TWEED SHIRE COUNCIL

Review of Environmental Factors

NRRT004 – Seating for Murwillumbah Railway Station precinct – South Murwillumbah

December 2024

Version control

Version number	Date	Prepared by	Reviewed by
1.0 Draft for internal review	13/11/2024	Engineering Division Environmental Scientists	Engineering Division Environmental Scientists
1.1 Final Draft for Project Client and Project Manager Signoff	17/12/2024	Engineering Division Environmental Scientists	[redacted]
1.2 Final	14/1/2024	Engineering Division Environmental Scientists	Engineering Division Environmental Scientists

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Executive Summary

The information in the below table summarises key important information within this Review of Environmental Factors.

Key information summary	Section
Works must be completed in line with the conditions of all relevant section 60 application approvals.	Table 4.2
Where locations to install seating, pathways, tables and benches are amongst trees and the design plans do not clearly identify locations, an environmental scientist would be required on site to show placement that is outside of structural root zones.	Section 10

Important notes and definitions

This Review of Environmental Factors (REF) has been prepared in accordance with the Tweed Shire Council Procedure titled: Environmental assessment procedures for Council Infrastructure Works V1.0, 2019 (the Procedure).

REF (Type A projects) template: Infrastructure works assessed using the REF (Type A project) template include routine maintenance works, emergency works, and projects with minor or predictable environmental impacts that can be managed using standard operating procedures and work methods, and industry adopted mitigation measures and management approaches.

Projects assessed using this template typically have minor environmental impacts, and do not require detailed assessment and environmental management plans to manage or offset project impacts. Refer to Part C, Section 5.0 of the Procedure for further guidance on REF assessment pathways.

Prior to works commencing

An activity under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A) must not be commenced prior to both the REF being "determined" by an appropriately delegated staff member and the determination report (the certified REF) being recorded in the Council's electronic data/records system.

The REF must sign off that Council has fulfilled its duty to consider the environmental impact of the activity pursuant to Section 5.5 of the EP&A Act. This includes certifying that the environmental safeguards and mitigation measures proposed ensure the environmental impact is not significant.

It is the responsibility of the person completing this REF that:

- Section 9.0 (certification and signoff) of this REF has been completed
- the project can proceed subject to project mitigation measures and relevant environmental safeguards outlined in Section 10.0 and any associated plans and external authorities
- all relevant approvals, licences, and permits have been obtained prior to works commencing
- all relevant construction personnel are aware of:
    - their responsibilities under this REF
    - the project specific mitigation measures and environmental safeguards outlined in Section 10.0
    - the conditions in any approvals, licences or permits
    - the project details and likely impacts of the project on the community.

Consultation

Environmental planning instruments (EPIs) set out obligations to notify and/or consult with stakeholders, including state agencies, councils and the community as part of the Division 5.1 process of the EP&A Act. Community consultation and referrals may also be required for certain types of approvals (consents, licences and permits) granted by determining authorities under legislation other than the EP&A Act. Proponents and determining authorities must consider any feedback from stakeholders on the proposed activity and/or its environmental impacts. EPIs set out obligations to notify stakeholders. All notification and consultation requirements must be met before a determination is made on the activity. A decision statement by each determining authority needs to be published alongside the published REF document.

Determining authorities will keep the following REF documentation available for public access once a determination has been made:

- the final REF document including appendices
- any associated SIS or BDAR
- the Decision Statement
- any REF document addenda.

The REF must be published on the determining authority's website or the NSW planning portal if the activity is triggered by any of the requirements outlined in clause 171(4) of the EP&A Regulation (clause 171(4)). For further information, refer to Section 6.0 of this REF.

Terms of reference for the assessment

For the purposes of this assessment, the following terms of reference are used:

- Disturbance footprint – refers to the direct footprint subject to development, including any disturbance associated with ancillary works (e.g. temporary access tracks or stockpile sites).
- Study area – the study area includes the disturbance footprint and any additional lands approximately 50 m either side of the disturbance footprint that could be affected directly or indirectly from the proposal. The objective of the assessment would ensure that impacts beyond the direct disturbance footprint are also considered where relevant.
- Subject site – refers to the parcel/s of land on which the development is proposed.
- Broader study area – lands within 10 km of the local study area and includes the Office of Environment and Heritage (OEH) Atlas of NSW Wildlife and Commonwealth Protected Matters database search areas.
- IBRA bioregion and subregion – the Interim Biogeographic Regionalisation for Australia (IBRA) identifies the lands within the Tweed Shire as within the South Eastern Queensland IBRA bioregion. Subregions within this bioregion include the Sunshine Coast-Gold Coast Lowlands, Burringbar-Conondale Ranges and Scenic Rim. These terms are used to describe the occurrence of threatened species, populations and communities at a regional level.

Direct and indirect impacts are defined in accordance with DPE (2022) as follows:

- Direct impacts are those that usually occur at the same time as the project and in the vicinity of the site.
    - For example, impacts may directly affect the habitat of species and ecological communities and of individuals using the study area. They include, but are not limited to, death through predation, trampling, poisoning of the animal/plant itself and the removal of suitable habitat
- Indirect impacts are those that occur as a consequence of the project of the direct impacts of a project. They may be delayed and happen further away from the site.
    - For example, impacts may sterilise or reduce the habitability of adjacent or connected habitats. They can include loss of individuals through starvation, exposure, predation by domestic and/or feral animals, loss of breeding opportunities, loss of shade/shelter, reduction in viability of adjacent habitat due to edge effects, deleterious hydrological changes, increased soil salinity, erosion, inhibition of nitrogen fixation, weed invasion, noise, light spill, fertiliser drift, or increased human activity within or directly adjacent to sensitive habitat areas.

Impact significance is rated as low, medium or high in this REF. Examples of low and high adverse impacts are as follows:

Low adverse impacts typically:	High adverse impacts typically:
are small scale	are large scale
are localised	are extensive
are short term	are long term
have a small impact dispersed over a long period	have a large impact over a short or long period
have reversible impacts	have potentially irreversible impacts
have effective mitigation measures available	have unavailable or untested mitigation measures
are totally compliant with standards, plans and policies	have uncertain or part compliance with standards, plans and policies
have a low interest from the public	have a high interest from the public
have a high level of understanding of the activity and expected impacts	have a low level of information on and understanding of the key issues

For further guidance on evaluating impacts, refer to Attachment A of the Department of Planning and Environment, Guidelines for Division 5.1 assessments, June 2022.

