservation of the national park's natural and cultural values, particularly given the majority of the works are within the existing disturbed footprint.

The proposed upgrade to the Somersby Falls carpark and boardwalk will fulfil the NPWS's obligations under the NPW Act by increasing opportunities for the public to enjoy and appreciate park values through increased parking spaces, safer access to the lower falls and provision of facilities, including toilets and picnic tables.

☒ Title and relevant sections of plan of management or statement of management intent

The proposed activity is consistent with the Brisbane Water National Park Plan of Management (PoM):

- a specific objective of the park's management is given in section 3 (p. 10/30) as: "*To provide car based recreational facilities at Somersby Falls, Girrakool and Pearl Beach.*"
- Section 4.3.2 (p. 24/30) identifies that *"* The picnic area at Somersby Falls will be upgraded as the primary facility area in the northern section of the park."*

☒ Title and relevant section of any applicable conservation action plan (CAP) for an asset of intergenerational significance (AIS) and the relevant AIS site number.

The adopted Conservation Action Plan for Somersby Mintbush (*Prostanthera junonis*), August 2022 identifies disturbance as a key risk to this species. In particular unauthorised maintenance activities.

Environmental impacts as a result of the proposed upgrade at Somersby Falls Picnic Area is being assessed under this REF, including a test of significance at Appendix 1.

The study area overlaps the Somersby Mintbush AIS site number AIS-E0-065 which is 52.8ha in size. There are no known records of Somersby Mintbush within the study area and the proposal will only disturb up to 0.16ha (0.30%) of this AIS site (see 8.1.5 for further details).

☐ Leasing, licensing and easement provisions (Part 12)

NA

☒ (**for internal NPWS/EHG projects only)** NPWS/EHG management powers and responsibilities (s 8 and s 12)

Permissible under s.8 Miscellaneous functions of Chief Executive:

(3) the Chief Executive shall in the case of every state conservation area:

(b) arrange for the carrying out of such works as the Chief Executive considers necessary for or in connection with the management and maintenance thereof.

Permissible under s12 Powers and function of service:

The Service is to carry out such works and activities as the Minister may direct, either generally or in a particular case, in relation to the following:

(f) the provision of facilities and opportunities for sustainable visitor or tourist use and enjoyment on land reserved under this Act.

The proposed activity forms part of the management powers and responsibilities of the NPWS under s.8 and s.12 of the Act. Other management powers or responsibilities outlined in the Act will not be neglected by the Service as a result of the proposed activity.

3.1.2 Wilderness Act 1987 (for activities in wilderness areas)

NA

3.1.3 Biodiversity Conservation Act 2016 (BC Act)

The purpose of the BC Act is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development and in particular:

- To conserve biodiversity at bioregional and state scales
- to maintain the diversity and quality of ecosystems and enhance their capacity to adapt to change and provide for the needs of future generations, and
- To assess the extinction risk of species and ecological communities and identify key threatening processes through an independent and rigorous scientific process; and
- to support conservation and threat abatement action to slow the rate of biodiversity loss and conserve threatened species and ecological communities in nature, and

- To establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity.

A flora and fauna assessment (desktop and field) was completed for the proposed development and informs the outcomes of this REF. The field survey validated results from the desktop assessment, to determine the likelihood of occurrence of threatened flora, fauna and threatened ecological communities or their habitat (results are summarised in section 8.1.5 of this REF)

Under section 7.3 of the BC Act, if threatened species, ecological communities or their habitat are present within the proposed development area, then a test of significance must be completed to determine whether the proposal is likely to significantly affect them.

Tests of significance (see Appendix 1) were completed for the 5 threatened species identified within or have potential to occur within the study area.

Results from the tests of significance determined that the proposed works will not have a significant impact on threatened species.

3.1.4 Rural Fires Act 1997 (RF Act)

The objectives of the RF Act are to provide:

- Prevention, mitigation and suppression of bush fire
- Coordination of bush fire fighting and suppression
- Protection of persons and property from injury, death or damage arising from bush fire
- Protection of infrastructure, environmental, economic, cultural and community assets from fire
- Protection of the environment considering principles of ecologically sustainable development.

Landowners have a responsibility to take practicable steps to prevent the occurrence of bush fires on, and to minimise the danger of spread of a bush fire on or from their land.

The reserve fire management strategy for Brisbane Water National Park provides mitigation measures to reduce the occurrence and spread of bush fire from and into the Park. Prescribed burning is the primary method for reducing bush fire risk in the reserve. A five-year burn program has been developed for the Park, last burn completed to the west of the proposed work location in 2018. No further fuel reduction strategies are proposed or required as part of the proposed development.

Mitigation measures to reduce the risk of bush fire during construction works are outlined in Section 9.3 of this REF.

3.2 Environmental Planning and Assessment Act 1979

3.2.1 Assessment pathway

It is confirmed that a REF is the applicable assessment pathway if each of the following apply.

☒ The activity may be undertaken without development consent under the provisions of s 2.73(1)(a) of the Transport & Infrastructure SEPP as it is

- ☒ on land reserved under the NPW Act or acquired under Part 11 of the NPW Act AND
- ☒ for a purpose authorised under the NPW Act.

☒ The activity is not designated development under Schedule 3 of the Environmental Planning and Assessment Regulation 2021

☒ The activity is not state significant infrastructure under Schedule 3(7) of the Planning Systems SEPP.

☒ The activity is not designated development under the s 2.7(2) of the Resilience & Hazards SEPP as:

- ☒ it is not on land mapped as littoral rainforest or coastal wetland, OR

☐ it is on land mapped as littoral rainforest or coastal wetland, AND that land is reserved (not acquired) under the NPW Act, AND the activity is consistent with the adopted plan of management (s 2.7(6) of the Resilience & Hazards SEPP), OR

☐ it is on land mapped as littoral rainforest or coastal wetland, AND the activity is routine maintenance with adverse effects restricted to the minimum possible (s 2.7(4) of Transport & Infrastructure SEPP), OR

☐ it is coastal protection works by a public authority and is either identified in a coastal management program, or is beach nourishment, temporary placement of sandbags or routine maintenance and repair of existing coastal protection works (s 2.16(2)(a) of Resilience & Hazards SEPP).

☒ The activity is not declared to be exempt development under an environmental planning instrument or fails to fully meet the requirements for exempt development.

3.2.2 Strategic plans

Is the activity proposed on land covered by a local strategic planning statement, regional strategic plan or district strategic plan made under Division 3.1 of the Act?

☐ No

☒ Yes

The Central Coast Regional Plan 2041 applies. The proposal is within Brisbane Water National Park which forms part of the biodiversity network identified on Figure 5 (p. 58) of the plan. The proposal is consistent with the regional plan's sixth objective, being to "*Conserve heritage, landscapes, environmentally sensitive areas, waterways and drinking water catchments"*. Particularly, the proposal is consistent with the Outdoor Recreation section (p. 60) of this objective which provides that "*While the biodiversity network provides habitat for native species it can, when suitable and when well planned, be used for nature-based recreation."* The proposal also aligns with "*allowing people to connect with nature while maintaining the conservation role of the biodiversity network."*

Other considerations detailed in the plan that the proposal is consistent with are:

• *aligning tracks along or near existing human-created or natural edges rather than bisecting undisturbed areas*

• *keeping a track and its zone of influence away from specific areas of known sensitive species*

• *avoiding or limiting access to critical habitat patches*

• *providing diverse track experiences so that track users are less inclined to create tracks of their own*

• *using spur tracks or dead-end tracks to provide access to sensitive areas because these tracks have less volume*

• *generally, concentrating activity rather than dispersing it*."

The park is also shown on Figure 20 (p. 120) and noted as being within a drinking water catchment on that figure showing the Watagan District. The proposal will be consistent with the planning proposals for the Watagan District (pp. 121-125), particularly to "*Ensure rural villages enhance quality of life, the environment and the economy*" given the proposal has potential to attract tourism to the locality, and given the plan identifies that "*Rural villages can be destinations for tourism, leisure and recreation activities within an integrated network of green and blue grids, while protecting high value assets and amenities*." The proposal also meets planning proposal 4 for the Watagan District which is to "*Protect the Central Coast's drinking water catchments to support resilient communities*" through application of appropriate measures to limit runoff and stormwater impacts of the proposal on water quality.

3.3 Other relevant NSW legislation

3.3.1 Coal Mine Subsidence Compensation Act 2017

NA

3.3.2 Fisheries Management Act 1994 (FM Act)

The proposed work falls within the key fish habitat buffer zone for the Hawkesbury Nepean (see Figure 5).

Section 193 of the FM Act is to have regard to any relevant habitat protection plan. The Habitat Protection Plan No 3 The Hawkesbury-Nepean River System, September 1998 applies to the proposed works at Somerby Falls Picnic Area.

The habitat protection plan specifies that:

- S7.1(2) Public authorities are to have regard to any habitat protection plan that is relevant to the exercise of their functions
- S7.1(3) A Public Authority is to notify the Minister of any function it proposes to exercise that is inconsistent with a habitat protection plan
- 7.2.1 public authorities must notify NSW Fisheries whenever they intend to undertake works or activities that may affect fish habitat.

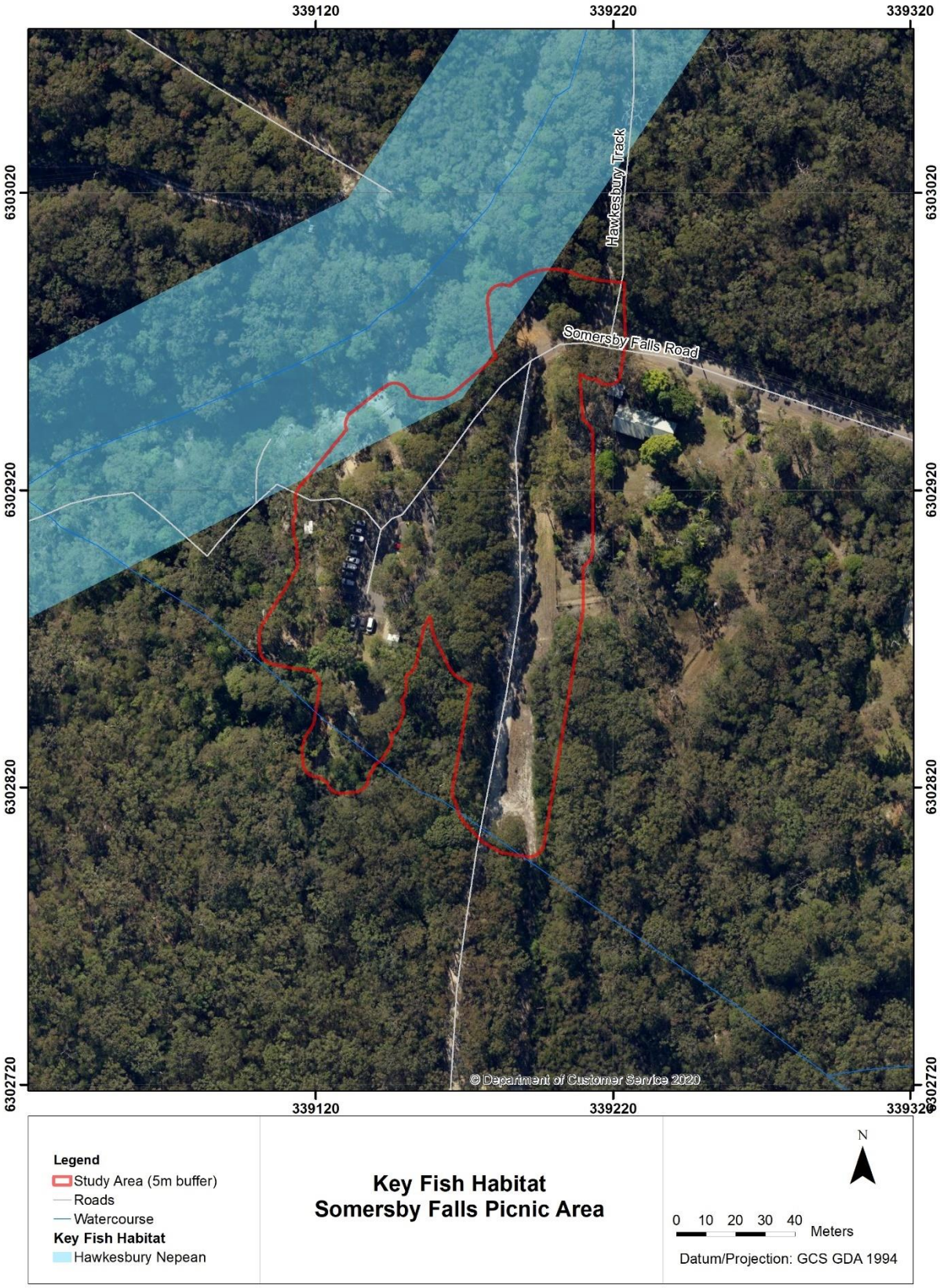
The habitat protection plan applies to all stages of a development within the catchment that may have negative impacts on key fish habitats. Mitigation measures for the proposal to reduce the risk of potential impacts to key fish habitat as a result of:

- General development
- Pollution
- Erosion and sedimentation
- Drainage

are addressed in section 9.1 of this REF.

The proposal will not affect fish, fish habitat, fish passage or marine vegetation, including threatened species or land that is intermittently submerged by water, therefore a permit or consultation under the FM Act in not required. Refer to Fig 2 to show how the study site overlaps with key fish habitat zone.

Figure 5 Key Fish Habitat



3.3.3 Heritage Act 1977

Not applicable. HHIMS search completed 26th October 2022. There are no known historic heritage sites within the study area. The closest known sites are located approximately 3km to the southwest on Mooney Mooney Creek.

3.3.4 Marine Estate Management Act 2014 (MEM Act)

Not applicable.

3.3.5 Crown Land Management Act 2016 (CL Act)

The objects of this Act are—

- to provide for the ownership, use and management of the Crown land of New South Wales
- to require environmental, social, cultural heritage and economic considerations to be taken into account in decision-making about Crown land
- to provide for the consistent, efficient, fair and transparent management of Crown land for the benefit of the people of New South Wales
- to facilitate the use of Crown land by the Aboriginal people of New South Wales because of the spiritual, social, cultural and economic importance of land to Aboriginal people and, where appropriate, to enable the co-management of dedicated or reserved Crown land
- to provide for the management of Crown land having regard to the principles of Crown land management.

Section 5.21 of the *Crown Land Management Act 2016* (CLM Act) enables a licence over Crown Land to be authorised for the use or occupation for purposes that the Minister administering the CLM Act sees fit.

A small area at the north-eastern section of the activity footprint is on Crown Land managed by Central Coast Council. The proposed bus turning bay located on Crown Land does not require council consent via a development application (DA) process because:

1. The land is zoned C1 National Parks and Nature Reserves under Central Coast Local Environmental Plan (CCLEP) 2022. Uses authorised under the NPW Act are permitted without consent in the C1 zoning table in CCLEP 2022, so given the upgrades are authorised under the NPW Act, the proposal is permitted without council consent and does not require a DA
2. Additionally, the car park and turning bay are deemed exempt development under section 2.21 of State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP) as a purpose listed in Schedule 1 of TISEPP (as an at grade car park and as ancillary access to that car park). Under Section 1.6 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) exempt development does not require development consent under Part 4 of the EP&A Act.

Crown Lands consented NPWS' to be the determining authority for the proposal given only a small portion of the project would be delivered off park on 5th November 2021. NPWS will continue to liaise with Crown Lands providing opportunity to review the draft REF and to recommend conditions.

NPWS applied for a licence from Crown Lands on 5 November 2021. A determined REF is required in order for Crown Lands to grant a licence. If determined favourably, this REF will be provided to Crown Lands in support of NPWS' licence request.

3.4 Does Commonwealth legislation apply?

3.4.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

The EPBC Act applies as the activity is on land that contains the following, or the activity may affect:

- nationally listed threatened species and ecological communities or listed migratory species.

The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritages places.

An EPBC Protected Matters search was completed on 19th October 2022 within a 5km search area from the study area.

A likelihood of occurrence analysis identified 8 threatened fauna, 11 threatened flora and 4 Threatened Ecological Communities as either occurring or having potential to occur within the study area (see details in Appendix 1).

Only one of these species, the White-throated Needletail (*Hirundapus caudacutus*) has been recorded within the study area. Threatened flora, Somersby Mintbush (*Prostanthera junonis*) is not known to occur within the study area. The closest known record is 300m to the south of the study area.

Based on likely habitat and extensive on ground searches by Emergent Ecology in December 2021, no Matters of National Environmental Significance were recorded, or considered to have potential to occur within the study area.

A detailed overview of these matters is provided in 8.1.5. An assessment of potential impacts was completed with outcomes listed in Appendix 1.

Results from the tests of significance determined that the proposed works will not impact EPBC matters.

3.5 Consistency with NPWS policy

Policy name	How proposal is consistent
NPWS Roads Policy (NPWS 2012)	The NPWS Roads Policy is part of the Roads Manual. It guides the design, construction, maintenance and demolition of roads as appropriate. Objectives in relation to roads are to: • establish and maintain a road network that efficiently facilitates achievement of conservation, visitation and other park management goals; • plan, design, construct and maintain roads consistent with their intended purpose; • implement good practice asset management of the road network, recognising the asset value of the road network; • address all legislative obligations with respect to roads;

	• minimise safety risks and environmental impacts from the road network, its management and use; • optimise the efficiency of the road network by considering connectivity with adjoining off-park roads and public transport when planning the location and maintenance of park roads. The proposed activity will ensure that the car park, and access, is managed in accordance with the objectives of the policy to ensure public accessibility and safety is balanced with environmental outcomes.
Visitor Safety Policy (DPIE 2017)	The visitor safety policy (DPIE 2017) outlines DPIE's legal duty of care and guidance for NPWS to address safety issues and reduce risk to park visitors. The proposal includes consideration for restricted mobility visitors, including allocated accessible parking and accessible viewing platforms. Visitor safety during construction phase will be managed in accordance with the Visitor Safety Policy and WH&S Acts and guidelines. The Park will be closed to the public during construction works. Safety fencing and signage will be in place during this period.
Walking Track Policy (NPWS 2012)	The purpose of the Walking Track Policy (2012) is to provide guidance on classifying tracks in accordance with Australian standards and how to communicate walking track experiences to visitors. The objectives of the policy are: • To meet government and industry standards in the design and classification of walking tracks. • To provide a range of walking experiences in parks that are suitable to the location and setting. • To provide a quality walking experience for park visitors which fosters public appreciation, understanding and enjoyment of natural and cultural heritage in parks. Effective communication of the different types of walking track experiences that are available in parks. The proposed activity will improve the walking tracks around the top of Somersby Falls.
Landslides and rockfalls policy	NPWS has a duty of care to minimise the risk of landslides and rockfalls to people in parks and to neighbouring landholders. No known rockfall or landslide hazards have been identified within the study area.
Park visitor facilities policy	The objectives of the policy are to: • Create a recognisable 'Australian' identity and image in park facilities that is consistent across NSW, while reflecting local physical and cultural character. • Ensure that appropriate planning is undertaken prior to installation of park facilities. • Ensure facilities planning and designs are sensitive to the environment, culture and heritage of the area as well as visitor needs. • Ensure facilities planning and design meets government and industry standards. The design, planning and construction of the upgraded facilities are in accordance with this policy.

	A landscape architect and relevant specialists have been involved in the planning phase to ensure the precinct plan meets policy requirements. Facilities such as toilets, walking tracks, BBQs, tables and shelters will be upgraded to the design and standards specified in the policy.
Signage policy	The objectives of the policy are to ensure that signage: • is consistent with management objectives and is appropriate for the management purpose • promotes and reinforces the identity of the NPWS • enhances the visitor experience and promotes environmentally protective behaviours • is consistent with the setting and minimises visual and environmental impacts • reduces both risks to visitors and the liability exposure for NPWS • improves visitor compliance with regulations and management restrictions A signage plan will be developed and implemented as part of the proposed upgrade in compliance with the signage policy.
Tree risk management policy	NPWS has a duty of care to manage and, where possible, to minimise the risks from hazardous trees to people in parks and neighbouring landholders. Tree risk is managed in accordance and consistent with the Australian Risk Management Standard AS/NZS ISO 31000:2018. Tree risk will be managed in accordance with the objects and management principles of the *National Parks and Wildlife Act 1974* and with other NPWS policies and procedures (including the Visitor Safety Policy and Fire Management Manual). When managing hazardous trees, NPWS prioritises the protection of life, consistent as far as possible with protecting the natural, cultural and social values of parks. The protection of property, including park infrastructure, is also an important consideration but is secondary to the protection of life. NPWS must reconcile its responsibilities for visitor and worker safety with the reality that it cannot eliminate all risks from trees in natural areas. NPWS focuses on tree risk management in high use areas where exposure is greatest for workers and visitors (e.g. picnic areas)
DRAFT Accessible Parks Policy, Nov 22	The NSW government has committed to removing barriers so that people with a disability can meaningfully participate in and enjoy an inclusive community. NPWS aims to continue to improve accessibility to help everyone experience and connect with national parks. The upgrade includes new accessible internal paths, amenities and viewing platform, as well as picnic tables suitable for wheelchair access and dedicated accessible parking spaces. NPWS has consulted with Central Coast Council's Access and Inclusion Reference Group (initial meeting held 15th September 2021). Refer to DOC22/997529.