1.0 Project details

Table 1: Project details

Project name	Seating for Murwillumbah Railway Station precinct
Project location	Murwillumbah Railway Station 2/284 Tweed Valley Way, South Murwillumbah
Project owner	Tweed Shire Council
Project brief number	NRRT004
Environmental Scientist (assessing officer)	[redacted]
Determining Officer	
Project Client	
Project Manager	

2.0 Site details

Table 2.1: Site details

Site/Parcel description	Zoning	Landowner
Murwillumbah Railway Station Lot 100 DP865105	E3 – Productivity Support	Government Owned Land – Transport Asset Holdings Entity of New South Wales

TABLE NOTES:
A: For works on Crown Land refer to Activity Specific Procedure – Council Infrastructure Works on Crown Land.
B: Owner's consent is not required for the preparation of Part 5 assessments of private land. Prior to works commencing on private land, Council officers are to notify property owners advising details of project and entry to land as permitted by the Powers of Entry provisions in sections 191A-193 of the Local Government Act, 1993.

3.0 Proposal description and permissibility

Table 3.1: Project proposal details

Description	Comment
Project background and need	The Northern Rivers Rail Trail Tweed section has transformed the former Casino to Murwillumbah rail corridor into a recreation and nature trail. The 24 km Tweed section connects Murwillumbah to Crabbes Creek with the starting location at Murwillumbah Railway Station. The Murwillumbah Railway Station has received and continues to receive upgrades to provide users of the rail trail with facilities to enhance their recreational experience. Proposed works include: • Installation of furniture to outdoor locations nearby to the trail including seating, picnic tables, benches and pathways to access some of the furniture and slabs for beneath furniture.
Alternatives considered	Alternatives for the use of the heritage area have been considered throughout the process of the rail trail construction. The use of the rail trail has been carefully considered to improve the use from the general public within the heritage area. Location of furniture and pathways were considered carefully to ensure no impacts to items of heritage significance or to scenic amenity.
Proposal description key project elements (e.g. nature, scale and extent of proposed activity)	Key project elements include: • installation of seating, picnic tables, benches on slabs • construction of pathways to allow for accessibility to furniture. Refer to plans in Appendix A, blue arrows indicate furniture location.
Construction activities (e.g. how will the project be constructed?). Explain construction footprint, site preparation activities (e.g. vegetation clearing, alternate access etc.), construction	In summary the scope of the activities would involve: • installation of environmental management controls where required • undertaking installations and construction by qualified and experienced tradespeople

Description	Comment
timeframes, hours of operation, relevant work methods, plant and equipment, earthworks, management of materials, traffic and access management, sensitive receivers etc.)	• stabilisation of disturbed surfaces and installation of landscape features • removal of environmental management controls.
Ancillary facilities (e.g. site compounds, stockpiles, set down areas, vegetation clearing and protection requirements, sensitive receivers etc.)	Ancillary activities associated with construction of the proposed works would include: • equipment laydown • environmental management activities • waste management All ancillary activities would be undertaken in previously cleared areas adjacent the project site.
Property access and acquisition requirements	Generally, the Murwillumbah Railway Station is open to the public. All of the proposed works would occur within Government Owned Land. Prior to any works being undertaken landowner's consent would be sought.
Estimated construction commencement date	From January 2025
Estimated construction completion date	Ongoing as funding becomes available.
Estimated cost of works	$60,000
Construction hours	Monday to Saturday 7 am to 6 pm. No work on Sunday or public holidays.

Table 3.2: Environmental site description

Description	Comment
Include a brief background description of the following environmental assessment elements.	
Biodiversity (vegetation communities, flora and fauna species)	The proposed works comprises land within the Murwillumbah Railway Station site. This disturbance footprint is within an open parkland area where many native and exotic amenity trees are present and a maintained (mown) lawn is beneath the canopy. No naturally occurring ecological communities are present within the subject site, however fauna adapted to urban environments would utilise

Description	Comment
	the vegetation within the subject site. Further information on biodiversity is in Appendix C.
Surface water and ground water	The subject site occurs approximately 130 m south of and upslope of the Tweed River. Erosion and sediment controls would be installed where required and managed to mitigate potential risk to aquatic habitats. Stormwater and overland flow would flow into the existing stormwater network before being released into the Tweed River.
Flood prone land	The subject site is located behind a levee, within flood prone land and lies at approximately 5.7 m elevation.
Soils and geology	The soil landscape of the railway station is mapped as an alluvial landscape being the Tweed (tw) soil landscape. The Tweed landscape is described as extensive marine plain of lower Tweed catchment consisting of deep Quaternary alluvium and estuarine sediments. Local relief <1 m; elevation 0–3 m; slopes <3%. The vegetation of this landscape is described as totally cleared closed-forest (rainforest), which is now predominantly sugar cane. Soils of this landscape are described as deep (>200 cm), poorly drained Brown Alluvial Clays on levees; deep (>200 cm), poorly drained Humic Gleys on backplain. Limitations of this landscape include flood hazard, high water tables, waterlogging and streambank erosion hazard. Extensive occurrence of potential acid sulfate soils; highly acid, erodible, impermeable and plastic soils which have high aluminium toxicity potential, low wet bearing strength and which are hardsetting (Morand, 1996).
Bushfire risk	According to 2023 bushfire prone land mapping, the proposed disturbance footprints are not within bushfire prone land.
Coastal hazards	The subject site is located outside of the coastal hazard zone as per the Tweed Shire Coastal Hazards Assessment completed in November 2013.
Extreme climate/weather events	The subject site is prone to extreme climate and weather events specifically flooding of the Tweed River.
Traffic and transport	The subject site is located within Government Owned Land that fronts both Tweed Valley Way and Railway Street. Entrance to the property is via these streets. A carpark within the subject site is accessible from Tweed Valley Way.

Description	Comment
Noise and vibration	The subject site is located within an urban area. The Murwillumbah Railway Station is surrounded by Tweed Valley Way, Railway Street, private properties, commercial businesses and agriculture (sugar cane cropping). The subject site is considered to be a low noise environment. Background sources of noise relevant to the site would include vehicular traffic, noises from residential and commercial properties and from people using the Rail Trail.
Scenic value	The subject site has low to medium visibility within an urban landscape according to the Tweed Shire Draft Landscape Strategy mapping.
Property and land use	The proposed subject site occurs wholly within the Government Owned Land of the Murwillumbah Railway Station.
Public access	The Murwillumbah Railway Station is open to the public. Shops have access to the public that is restricted to normal commercial opening hours.
Aboriginal heritage and historic (non-Aboriginal) heritage	According to the Tweed Shire Aboriginal Cultural Heritage Management Plan (ACHMP) the site is not mapped as being within any known or predictive areas of Aboriginal cultural significance. The Murwillumbah Railway Station and yard group is identified as a state heritage item. On the State Heritage Register it is listing number 01206. It is also listed in the *Tweed Local Environmental Plan 2014* in Schedule 5, Part 1, Item number 66.
Any other environmental elements	Nil.

Table 3.3: Consultation

Description	Comment
Include a description of the public authority and community consultation requirements and outcomes.	
Public authorities	Part 2 Division 1 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP) defines the consultation required with relevant public authorities during the assessment process and prior to development commencing. Sections 2.15(1) and 2.15(2) refer to the proponent's consultation requirements with public authorities other than Councils for a specified development. Section 2.15(1) states that a public authority must not carry out specified development that this Policy provides may be carried out without consent, unless the authority has provided notice to respective authorities as per subsection 2.15(1)(a) and (b). The proposed works are not considered specified development.
Community consultation	Community engagement would occur prior to works being undertaken and in line with the Community Engagement and Participation Plan 2019–2024.