3.6 Summary of licences and approvals

3.6.1 Approval under the NPW Act

Brief description of the type of approval sought
Internal NPWS approval or authorisation, including expenditure. Director consent issued pursuant to Clause 34 of the *National Parks and Wildlife Regulation 2019*.

3.6.2 Other approvals

A: Crown Lands Licence: A small section of the proposed works, a bus turning circle located outside the proposed new carpark, is located outside the Brisbane Water NP boundary on Crown Lands. NPWS will require a licence as the instrument of authority for use and occupation of Crown Land and/or Crown Road for that purpose under the *Crown Land Management Act 2016*.

Crown Lands Licence application was submitted 5/11/2021, pending consent as determined REF is required. Conditions to consent will apply to the proposed works.

B: Aboriginal Heritage Impact Permit (AHIP) under S.90 of the *National Park and Wildlife Act, 1974,* required due to known aboriginal sites within the study area. As part of a thorough due diligence assessment an Aboriginal Cultural Heritage Assessment Report (ACHR) was undertaken which included test pitting in the study area (refer to Appendix 2). A s.90 application for a permit to Harm was submitted to Heritage NSW for consideration, with intent to request issue of permit with conditions. The REF is required to be determined before this permit can be issued.

C. Central Coast Council – Deed of agreement for long term repair and maintenance of the Crown Lands Licence area (refer to Central Coast Council's letter to NPWS DOC22/104630).

3.6.3 Publication triggers

Triggers for publication of the REF

Permit or approval	Applicable?
Fisheries Management Act, sections 144, 201, 205 or 219	No
Heritage Act, section 57 (commonly known as a section 60)	No
National Parks and Wildlife Act, section 90 (AHIP)	Yes
Protection of the Environment Operations Act 1997, sections 47–49 or 122	No

To conclude: Following determination, the REF must be published under s.171 (4) of EP&A Regs due to requirement for additional approval under Section 90 of the NPW Act.

4. Consultation – general

4.1 Consultation required under Transport & Infrastructure SEPP

Consultation with the following authorities is required as the proposal will affect the items ticked below:

4.1.1 Local Council (sections 2.10, 2.11, 2.12 and 2.14)

☒ local council infrastructure or services (such as stormwater, sewer, roads and footpaths)

☐ heritage items listed under the local environmental plan (LEP)

☐ flood patterns on flood-liable land

☐ land within the mapped coastal vulnerability area and the activity is inconsistent with a certified coastal management program for the land.

300mm, 600mm and 900mm water mains managed by Central Coast Council pass through the study area. These water mains lie under the proposed bus turning area, then continue following the Somersby Pipeline Fire Trail to the south. The 300mm water main is generally to the east of the Fire Trail, 900mm to the west of the Fire Trail, whilst the 600mm lies under the centre of the Fire Trail within the northern half of the proposed carpark. Refer to Appendix 6 design plans for utility locations.

Central Coast Council has been consulted from concept through to 90% detailed design in 2 separate Units within Council as follows:

1. Water and Sewer Assessment - design parameter consultation:
   - Separate approvals are required from Councils Water and Sewer directorate required for any under council owned water and sewer assets.
   - Consultation with Council Water Assessment team between June and July 2021 provided design parameters for the development of the civil detailed design plans.
   - This consultation followed on site meeting with key council representatives (June 2021) in the early design phase was required due to council managed water mains located under the proposed new carpark location.
   - Council invited to review and provide comment on 50% detailed design plans (August 2021)
   - Council invited to review and provide comment on 90% detailed design plans (Dec 21)

2. Approval to conduct works within Councils managed “track in Use’ (Hawkesbury Track): key outcomes as noted in letter from Council dated 29 July 2021 (DOC22/104630):

   - All works funded and managed by NPWS and maintained ongoing.
   - Consultation with neighbours NPWS responsibility
   - Access over ‘track in use’ to be retained during construction for access for neighbours
   - Stormwater pipe to be modified to Councils satisfaction
   - Dilapidation survey required for road and stormwater pipe
   - Council to review plans and draft REF
   - Enter into executed deed of Agreement for the ongoing management and maintenance of the asset.

Central Coast Council will continue to have access to manage the water mains and associated infrastructure with pre, during and post construction. The design of the carpark has considered these water assets and incorporated Council comments into the final concept plan.

4.1.2 National park or other C1-zoned land (sections 2.15(2)(a) and 2.15(2)(b))

☐ land zoned C1 (formerly E1) or on/adjacent to land reserved or acquired under the NPW Act

Outcomes of consultation with NPWS:

Not applicable

4.1.3 Roads or maritime (section 2.15(2)(c) or Schedule 3)

Is the activity:

☐ a fixed or floating structure in navigable waters

☐ traffic-generating development on main roads?

If relevant, provide details of the consultation with Transport for NSW.

Not applicable

4.1.4 Siding Spring Observatory (section 2.15(2)(d))

☐ increase the amount of artificial light in the dark night sky within 200 kilometres of the Siding Spring Observatory

Not applicable.

4.1.5 Defence communications buffer (section 2.15(2)(e))

☐ located within the buffer around the defence communications facility near Morundah as mapped under the Lockhart, Narrandera or Urana LEPs.

Not applicable.

4.1.6 Mine subsidence area (section 2.15(2)(f))

☐ land in a mine subsidence district within the meaning of the Coal Mine Subsidence Compensation Act 2017.

Not applicable.

4.2 Consultation requirements under NPW Act for leases and licences

If the activity requires a lease or licence under s 151 or s 151H of the NPW Act, indicate if it requires:

☐ public consultation under s 151F

☐ referral to the NPW Advisory Council or another advisory committee under s 151G.

Not applicable.

4.3 Targeted consultation

4.3.1 Adjacent landowners

NPWS ranger communicated with direct park neighbours within the vicinity of the study area from early 2020. The purpose of the communication was to advise of the community of the proposed upgrade and upcoming consultation period for the concept design in mid-2021.

The neighbours included 6 residents along Somersby Falls Road. The closest neighbour adjacent to the entrance to Somersby Falls has had some specific consultation regarding the carpark adjacent to their property.

These 6 neighbours along Somersby Falls Road were also included in the Stakeholder and communications Engagement Plan for the project, receiving regular email communications and updates throughout the various planning phases.

4.3.2 Wider community consultation and/or notification of works

NPWS developed a project webpage located at:
https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-management/community-engagement/somersby-falls-picnic-area-upgrade

A Stakeholder and Communications Engagement Plan was developed and implemented for the project (refer to DOC22/335722).

The intent of the project webpage is to provide a single point of information for the project where a range of interested stakeholders can access current project updates and view critical documents relating to the proposed works.

Between 18th January to 18th April 2021 the concept design was placed on public exhibition and NPWS invited stakeholders and visitors to review and provide feedback on the early concept plan.

A project information sign was also installed onsite to advise visitors of the proposed project and how they can access the concept design plan online and provide a submission.

The opportunity to talk to visitors on site was also undertaken where possible during the exhibition period of the concept design plan.

A total of 5 submissions were received over a 3-month period. The submissions review report identified key areas of concern as:

- Vehicles on Somersby falls Road and carparking
- Accessibility – accessible access to viewing areas, amenities, change tables
- Facilities - provision of drinking water, more bins, shower to wash feet.

NPWS has taken this feedback on board and where applicable have incorporated items into the design plans for the upgrade of the precinct.

NPWS also undertook targeted consultation and communication with a range of stakeholders, including:

- Central Coast Council
- Crown Lands
- Ausgrid
- LALC and aboriginal representatives
- Local member
- NPWS Legal Branch
- NPWS Planning and Environmental Assessment Team
- NPWS Reservations team
- NPWS Aboriginal Partnerships Branch
- NPWS digital and technology team
- Specialist consultants – archaeologists, ecologist, geotechnical and civil engineers.

4.3.3 Interest groups and/or notification

NPWS consulted with a number of interest groups including:

- Access and Inclusion Reference Group on 15th September 2021 (DOC22/997529)
- Council tourism stakeholder meetings in 2021 and 2022.
- Local business within the Somersby Area
- NPWS Commercial Tour operators

5. Consultation – Aboriginal communities

An Archaeological Report (AR) and Aboriginal Cultural Heritage Assessment (ACHA) were prepared by Biosis in November 2022 for the Somersby Falls Precinct. Both reports are attached as Appendix 2 and 3.

Consultation included:

- Identification of relevant Aboriginal stakeholders (known stakeholders were provided by Heritage NSW)
- placing a public notice in Coast Community News on the 13th April 2022 inviting Aboriginal people who hold cultural knowledge to register their interest in providing assistance in determining the significance of Aboriginal objects / places in the vicinity of the study area
- Written correspondence and face to face meetings.

Registered Aboriginal Parties were involved in the archaeological assessment, including providing advice on past and present values, information gathering, as well as assisting with test pitting and identification / assessment of artefacts.

5.1 Native title notification requirements

1. Is the land subject to an Indigenous land use agreement (ILUA)?

☒ No
☐ Yes

The National Native Title Tribunal (NNTT) provided Biosis the results of their search via email on the 1/4/22 - the study area was freehold with no Registered Indigenous Land Use Agreements in place. (refer to ACHA Appendix 2 – Consultation Log).

2. Has native title been **extinguished**?

☐ No or unclear
☒ Yes

4.1.1 of the ACHA states that “a search conducted by the NNTT listed the study area as freehold with no Registered Native Title Claims, Unregistered Claimant Applications or Registered Indigenous Land Use Agreements within the study area”. (Refer also to ACHA Appendix 2 – consultation log)

3. Has there been a determination of native title applicable to the land or is there a native title claim pending (check the National Native Title Tribunal website)?

☐ No
☐ Yes

Not applicable. Native Title has been extinguished as it is freehold land.

4. If native title is not confirmed as extinguished, is the activity occurring on land reserved as park on or before 23 December 1996 AND is an act in accordance with the purpose of reservation AND
    a. is either a 'public work' as per subdivision 24J of the Native Title Act (e.g. a building or other structure that is fixed to the landscape, a road or bridge, a well or a bore, or involves major earthworks)
    OR
    b. involves the grant of a lease?

☐ No

☐ Yes

Not applicable. Native Title has been extinguished as it is freehold land.

5. If native title is not confirmed as extinguished and the circumstances of Question 4 do not otherwise apply, is the activity either:
    a. a facility for service to the public (as defined in subdivision 24K of the Native Title Act)
    OR
    b. a low-level activity (as defined in subdivision 24L of the Native Title Act)?

☐ No

☐ Yes

Not applicable. Native Title has been extinguished as it is freehold land

5.2 Parks under other joint management arrangements

Is the park's management subject to another joint management arrangement such as a memorandum of understanding?

☒ No ☐ Yes

If relevant, provide details of the outcomes of any discussions with the advisory committee or consultative group.

5.3 Other parks

Extensive consultation with the Aboriginal Community was undertaken by Biosis on behalf of NPWS in preparation of both the Archaeological Report and Aboriginal Cultural Heritage Assessment for the Somersby Falls Precinct (see Appendix 2 and 3)

6. Proposed activity (or activities)

6.1 Location of activity

Description of location	Somersby Falls Picnic Area

Site commonly known as If applicable	As above		
Park name Lands reserved under NPW Act	Brisbane Water National Park		
Other tenures Include lands acquired under Part 11 of the NPW Act	Crown Land		
Lot/DP If available	53/DP755246		
Street address If available	Somersby Falls Road, Somersby NSW 2250 If available		
Site reference	Easting: 339,175 (GDA94)	Northing: 6302,910	MGA zone: 56

6.2 Description of the proposed activity

The Somersby Falls precinct upgrade proposal is focused on the improvement to the picnic area, facilities and elevated boardwalk provided at the main visitor area within Somersby Falls. New works are proposed that include a new car paking area, a dedicated small bus turning area and a new viewing platform at the top falls.

The proposed works will:

- increase carparking capacity from 22 to 60 reducing vehcile parking along Somersby Falls road, and improving visitor safety and reducing neighbours parking issues.
- increase cubicles for amenities from 4 – 8,
- increase BBQ's from 1-6,
- Improve the waste water system from a 5,000L septic tank with absorption trench to a fully contained 30,000L septic tank
- Install new rainwater harvesting system (tank 10,000L)
- Provide accessible access linking new carpark, facilities and walking tracks to new viewing platform.
- New viewing patform and adjacent fencing will stop visitors walking over the rocks of the top falls, protecting the aboriginal sites and reducing public risk.
- Provide small bus turning circle to provide oppounity for eco tour operators, educational activites and small group tours.

The following detailed works are included in the proposed construction activity:

1. **Preliminary works coordination required:**
   - All approvals received and conditions of approval included in tool box induction site meeting with contractor.
   - Asset mgt system established (AMS).
   - Contract admin established and all pre-commencement contractor documents received by NPWS - WHS, CEMP, insurances, works program.
   - Site induction with contractor completed.
   - Stakeholder updates provided.
   - Limit of Works and 'no go' zones established.
   - Dilapidation survey of Somersby Fall Road and Council assets.

2. **Site Establishment/Mobilisation**
   - Supply and Installation of site fencing to ensure site is always kept secure.
   - Supply and Installation of statutory and mandatory construction signage to site fencing.
   - Delivery and set up of site shed and amenities to existing cleared hardstand area to north of site (bus turning circle area).
   - Traffic control and temporary closures to Somersby Falls Rd implemented. i.e 'local residents only'.
   - Initial site survey.

3. **Environmental Controls / Sediment and Erosion Control**
   - Set up and installation of sediment control fencing to perimeter of site.
   - Installation of sand bagging to stormwater pit locations.
   - Installation of temporary drainage swales and diversion drains for clean and dirty run off.
   - Installation of sediment control basins in strategic locations.
   - Locate and identify desirable locations for material stockpiles and install sediment fencing and sandbags as required.

- Install stabilised site access to site entry to manage transfer of material outside of site with washdown areas as needed.
- Construction Environmental Management Plan to be prepared by contract as part of tender.
- Refer to civil design plans for sediment control plans.

4. Vegetation Clearing

- Identify, mark and install flagging tape around all trees identified on site to remain and not be removed.
- Identify and mark habitat trees requiring removal to ensure that correct control measures are applied prior to habitat tree removal.
- Identify and mark areas to be cleared and removed with marking paint.
- Identify, mark and install flagging tape to clearly identify vegetation clearing exclusion zones across the site.
- Extent of vegetation clearing is indicated on engineering plans.
- Vegetation to be cleared with 20t excavator and bucket scrape.
- Larger trees to be removed by qualified arborist. Root balls to be removed from ground with excavator and claw attachment.

5. Existing Services

- Pothole and expose existing water mains to clearly identify all inground services prior to any excavation commencing.
- Install temporary protection / hoarding around existing above ground services and valves. Above ground assets to always remain accessible.
- Install tiger tails to overhead power lines running parallel with water/electricity easement.
- Locate and cap existing non potable water supply ready for relocation to new amenities block location.

6. Demolition

- Remove existing fixed furniture from site for repurposing by NPWS.
- Remove existing pathways, wire fencing, BBQ area slabs, BBQ shelters, timber garden bed retaining, crazy paver stone, timber post and rail fencing, gates, site signage, concrete pathways, bitumen/asphalt carpark, concrete dish drains/swales, stormwater drainage and pits, amenities building, inground septic tanks and sewer and any other structures as per demolition plan LA101-E.
- 20T Excavator to be utilised to remove items for removal/transportation from site by truck and dog to an approved waste facility.
- Septic tanks to be pumped out prior to removal. Tanks to be dug and craned out with excavator.
- Refer to detailed design plans for demolition plan (Appendix 6).

7. Bulk Excavation

- 20t excavators and graders to grub site 100-200mm ready for bulk excavation to design levels to picnic area.
- All graded material to be stockpiled on site if fill is classified ENM or VENM. Contaminated fill to be disposed of offsite at an approved waste facility with tip dockets provided to principal.
- Bulk excavation of picnic area to various levels as per bulk cut/fill plan and down to specified design RL’s.

- 5t max excavators to be used to carpark area to complete site grub and bulk excavation down to required RL's to areas within 2m zone of influence to inground water mains.
- 20T excavators can be utilised to complete bulk cut excavation down to RL's provided machines are outside the 2m zone of influence.
- Placement of heavy metal plate as method of protection to inground mains is required for any areas where machinery >4t is to traverse water mains.
- Excavation in rock is highly probable to amenities block and BBQ shelter areas. Excavator with hammer/breaker attachment required to break up rock and remove from site in these areas or re-use if determined suitable by civil engineer.

8. Detailed Excavation

- 10-20t excavators to complete detailed excavation and dig trenches for new stormwater lines to areas as detailed on Civil Works Sheet 1, 2 and 3.
- Excavation to for stormwater pits to be completed to depth indicated on pit schedule approx. 800-1200mm deep.
- Detailed excavation for stone retaining walls and sub soil drainage to areas indicated on plan.
- All spoil removed during detailed excavation to be stockpiled on site in designated stockpile area with appropriate sediment control installed. Spoil to be used to back fill retaining walls, stormwater drainage lines and pits where applicable.
- Amenities block and BBQ area slabs to be excavated down to required RL. Excavation in rock is highly probable to these areas. Excavator with hammer/breaker attachment required to break up rock and remove from site.
- Detailed excavation for amenities block slab internal sewer and drainage lines.

9. Stormwater, Drainage, Sub-Soil Drainage

- Installation of new uPVC stormwater pipe at specified sizing to areas indicated on Civil Works sheets.
- Installation of new precast concrete pits as per pit schedule in required locations as detailed on Civil Works sheets.
- Connection of new stormwater lines to new stormwater pits as per connection details on civil detail sheets.
- Installation of all sub-soil ag line drainage behind retaining walls and to areas indicated on plan. Sub soil drainage to be plumbed into new stormwater pits as detailed.
- Connection of uPVC stormwater pipe to precast concrete headwall outlets in adjacent bushland just outside site boundary. Stormwater to drain away into bushland and natural easements. Disbursement of stormwater off site as per headwall locations noted on plan. Riprap rock sections at each headwall to help disperse water evenly into bushland.
- Installation of internal sewer and drainage lines to amenities block slab.

10. Sandstone Retaining Walls

- Importation of DGB20 base material, spread and compacted with plate compactor to retaining wall detail excavated areas.
- Installation of 2000x500x500 sandstone block retaining walls in areas indicated. Sandstone retaining walls to be either single or double block in height.
- Sandstone blocks to be supplied by local quarry.
- Sandstone to be moved and positioned with 20t excavator and claw attachment.

- Imported aggregate drainage material to be installed around sub soil drainage and backfilled behind sandstone retaining walls as per Civil Details sheet 3. All backfill material to be wrapped in geofabric.

11. Concrete Slab / Pathways / Kerb & Gutter / Surface Drains

- Form up concrete slabs for BBQ area and amenities block slabs.
- Installation 120mm Slab w/ 400 x 350 D Footing beams. 32MPa concrete with SL82 central on 0.2 poly.2 x 3-11TM Bars to top and bottom in beams with 250mm high steel clips at 600mm centres. Min 50mm Cover to bars.
- Concrete to be delivered to site via concrete truck and pumped with concrete pump.
- Ensure internal drainage and sewer lines are inspected prior to concrete slab pour.
- Form up concrete pathways and install SL72 mesh. Concrete pathways to be 25mPa.
- Construction joints to be installed as per pavement and jointing plan details sheet 3 – C06.03.
- Installation of concrete dish drains to areas nominated for management of surface water across carpark and access road areas.
- Installation of kerb and gutter to areas nominated with concrete kerbing machine.
- All concrete spoil to be removed off site and disposed of at an approved waste facility.

12. Carpark Grading / Fill / Compaction

- Carpark to be graded to max 5% in direction of parking and 6.25% in all other directions. Max grade of disabled parking area 2.5%.
- 5T Machines with grader attachments to be used to grade bulk cut to required design levels.
- DSG40 subbase and DSG20 base material to be imported, spread and compacted to required density levels. Geotech engineer to confirm compaction is achieved.
- Excess excavated fill throughout bulk excavation to be stockpiled and used across site to raise areas as per bulk earthworks cut & fill plan.
- Compaction and vibrating plant use limited to distances greater than 2m from mains.
- Smaller hand machine to be used for vibration and compaction within zone of influence of water mains.

13. Asphalt / AC Course

- Install new AC layer across existing bitumen access road. Asphalt and roller plant to be used to existing access road as this area is being resurfaced only and does not traverse over any inground services.
- Install 40mm AC wearing course asphalt to carpark area.
- Compact AC course with roller. Compaction plant use limited to distances greater than 2m from mains.
- Smaller hand compaction machine to be used for compaction within zone of influence of water mains.

14. Line Marking & Signage

- Install new statutory signage as per signage and line marking plan.
- Install line marking to AC pavement as indicated on signage and line marking plan.
- Line marking to be painted in yellow and white paint.
- NPWS signage to be installed in accordance with NPWS signage manual and as per signage plan LA206.

- Install tactile ground surface indicators in required locations. TGSI to be adhesive fixed to pavement.
- Refer to detailed design plan for proposed signage plan (Appendix 6).

15. Fencing

- Install new galvanised steel posts and metal rope fencing to the perimeter of the carpark and carpark pathway. Fencing detail as per architect detail on LD403.
- Maintain existing timber post and rail fencing to perimeter of picnic area where existing fencing is to remain. Existing fencing only to remain in low visibility areas.
- Supply and install new timber post and rail fencing to high visibility area, mostly to the western perimeter of the picnic area.
- All existing timber fencing to be removed is to be cut at ground level to minimise disturbance to the natural ground and bedrock below the surface.
- Relocate existing entry gate to the southern trail access at the head of the carpark.

16. Sandstone Steps and Emulsion Pathways

- Install base layer of quarter minus to underside of sandstone steps. Plate compaction of base layer material.
- Installation of sandstone steps to plate compacted base material.
- Shape and spread road base to a thickness of 100mm with rakes and shovels to emulsion surface areas.
- Compact road base with smooth drum roller or plate compactor.
- Apply bitumen to the road base surface and at the same time apply a thin coat of 5-7mm gravel by shovel. Roll with a lawn roller (filled with water).

17. Amenities Block / Septic Tank / Water Tank

- Construction 8 stall amenities block as per NPWS Parks Facilities Manual design guidelines: install hardwood timber superstructure, colorbond roof sheeting, Ritek custom compressed FC panels to infill wall frames, toilets, basins, wastes and tap outlets.
- Install 10,000L water tank to rear of amenities block and plumb in.
- Remove existing inground concrete septic tanks and crane onto truck for disposal.
- Install new septic tanks and plumb into amenities block sewer line.
- New Septic tanks to be installed as specified by Northrop Engineers.
- Install new gas bottles for new BBQ’s.

18. Elevated Viewing Platform

- Install new FRP elevated viewing platform to rock platform.
- Dowel and chemically anchor FB2 UA into side of new concrete pavement.
- Install concrete pad footings onto 2 layers of membrane plastic to minimise disturbance to existing bed rock.
- Install post supports and beam superstructure and fix FRP grated decking.

19. Landscaping

- Ameliorate topsoil and ensure soil properties are to the required condition prior to planting and turfing in landscaped areas.
- Supply and install native low maintenance planting to garden bed areas.
- Supply and install new turf to turfed areas.

- Planting and Turf is to be watered and established as per required maintenance schedule following completion for 16 weeks.
- Spread hardwood woodchip/mulch to all planted areas.

20. Fixed Furniture / Equipment

- Install new fixed furniture tables and seats to concrete slabs. Furniture to be fixed to slabs with threaded rod mechanically anchored into position.
- Install hardwood timber large BBQ structure as per NPWS design guidelines and details
- Install colorbond roof sheeting to BBQ structures.
- Install new gas bottle operated BBQs to each BBQ shelter
- Re-install existing PUF machine.

21. Site Clean / De-Establishment

- Removal of site fencing
- Removal of statutory and mandatory construction signage to site fencing.
- Disconnection and removal of site shed and amenities to existing cleared hardstand area to north of site (bus turning circle area).
- Handover meeting held on site with contractor and project team.
- Hose down all surfaces and complete a builders clean to all fixed structures.

22. Establishment and Maintenance Period

- Regular routine maintenance to landscaped areas as per landscape specification at required intervals to ensure planting and turf is well established and free from defects 16 weeks after handover.

23. Post construction Works

- Works as Executed drawings to be provided to NPWS for contract close out and certification.
- Dilapidation survey of Somerby Falls road and Council assets.
- Construction Approval – completed works required.
- AMS/GIS data capture process to be completed post construction.
- Handover -including warranties, instructions, maintenance program undertaken by project team t Area.
- Project closeout - finances, contract admin, asset data required.
- Webpage update with post construction photos of new precinct.

6.2.1 The proposed activity: pre-construction, construction, operation and remediation

Pre-construction:

The focus for pre-construction is the design and Approvals, includes:

- in all required environmental site inspections, design site meetings, the cultural heritage assessment works (Refer to Appendices 2, 3 and 6).
- A dilapidation report will be prepared prior to construction commencing to assess current condition of the access road to the site.
- Communications with key stakeholders: neighbours, Council, Crown Lands.

- Procurement – site inspections during the tender process will occur for interested tenders. A pre-start site meeting will occur for the successful tender and all pre-commencement survey and mark out works will be completed.

Construction:

- The precinct will be closed to visitors for the duration of the construction works.
- Weekly toolbox meetings will be held between the principles representative (NPWS) and the contractors.
- Refer to activity detailed in section 6.2 above.
- Community and stakeholder updates will be provided at key milestones, via the project webpage.
- Photos and monitoring of works progress will be conducted by project team.

Operation:

- Handover at work completed to Central Coast Area team.
- Maintenance manuals and warranty certifications to be provided.
- AMS data capture and updating of the AMS system post construction.
- Works as Executed (WAE) drawings to be provided.

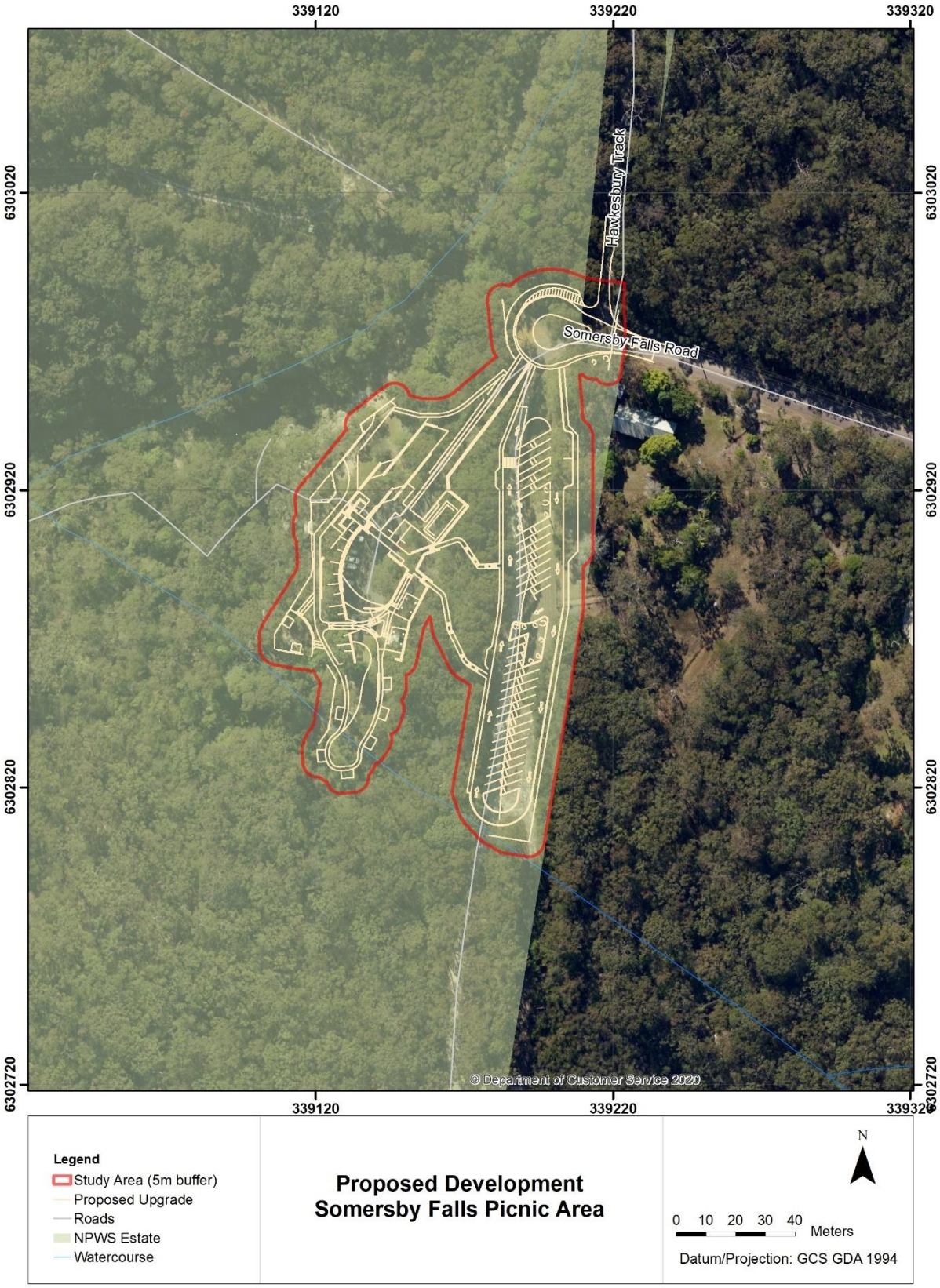
Remediation:

- Defects liability period estimated to be 12 months.

6.2.2 The activity footprint (size of the area of impact)

The study area is approximately 1.5ha. This includes a 5m disturbance buffer from the proposed upgraded carpark, picnic area and facilities (see Figure 6 and Appendix 6 construction plans)

Figure 6 Study Area



6.2.3 Proposed construction methods, materials and equipment

The construction methodology will be dependent upon the asset/task and will vary across the site. Section 6.2 details the type of machinery, proposed methodology and overview of materials to be used.

Civil works will use a range of machinery type suitable for the required task up to 20T excavators, cranes, concrete mixers, compactors to hand held machinery.

Refer also to Appendix 6 'Civil Works Package' for breakdown of materials to be used.

6.2.4 Receival, storage and on-site management for materials used in construction

Trucks will be used to transport the material to the study area via Somersby Falls Road. Materials will be temporarily stockpiled onsite at designated site compounds (refer to Appendix 6). Erosion and sediment control mitigation measures will be implemented around temporary stockpiles / materials onsite.

Traffic control may be required at the intersection of Somersby Falls Road and the Hawkesbury Track to manage local traffic.

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

Refer to Appendix 6 'Civil Works Package' for cut and fill plans. Preliminary earthwork volumes are: cut 1,536m^3, fill 1,724m^3 with the balance of 188m^3 to be imported.

Refer to Appendix 6 'Landscape Package' for detailed demolition and planting plans. Approximately 0.25ha of woodland, 28 trees (including 3 habitat trees) will be removed as part of the proposed upgrade. The extent of landscape works will be clearly marked, as well installation of protective barriers around habitat trees and those to be retained.

6.2.6 Environmental safeguards and mitigation measures

Refer to Section 9 of this REF for detailed environmental safeguards and mitigation measures.

All work must comply with conditions of approval and clauses of:

- GC21 contract conditions
- Aboriginal Heritage Impact Permit (AHIP)
- Central Coast Council - Deed of Agreement
- Crown Lands Licence

6.2.7 Sustainability measures – including choice of materials and water/energy efficiency

Sustainability measures that have been incorporated into the design include:

- New rainwater harvesting system (10,000L tanks) to supply amenities with water for handwashing as well as watering gardens
- Gas for BBQs
- Hardwood vs rainforest or pine timbers - in line with Parks Facilities Manual.
- Cut vegetation will be mulched and re-used onsite where possible
- Native / endemic plants will be used in landscaping
- Local stone will be sourced for landscaping and retaining
- Improved stormwater management to assist with future rainfall events / climate change

6.2.8 Construction timetable and staging and hours of operation

The proposal start time for the construction works in early February 2023 and expected completion of June 2023. Weather permitting.

Hours of operation will be standard construction hours:

- 7am to 6pm Monday-Friday
- 8am to 1pm Saturdays
- Extended weekend hours and public holiday work can only occur with Area Manager approval.

7. Reasons for the activity and consideration of alternatives

7.1 Objectives and reasons for the proposal

The objective of the proposed upgrade is to enhance the visitor experience and safety through improved layout and amenities, whilst maintaining the natural features and character of the Somersby Falls Picnic Area.

The existing facilities and associated infrastructure are inadequate and outdated, resulting in increased maintenance liabilities and limited capacity to meet both current and future demand.

At present:

- Existing visitor facilities fail to meet visitor capacity expectation
- Drainage and erosion control measures are degraded and underperforming
- Inadequate facilities pose a potential risk to visitor safety
- Community concerns due to vehicle congestion on Somersby Falls Road and access issues
- Accessibility concerns for disabled or limited mobility visitors

The proposed work will upgrade visitor facilities including amenities, picnic shelters and BBQs as well as increasing and improving car parking and disabled / limited mobility access.

7.2 Consideration of alternatives

Do nothing

The current Somersby Falls car park, picnic and boardwalk infrastructure was installed over 30 years ago and is now in a poor condition. The stairs and boardwalk to the lower falls are approaching the end of their serviceable life. The current infrastructure provides limited access for visitors. If the project does not proceed, the infrastructure will continue to deteriorate and pose safety and/or visual concerns and increased maintenance liabilities for NPWS.

Walking Track upgrade:

The elevated timber steps that lead visitors from the top falls, down the creek to the middle and lower falls are approaching the end of their serviceable life. Detailed design plans have been completed to the stage where a final design and construction contract could be let to upgrade these assets. This work is out of scope for the construction of the current upgrade for the precinct due to budget constraints and increased construction costs post COVID. This is a future funding option consideration and is not included in this REF assessment.

Minor upgrade to existing facilities

The option to only upgrade elements of the existing precinct were considered in early concept and funding approvals. The upgrade of the amenities facilities would result in improved facilities, however, does not address a key concern of parking and visitor safety on Somersby Falls Road.

Upgrade picnic area and expand carpark – preferred option

This option involves the complete upgrade of the picnic area and construction of a new carpark. This is the preferred option.

The detailed design plans for this proposal are an all-inclusive precinct upgrade and the options to stage or select elements of the design plans were considered. The programming and sequencing of works from a construction perspective required consideration and will impact the costings by contractors due to additional mobilisation and de-mobilisation, materials handling, certifications and constructability. The tender package for the project will need to have flexibility into the contracted elements due to increasing construction costs and a set budget.

The use of the Parks Facilities Manual for standard items has been included into the design plans, and capacity of amenities (i.e. the number of required cubicles for the amenities has been adjusted, though will aim to future proof the site to cater for the increasing visitation numbers to the site.

7.3 Justification for preferred option

Upgrades to the Somersby Falls car park, picnic area and viewing platform are required to maintain the current recreational activities of park users which are in line with the Brisbane Water NP PoM (NPWS 1992). If upgrade works do not proceed, infrastructure will deteriorate further and cause potential safety liabilities, and costs for replacement /upgrades will further increase.

The proposed works addresses the key goals for the project and is achievable with the existing budget.

8. Description of the existing environment

8.1 Overview of the project area

The study area is located at Somersby Falls Picnic Area at the end of Somersby Falls Road in Brisbane Water National Park (See Figure 2).

The proposed work will upgrade the existing picnic area, including amenities, walking tracks and day use area. A section of the adjacent Somersby Pipeline Fire Trail will be upgraded to a sealed surface incorporating the new carpark.

Photo 1 Existing picnic facilities

Photo 2 Existing landscaping condition

Photo 3 Existing viewing area over top falls.

Although the study area is 1.5ha in total (this includes a 5m buffer), it primarily consists of an existing disturbed landscape - mown picnic area, vehicle access road and adjacent fire trail.

It is anticipated that the disturbance from the proposed work will only impact 0.69ha of woodland vegetation, 28 trees, of which 3 are habitat trees, 0.16ha of the Asset of Intergenerational Significant site for *Prostanthera junonis* (AIS site # AIS-E0-065) and 9 individuals of the threatened flora *Hibbertia procumbens.*

8.1.1 Geology, geomorphology and topography

The proposed upgrade is located within the Hawkesbury Sandstone geological unit of the Sydney Basin (See Figure 7), generally consisting of medium to coarse grained quartz sandstone with minor shale and laminate lenses and sandy soils (Biosis 2022).

The study area is located on a gentle undulating slope between two creeks with an elevation range between 130-170m (see Figure 8 and Figure 9).

The proposed work has the potential to cause soil erosion and sedimentation of the adjacent creek, however, improvements in site drainage and associated infrastructure will have long term positive outcomes for the site through reducing erosion and surface water runoff over sensitive sites.

The upgrade in site drainage will enable the site to drain effectively and to be used in all weather conditions. Drain placement and relocation has also been considered to reduce impact on the adjacent Aboriginal grinding grooves.

Mitigation measures, including the requirement for a detailed soil and erosion control plan to be developed for the site are addressed in section 9.1 of this REF.