Table 3.4: Permissibility of the proposal

Description	Comment
Relevant planning instrument	*State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP)
Division/section/subsection	Division 12 Parks and other public reserves Section 2.73 Development permitted without consent
Controlling provisions/performance criteria	(1) Any of the following development may be carried out by or on behalf of a public authority without consent on land owned or controlled by the public authority— (a) development for any of the following purposes— (i) roads, pedestrian pathways, cycleways, single storey car parks, ticketing facilities, viewing platforms and pedestrian bridges (ii) recreation areas and recreation facilities (outdoor), but not including grandstands

Description	Comment
	(vii) food preparation and related facilities for people using the reserve.
Comments	The land tenure is Government Owned Land therefore satisfies that the land is owned by a Public authority. Tweed Shire Council (TSC) has a lease over the site and manages all infrastructures, licences, developments and uses of the site therefore this satisfies that the land is controlled by a public authority and TSC would be undertaking the works.

Table 3.5: Design options

Description	Comment
Include a description of design constraints and measures taken to avoid and minimise potential environmental impacts.	
Avoid/minimise/offset measures	The proposed works are restricted to the open areas within the station area. Placement of all seating, tables, benches and pathways have avoided tree structural root zones and therefore impacts to the environment have been avoided. An offset is not required under legislation, to ensure, maintain or improve outcomes for biodiversity.

4.0 Duty to consider environmental impacts pursuant to Section 5.5 of the *Environmental Planning and Assessment Act 1979*

4.1 Confirmation of design and construction footprint

This section is to confirm the design and construction footprint of the proposed activity prior to undertaking the environmental impact assessment in the following sections.

Table 4.1: Confirmation of design and construction footprint

Footprint type	Confirmed (Yes/No)	Date confirmed	Comment or outcome (e.g. Design footprint confirmed by Civil Engineering Designer; construction footprint confirmed by Construction Engineer; not relevant as works are within an existing building)
Design footprint	Yes	11/11/2024	Email received from Project Manager stating design and construction footprint approved by Project Client.
Construction footprint	Yes	11/11/2024	Email received from Project Manager stating design and construction footprint approved by Project Client.

4.2 Environmental planning requirements

This section is intended to fulfil the duty to consider environmental impacts pursuant to Section 5.5 of the EP&A Act 1979:

"a determining authority in its consideration of an activity shall … examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity."

Table 4.2: Environmental planning, cultural, and community impact considerations and assessment

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
		(Yes/No)	(Direct, indirect and cumulative; consider type, extent, size, duration, importance, level of concern/interest) (Consider construction & operation)	(Low, medium, high)[2]	(See notes below)
Environmental and ecological considerations					
1	Does the subject site contain Environmental Protection Zones (as defined under the Tweed LEP 2014)?	No	N/A	N/A	N/A
2	Are works within or adjacent to a national park, nature reserve, Aboriginal area, conservation area, marine park or marine reserve?	No	N/A	N/A	N/A
3	Does the subject site contain Matters of National Environmental Significance (NES) (RAMSAR Wetlands, threatened species, migratory birds, World Heritage, National Heritage, nature reserve etc.) or on Commonwealth land (refer Commonwealth Department of Agriculture, Water and the Environment)?	Yes	Refer to Appendix B for the assessment of the matters of NES. No matters of NES are within the subject site.	Low	A

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
4	Will the project impact upon Matters of NES described above?	No	Matters of NES would not be impacted.	N/A	N/A
5	Are works within or near areas protected by State Environmental Planning Policies (SEPP) for conservation purposes?	No	N/A	N/A	N/A
6	Does the subject site contain NSW endangered or vulnerable species, populations, or ecological communities or their habitats, pursuant to the NSW *Biodiversity Conservation Act 2016* (BC Act) or the *Fisheries Management Act 1994* (FM Act)?	Yes	The subject site does not contain any threatened species, populations or ecological communities or their habitats.	Low	A
7	Will the project impact upon NSW endangered or vulnerable species, populations, or ecological communities or their habitats, pursuant to the NSW BC Act or the FM Act?	No	No NSW threatened species, populations or ecological communities would be impacted by the proposed works.	N/A	N/A
8	Does the subject site contain, or is the site adjacent to a flying-fox colony?	No	[redacted]	N/A	N/A
9	Does the subject site contain, or is the site adjacent to a raptor nest?	No	[redacted]	N/A	N/A
10	Does the subject site contain habitat areas falling within an identified wildlife corridor?	Yes	The subject site is not within a regional wildlife corridor.	N/A	N/A
11	Is native vegetation (including understorey vegetation layers), or native trees likely to be affected?	Yes	Vegetation within the station precinct area would be protected. All infrastructure has been designed to be installed outside of any and all structural root zones.	Low	A

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
	Native vegetation includes marine vegetation (i.e. mangroves, saltmarsh, or seagrass), freshwater wetlands with emergent or floating plants, sedgelands, native grasslands, heath and shrub lands, woodlands, open forests and rainforests?				
12	Removing or lopping trees within an area mapped under a Tree Preservation Order?	No	N/A	N/A	N/A
13	Does the proposed works include artificial lighting?	No	N/A	N/A	N/A
14	Does works involve dredging and/or reclamation of water land (refer Department of Primary Industries (DPI) Fisheries)?	No	N/A	N/A	N/A
15	Would development comprise a fixed or floating structure in or over navigable waters (consultation required with Transport for NSW – Maritime)?	No	N/A	N/A	N/A
16	Working within a Crown Land waterway, Coastal Reserve, or other Crown Land reserve?	No	N/A	N/A	N/A
Historic archaeological heritage considerations					
17	Are works within the 'place' of a 'Heritage Item' identified on the Register of the National Estate, under the NSW *Heritage Act 1977* or an environmental planning instrument (refer Commonwealth	Yes	The Murwillumbah Railway Station and yard group is identified as a state heritage item. On the State Heritage Register it is listing number 01206. It is also listed in the *Tweed Local Environmental Plan 2014* in Schedule 5, Part 1, Item number 66.	Low	A