Figure 7 Geology

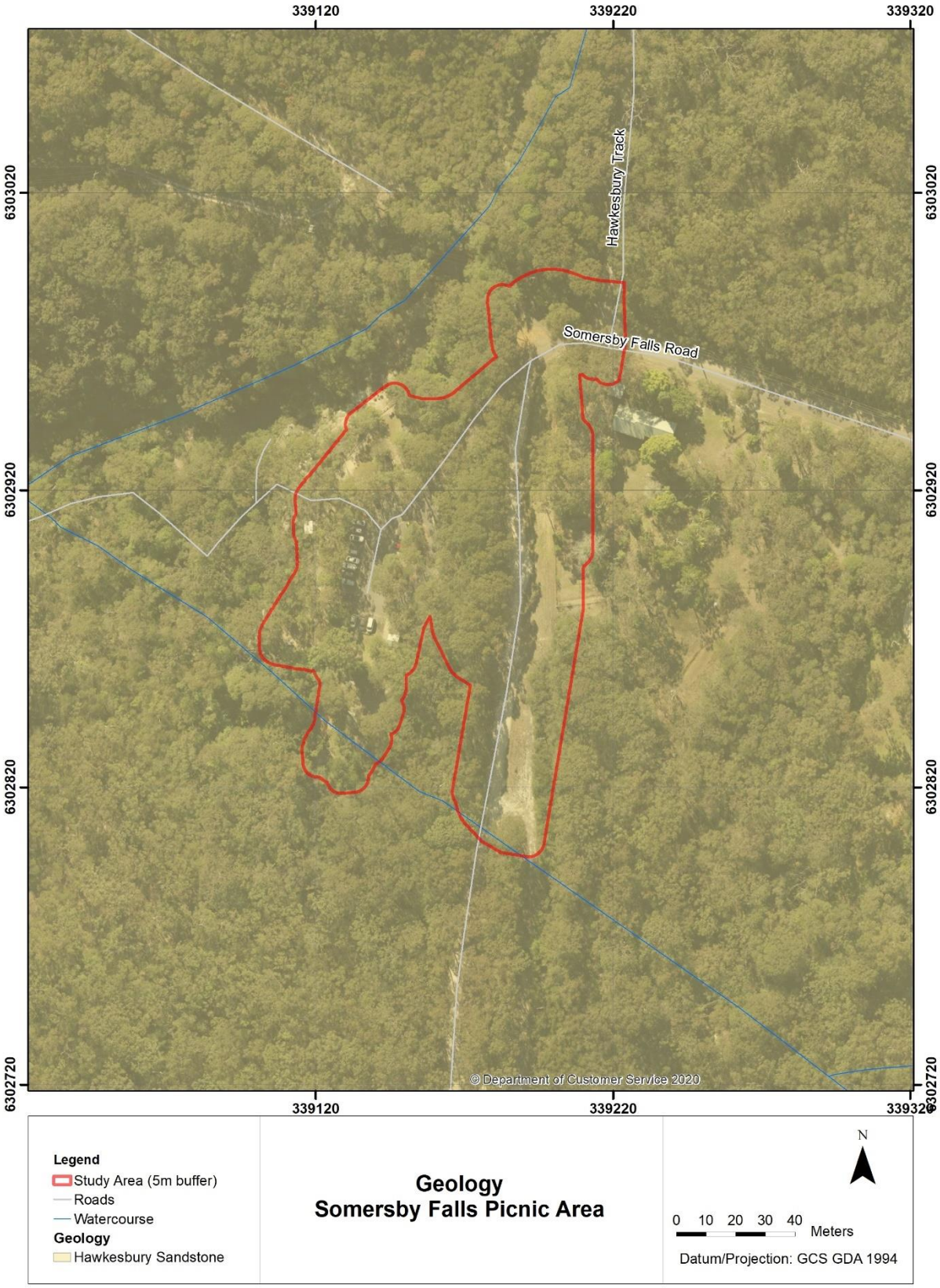


Figure 8 Topography

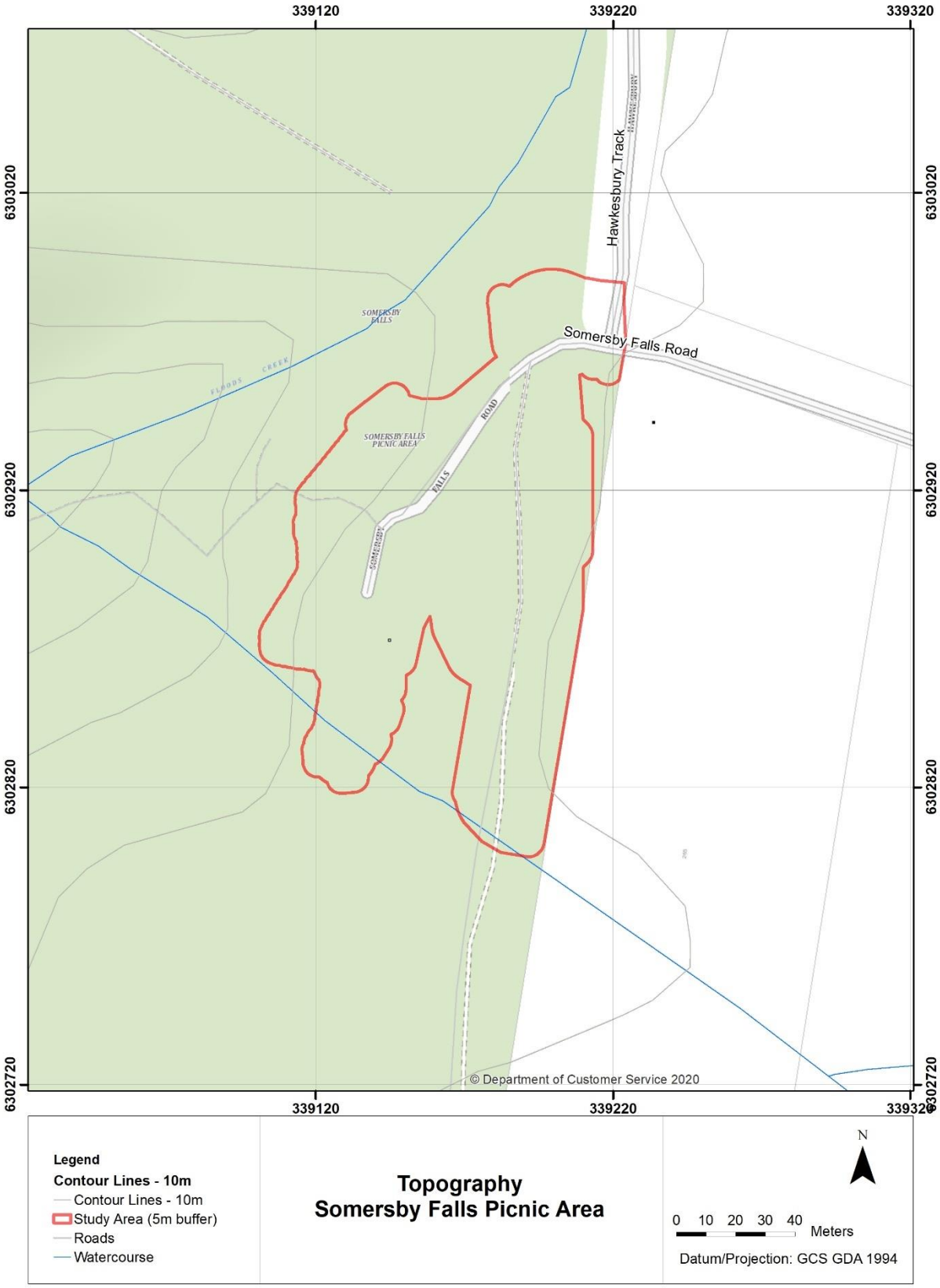
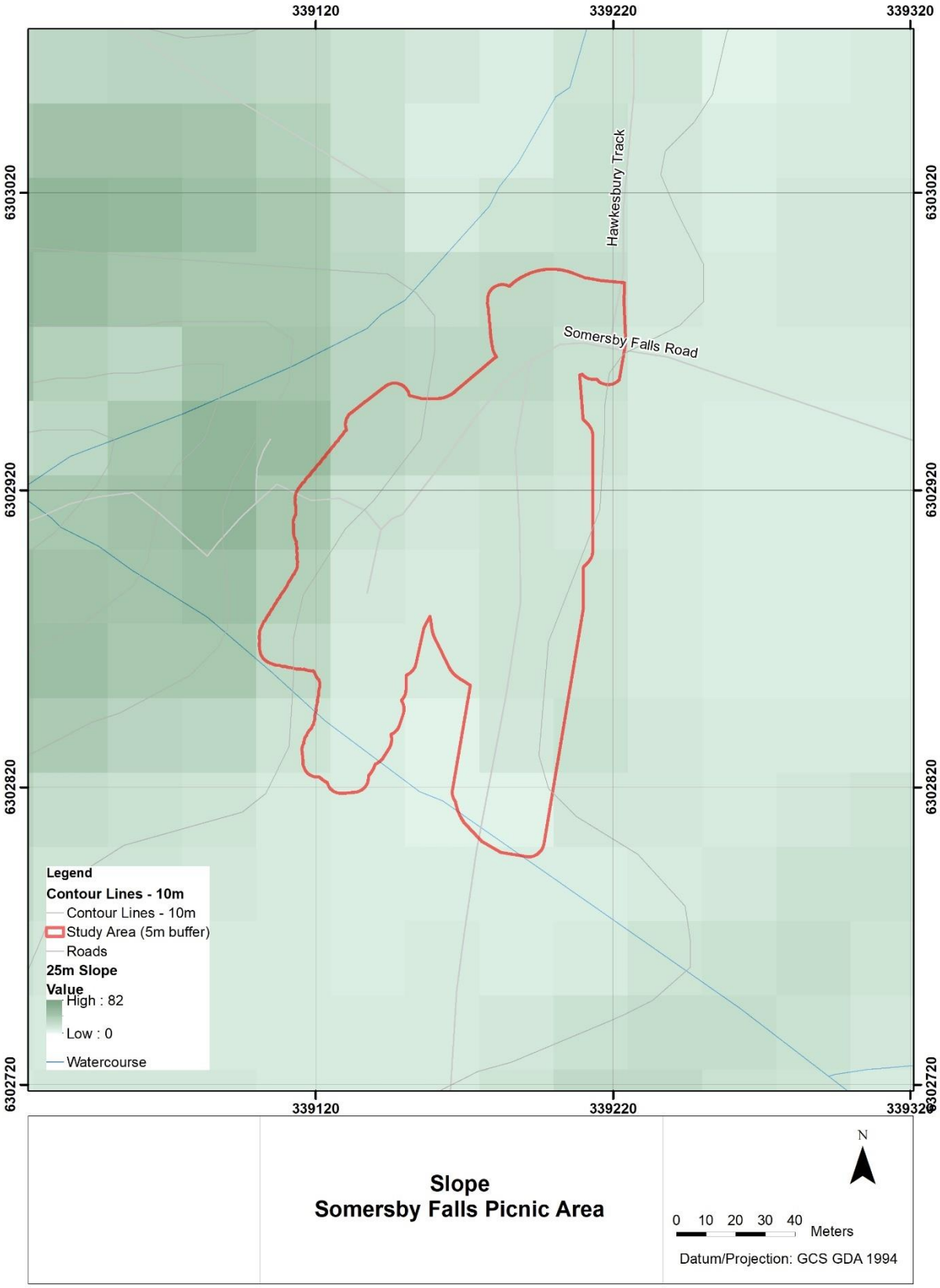


Figure 9 Slope



8.1.2 Soil types and properties (including contamination)

Biosis (2022) described the soil landscape within the study area as Sydney Town, which is generally characterised by undulating to rolling hills and moderately inclined slopes on quartz sandstone along the edge of the Somersby Plateau (see Figure 10). The soils are highly permeable, strongly acidic with low fertility and are subject to permanent waterlogging and may present a very high erosion hazard.

Moderate to severe sheet erosion and rilling can occur within this soil landscape when vegetation has been extensively cleared for development (as in the adjacent Somersby Industrial Estate). (Source: P:\Corporate\Products\Soil\SoilLandscape\Soil_Land_Resources_Reports\SLR_HunterRegion_reports\stz.doc).

Soil erosion risk for the study area is predominantly low, however, moderate soil erosion risk is likely in the north western portion of the site (see Figure 11)

The proposed work will not involve extensive vegetation clearing; however, the site will be excavated, with bare earth exposure for a period of time to enable installation of facilities and associated infrastructure. This exposure has the potential to cause soil erosion and sedimentation of the adjacent creek.

Detailed soil and erosion mitigation measures will be developed for the project and are addressed in section 9.1 of this REF.

Acid sulphate soils are not present within the study area (Central Coast Council LEP 2022 online mapping). (See Figure 12)

Figure 10 Soil Landscapes

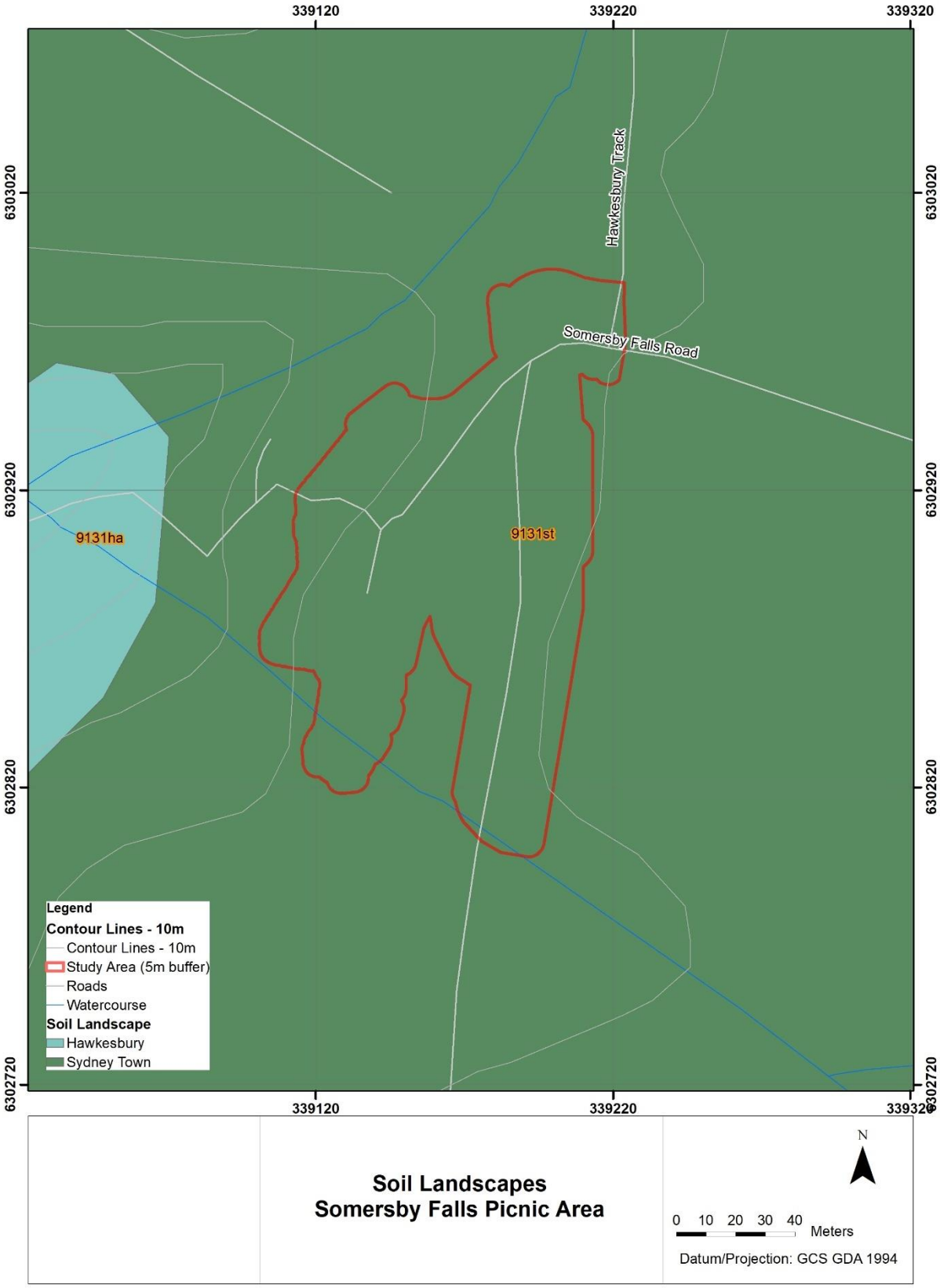


Figure 11 Soil Erosion Risk

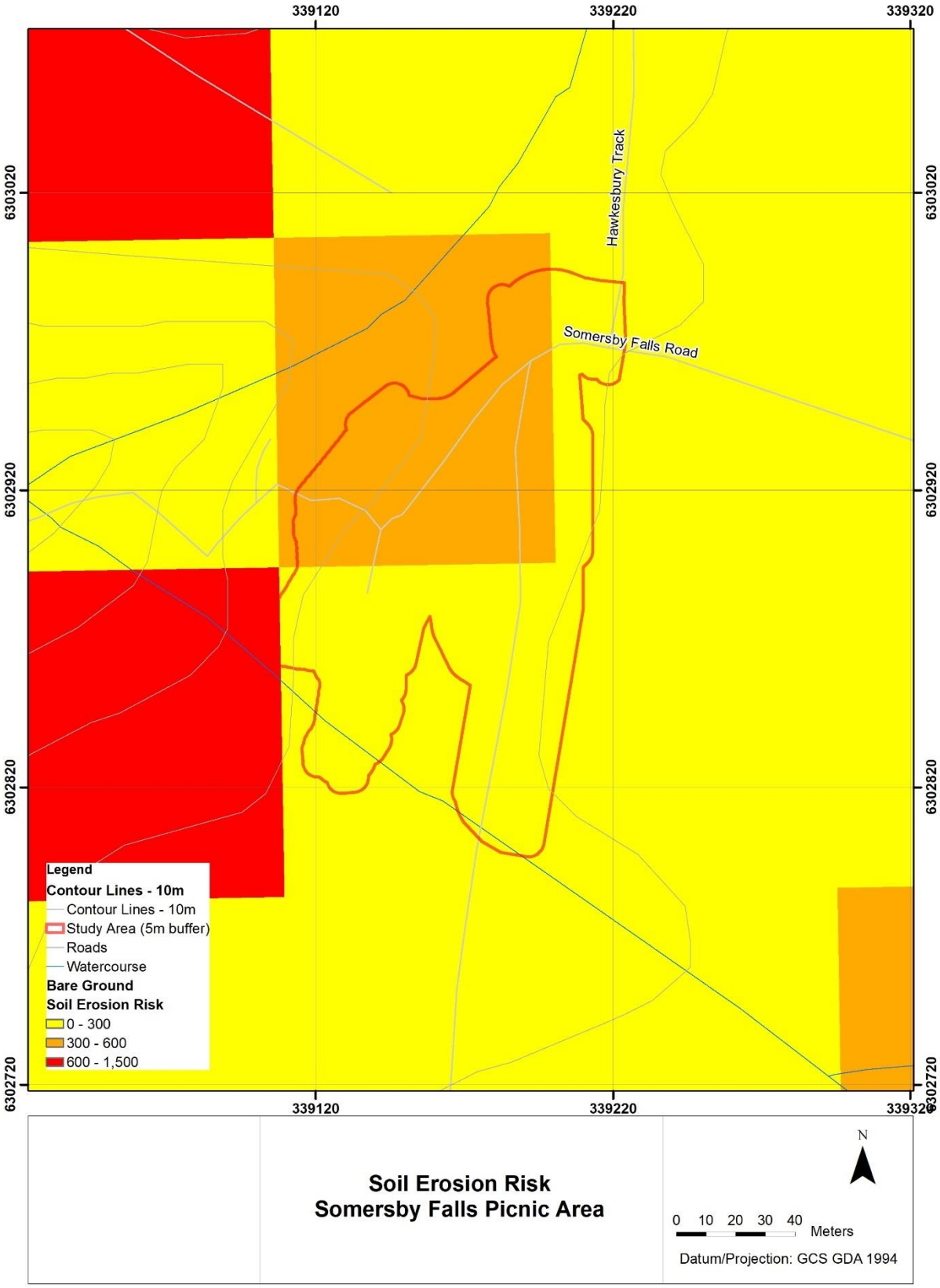
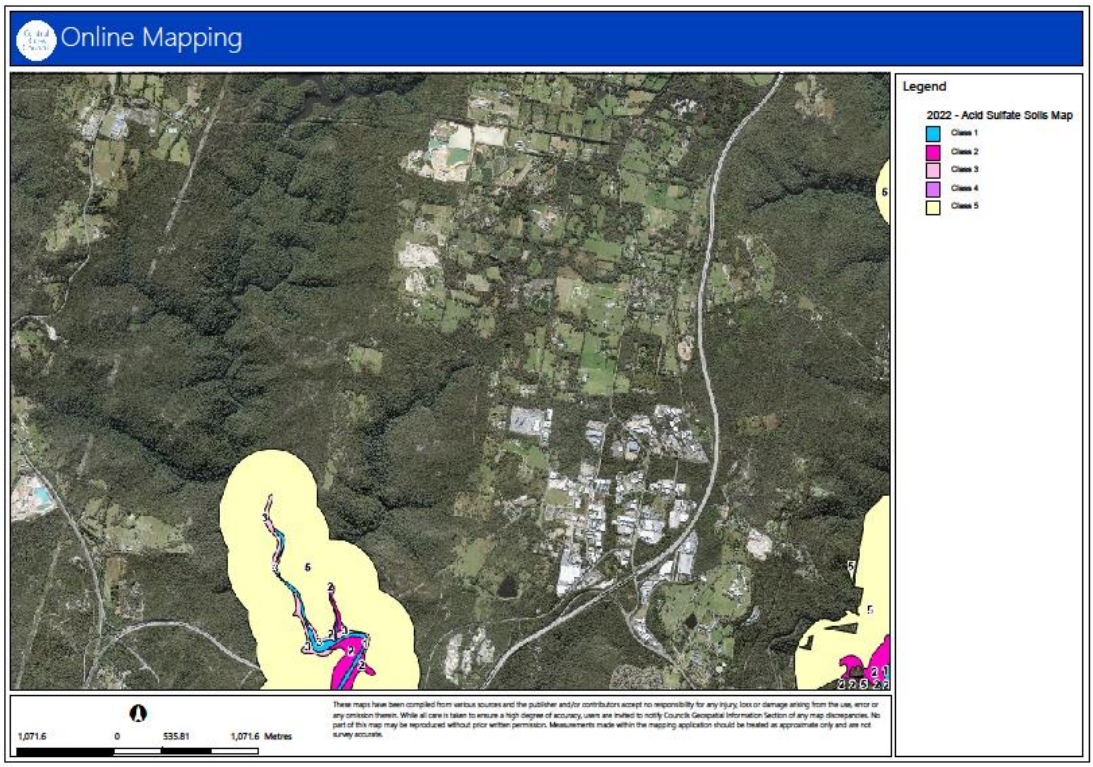


Figure 12 Acid Sulphate Soils



8.1.3 Watercourses, waterbodies and wetlands (including their catchment values)

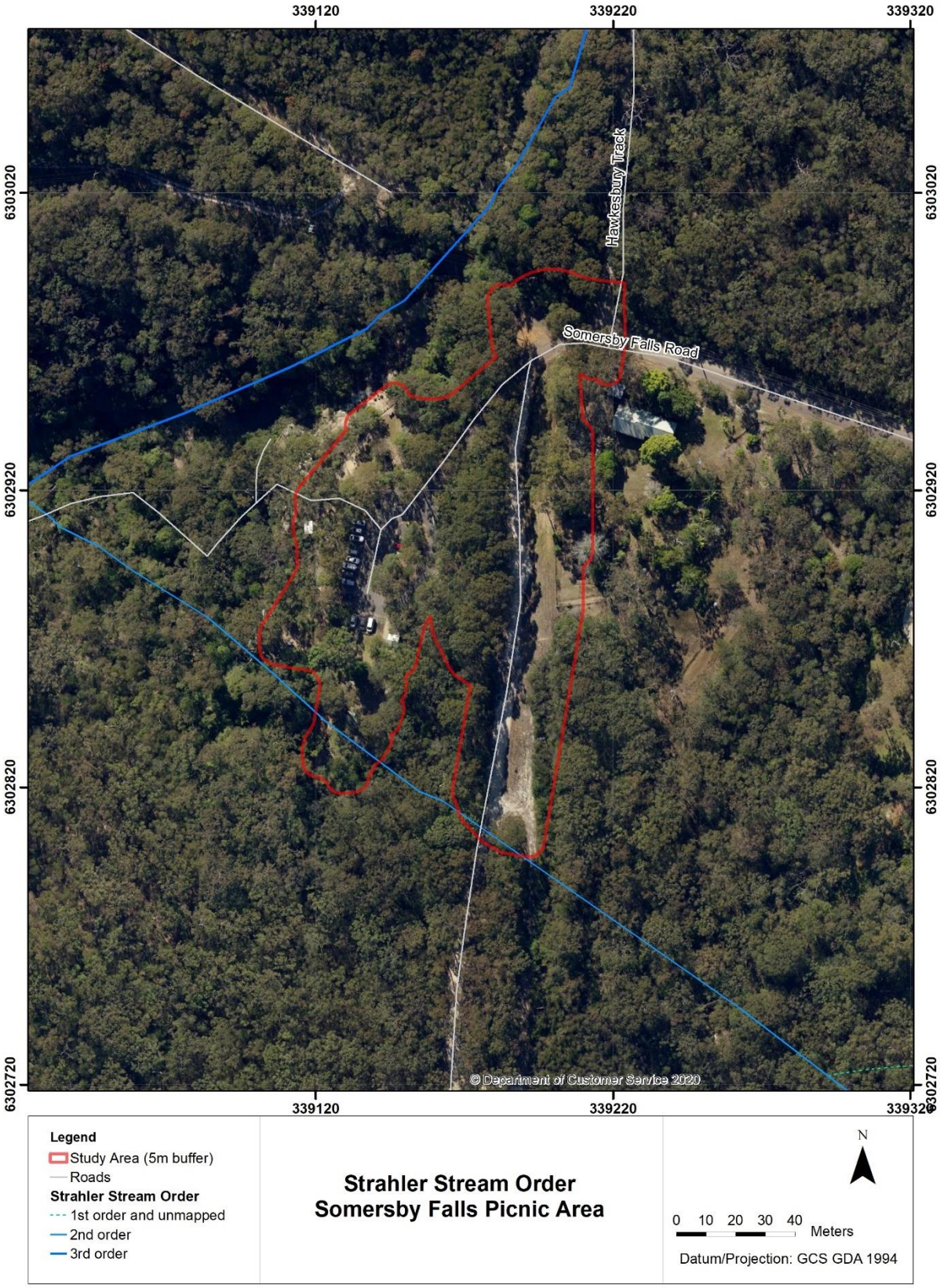
Floods Creek, a 3rd order Strahler stream lies to the north of the proposal, whilst an unnamed 2nd order Strahler stream lies to the south (see Figure 13).