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
	and State Heritage Registers, Schedules of the Tweed Local Environmental Plan 2014 (TLEP))?		Prior to undertaking any works an evaluation of the proposed works have been completed to determine if works are exempt under the *Heritage Act 1977* (Heritage Act) or whether an approval is required in the form of a Statement of Heritage Impact (SOHI). A SOHI has been completed and an application made under section 60 of the Heritage Act has been completed by heritage consultants on behalf of Tweed Shire Council and submitted to Heritage NSW (Appendix D). Landowners consent must be obtained to apply for a section 60 approval and would be sought prior to works being undertaken. **All proposed works would be undertaken in line with the conditions outlined in the section 60 approvals.**		
18	Are works within or adjacent to a mapped predictive or known location of Aboriginal Cultural Heritage (ACH) identified in the Aboriginal Cultural Heritage Management Plan (ACHMP) 2018? Is it located in or near a declared site or place identified by the Aboriginal Heritage Information Systems (AHIMS) Web Services?	Yes	The proposed works are not within a mapped known or predictive area of Aboriginal Cultural significance as mapped under the ACHMP. Refer to section 4.5 and Appendix E for further information.	Low	A
Community considerations					
19	In regards to specified development described in Division 1 of the SEPP Transport and Infrastructure, is consultation required with other public authorities?	No	N/A	N/A	N/A
20	Will the project involve generating, handling, storing, transporting or disposing of special (e.g. asbestos, clinical,	No	N/A	N/A	A

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
	tyres), liquid, hazardous (batteries, coal tar, lead paint waste etc.), or restricted solid waste (e.g. contaminated soil etc.), dangerous goods, or controlled chemicals?				
21	Involve discharging anything to a waterway or stormwater drain?	Yes	Runoff from the subject site during construction is expected to enter stormwater drains which then enter the local waterway systems. Mitigation measures including erosion and sediment controls will be implemented throughout construction. Maintenance of these controls will be undertaken periodically and after weather events to reduce impacts on the local waterway systems. Without these controls it is expected that a medium impact would occur on these waterways due to sediment entering the system. These controls reduce the sediment entering the waterways and therefore a low impact is expected during construction. Post-construction, all disturbed surfaces will be stabilised and controls will be removed. It is expected that there would be no impacts on waterways post-construction.	Low	A
22	Disturb subsurface or above ground utilities – Country Energy, Telstra, local council water and sewer?	No	N/A	N/A	N/A
23	Works requiring interception of a ground aquifer (i.e. dewatering)?	No	N/A	N/A	N/A
24	Works that intercept acid sulfate soils (ASS) or potential acid sulfate soils (PASS)?	Yes	The subject site is located within a mapped Class 4 ASS area. The proposed works require excavation to install formwork for concrete. Further investigations are required for works greater than 2 m below ground level. All works proposed would be less than 2 m in depth and therefore further investigations were not conducted. Refer to Section 4.5 for further information.	Low	A
25	Works involving noise generating activities such as pile drivers, hydraulic hammers, machine-mounted rock breakers, generators or similar equipment in an urban area?	Yes	Works would inherently result in the increase of noise at the site during construction. As the proposed works are short-term and mitigation measures are proposed to minimise the potential impacts associated with the proposed construction works, noise impacts are considered negligible.	Low	A

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
26	Is it expected that traffic volumes would be similar to the most recent traffic counts? Is it expected that the proposed works would impact traffic?	Yes	The proposed works are wholly within the Murwillumbah Railway Station land parcel and a carpark is also present. Works would not extend onto Railway Street or Tweed Valley Road and delays are not expected to impact traffic. Traffic on Tweed Valley Way is expected to be much greater during peak hours.	Low	A
27	Community consultation or engagement		Community engagement would occur prior to works being undertaken and would be in line with the Community Engagement and Participation Plan 2019–2024.		
Will works occur in other sensitive or constrained areas as outlined below?					
28	Working on a classified road including freeway, highway, main road, tourist road etc.?	No	N/A	N/A	N/A
29	Using flames during a total fire ban or working within bushfire protected lands?	No	N/A	N/A	N/A
30	Areas or items of high architectural, historical, environmental protection or scientific value?	Yes	Murwillumbah Railway Station is identified as a heritage item on the State Heritage Register. Refer to item 17 in this table.	Low	A
31	Coastline and dune fields, caves, wetlands (not state significant) or other unique landforms?	No	N/A	N/A	N/A
32	Areas or items of high scenic value?	Yes	The subject site has low to medium visibility within an urban landscape according to the Tweed Shire Draft Landscape Strategy mapping. The site is visible from road users of Railway Street, from businesses operating within the Railway Station precinct and from users of the Rail Trail. The proposed works are to install additional seating, picnic tables and benches with accessible pathways for Rail Trail users to utilise whilst spending time within the precinct. This would also benefit businesses operating within the Murwillumbah Railway Station providing places for customers to rest and eat. A basic visual impact assessment is satisfactory for the proposed scope of works and low to medium visibility. During construction the site would have an increase in machinery, plant and personnel. In the short-term, negligible adverse impacts would be experienced by users of the Rail Trail,	Low	A

Impact considerations		Relevance to proposal?	Impact identification and assessment	Impact evaluation[1]	Mitigation actions[#]
			businesses within he station precinct and the public. Post-construction, the subject site and visibility would be similar to that prior to works.		
33	Recreational areas (beaches, foreshores, parks, picnic areas, lookouts, national features, tourist areas, tourist roads/routes etc.)?	Yes	The subject site is part of the Northern Rivers Rail Trail that invites tourists and locals alike for recreation. The disturbance footprints would be cordoned off and not be accessible by the public during construction works for safety reasons. Post-construction public access would be reinstated.	Low	A
34	Erosion prone areas?	No	N/A	N/A	N/A
35	Bush regeneration areas, dune regeneration areas etc.?	No	N/A	N/A	N/A
36	Areas of high bushfire risk?	No	N/A	N/A	N/A
37	Weeds?	No	N/A	N/A	N/A
38	Urban bushland or remnant roadside vegetation?	No	N/A	N/A	N/A
39	Major pedestrian routes (e.g. foreshore walks, around sporting venues etc.)?	Yes	The subject site is part of the Northern Rivers Rail Trail that invites tourists and locals alike for recreation. The disturbance footprints would be cordoned off and not be accessible by the public during construction works for safety reasons. Post-construction public access would be reinstated.	Low	A
40	Schools, childcare centres, playgrounds etc.?	No	N/A	N/A	N/A
41	Works on private land?	Yes	The proposed works are on Government Owned Land. Prior to works being undertaken, landowner's consent would be sought.	Low	A

[1] For further guidance on evaluating impacts, refer to Attachment A, Department of Planning and Environment, Guidelines for Division 5.1 assessments, June 2022.

[2] See the Terms of Reference for the Assessment section of this REF for explanation of low and high adverse impacts (pg 3).

[#]MITIGATION ACTIONS – the following actions are required as part of completing Table 4.1:

A: Include specific environmental safeguards if required within Section 10.0 to avoid, minimise or mitigate impacts of the project.
B: Attach a copy of the relevant approval, licence, permit or record of correspondence.
C: If the subject site contains Matters of National Environmental Significance, and works are not considered to impact upon these species, populations, or ecological communities, then complete the Matters of NES template and append to this application. If impacts are likely, a separate referral is required to the Commonwealth Department of Agriculture,

Water and the Environment (AWE) and the project is not eligible to be lodged as an REF (Type A Project) template format. Refer to Part C, Section 5 for guidance on preparing an REF (Type B Project) template assessment.