Both creeks are tributaries of Mooney Mooney Creek and the Hawkesbury River and do not feed into a water supply catchment.

The highest average rainfall for the Gosford AWS (Narara Research Station - approximately 10km from the proposed works) is in February at 154.7mm, with the lowest being in September at 68.5mm (source: BOM 2022 http://www.bom.gov.au/climate/averages/tables/cw_061087.shtml).

The proposed work will involve excavation to bare earth, with exposure expected for a period to enable installation of facilities and associated infrastructure. This exposure has the potential to cause soil erosion and sedimentation of the adjacent creek. Detailed soil and erosion mitigation measures will be developed for the project and are addressed in section 9.1 of this REF.

Figure 13 Strahler Stream Order



8.1.4 Coasts and estuaries

Not applicable.

8.1.5 Biodiversity

Overview of terrestrial and aquatic biodiversity

The vegetation was mapped and classified by Stephen Bell in 2009

There are two vegetation communities present within the study area. Exposed Hawkesbury Woodland (0.36ha) and Hawkesbury Banksia Scrub-Woodland (0.1912ha). The remainder of the site consists of disturbed vegetation (canopy only 0.1772ha) and cleared land (0.7534ha).

Exposed Hawkesbury Woodland consists of *Corymbia gummifera, Eucalyptus haemastoma* and *Angophora costata* occurring as widely spaced trees in the canopy, with shrubs *Banksia serrata, Platysace linearifolia, Leptospermum trinervium, Grevillea buxifolia* and *Banksia ericifolia*.

The primary tree within the Hawkesbury Banksia Scrub-Woodland is *Eucalyptus haemastoma,* with shrubs *Banksia ericifolia, Banksia oblongifolia, Leptospermum trinervium, Angophora hispida, Hakea teretifolia.*

The remainder of the study area consists of cleared land which is part of the existing Somersby Falls Picnic Area and the adjacent Somersby Pipeline Fire Trail as well as disturbed (cleared) land with no understorey (canopy only).

Vegetation	Area (ha) within study area	% of study area
Exposed Hawkesbury Woodland (GCC-E26)	0.36	24
Hawkesbury Banksia Scrub-Woodland (GCC-E29)	0.19	13
Disturbed (canopy only)	0.18	12
Cleared	0.77	51

Of the 0.36ha of exposed Hawkesbury Woodland within the study area, it is anticipated that only 16% of this will be directly impacted by construction works. Works include a footpath associated with the new carpark, two walking tracks linking the carpark and picnic area as well as picnic area drainage improvements (see Figure 14 and Figure 15).

The 0.19ha of the Hawkesbury Banksia Scrub-woodland within the study area, is a previously disturbed community. A small number of shrubs remain scattered throughout the landscaped picnic area gardens whilst more intact shrubs lie around the edges of the existing picnic area and bus parking area. The whole 0.19ha of this community will either be removed or disturbed for construction of the upgraded picnic area, bus turning area and footpaths.

A detailed habitat tree inspection was undertaken by Emergent Ecology on 6th December 2021. 16 habitat trees were identified within the study area, 3 of these are proposed to be removed. A further 28 trees (non-habitat) will also be removed (see Figure 16)

Detailed biodiversity mitigation measures are addressed in section 9.2 of this REF and Appendix 5 – Habitat Tree Felling Procedures.

Figure 14 Vegetation Communities

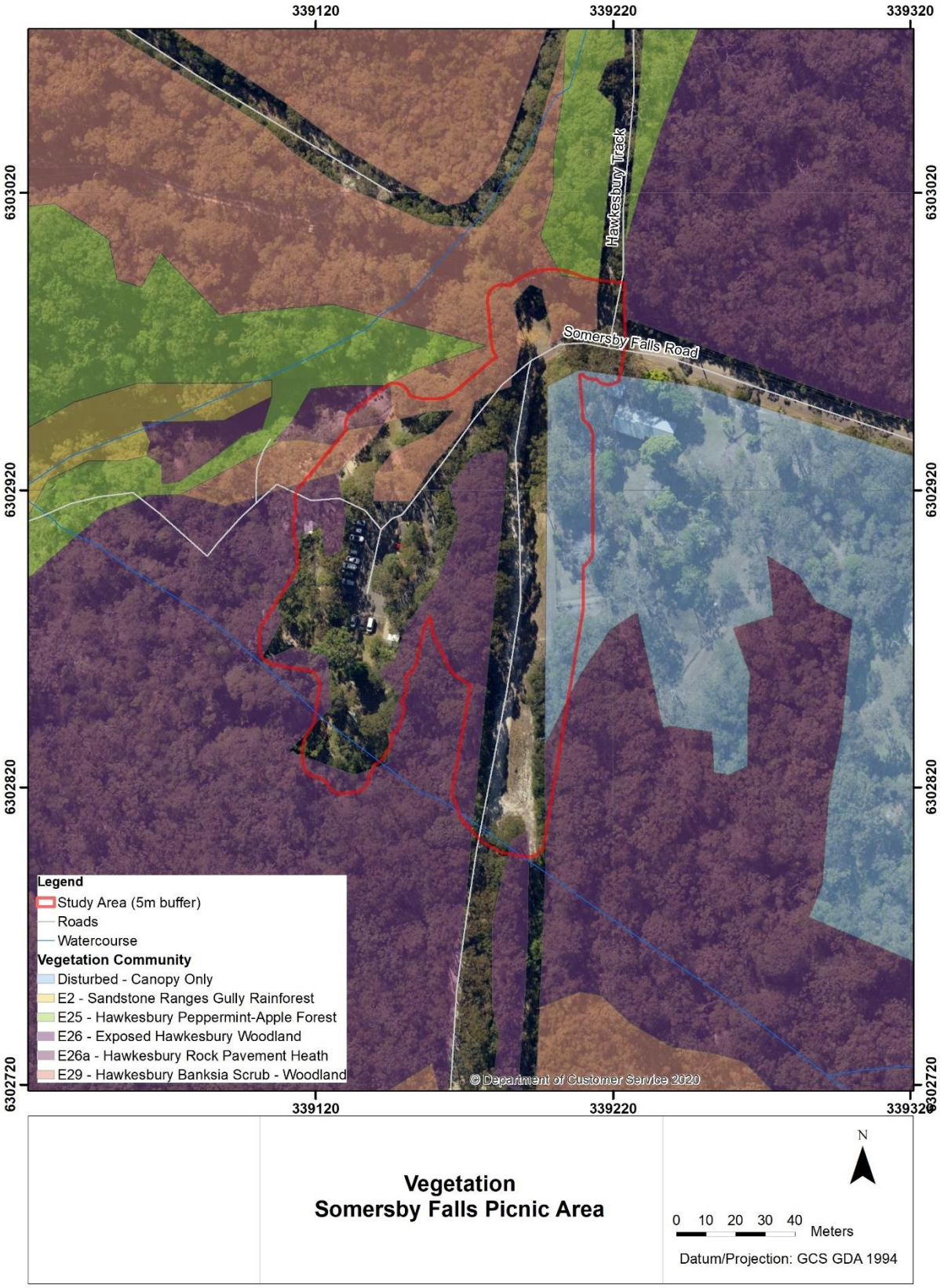


Figure 15 Vegetation Impact

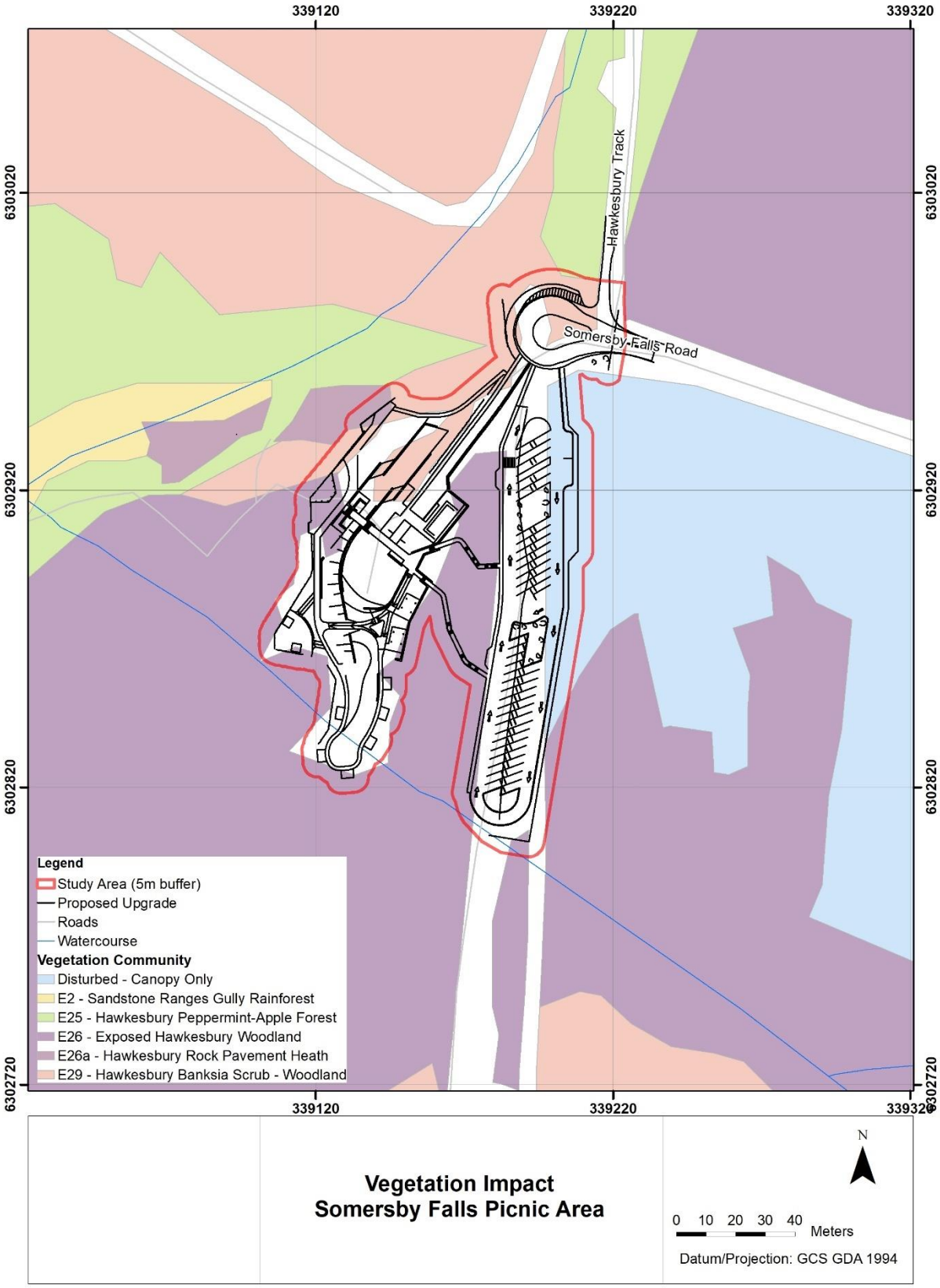
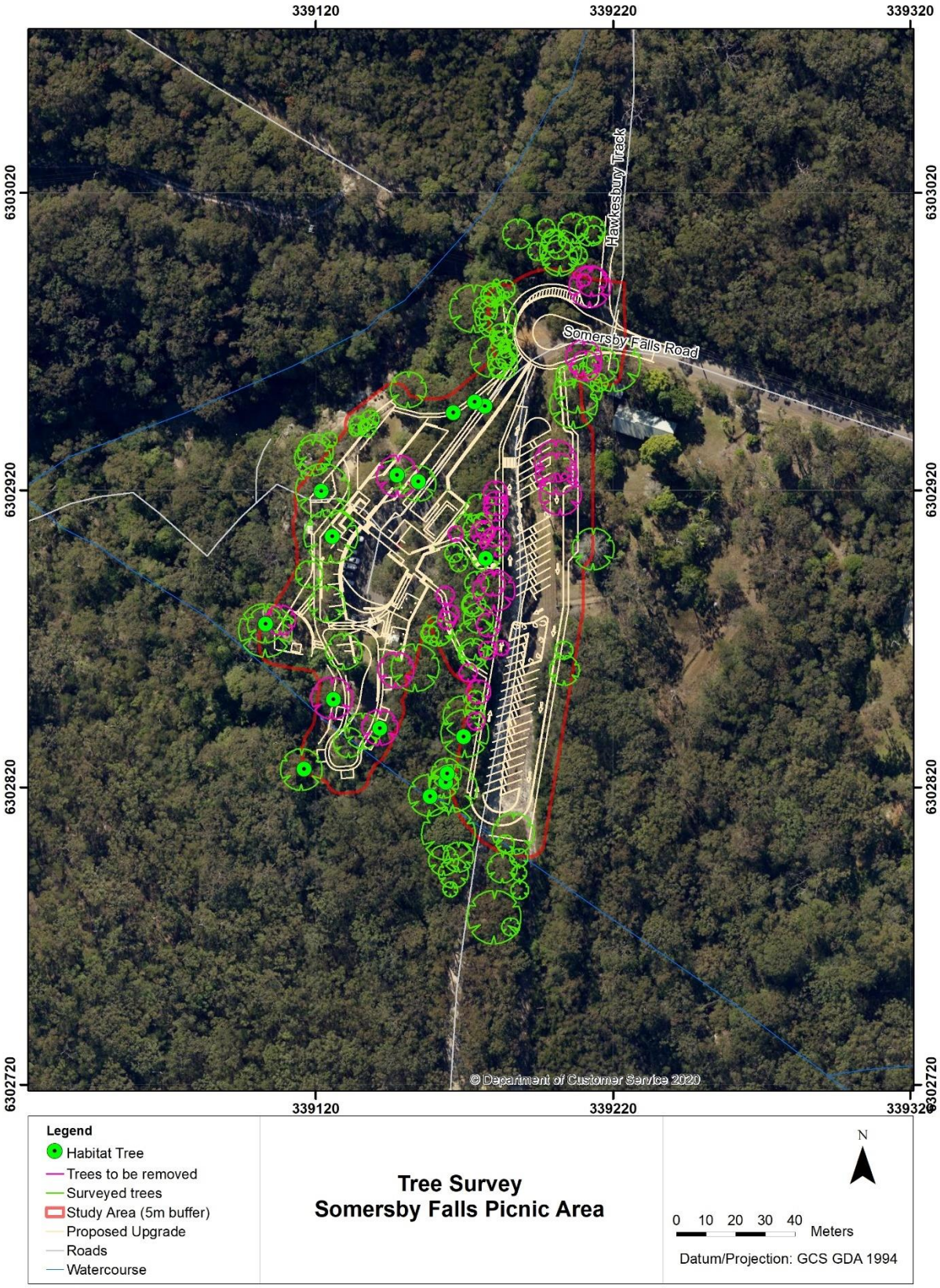


Figure 16 Tree Survey



Areas of outstanding biodiversity value or critical habitat

Not applicable. There are no areas of outstanding biodiversity value or critical habitat within the study area.

Environmental assets of intergenerational significance (AIS)

The Somersby Mintbush (*Prostanthera* junonis) AIS site number AIS site AIS-E0-065 falls within the southern portion of the study area.

Approximately 0.47ha of this AIS site may be affected by the proposed development.

Of the 0.47ha of the AIS site, 0.28ha (60%) is cleared land (part of the existing Somerby Falls Picnic Area), and 0.03ha (6%) is existing disturbed land (canopy only with no understorey).

There are no known records of Somersby Mintbush within the study area. The closest known records are 300m to the south, therefore the proposal will only disturb 0.16ha of potential habitat (Exposed Hawkesbury Woodland).

The adopted Conservation Action Plan for Somersby Mintbush (*Prostanthera junonis*), August 2022 identifies disturbance as a key risk to this species. In particular unauthorised maintenance activities.

AIS-E0-065 site is 52.8ha in size. It is expected that the proposed work has the potential to disturb up to 0.16ha (0.30%) of the AIS site (see Figure 17 and Figure 18).

Detailed biodiversity mitigation measures are addressed in section 9.2 of this REF and potential impacts are detailed in the test of significance at Appendix 1. If mitigation measures identified in Section 9 of this REF are implemented, a significant impact is not likely to occur for *Prostanthera junonis* or AIS site # AIS-E0-065 as a result of the proposed work.

Figure 17 Asset Of Intergenerational Significance

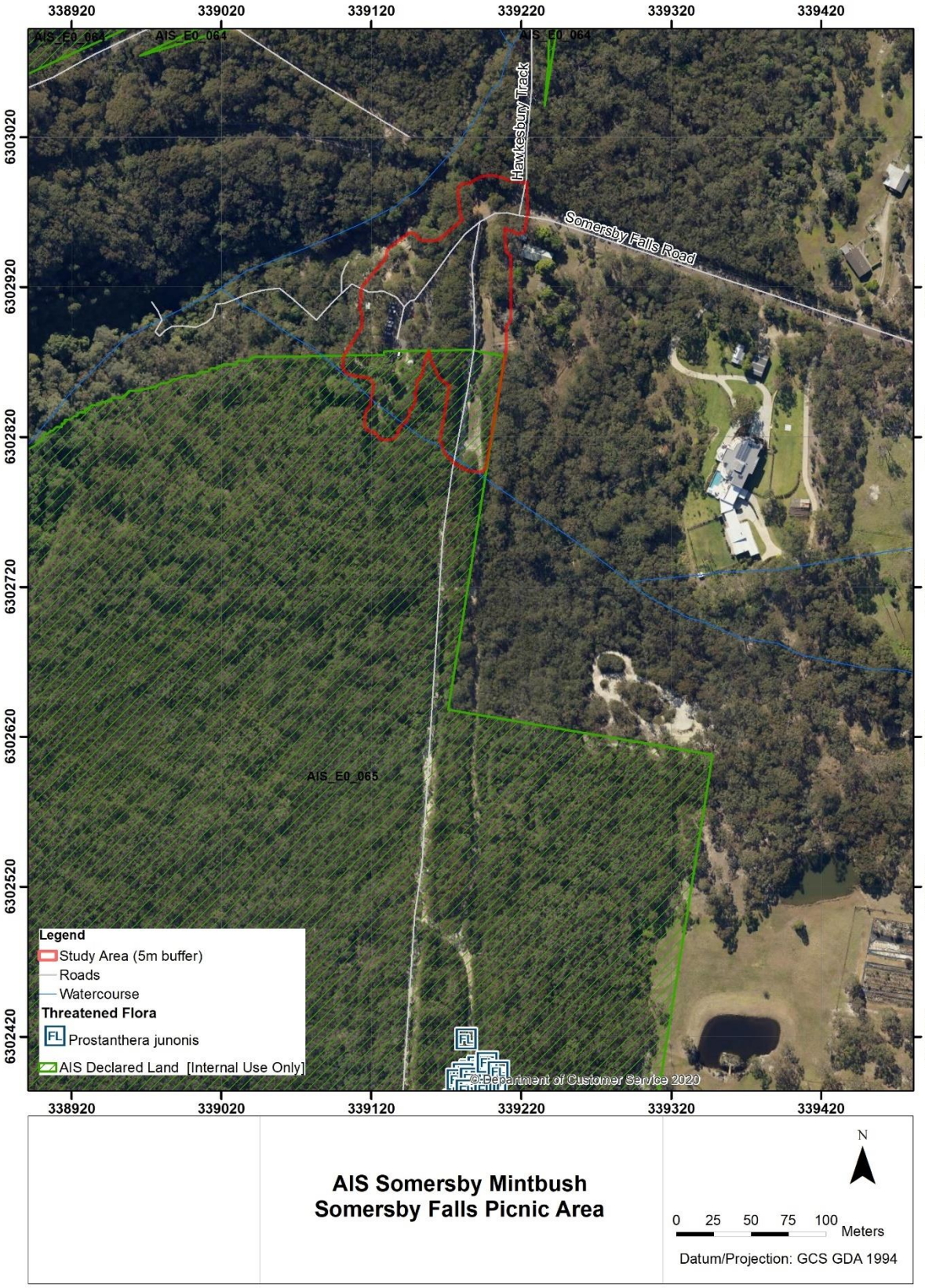
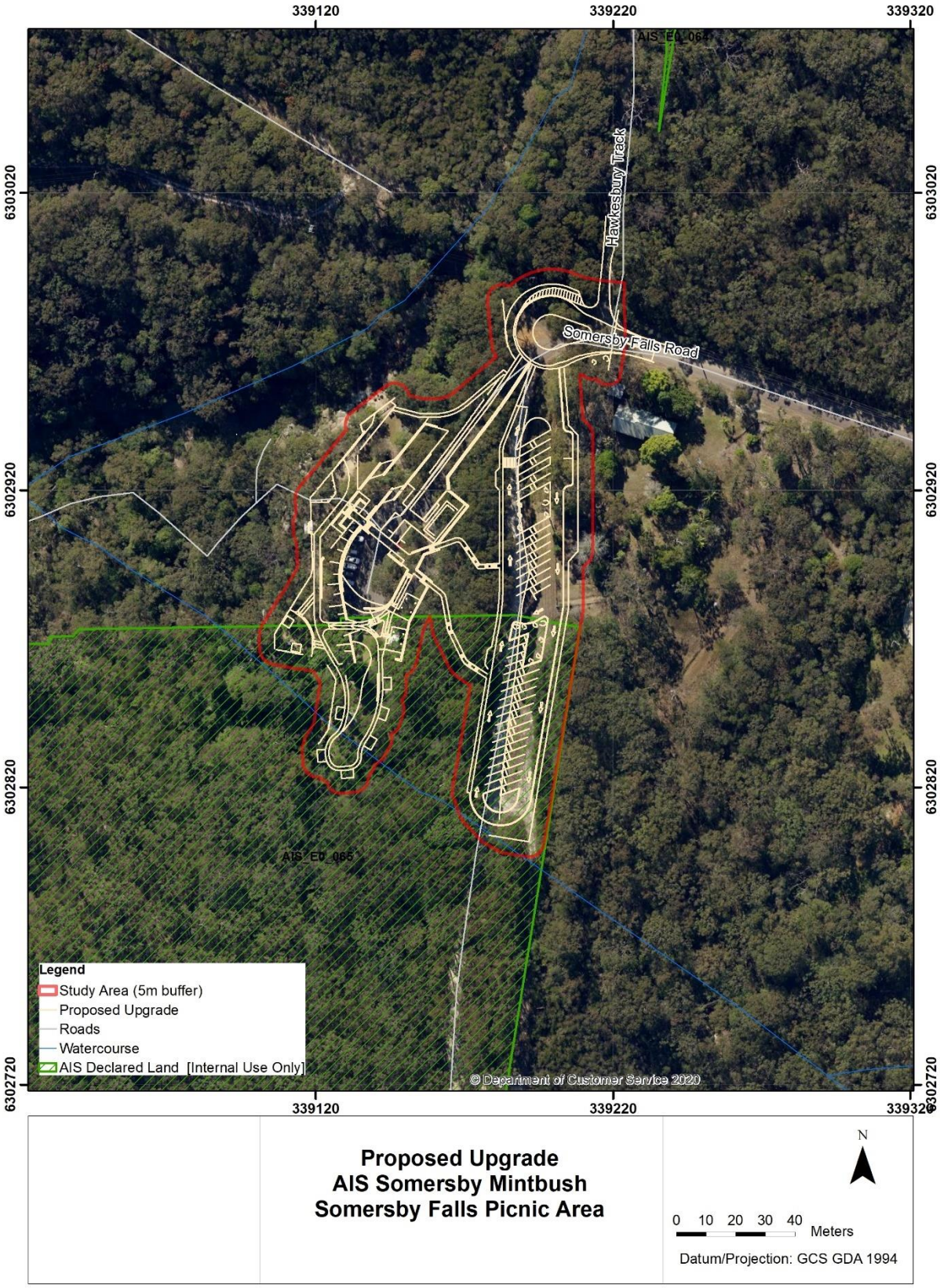


Figure 18 Proposed Upgrade in relation to AIS Somersby Mintbush



Threatened ecological communities

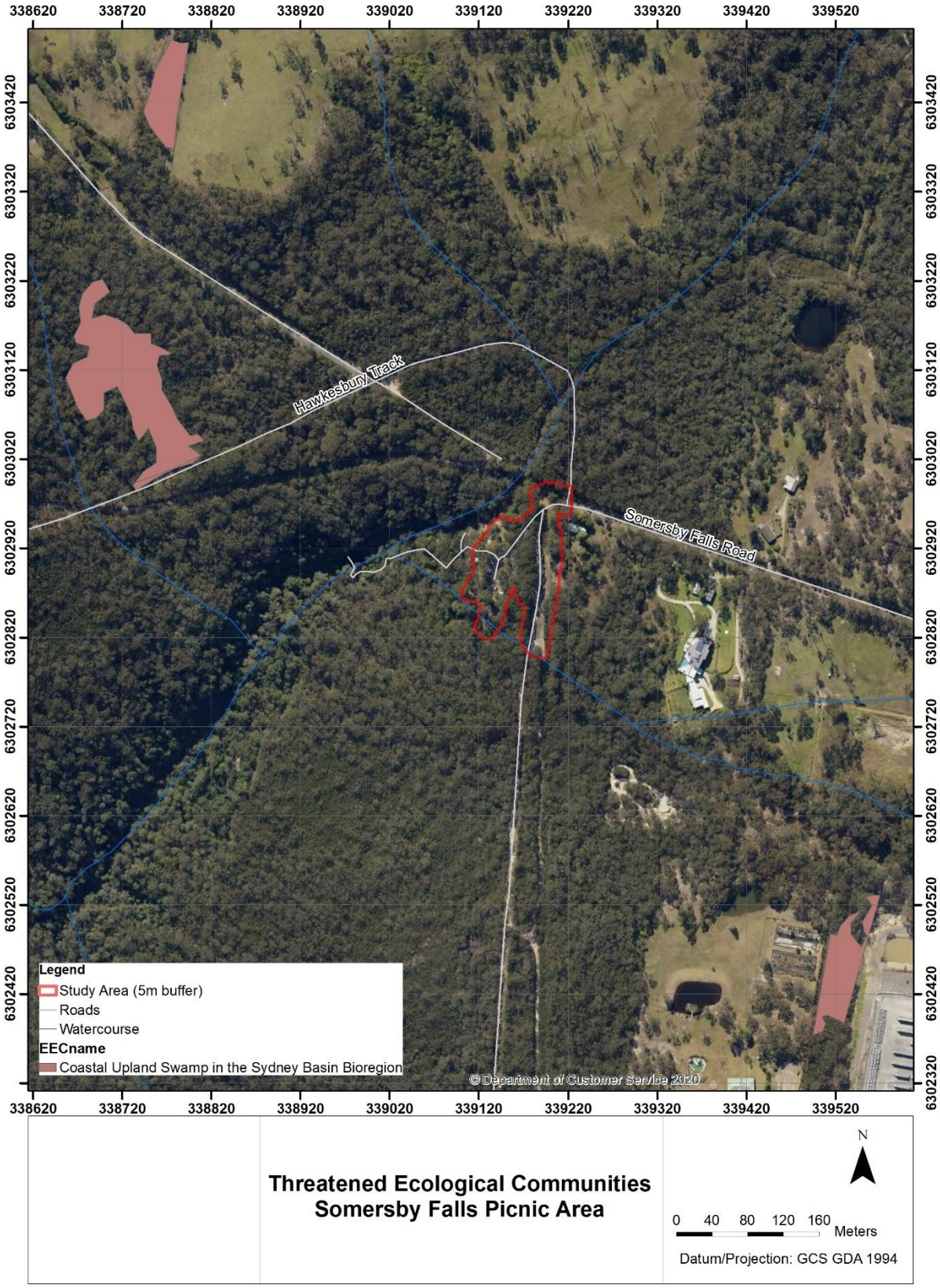
A database search of both BioNet and EPBC Protected Matters Search Tool was completed in December 2021 (by Emergent Ecology) and on the 19th October 2022. There are no known Threatened Ecological Communities (TEC) within the study area (see Figure 19), however, EPBC results identified 4 TECs that likely occur within the 5km search area:

- Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community
- River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria
- Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland
- Coastal Upland Swamps in the Sydney Basin Bioregion

A site inspection by Emergent Ecology on the 6th December 2021 did not identify suitable habitat for any of these TECs within the study area.

Detailed biodiversity mitigation measures are addressed in section 9.2 of this REF and a likelihood of occurrence table for these TECs can be found at Appendix 1.

Figure 19 Threatened Ecological Communities



Threatened species and populations

A database search of BioNet was completed in December 2021 (by Emergent Ecology) and again on the 19th October 2022 by NPWS.

BioNet results identified 40 threatened fauna and 15 threatened flora within a 10km search area from the study area. Of these, only 4 threatened fauna and 1 threatened flora have been recorded within the study area, with 1 likely occurring (*Prostanthera junonis*).

Common Name	Scientific Name	BC Act Status	EPBC Act Status
Red-crowned Toadlet	*Pseudophryne australis*	V	
White-throated Needletail	*Hirundapus caudacutus*		V
Eastern Coastal Free-tail Bat	*Micronomus norfolkensis*	V	
Large bentwing-bat	*Miniopterus orinae oceanensis*	V	
Spreading Guinea Flower	*Hibbertia procumbens*	E	
Somersby Mintbush	*Prostanthera junonis*	E	E

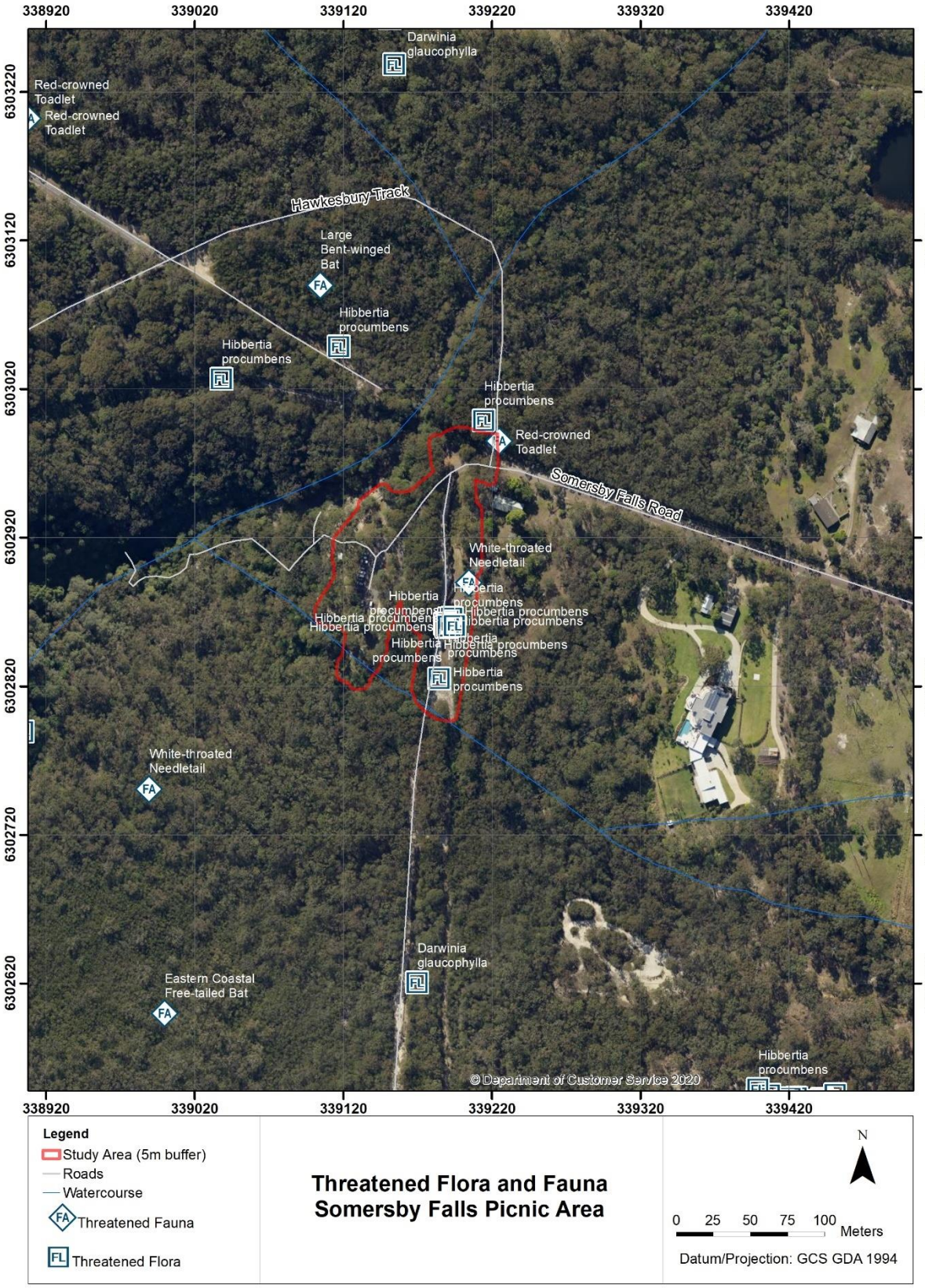
A likelihood of occurrence analysis identified 22 threatened fauna, 14 threatened flora, 4 Threatened Ecological Communities and 1 Asset of Intergenerational Significance as either occurring or having potential to occur within the study area (see details in Appendix 1).

Based on likely habitat and extensive on ground searches by Emergent Ecology in December 2021, only one threatened species, *Hibbertia procumbens* was recorded, or considered to have potential to occur within the study area. Nine individuals of the *Hibbertia procumbens* which is listed as vulnerable under the BC Act was found within the existing Pipeline / Powerline easement (see Figure 20). These individuals will be removed as part of the upgrade as the footprint of the new carpark and associated infrastructure cannot be modified to exclude these species.

The Red-crowned Toadlet (RCT) has not been recorded within the study area, rather in a culvert to the north and outside of the study area. The proposed work will disturb approximately 0.034ha of foraging habitat directly adjacent to the culvert. The culvert will not be disturbed.

An assessment of significance under the BC Act determined there would be no significant impact to the Red-crowned Toadlet, White Throated Needletail, Eastern Coastal Free-tail Bat, Large Bentwing-bat and *Hibbertia procumbens* or local populations as a result of the upgrade (refer to Appendix 1). These species are regionally abundant, and the location of the proposed activity is not at the species extent of range or an important population.

Figure 20 Threatened Flora and Fauna

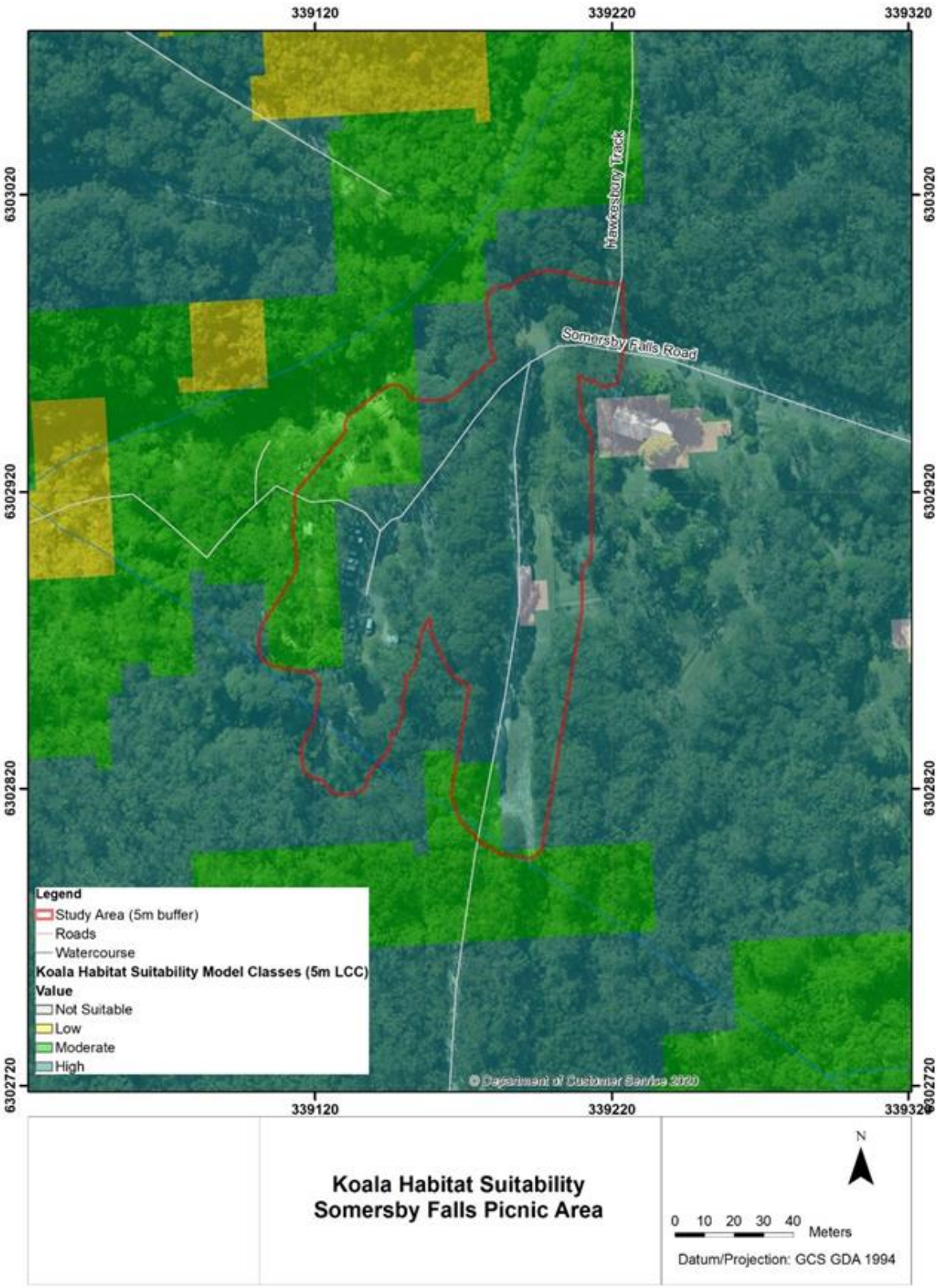


SEPP Koala Habitat Protection:

There are no known koala records within the study area, however, there is moderate to high koala habitat suitability (see Figure 21). This suitability model has not taken into account the already cleared picnic area, fire trail and disturbed land (canopy only).

The project area falls is outside the Central Coast (Gosford) Area of Regional Koala Significance and therefore no further assessment is required.

Figure 21 Koala habitat suitability



8.2 Cultural values

8.2.1 Aboriginal cultural heritage

An Archaeological Report (AR) and Aboriginal Cultural Heritage Assessment (ACHA) were prepared by Biosis in November 2022 for the Somersby Falls Precinct. Both reports are attached as Appendix 2 and 3.

Extensive Aboriginal community consultation was incorporated into the preparation of both of these reports. Site interpretation and mitigation measures were developed in consultation with Aboriginal community and are addressed in section 9.5 of this REF.

The archaeological assessment identified two Aboriginal sites within the study area:

- AHIMS 45-3-001/Somersby; grinding groove site
- Somersby Falls PAD-01 (AHIMS pending)

The griding grooves are located on a sandstone rock platform in Floods Creek outside and to the north of the study area. Grinding grooves are scattered around the potholes of the creek. Graffiti has been carved into the rock around the site closest to the edge of the picnic area.

The Potential Archaeological Deposit (PAD) site is a new site that was identified during the preparation of the Archaeological Report and associated test pitting. It is a low density, sub surface archaeological deposit containing 38 artefacts (Biosis 2022). Due to the level of disturbance and modification of the landscape that occurred to construct the existing picnic area, this PAD has moderate potential to contribute further information about Aboriginal occupation and land use within the region (Biosis 2022).

BIOSIS 2022 recognised the following potential archaeological impacts as a result of the upgrade:

AHIMS Site no.	Site Name	Significance	Type of harm	Degree of harm	Consequence of harm
AHIMS pending	Somersby Falls PAD-01	Moderate	Direct	Partial	Partial loss of value
45-3-0014	Somersby; grinding groove site	High	Indirect	Partial	Partial loss of value

The proposed upgrade will directly impact the PAD and has the potential to impact the rock platform containing the grinding groove site, therefore an AHIP is required.

Detailed mitigation measures are addressed in section 9.5 of this REF.

Photo 4 Grinding grooves located adjacent to the proposed site

8.2.2 Historic heritage values

European exploration of the Central Coast area began soon after the arrival of the First Fleet. In 1788-89, Brisbane Water, Mullet Creek and Mooney Mooney Creek were explored. European settlement along the Hawkesbury River began about 1794. In the early 1820's the area between the Hawkesbury and Hunter Rivers became available for European settlement.