D: If works are within the SEPP Resilience and Hazards area, and the Action Type is N/A, then comments or further assessment must be appended providing justification. There is no requirement to address matters within the SEPP Resilience and Hazards for activities under Part 5 of the EP&A Act unless required under the SEPP Transport and Infrastructure. Similarly, there are no requirements to undertake a SEPP Biodiversity and Conservation Koala assessment report for activities under Part 5 of the EP&A Act, however, clearing of koala feed trees within the Tweed Coast Comprehensive Koala Plan of Management area must be justified in accordance with Clause 5.4 of that plan.

E: A referral to the relevant authority is required under the SEPP Transport and Infrastructure and a period of 21 days allowed for response. All responses are to be considered and included in this assessment.

F: Undertake relevant database searches as described in Part C, Section 3.2, Section 5.0 and as identified within relevant Activity Specific Procedures in Part D of the Procedure.

G: If the subject site contains NSW endangered or vulnerable species, populations, or ecological communities or their habitats, pursuant to the BC Act or the FM Act, but these species or populations will not use on-site habitats on occasion, or will not be influenced by off-site impacts of the proposal as per the NSW Office of Environment and Heritage (OEH) Threatened Species Test of Significance Guidelines (OEH, 2018), then the project can proceed with caution subject to standard environmental safeguards in Section 10.0.

H: If the subject site contains NSW endangered and vulnerable species, populations, or ecological communities or their habitats, pursuant to the BC Act or the BC Act and the works are not considered to impact significantly upon these (refer to the NSW OEH Threatened Species Test of Significance Guidelines), then details must be appended providing justification. If impacts are likely and non-standard biodiversity mitigation measures are required to offset these impacts, the project is not eligible to be lodged as an REF (Type A Projects) template assessment and an REF (Type B Projects) template assessment must be used. Refer to Part C, Section 5.0, Table C5 of the Procedure for further guidance on REF template selection and to the Activity Specific Procedure – Biodiversity assessment and mitigation for guidance on offsetting approaches and requirements.

I: Councils are exempt from Controlled Activity Approvals under the Water Management Act 2000 (WM Act).

J: Geotechnical investigations would be undertaken prior to the commencement of works to determine the depth of groundwater and the presence of ASS. Should investigations identify that ASS would be impacted during construction, then an ASS management plan would be prepared prior to the commencement of works. Additionally, should investigations identify that groundwater is likely to be intercepted, then a dewatering management plan would be prepared prior to the commencement of works. Refer to the relevant Activity Specific Procedures in Part D of the Procedure for further guidance.

K: A biosecurity matter and a biosecurity impact are described in Section 10 and Section 13 of the Biosecurity Act 2015. Refer to Schedule 3 of the Biosecurity Regulation and the North Coast Regional Weed Strategic Management Plan 2017 for further information on priority weeds and their management.

4.3 Species Impact Statements (SIS) and Biodiversity Development Assessment Report (BDAR) requirements

Section 7.8 of the BC Act states that a proposal that is regarded as an activity that significantly affects terrestrial threatened species and ecological communities, or their habitats, is taken to also significantly affect the environment.

Section 221ZX of the FM Act states that an activity is likely to significantly affect the environment if aquatic threatened species, populations or ecological communities will be affected according to the test in section 220ZZ of the FM Act.

Table 4.3: Requirements of significant impacts

Significant impacts	Test to identify significant impact	Significant impacts likely for this proposal?	Required outcome of tests	Required for this activity? (N/A, REF, SIS, BDAR)
Will there be significant impacts on terrestrial threatened species, ecological communities or their habitats?	• Test of significance Section 7.3 of BC Act.	No (Refer to Appendix C).	No = REF Yes = REF & SIS or REF & BDAR If proponent elects to provide BDAR in place of SIS, then needs to consider whether proposed activity would exceed the biodiversity offset scheme threshold.	REF
Will there be significant impacts on aquatic threatened species, populations or ecological communities?	• Test in Section 220ZZ of FM Act.	No (Refer to Appendix C).	No = REF Yes = REF & SIS	REF
Will there be significant impacts on both terrestrial and aquatic threatened species, populations and/or ecological communities?	• Test of significance Section 7.3 of BC Act and • Test in Section 220ZZ of FM Act.	No (Refer to Appendix C).	No = REF Yes = REF & SIS & BDAR	REF

4.4 Tweed Shire Council's Contaminated Land Policy Assessment

Table 4.4: Response to TSC's Contaminated Land Assessment (V1.1) items of consideration

Item	Consideration	Response
1	Please specify all land uses to which the site has been put, including the current use.	A review of available historical aerial photography from 1962 to 2024 indicates that the subject area has been utilised as a railway line and station being the Murwillumbah Railway Station. The railway line ran from Murwillumbah to Sydney with the Murwillumbah section and station being completed in 1894. In the 1962 historical photo, the subject site appears to be cleared of native trees and buildings, tracks and water tanks associated with the railway station are evident. The subject site remained similar in appearance throughout the sequence of historical imagery until 2004 when a demountable building had been placed at the site and trees became more apparent surrounding the station area. Refer to Figures 5 to 12 in Section 11. Figures 13 and 14 show photographs from the circa 1904 and 1905 of the railway station.
2	Is the proponent aware of uses to which properties adjoining the site have been put? If so, please specify.	Yes. The site and immediate surrounds are the Murwillumbah Railway Station and buildings, tanks and tracks associated with the railway line.
3	Do any of the uses correlate with the potentially contaminating activities from current or historical land use? Refer to Table 1 in Schedule 1 of the Contaminated Land Policy for potential contaminants of concern.	Yes. The subject site has potentially contaminated land due to the association with the railway line. Railway yards have the following chemicals associated: • Hydrocarbons • Arsenic • Phenolics (creosote) • Heavy metals • Nitrates • Ammonia. The closest cattle dip sites (the Midget, South Murwillumbah and Buchanans Dips) are located approximately 1.2 km east from the works footprint, and are removed from the subject site.

Item	Consideration	Response
4	If the answer to 3 is yes - has there been any testing or assessment of the site and, if so, what were the results?	The majority of the works are limited to the station building areas where contaminants associated with the railway line, are unlikely to have contaminated. No further testing required in these areas. The staging area extension would be formed up and connected to the existing concrete sections. The existing staging area was completed with no known contamination, therefore the extension able to be constructed with no further testing required. Further the Northern Rivers Rail Trail – South Murwillumbah to Crabbes Creek Review of Environmental Factors concluded that contamination of the site is unlikely and further investigations are not warranted (TSC, 2019). A site walkover has been undertaken to identify and assess any evidence of historical or recent surface contamination at the site such as chemical drums, odours, discoloured patches of earth etc. This investigation did not identify any such evidence within or adjacent to the proposed alignment.
5	Is the proponent aware of any contamination on the site?	No.
6	What remediation work, if any (carried out voluntarily or ordered by a government agency), has been taken in respect to contamination which is or may have been present on the site?	Nil, proceed with caution. Works would cease immediately if any potential source of contamination (e.g. soil discolouration, odours or asbestos material) is uncovered during construction. In such instances, further site investigations would be undertaken to determine if additional investigations or remediation in accordance with a council approved Remediation Action Plan would be required.

Refer to the following document for further information: Tweed Shire Council Contaminated Land Policy Version 1.1, November 2007.

TABLE NOTES:

A: Refer to the Activity Specific Procedure – Preliminary contaminated land use assessments in Part D of the Procedure for further guidance.

B: In the event that contamination is suspected, chemical testing should be undertaken and a contamination assessment report appended to confirm that contaminated lands are not present and /or would not be impacted by the proposal.

C: Under section 60 of the Contaminated Land Management Act 1997, a person whose activities have contaminated land or a landowner whose land has been contaminated is required to notify NSW Environment Protection Authority (EPA) when they become aware of the contamination.

4.5 Preliminary acid sulfate soils assessment

Table 4.5: Preliminary acid sulfate soils assessment

Item	Consideration	Response
1	Is the project site located within a known mapped ASS constraint area as per Table 4.4 of classes below? If yes, please specify. If no, further assessment for ASS is NOT required.	Yes. The 1:25000 ASS Planning maps indicate that the subject site occurs within a Class 4 mapped area. Further investigations are required for any works more than 2 m below ground level or any works by which the water table is likely to be lowered more than 2 m below the natural ground surface (Table 4.6).
2	Will the projects maximum depth of excavation impact the identified ASS class? Please specify.	No. Based on the current scope of works, all excavations would be less than 2 m below ground level. It is unlikely that ASS would be intercepted.
3	Has soil sampling and analysis been carried out to determine if an Acid Sulfate Soils Management Plan (ASSMP) is required? Please specify.	No. No sampling or analysis is required.
4	Based on the above items is an ASSMP required? Please specify.	In consideration of the proposed depth of excavations which would not intercept native soil (e.g. estuarine material) an ASSMP is not required.

Refer to the following documents for further information: TSC Acid Sulfate Soil Management Plan for Minor Works and Acid Sulfate Soil Manual (published by the Acid Sulfate Soil Management Advisory Committee (ASSMAC) 1998).

TABLE NOTES:

A: Refer to the Activity Specific Procedure – Preliminary contaminated land use assessments in Part D of the Procedure for further guidance.

B: In the event that ASS is suspected, chemical testing should be undertaken and an assessment report appended to confirm that ASS lands are not present and /or would not be impacted by the proposal and therefore requiring an ASSMP.

C: Under Part 7 Additional Local Provisions, Clause 7.1 ASS of the TLEP (2014), a person must not, without development consent, carry out works on land shown as being Class 1, 2, 3, 4 or 5 land on the series of maps held in the office of the Council and marked “Acid Sulfate Soils Map”, being the works specified for the class of land.

Table 4.6: Classes of ASS as per ASS Maps (TLEP 2014)

Class of land	Specified works
1	• Any works.
2	• Works below the natural ground surface. • Works by which the water table is likely to be lowered.
3	• Works more than 1 metre below the natural ground surface. • Works by which the water table is likely to be lowered more than 1 metre below the natural ground surface.
4	• Works more than 2 metres below the natural ground surface. • Works by which the water table is likely to be lowered more than 2 metres below the natural ground surface.
5	• Works within 500 metres of Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum and by which the water table is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.

4.6 Aboriginal cultural heritage preliminary assessment

As explained within the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECC&W, 2010), the NSW Aboriginal cultural heritage due diligence assessment is a code of practice developed to assist individuals and organisations to exercise due diligence when carrying out activities that may harm Aboriginal objects and to determine whether they should apply for consent in the form of an Aboriginal Heritage Impact Permit (AHIP). The *National Parks and Wildlife Act 1974* (NPW Act) provides that a person who exercises due diligence is determining that their actions will not harm Aboriginal objects and has a defence against prosecution for the strict liability offence if they later unknowingly harm an object without an AHIP.

Tweed Shire Council has developed a Preliminary Aboriginal Cultural Heritage Assessment (PACHA) to ensure Council infrastructure projects minimise the risk of harm to Aboriginal places and objects of cultural heritage significance. The objective is to identify those projects with a significant risk of harm to Aboriginal cultural heritage and conversely, those projects for which the risk of harm is low. Projects determined to have a high risk of harm to ACH require a more detailed assessment in the form of an Aboriginal Cultural Heritage Assessment Report (ACHAR) and potentially an Aboriginal Heritage Impact Permit (AHIP). Those determined to have a low risk of harm to ACH may proceed with caution without an ACHAR or AHIP.

A PACHA is provided in Appendix E. In summary, the PACHA found that harm to Aboriginal places and objects can be avoided and an ACHAR and AHIP is not required.

5.0 Clause 171(2) factors

According to clause 171(2) of the Environmental Planning and Assessment Regulation 2021 (EP&A Regulation 2021), Council must take into account the following factors when consideration is being given to the likely impact of the activity on the environment.

Table 5.1: Clause 171(2) assessment conditions

Matters for consideration	**Likely impact** (nil/positive/negative)
a Any environmental impact on a community	*Negligible negative impact* The assessment of this REF has demonstrated that there would be minimal environmental impact on the community.
b Any transformation of a locality	*Negligible negative impact* The proposed activity would result in a temporary transformation of the locality during construction in association with construction machinery, equipment, personnel and materials. Following construction, the locality would be reflective of the current situation.
c Any environmental impact on the ecosystems of the locality	*Negligible negative impact* The environmental impact on local ecosystems is expected to be minimal based on the minor scope of works and short duration of construction works.
d Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality	*Negligible negative impact* There would be a minor reduction in the aesthetic value of the locality due to the temporary presence of construction workers and associated plant and control measures.
e Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations	The SOHI outlines that: *"the proposed works will not have any physical or visual impacts on the 1920s Station building, or the other structures assessed as being highly significant. The proposed works have been carefully sited to avoid any obstruction of views to these structures, and avoid removal of vegetation, and also impacts to tree roots.* *Cumulatively, the proposed works are also considered to be minor in nature with minimal impact to the Murwillumbah Railway Station and Yard Group. The works are considered to maintain and even enhance the heritage values of the place by ensuring the ongoing use of the Station complex which allows for maintenance and conservation, and promoting and allowing for a greater public appreciation of the history and significance of the place."*