A number of historic places are associated with the Sydney to Newcastle rail link, which was completed in 1889. Other sites are related to minor agricultural operations, quarrying for stone and mining for ochre pigments.

There are 30 known historic heritage sites recorded in Brisbane Water National Park. There are no known sites within or adjacent to the proposed development at Somersby Falls Picnic Area.

HHIMS search completed 26th October 2022. There are no known historic heritage sites within the study area. The closest known sites are located approximately 3km to the south west on Mooney Mooney Creek.

8.3 Social values

8.3.1 Recreation values

Somersby Falls Picnic Area is located within a rainforest setting featuring a short walking track to the three levels of the cascading Somersby waterfall. The Picnic Area offers picnic tables and BBQ facilities as well as a gentle sloping grassed area for recreational activities.

Due to its proximity to the M1, Gosford and Sydney, visitation levels have been consistently increasing with over 100,000 visitors recorded in 2021 (data taken from onsite pedestrian counter). During weekends and peak holiday periods, parking can be very difficult, and the picnic area facilities / amenities are beyond capacity.

The tranquil location and spectacular waterfalls, a short walk from the carpark, makes this one of the Central Coasts most scenic picnic spots (as listed on the lovecentralcoast https://www.lovecentralcoast.com/news/the-central-coasts-most-scenic-picnic-spots).

8.3.2 Scenic and visually significant areas

The upgrade will include construction of a small viewing platform above Top Falls, just off the northern part of the picnic area. This new platform will enhance the visitor experience and safety, enabling visitors of all mobility levels to have unhindered views upstream along Floods Creek. At present, visitors are climbing over barriers to access the rock platform / creek to obtain views upstream.

This new viewing platform has been designed in a way that it will be setback along the edge of the rock platform and will have minimal impact to visitors below at the Middle Falls, looking upstream at the main waterfall. Detailed designs of the platform are attached as Appendix 6.

8.3.3 Education and scientific values

The natural and cultural values of the picnic area provide educational opportunities for visitors. Interpretative signs and displays will be updated throughout the site providing key information to visitors on the importance of the area to both Aboriginal and scientific communities, particularly around Aboriginal art and occupation as well as locally endemic threatened species.

8.3.4 Interests of external stakeholders

The upgrade of the picnic facilities and carpark will improve the recreational experience for adjoining landowners and park visitors.

At present, congestion on Somersby Falls Road and carparking opportunities are limited during peak periods, holidays and the warmer months.

As a result of engaging with park neighbours regarding the proposed project, the main concern was landholders frustration when unable to travel down Somersby Falls Road due to congestion or when vehicles are parked blocking or restricting access to their private property. The number of vehicles, people walking down the street was also considered a safety issue.

NPWS has addressed the park neighbours concerns by designing a car park with off street parking capacity of 60 spaces. This is an increase from the existing 22 spaces. This design will provide greater opportunity for vehicles to park within the dedicated parking area, and reduce the parking Somerby Falls road.

The design for the upgraded facilities, increased capacity carpark and turning bay will reduce pressure and congestion, providing for a more enjoyable visitor experience.

The Somersby Pipeline Fire Trail is currently graded as a Category 1 fire trail under the Central Coast Bush Fire Management Committees Fire Access Fire Trail plan. Upgrading the northern portion of this trail to a sealed surface and single directional flow carpark, will improve emergency vehicle access and reduce congestion on Somersby Falls Road. The security gate for access into the southern portion of the Park will be upgraded and signposted to ensure kept clear at all times.

Central Coast Council has an interest in the project due to the water pipes which are located under the propose car park. NPWS has meet and engaged through the design process with Council representatives to ensure the planned design works are in accordance with Council requirements.

Photo 5 Existing interpretative shelter.

8.4 Matters of National Environmental Significance

A database search of EPBC Protected Matters Search Tool was completed in December 2021 (by Emergent Ecology) and again on the 19th October 2022 by NPWS.

EPBC results identified 54 threatened fauna (excluding 3 marine species), 27 threatened flora, 4 Threatened Ecological Communities and 18 migratory species (excluding 29 marine species) that may, are likely or are known to occur within the 5km search area from the study area. Only one of these species, the White-throated Needletail (*Hirundapus caudacutus*) has been recorded within the study area (see Figure 20).

Common Name	Scientific Name	BC Act Status	EPBC Act Status
White-throated Needletail	*Hirundapus caudacutus*		V
Somersby Mintbush	*Prostanthera junonis*	E	E

A likelihood of occurrence analysis identified 8 threatened fauna, 11 threatened flora and 4 Threatened Ecological Communities as either occurring or having potential to occur within the study area (see details in Appendix 1).

Based on likely habitat and extensive on ground searches by Emergent Ecology in December 2021, no Matters of National Environmental Significance was recorded, or considered to have potential to occur within the study area.

An assessment of significance under the EPBC Act for the White-throated Needletail and Somerby Mintbush (AIS site) determined there would be no significant impact as a result of the upgrade (refer to Appendix 1).

9. Impact assessment

9.1 Physical and chemical impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. impact on soil quality or land stability?	☒	Low	Excavation works (eg. cut and fill, drainage improvements) have the potential to cause erosion of soils and subsequent sedimentation of the adjacent creeks. Exposed bare earth will be more susceptible to erosion during rainfall events.	Implement erosion and sediment control plan DDC02.01 (refer to Appendix 6). Minimise bare earth exposure times / stabilise soils as soon as possible. Consider covering large areas with geotechnical fabric, mulch or other suitable material, especially prior to forecast heavy rainfall events. Inspect control measures daily. Complete landscaping works as per detailed landscaping plan (refer to Appendix 6) prior to site demobilisation.
2. affect a waterbody, watercourse, wetland or natural drainage system – either physically or chemically (e.g. due to runoff or pollution)?	☒	Low	Excavation works have the potential to cause erosion of soils and subsequent sedimentation of the adjacent creeks. Exposed bare earth will be more susceptible to erosion during rainfall events. Fuel, oil and chemicals will be used during construction by vehicles, machinery and in materials used for road re-surfacing and the construction of concrete footings. Potential for runoff into adjacent creek if not stored / used correctly.	Implement erosion and sediment control plan DDC02.01 (refer to Appendix 6). The plan must be prepared using the guidelines Managing Urban Stormwater: Soils and Construction (Landcom 2004) and any other relevant guidelines. Minimise bare earth exposure times / stabilise soils as soon as possible. Consider covering large areas with geotechnical fabric, mulch or other suitable material, especially prior to forecast heavy rainfall events. Inspect control measures daily.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				Fuels and chemicals must be handled and stored in accordance with relevant material safety data sheets (MSDS) and Australian standards (AS1940 The storage and handling of flammable and combustible liquids). Storage and refuelling should occur on hardstand areas with an approved bunding system in place to prevent contamination into the surrounding environment. Regularly inspect plant and equipment for fuel / oil leaks. Spill kits must be on site during the construction period.
3. change flood or tidal regimes, or be affected by flooding?	☐	NA	NA	
4. affect or be affected by coastal processes and coastal hazards, including those under climate change projections (e.g. sea level rise)?	☐	NA	NA	
5. involve the use, storage or transport of hazardous substances, or use or generate chemicals which may	☒	Low	Fuel, oil and chemicals will be used during construction by vehicles, machinery and in materials used for road re-surfacing, emulsion footpaths and the construction of concrete pads / footings.	Fuels and chemicals must be handled and stored in accordance with relevant material safety data sheets (MSDS) and Australian standards (AS1940 The storage and handling of flammable and combustible liquids).

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
build up residues in the environment?				Storage and refuelling should occur on hardstand areas with an approved bunding system in place to prevent contamination into the surrounding environment. Regularly inspect plant and equipment for fuel / oil leaks. Spill kits must be on site during the construction period.
6. involve the generation or disposal of gaseous, liquid or solid wastes or emissions?	☒	Low	Solid waste will be generated through the demolition and removal of existing picnic area and associated infrastructure, excavation and construction works. Decommissioning of the existing septic tank will involve removal of effluent and sludge. Vegetation will be cleared for construction of new picnic area, carpark, walking tracks and during excavation – cut and fill. Gaseous emissions from vehicles and machinery whilst operating have the potential to remain suspended in the immediate vicinity for short periods of time.	Classify waste for disposal in accordance with EPA's Waste Classification Guidelines, 2014. Waste / soil spoil storage will be in a designated compound area. Ensure erosion and sediment control measures are installed around the compound area. All waste that cannot be reused / recycled, must be removed from the site at completion of the works and disposed of at a licenced waste management facility. Effluent and sludge from the septic tank to be removed by an approved contractor prior to decommissioning. Decommissioning to be in accordance with NSW government guidelines Native vegetation should be mulched and re-used onsite. There will be minimal air quality impacts. Emissions will generally be contained within the immediate vicinity of the vehicle / machinery. Construction works will be limited to the hours of Monday to Friday between 7am and 6pm and Saturday 8am to 1pm. Extended weekend hours and

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				public holiday work can only occur with Area Manager approval. Picnic Area to be closed to the public and secured with security fencing and signage for the duration of the construction works.
7. involve the emission of dust, odours, noise, vibration or radiation?	☒	Low	There may be short term noise, dust and odours associated with the construction phase of the proposed upgrade works. Odours would be associated with the resurfacing of the bitumen. Due to the isolated nature of the area, these impacts would be unlikely to project to nearby residential areas, and the picnic area will be closed to visitors. Potential noise impacts from demolition, excavation and construction works projecting beyond the Park to residential areas would be low level and short term. There will be no ongoing increase in dust, odour, noise, vibration or radiation following the construction phase of any proposed activities.	Construction works will be limited to the hours of Monday to Friday between 7am and 6pm and Saturday 8am to 1pm. Extended weekend hours and public holiday work can only occur with Area Manager approval. Picnic Area to be closed to the public and secured with security fencing and signage for the duration of the construction works. Use water trucks or sprinkler devices during construction to suppress dust. Regular liaison with direct neighbours during the construction phase.

9.2 Biodiversity impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. affect any declared area of outstanding biodiversity value or critical habitat or environmental asset of intergenerational significance?	☒	Low	0.47ha of the Somersby Mintbush (*Prostanthera junonis*) AIS site number AIS site AIS-E0-065 falls within the southern portion of the study area. 0.28ha (60%) of this AIS site is already cleared (part of the existing Somerby Falls Picnic Area). Works in this section include cut and fill excavation works, drainage upgrades, construction of new walking tracks and installation of new furniture and amenities. 3 trees, including 2 habitat trees will be removed from this section. 0.03ha (6%) of the AIS site within the study area is existing disturbed land (canopy only with no understorey). Works in this section include cut and fill excavation works, drainage upgrades and construction of a new carpark and associated infrastructure. 0.16ha (34%) of the AIS site within the study area is previously disturbed Exposed Hawkesbury Woodland. Works within this section includes vegetation removal, construction of a walking track (50m^2), drainage upgrades and construction of a carpark and associated infrastructure. 6 trees will be removed from this section, none habitat trees.	Undertake vegetation pre-clearing survey prior to commencing work. Implement landscape architects plan for trees to be retained and protected (refer to Appendix 6) Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh. All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
2. result in the clearing or modification of vegetation, including ecological communities and plant community types of conservation significance? ^	☒	Low	Of the 0.36ha of exposed Hawkesbury Woodland within the study area, it is anticipated that only 16% of this will be directly impacted by construction works. Works include construction of a footpath associated with the new carpark, two walking tracks linking the carpark and picnic area as well as picnic area drainage improvements. 0.19ha of the Hawkesbury Banksia Scrub-woodland will either be removed or disturbed for construction of the upgraded picnic area, bus turning area and footpaths. 28 trees, 3 which are habitat trees are proposed to be removed to enable upgrade of the picnic area facilities, footpaths and carpark.	Undertake vegetation pre-clearing survey prior to commencing work. Implement landscape architects plan for trees to be retained and protected (refer to Appendix 6). Any existing trees which form part of the final landscaping plan shall be protected by installing appropriate protection barrier fencing or similar; care to be taken to not cut roots unnecessarily. Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh. All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works. Follow habitat tree felling procedures outlined in Appendix 5. Complete landscaping works as per detailed landscaping plan (refer to Appendix 6). Landscaping will result in more native plants being planted than what will be removed.
3. endanger, displace or disturb terrestrial or aquatic fauna, including fauna of conservation significance, or create a barrier to their movement? ^	☒	Low	Most of the proposed works are within the existing disturbed picnic area and adjacent fire trail. Fauna likely to inhabit the study area, such as reptiles and birds, are highly mobile and would not be impacted by the proposed works. There may be a barrier to their movements during construction and site fencing, however, this is a temporary measure considering there is a large	Undertake vegetation pre-clearing survey prior to commencing work. Implement landscape architects plan for trees to be retained and protected (refer to Appendix 6). Any existing trees which form part of the final landscaping plan shall be protected by installing appropriate protection barrier fencing or similar; care to be taken to not cut roots unnecessarily.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
			amount of undisturbed, foraging habitat directly adjacent that will be retained. 28 trees, including 3 habitat trees are proposed to be removed to enable upgrade of the picnic area facilities, footpaths and carpark. The Red-crowned Toadlet (RCT) has been recorded in a culvert to the north and outside of the study area. There is potential for the RCT to move through the Hawkesbury Banksia Scrub-woodland in the study area, of which 0.034ha will be disturbed as a result of the proposed work. If the flow of the drainage line is maintained, works are unlikely to create a permanent barrier to the movement of the RCT.	Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh. All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works. Follow habitat tree felling procedures outlined in Appendix 5. Ecologist to conduct a pre-work survey for Red-crowned Toadlet in the Hawkesbury Banksia Scrub Woodland prior to disturbance and in adjacent culvert. Clearly mark areas outside of the study area utilised by the RCT, including the adjacent culvert. Implement erosion and sediment control plan to ensure no impact on the adjacent culvert. If tadpoles or frogs are detected during works, contact Ecologist / NPWS to confirm species prior to resuming. If it is necessary to handle the frog / tadpole prior to arrival of Ecologist / NPWS, capture using disposable gloves and place in clean, plastic container or bag with a small handful of moist leaves / water. Ecologist / NPWS can relocate frog to suitable relocation site. To reduce the risk of the spread of diseases in frogs, footwear, machinery, vehicles and other construction equipment must be cleaned prior to entry into the Park.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				Follow Hygiene guidelines for wildlife (DPIE 2020) and Hygiene protocol for the control of disease in frogs (DECC 2008).
4. result in the removal of protected flora or plants or fungi of conservation significance? ^	☒	Low	Nine threatened flora *Hibbertia procumbens* will be removed during construction of the new carpark, footpaths and associated drainage and infrastructure. A test of significance was undertaken for this species. Considering the availability of high-quality habitat in the adjacent landscape; the species being regionally abundant; and the study area not being at the species extent of range, the proposed upgrade is unlikely to have a significant impact on this species.	Undertake vegetation pre-clearing survey prior to commencing work. Implement landscape architects plan for trees to be retained and protected (refer to Appendix 6). Any existing trees which form part of the final landscaping plan shall be protected by installing appropriate protection barrier fencing or similar; care to be taken to not cut roots unnecessarily. Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh. All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works. Implement unexpected finds protocol. Incorporate in Construction Environmental Management Plan. If during the course of the activity, you become aware of the presence of threatened species, populations or threatened ecological communities, or their habitats, that have not been identified and which are likely to be affected by the activity: • immediately cease all work likely to affect the threatened species, populations or threatened ecological communities, or their habitats;

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				• inform the Central Coast Area Manager and/or the local NSW Primary Industries office (for threatened fish or marine vegetation matters) as relevant. Notification must be made as soon as practicable by phone, electronically or in writing; not recommence work likely to affect the threatened species, populations or threatened ecological communities, or their habitats until receiving written advice from the NPWS and/or NSW Primary Industries to do so.
6. contribute to a key threatening process to biodiversity or ecological integrity?	☒	Low	Clearing of native vegetation has been recognised as a key threatening process for *Prostanthera junonis* (PJ), contributing to loss of biological diversity. 0.47ha of the Somersby Mintbush (*Prostanthera* junonis) AIS site number AIS site AIS-E0-065 falls within the southern portion of the study area. 0.28ha (60%) of this AIS site is already cleared (part of the existing Somerby Falls Picnic Area). Works in this section include cut and fill excavation works, drainage upgrades, construction of new walking tracks and installation of new furniture and amenities. 3 trees, including 2 habitat trees will be removed from this section. 0.03ha (6%) of the AIS site within the study area is existing disturbed land (canopy only with no understorey). Works in this section include cut and fill excavation works, drainage upgrades and	Undertake vegetation pre-clearing survey prior to commencing work. Implement landscape architects plan for trees to be retained and protected (refer to Appendix 6). Any existing trees which form part of the final landscaping plan shall be protected by installing appropriate protection barrier fencing or similar; care to be taken to not cut roots unnecessarily. Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh. All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works. Complete landscaping works as per detailed landscaping plan (refer to Appendix 6). Landscaping will result in more native plants being planted than what will be removed.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
			construction of a new carpark and associated infrastructure. 0.16ha (34%) of the AIS site within the study area is previously disturbed Exposed Hawkesbury Woodland. Works within this section includes vegetation removal, construction of a walking track (50m^2), drainage upgrades and construction of a carpark and associated infrastructure. Removal of bushrock, which destroys shelter and nests has been identified as a key threatening process for the Red-crowned Toadlet (RCT). The proposed work will not remove bushrock from RCT habitat. A test of significance was undertaken for these species. Due to the minor works within potential habitat and considering the large amount of undisturbed habitat directly adjacent to the study area that will be retained, it is unlikely the proposed upgrade will impact on a key threatening process for these species.	
7. introduce weeds, pathogens, pest animals or genetically modified organisms into an area?	☒	Low	Movement of machinery, vehicles and workers and the resulting vegetation and soil disturbance has the potential to introduce and facilitate the spread of weeds.	To reduce the risk of the spread of *Phytophthora* and weeds, machinery, vehicles and other construction equipment must be cleaned prior to entry into the Park.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				Implement *Phytophthora* hygiene protocols detailed in Appendix 4. There are no known records of *Phytophthora* at Somersby Falls Picnic Area. Implement post work weed monitoring program, initially each month for the first 3 months, then twice yearly. Manage weed infestations as per standard NPWS policies and procedures (as required).

9.3 Community impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. affect community services or infrastructure?	☒	Low (short term) Positive (long term)	The picnic area and associated infrastructure will be closed during the construction phase, preventing community recreation and use. Although there will be short term impacts to the community during the closure, there will be positive long-term improvements through the upgraded facilities and carpark. Neighbours and users of Somerby Falls Road will see increased traffic from construction vehicles/trucks using the road. This will be short term, during construction hours only. The proposed works will improve safety and access for persons with limited mobility; vehicle and pedestrian congestion on Somersby Falls Road and reduce environmental impacts on the	Secure site to prevent public access during the construction phase using security fencing, signage and website notifications. Inspect fencing and signage daily. Implement communication strategy notifying community, particular neighbours and users of Somersby Falls Road, of proposed works program well in advance. Provide details of alternative sites to use during closure, such as Girrakool Picnic Area, Mount Penang Parklands and Olney State Forest.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
			Park through improved amenities and infrastructure. The proposed carpark and bus turning area is being constructed above and within close proximity to 300mm, 600mm and 900mm water mains managed by Central Coast Council. Closures and construction work may impact Council's ability to access and maintain the water mains and associated infrastructure. Long term there will be an improvement in accessibility for Council. The proposed carpark will be constructed under Ausgrid 11kV high voltage powerlines. Closures and construction work may impact Ausgrid's ability to access and maintain their infrastructure. There will be positive long term effects for Ausgrid as the construction of the carpark will remove vegetation that will no longer require maintenance.	Project manager to prepare and implement site access arrangements with Central Coast Council prior to commencing construction. Comply with deed of agreement between NPWS and Central Coast Council. Project manager to prepare and implement site access arrangements with Ausgrid prior to commencing construction. Maintain regular communications with Ausgrid throughout the construction phase to ensure nil impact to their infrastructure. All contractors must be briefed on the location of Council and Ausgrid infrastructure, including mitigation measures to protect these assets from damage. Location of infrastructure detailed in design plans. Refer to Appendix 6.
2. affect sites important to the local or broader community for their recreational or other values or access to these sites?	☒	Low (short term) Positive (long term)	Access to the popular recreational destination, Somersby Falls is through the Picnic Area. Somersby Falls and the associated walking track will be closed during the construction phase. Alternate access arrangements to Somersby Falls will not be in place. Although there will be short term impacts to the recreational values of the site during the closure, the upgrade will vastly improve the amenities and	The proposed work aligns with the recommended upgrade approved in the Brisbane Water National Park Plan of Management (NPWS 1992). Provide details of alternative sites to use during closure, such as Girrakool Picnic Area, Mount Penang Parklands and Olney State Forest.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
			access to the picnic area, thus improving recreational values of the area.	
3. affect economic factors, including employment, industry and property value?	☐	NA	NA	
4. have an impact on the safety of the community?	☒	Low (short term) Positive (long term)	The picnic area and associated infrastructure will be closed during the construction phase to remove the risk of potential harm to the community. Although there will be short term impacts to the community during the closure, there will be positive long-term safety improvements through the upgraded facilities and carpark. The proposed works will improve safety through reducing pedestrian and vehicle congestion on Somersby Falls Road, constructing a safe viewing platform and walking tracks suitable for persons with limited mobility.	Secure site to prevent public access during the construction phase using security fencing, signage and website notifications. Inspect fencing and signage daily. Implement communication strategy notifying community and neighbours of proposed work well in advance. Provide details of alternative sites to use during closure, such as Girrakool Picnic Area, Mount Penang Parklands and Olney State Forest.
5. cause a bushfire risk?	☒	Low	Potential for machinery and equipment used during construction works to spark and start a bushfire. Firefighting vehicle access restricted during construction works. Firefighting vehicle access restricted as a result of partial change of use from dedicated fire trail to part carpark during peak visitation periods.	Firefighting equipment must be onsite during periods of declared very high fire danger if heavy plant operating. Foams or gels are not to be used in firefighting operations. Machinery which may result in sparking or ignition must not be operated during a Park Fire Ban or a declared Total Fire Ban.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				Store fuel and other similar flammable materials, such as gas cylinders and paint, in appropriate fire-resistant storage containers. Project team to communicate alternate access arrangements along Somersby Pipeline Fire Trail to emergency services during construction period. Access through the site for emergency vehicles only with approval of site supervisor. At completion of works, install statutory signage to inform public of vehicle parking and movement arrangements, including no parking in front of southern security gate.
6. affect the visual or scenic landscape? ^	☒	Low (short term) Positive (long term)	The proposed works are mostly contained to the existing disturbed Somersby Falls Picnic Area and adjacent Somersby Pipeline Fire Trail. Although small pockets of vegetation and trees will be removed, the overall visual effect of the upgrade will be positive for the community due to improved drainage and landscaping. Temporary signage and security fencing will be placed around the study area during the construction phase. These will be removed at completion of the works.	Undertake vegetation pre-clearing survey prior to commencing work. Implement landscape plan (refer to Appendix 6) Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh. All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works. Do not stockpile excess spoil and waste onsite. Dispose of at an approved waste management facility as detailed in Section 9.1 above. Remove all signs and fencing at completion of the works.

9.4 Natural resource impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. result in the degradation of the park or any other area reserved for conservation purposes?	☒	Low	The proposed works are mostly contained to the existing disturbed Somersby Falls Picnic Area and adjacent Somersby Pipeline Fire Trail. Drainage and amenity improvements as well as the new carpark, will be beneficial to the area, reducing impacts on the adjacent park. Excavation works (eg. cut and fill, drainage improvements) have the potential to cause erosion of soils and subsequent degradation of the adjacent landscape.	Conduct pre-work survey and clearly define study area / work / no go zones prior to commencing work. Implement erosion and sediment control mitigation measures detailed in Section 9.1 above.
2. affect the use of, or the community's ability to use, natural resources?	☒	Low	Access to the popular Somersby Falls will be closed during the construction phase, affecting the community's ability to access this natural resource. Although there will be short term impacts to the community during the closure, there will be positive long-term improvements through the upgraded facilities and carpark. The proposed works will improve accessibility through reducing pedestrian and vehicle congestion on Somersby Falls Road, construction of a viewing platform and walking tracks suitable for persons with limited mobility.	Implement communication strategy notifying community of proposed work well in advance. Provide details of alternative sites to use during closure, such as Girrakool Picnic Area, Mount Penang Parklands and Olney State Forest.
3. involve the use, wastage, destruction or depletion of natural	☒	Low	Detailed cut and fill plans have been developed for the site (refer to Appendix 6). This will ensure	Clearly demarcate cut and fill levels and identify infrastructure and furniture for re-use prior to demolition.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
resources including water, fuels, timber or extractive materials? ^			excess fill is utilised across the site, minimising disposal / wastage. Infrastructure and furniture within the existing picnic area will be re-used where possible. Cut vegetation will be mulched and re-used on site.	
4. provide for the sustainable and efficient use of water and energy? †	☒	Positive	A rainwater tank will be installed for handwashing at the amenities block. Untreated town water will be used for flushing toilets. Solar will be used to charge the PUF machines.	Non potable water signs to be installed in amenities block to advise of untreated water i.e. do not drink.

9.5 Aboriginal cultural heritage impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. disturb the ground surface or any vegetation likely to contain culturally modified trees?	☒	High	The proposed works will have a direct impact on Somersby PAD-01 (AHIMS pending) and has the potential to impact the exposed rock platform containing grinding grooves (AHIMS 45-3-0014). Direct impact to the PAD will be from excavation works and construction / installation of drainage and other infrastructure within the picnic area. Following a review of proposed construction methodology, the ACHAR prepared by BIOSIS	Involve geotechnical specialist to finalise location of footings for viewing platform to remove potential impacts on sandstone platform. Twice yearly condition inspections of sandstone platform following construction of viewing platform. Identify hold points for high-risk areas and activities. Particularly around fill deposits in lower picnic area,

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
			2022 summaries potential harm to the grinding groove site 45-3-0014 as 'no harm' and consequence of harm 'no loss of value'. The ACHAR determined that an AHIP will be required for the direct impact to the PAD.	in close proximity to grinding grooves and excavation around septic tank. All workers involved in the works must attend a detailed Aboriginal heritage induction. Place information posters around worksite to serve as reminders to workers about Aboriginal objects within the study area. Works to be supervised by suitably experienced and trained NPWS staff in Aboriginal site identification. Periodic inspections and site tours by RAPs. Establish no-go areas in vicinity of grinding grooves. Cover grinding grooves with brightly coloured plastic sheeting and weighed down by low impact objects such as sandbags. Implement unexpected finds protocol. Incorporate in Construction Environmental Management Plan. • Should any Aboriginal objects be encountered during works associated with this proposal, works must cease in the vicinity and the find should not be moved until assessed by a qualified archaeologist. • A no-go area should be established around the suspected Aboriginal object, and clearly demarcated with flagging tape or similar. • The archaeologist and NPWS staff will investigate and assess the Aboriginal object to determine the nature, extent and significance of

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
				the find. This will enable recommendations to be provided on how work can proceed and whether any further work is required. The archaeologist must supply written advice to the Project Manager within 24 hours stating: • A determination of whether the find is an Aboriginal object. • Advice on whether how the project is to proceed and whether the establishment of any no-go areas is necessary. • A recommendation on further works that may be required and timeframe for completion of these works. • The archaeologist, Heritage NSW and Aboriginal stakeholders will be notified. This will include a statement concerning the find, management measures implemented and notification of any further works arising. Aboriginal stakeholders are to be involved in any further assessments or works as required. • AHIMS site cards will be prepared for each new site identified and submitted to AHIMS in accordance with the Code.
2. affect or occur near known Aboriginal objects, Aboriginal places or an Aboriginal cultural asset of intergenerational significance?	☒	High	The proposed works will have a direct impact on Somersby PAD-01 (AHIMS pending) and has the potential to impact the exposed rock platform containing grinding grooves (AHIMS 45-3-0014). Direct impact to the PAD will be from excavation works and construction / installation of drainage and other infrastructure within the picnic area.	As above.

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
If so, can impacts be avoided? How?			There are no alternatives available to avoid impacts to the PAD. The ACHAR prepared by BIOSIS 2022 determined that an AHIP is required. Following a review of proposed construction methodology, the ACHAR summaries potential harm to the grinding groove site 45-3-0014 as 'no harm' and consequence of harm 'no loss of value'. If mitigation measures are implemented, there will not be an impact to the grinding grooves.	
3. affect areas: - within 200 m of waters - within a sand dune system - on a ridge top, ridge line or headland - within 200 m below or above a cliff face - in or within 20 m of a cave, rock shelter or a cave mouth? If so, can impacts be avoided? How?	☒	High	The proposed upgrade lies within 5m of Floods Creek, which contains a sandstone platform with grinding grooves. The grinding grooves lie outside of the study area and will not be impacted by the proposed works. Excavation works (eg. cut and fill, drainage improvements) have the potential to cause erosion of soils and subsequent degradation of the adjacent landscape.	As above. Conduct pre-work survey and clearly define study area / work / no go zones prior to commencing work. Implement erosion and sediment control mitigation measures detailed in Section 9.1 above.
4. affect wild resources which are used or valued by the Aboriginal community	☐	NA	NA	

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
or affect access to these resources?				
5. affect access to culturally important locations?	☒	Low	A safety fence will be installed around the picnic area to limit visitors accessing Floods Creek and walking over the grinding grooves. This was a recommendation from the Registered Aboriginal Parties (RAPs) in the development of the Aboriginal Cultural Heritage Assessment Report to assist in protecting the site. This fence has the potential to limit the ability of Aboriginal community to access the site. The site will be closed to the public during construction, preventing Aboriginal community access to the PAD.	The fence will be installed as a safety feature, rather than restricting public access to Floods Creek and the grinding grooves. Interpretative material will be installed around the picnic area discouraging visitors from entering Floods Creek as well as the cultural significance of the area. RAP representatives will have opportunities to attend the site during the construction period (as per ACHAR recommendation).

9.6 Other cultural heritage impacts during all stages of the activity

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. affect or occur near places, buildings or landscapes of heritage significance? ^	☐	NA	NA	

Is the proposed activity likely to…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
2. impact on relics or moveable heritage items, or an area with a high likelihood of containing relics? ^	☐	NA	NA	
3. impact on vegetation of cultural landscape value (e.g. gardens and settings, introduced exotic species, or evidence of broader remnant land uses)?	☐	NA	NA	

9.7 Impacts on Matters of national environmental significance (MNES) under the EPBC Act during all stages of the activity

Is the proposal likely to affect MNES, including:	Applicable? *	Likely impact (negligible, low, medium or high adverse; or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. listed threatened species or ecological communities)?	☒	Negligible	Based on likely habitat and extensive on ground searches by Emergent Ecology in December 2021, no Matters of National Environmental Significance was recorded, or considered to have potential to occur within the study area (see details in Appendix 1). An assessment of significance under the EPBC Act for the White-throated Needletail and	Undertake vegetation pre-clearing survey prior to commencing work. Clearly define extent of vegetation removal, including exclusion zones. Boundaries should be marked with metal star pickets or other suitable markers and high visibility flagging tape / barrier mesh.

Is the proposal likely to affect MNES, including:	Applicable? *	Likely impact (negligible, low, medium or high adverse; or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
			Somerby Mintbush (AIS site) determined there would be no significant impact as a result of the proposed work (refer to Appendix 1).	All contractors must be briefed on extent of vegetation clearing and exclusion zones prior to commencing works. Implement unexpected finds protocol. Incorporate in Construction Environmental Management Plan. If during the course of the activity, you become aware of the presence of threatened species, populations or threatened ecological communities, or their habitats, that have not been identified and which are likely to be affected by the activity: • immediately cease all work likely to affect the threatened species, populations or threatened ecological communities, or their habitats; • inform the Central Coast Area Manager and/or the local NSW Primary Industries office (for threatened fish or marine vegetation matters) as relevant. Notification must be made as soon as practicable by phone, electronically or in writing; not recommence work likely to affect the threatened species, populations or threatened ecological communities, or their habitats until receiving written advice from the NPWS and/or NSW Primary Industries to do so.
2. listed migratory species?	☐	NA	NA	
3. the ecology of Ramsar wetlands?	☐	NA	NA	

Is the proposal likely to affect MNES, including:	Applicable? *	Likely impact (negligible, low, medium or high adverse; or positive; or N/A)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
4. world heritage values of World Heritage properties?	☐	NA	NA	
5. the national heritage values of national heritage places?	☐	NA	NA	

9.8 Cumulative impacts during all stages of the activity

When considered with other projects, is the proposed activity likely to affect…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
1. natural landscape or biodiversity values through cumulative impacts?	☐	NA	There are no other scheduled large scale infrastructure works proposed in Brisbane Water National Park or in the vicinity. Routine fire trail maintenance works are being undertaken in the park. Transport for NSW, Sydney Trains proposed Flume upgrade at Wondabyne has been delayed until the 2023-24 financial year. There are a few industrial developments proposed in the Somersby Area, none in close proximity to the study area.	

When considered with other projects, is the proposed activity likely to affect…	Applicable? *	Impact level (negligible; or low, medium or high adverse; or positive; or NA)	Reasons (describe the type, nature and extent of impact, taking into account the receiving environment & proposed safeguards which will limit the impact)	Safeguards/mitigation measures
2. cultural (Aboriginal, shared and historic heritage) values through cumulative impacts?	☐	NA	There are no other scheduled large scale infrastructure works proposed in Brisbane Water National Park or in the vicinity. Routine fire trail maintenance works are being undertaken in the park.	
3. social (amenity, recreation, education) values through cumulative impacts?	☐	NA	There are no other scheduled large scale infrastructure works proposed in Brisbane Water National Park or in the vicinity. Mount Penang Parklands are currently upgrading two tracks. Public access to the parklands will be maintained for the duration of the works. There are no closures, just minor access changes as the project progresses. There are no known or exhibited closures or infrastructure works in Olney State Forest.	
4. the community through cumulative impacts on any other part of environment (e.g. due to traffic, waste generation or perceived over-development??	☐	NA	There are no other scheduled large scale infrastructure works proposed in Brisbane Water National Park or in the vicinity. Mount Penang Parklands are currently upgrading two existing tracks from unsealed to sealed surfaces. This accounts for a small area of Mount Penang Parklands which remains undeveloped and open to the public. There are no known or exhibited closures or infrastructure works in Olney State Forest.	

10. Summary of impacts and conclusions

Environmental factor	Consideration	Significance of impact*
(a) the environmental impact on the community	Social, economic and cultural impacts as described in sections 9.3, 9.5 and 9.6	Not significant
(b) the transformation of the locality	Human and non-human environment as described in sections 9.1, 9.2 and 9.4	Not significant
(c) the environmental impact on the ecosystems of the locality	Amount of clearing, loss of ecological integrity, habitat connectivity/ fragmentation and changes to hydrology (both surface and groundwater) as described in sections 9.1, 9.2 and 9.4 and, for nationally listed threatened ecological communities, in section 9.7.	Not significant
(d) reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	Visual, recreational, scientific and other impacts as described in section 9.3.	Not significant
(e) the effects on any locality, place or building that has— (i) aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance, or (ii) other special value for present or future generations	Impacts to Aboriginal and historic heritage associated with a locality (including intangible cultural significance), architectural heritage, social/community values and identity, scenic values and others, as described in sections 9.3, 9.5 and 9.6 and (for MNES heritage places) section 9.7.	Not significant
(f) the impact on the habitat of protected animals, within the meaning of the Biodiversity Conservation Act	Impacts to all native terrestrial species, including but not limited to threatened species, and their habitat requirements, as described in section 9.2.	Not significant
(g) the endangering of a species of animal, plant or other form of life, whether living on land, in water or in the air	Impacts to all listed terrestrial and aquatic species, and whether the proposal increases the impact of key threatening processes, as described in section 9.2	Not significant
(h) long-term effects on the environment	Long-term residual impacts to ecological, social and economic values as described in all parts of section 9.	Not significant
(i) degradation of the quality of the environment	Ongoing residual impacts to ecological, social and economic as described in section 9.4.	Not significant
(j) risk to the safety of the environment	Impacts to public and work health and safety, from contamination, bushfires, sea level rise, flood, storm surge, wind speeds, extreme heat, rockfall and landslip, and other risks likely to increase due to climate change as described in sections 9.1, 9.3 and 9.4.	Not significant
(k) reduction in the range of beneficial uses of the environment	Impacts to natural resources, community resources and existing uses as described in sections 9.3 and 9.4.	Not significant
(l) pollution of the environment	Impacts due to air pollution (including odours and greenhouse gases); water pollution	Not significant

Environmental factor	Consideration	Significance of impact*
	(water quality health); soil contamination; noise and vibration (including consideration of sensitive receptors); or light pollution, as described in sections 9.1 and 9.3.	
(m) environmental problems associated with the disposal of waste	Transportation, disposal and contamination impacts as described in section 9.3.	Not significant
(n) increased demands on natural or other resources that are, or are likely to become, in short supply	Impacts to land, soil, water, gravel, minerals and energy supply as described in section 9.4.	Not significant
(o) the cumulative environmental effect with other existing or likely future activities	The negative synergisms with existing development or future activities as considered in section 9.8.	Not significant
(p) the impact on coastal processes and coastal hazards, including those under projected climate change conditions	Impacts arising from the proposed activity on coastal processes, and impacts on the proposed activity from those coastal processes and hazards, both current and future, as considered in section 9.1.	Not significant
(q) applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1	Inconsistency with the objectives, policies and actions identified in local, district and regional plans, as considered in section 3.2.2.	Not significant
(r) other relevant environmental factors.	Any other factors relevant in assessing impacts on the environment to the fullest extent, such as native title.	Not significant

In conclusion indicate if:

- There is likely to be a significant effect on the environment and an environmental impact statement is required

  ☒ No
  ☐ Yes

Reason(s): The majority of the works are within the footprint of the existing disturbed picnic area and adjacent fire trail. Only a small amount of work is proposed outside of the existing disturbed footprint.

- There is likely to be a significant effect on threatened species, populations, ecological communities or their habitats and a species impact statement is required

  ☒ No
  ☐ Yes

Reason(s): The majority of the works are within the footprint of the existing disturbed picnic area and adjacent fire trail. Although both *Hibbertia procumbens* and AIS site # AIS-E0-065 will be directly impacted by the proposed upgrade, the test of significance determined this will not significantly affect these due to the availability of high quality, undisturbed habitat adjacent to the study area.

- The activity is likely to have a significant impact on matters of national environmental significance listed under the Cwth Environment Protection and Biodiversity Conservation Act

  ☒ No

☐ Yes

Reason(s): The majority of the works are within the footprint of the existing disturbed picnic area and adjacent fire trail. Although both *Hibbertia procumbens* and AIS site # AIS-E0-065 will be directly impacted by the proposed upgrade, the test of significance determined this will not significantly affect these due to the availability of high quality, undisturbed habitat adjacent to the study area.

- The activity will require certification to the Building Code of Australia, Disability (Access to Premises – Buildings) Standards 2010 or Australian Standards in accordance with the NPWS Construction Assessment Procedures

☐ No

☒ Yes

Reason(s):

All new building work will comply with the Building Code of Australia (BCA).

Demolition works will comply with AS2601-2001 *Demolition of structures.*

All new infrastructure works including walking tracks, steps, footpaths, amenities, fencing, viewing platform and carpark will be constructed in accordance with relevant Australian Standards. An accessible path of travel from the disabled carparking spaces to the public entrance of the picnic area will be provided.

Quality assurance packages will be provided by the contractor at completion of works, relating to those items that were built to AS, BCA design requirements.

11. Supporting documentation

Please provide details of documentation included with this application.

Document title	Author	Date
1. HHIMS Search (DOC22/930699-1)	Laurie Pasco	26/10/22
2. Protected Matters MNES Layers (DOC22/639630-3)	Laurie Pasco	19/10/22
3. BioNet Map (DOC22/639630-2)	Laurie Pasco	19/10/22
4. BioNet Search (DOC22/639630-1)	Laurie Pasco	19/10/22
1. Submissions Report/snapshot (DOC21/314522-1)	NPWS	12/8/21
2. Community and Stakeholder Engagement Plan (DOC20/335722) + (SF19/93291)	NPWS	2021
3. Council Letter – Approval to conduct works and conditions. DOC22/104630	Central Coast Council	29/07/21
Appendix		
Appendix 1: Threatened species tests of significance	Tasman Willis, Principal Ecologist, Emergent Ecology / Laurie Pasco	4/11/22
Appendix 2: Aboriginal Cultural Heritage Assessment	Biosis	4/11/22
Appendix 3: Somersby Falls Archaeological Report	Biosis	4/11/22
Appendix 4: Phytophthora Management		
Appendix 5: Habitat Tree Felling Procedures	Emergent Ecology	
Appendix 6: Detailed Design Plans – 90% - A: Car park and Picnic Design Plans - 90% - B: Viewing Platform Design Plans – 90% - C: Civil Engineering Design Plans – 90%	MOIR Landscape Architects	1/06/22

12. Fees for external proponents

Proponents external to NPWS are required to pay an initial fee of $220 (a final fee is also required before determination of the REF).

☐ $220 payment/cheque for initial fee is enclosed

☐ A waiver of fees is requested for the following reasons:

13. Declarations

As the person responsible for the preparation of the REF, I certify that, to the best of my knowledge, this REF is in accordance with the EP&A Act, the EP&A Regs and the Guidelines approved under section 170 of the EP&A Regs, and the information it contains is neither false nor misleading.

Signature	Rachel Kempers
Name (printed):	Laurie Pasco / Rachel Kempers
Position	Ranger / Principal Project Officer
Date	14/11/22

By endorsing the REF, the proponent confirms that the information in the REF is accurate and adequate to ensure that all potential impacts of the activity can be identified.

Signature	
Name (printed)	Richard Colbourne
Position	A/Area Manager
Date	28/11/22

Seal (if signing under seal):

Next steps

- Submit the signed REF to the relevant NPWS Area Office, requesting determination of the REF and advice on when approval for the works may be forthcoming.