Matters for consideration	Likely impact
f Any impact on the habitat of protected animals (within the meaning of the Biodiversity Conservation Act 2016)	*Negligible negative impact* The site is disturbed from past and current land uses. The site has minimal habitat value for fauna, however, amenity trees would provide foraging and nesting opportunities to fauna adapted to urban environments. Accordingly, the proposal would not have a significant impact on habitat of protected fauna species.
g Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air	*Negligible negative impact* The site is disturbed from past and current land uses. The site has minimal habitat value for fauna, however, amenity trees would provide foraging and nesting opportunities to fauna adapted to urban environments. Accordingly, the proposal would not have a significant impact on habitat relied upon by threatened, endangered or vulnerable species.
h Any long-term effects on the environment	*Negligible negative impact* Mitigation measures listed in Section 10 of this REF would be implemented during construction to ensure that there are no long-term effects on the environment.
i Any degradation of the quality of the environment	*Negligible negative impact* Construction works would likely result in some minor short-term impacts on the environment. Mitigation measures as listed in Section 10 of this REF would ensure that these impacts do not degrade the quality of the environment in the longer term.
j Any risk to the safety of the environment	*Negligible negative impact* The proposed activity would have minimal risk to the safety of the environment. A range of risk management measures would be utilised during construction which are summarised in Section 10 of this REF.
k Any reduction in the range of beneficial uses of the environment	*Negligible negative impact* The proposed activity would not reduce the overall range of beneficial uses of the environment.
l Any pollution of the environment	*Negligible negative impact* Mitigation measures as listed in Section 10 of this REF would minimise the risk of pollution to the environment during works.
m Any environmental problems associated with the disposal of waste	*Negligible negative impact* There would be no environmental problems associated with the disposal of waste. There would be only a minor contribution of construction waste to landfill.
n Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply	*Negligible negative impact* Some demand for additional materials would be generated as part of the proposed development. There would also be a minor contribution to reliance upon non-renewable fuel resources during construction.

Matters for consideration	Likely impact
o *Any cumulative environmental effect with other existing or likely future activities*	*Negligible negative impact* Construction machinery and plant relies on non-renewable fuel which contributes to atmospheric greenhouse gasses and, subsequently, anthropogenic climate change. Council's operations generate greenhouse gas emissions primarily from the use of fossil-fuel powered electricity (79% at July 2019), from burning transport fuels across Council's fleet (15% at July 2019) and from nitrous oxide and methane emissions from wastewater treatment plants (6% at July 2019). Although there are currently limited alternative energy sources for Council's plant and machinery, Council's Renewable Energy Action Plan (REAP) have set a target of reducing its greenhouse gas emissions from electricity use by 50% by 2025. Although there is currently a cumulative environmental effect from the generation of greenhouse gas emissions, measures listed within Council's REAP will mitigate long-term effects.
p *Any impact on coastal processes and coastal hazards, including those under projected climate change conditions*	*Nil* The subject site is located outside the coastal hazard zone as per the Tweed Shire Coastal Hazards Assessment completed in November 2013. Therefore, the proposal is unlikely to impact upon coastal processes or hazards.
q *Any applicable local strategic planning statements, regional strategic plans or district plans made under the Act, Division 3.1*	The Local Strategic Planning Statement 2020 (LSPS) themes align with 4 goals from the North Coast Regional Plan 2036 (NCRP) being: 1 Natural environment 2 Thriving economy 3 Liveable communities 4 Diverse housing and lifestyles. The planning priorities within the LSPS are broadly consistent with the NCRP and the Community Strategic Plan 2017–2027 (CSP) strategic direction. This project incorporates the following planning priorities of the LSPS: • Planning priority 9: Promote a diverse tourism industry that is in harmony with, and leverages off, the Tweed's natural environment, rich culture and heritage assets, emerging niche rural industries, and enhances local communities, culture and environment. • Planning priority 11: Cultivate a desirable and healthy lifestyle choice with a strong sense of community, diverse

Matters for consideration	Likely impact
	places for people to be happy, build resilience, feel safe and be well connected. • Planning priority 14: Preserve and enhance the distinctive characteristics of our centres, towns and villages that make them special and unique, into the future. This project incorporates the following goals from the CSP: • Goal 2.1: Regulate and deliver the built environment to balance the social, cultural, economic and environmental needs of the community. • Goal 3.1: Provide social, cultural and economic opportunities enabling healthy, safer and more inclusive communities. • Goal 3.2: Provide places for people to live, work, visit, play and enjoy the Tweed.
r Any other relevant environmental factors	No other relevant factors require consideration.

6.0 Publication requirements

According to clause 171(4) of the EP&A Regulation 2021, Council must publish REFs and all relevant information if identified in Table 6.1.

Table 6.1 Clause 171(4) publication requirements

Publication requirements[1, 2]	Publication requirement (yes or no)	Published[4] (n/a, TSC website)
A capital investment value of more than $5 million	No	N/A
An approval or permit for activity that requires approval under:		
• FM Act sections 144, 200, 205 or 219	No	N/A
• *Heritage Act 1977* section 57	Yes	TSC website
• *National Parks and Wildlife Act 1974* section 90	No	N/A
• *Protection of the Environment Operations Act 1977* sections 47–49 or 122	No	N/A
If the determining authority considers it to be in the public interest[3]	No	N/A

TABLE NOTES:

1 There are allowances for exceptional circumstances where publication is not required; this is at the Planning Secretary's discretion.
2 Where certain parts of this REF document is sensitive, such as sensitive cultural information requested to be redacted by Aboriginal parties or cyber security impacts and mitigation measures, in these instances, the REF document content can be redacted where required. The REF document (excluding sensitive information) needs to be available online.
3 For further guidance refer to Point 6 in Attachment A of the Department of Planning and Environment, Guidelines for Division 5.1 assessments, June 2022.
4 The review must be published before the activity commences; or if publishing the review before the activity commences is not practicable—as soon as practicable, and no later than 1 month, after the activity commences.

7.0 Supporting documentation

Table 7.1 below provides a summary of additional assessment, management plans, permits, licences and approvals required for the proposed activity.

Table 7.1: Summary of additional assessments, plans and approvals

Checklist of additional assessments, management plans, permits, licences or approvals	**Required?** (yes/no)	**Attached?** (yes/no)
Data base searches		
NSW Wildlife Atlas Flora and Fauna Records Search	Yes	No – Information on file and incorporated into Appendix C.
Commonwealth Protected Matters Search	Yes	No – Information on file and incorporated into Appendix B.
Aboriginal Heritage Information Management System search (AHIMS)	Yes	No – Information on file.
State Heritage Inventory	Yes	Yes – SOHI in Appendix D
Maritime Heritage Database	No	N/A
Assessments		
Assessment of matter of National Environmental Significance	Yes	Yes. Refer to Appendix B.
Contaminated Lands Assessment	No	Due diligence assessment provided in Section 4.4.
Preliminary Flora and Fauna Assessment	Yes	Yes. Refer to Appendix C.
Management plans		
Acid Sulfate Soil Management Plan for Minor Works	No	N/A
Project-specific Acid Sulfate Soil Management Plan	No	N/A
Dewatering Management Plan	No	N/A
Landscape Management Plan	No	N/A
Vegetation Management Plan	No	N/A
Waste Management Plan	Yes	Yes. Refer to Appendix F.

Checklist of additional assessments, management plans, permits, licences or approvals	Required? (yes/no)	Attached? (yes/no)
Permits/licences/approvals		
A water access licence (WAL) or water supply works approval under the Water Management Act 2000.	No	N/A
NSW DPI Fisheries Permit	No	N/A
NSW DPI Crown Lands – General or Short-term Licence	No	N/A
Consultation		
NSW Environment, Energy and Science (EES)	No	N/A
Transport for NSW	No	N/A
Publishing requirements		
Sensitive information required to be redacted prior to publishing online	Yes	Website version would have all sensitive information redacted prior to publishing.

Link to information on file:

[redacted]

8.0 Conclusions

This REF has assessed the proposed activity and any potential impacts. The activity is unlikely to significantly affect the environment, and therefore an EIS is not required.

The activity is unlikely to significantly affect threatened species, populations, ecological communities or their habitats and therefore an SIS and/or BDAR is not required.

9.0 Certification and determination

Table 9.1: Certification by Environmental Scientist preparing the assessment

Certification (person preparing the assessment)	
I certify to the best of my knowledge that: a this REF provides a true and fair review of the proposed activity in relation to its likely effects on the environment. It assesses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposed activity b this REF has established that the activity is not likely to significantly affect the environment and an Environmental Impact Statement is not required c the REF has concluded that there will be no significant impacts on matters of national environmental significance or any impacts on Commonwealth land d the proposal should proceed subject to the implementation of all environmental safeguards and management actions identified in the REF and compliance with all other relevant statutory approvals, licenses, permits and authorisations. Note 1: Projects with unacceptable impacts are recommended not to proceed (with reasons stated) or be subject to further investigation and assessment in accordance with an Environmental Impact Statement process. Note 2: The imposition of environmental safeguards and management actions identified in the REF are to minimise any adverse impact the activity may cause and to give effect to the objectives of Part 5 of the Environmental Planning and Assessment Act, 1979.	
Name	[redacted]
Signature	
Position	Environmental Scientist
Date	17/12/2024

Table 9.2: Review and final determination under delegated authority

Review and final determination (person with delegated authority to review and determine the assessment)	
I certify: • to the best of my knowledge that based on the completed REF and my knowledge of the project, the assessment has been adequately completed, and the conclusion as to the likely environmental impact of the project is reasonable and the project can proceed subject to the relevant management measures and environmental safeguards and other relevant authorities described within the REF. • that I have reviewed and endorsed the contents of this REF document and, to the best of my knowledge, it is in accordance with the EP&A Regulation and the Guidelines approved under clause 170 of the EP&A Regulation, and the information it contains is neither false nor misleading.	
Name	[redacted]
Signature	
Position	Senior Planning Applications Officer
Date	

Table 9.3: Project client signoff

Project client signoff	
I confirm that the: • REF provides an accurate description of the project scope of works • mitigation measures proposed within the REF are budgeted for and form part of the final project scope of works.	
Name	[redacted]
Signature	
Position	Manager Destination Communication and Customer Experience
Date	06/01/2025

Table 9.4: Project manager signoff

Project manager signoff	
I confirm that: • I have reviewed the design and construction footprint as assessed within this REF • the mitigation measures proposed within the REF will be implemented as described during construction and operation of the works • any changes to the project scope of works or disturbance footprint will be communicated to Council's Engineering Division Environmental Scientist, for further assessment (if required).	
Name	[redacted]
Signature	
Position	Project Manager – Contracts
Date	14/01/2025

10.0 Project mitigation measures

Table 10.1: Project mitigation measures

General and/or non-standard mitigation measures	Code
The activity is to be completed in general accordance with the Review of Environmental Factors.	GNS1
All work associated with this activity is to be carried out so as not to cause a nuisance to residents in the locality from noise, water or air pollution.	GNS2
All construction and/or demolition site work including the entering and leaving of vehicles is limited to the following hours, unless otherwise permitted by Council: • Monday to Saturday from 7 am to 6 pm • No work to be carried out on Sundays or Public Holidays.	GNS3
Written notice shall be given to any affected residences at least two weeks prior to any works commencing.	GNS4
All construction personnel working at the site would be inducted prior to commencement of works.	GNS5
A site-specific erosion and sediment control plan would be prepared prior to works commencing.	GNS7
All required erosion and sediment control works would be installed and maintained in accordance with the Sediment and Erosion Control Plan and in accordance with the Blue Book – *Managing Urban Stormwater – Soils and Construction.*	GNS8
Prior to construction (minimum of 6 weeks), the Project Manager would liaise with the Communications Unit to identify the required community engagement or consultation required to be undertaken.	GNS10
All community engagement or consultation would be in line with the Community Engagement and Participation Plan 2019–2024.	GNS11
Works must be completed in line with the conditions of all relevant section 60 application approvals.	GNS-NRRT004-1
Where locations to install seating, pathways, tables and benches are amongst trees and the design plans do not clearly identify locations, an environmental scientist would be required on site to show placement that is outside of structural root zones.	GNS-NRRT004-2

Flora and fauna	Code
Pre-construction	
Vegetation that is to be retained, including high conservation zones, is to be clearly identified and delineated from the construction footprint. High-visibility temporary fencing (e.g. scrim or flicker tape) identifying no-go zones is to be installed prior to the commencement of construction works.	F&F1
Where construction works or movement of materials are considered likely to damage trees (trunks, branches or roots), precautionary measures including trunk and branch protection in line with Section 4 of AS4970-2009 would be installed.	F&F2
In the event that native threatened species are identified within the disturbance footprint, construction would avoid disturbance of the individuals and, if necessary, the individuals would be relocated by experienced wildlife handlers.	F&F4
If nests and/or eggs of native species are identified within the disturbance footprint, the construction works would be postponed until the eggs are hatched and the hatchlings have dispersed on their own accord or an experienced wildlife handler has safely relocated them.	F&F5
All machinery used on site is to be clean – i.e. tracks, vehicle tyres, buckets and attachments are to be visibly free of soil and plant material to minimise the risk of introduction and spread of weed propagules.	F&F9
During construction	
No construction materials, stockpiles, or construction equipment including heavy vehicles and machinery shall be located or parked within the drip line of trees adjacent the project.	F&F11
All works in regards to the management of vegetation (pruning of roots or branches or removal of identified trees) would be supervised by a suitably qualified arborist.	F&F12
Remove all waste containing weeds and seeds from the site and dispose of so that the spread of weeds is minimised.	F&F18
When controlling weeds, refer to measures stipulated by the *New South Wales Weed Control Handbook – A guide to weed control in non-crop, aquatic and bushland situations.*	F&F19

Erosion and sediment control	Code
Pre-construction	

Erosion and sediment control	Code
All required erosion and sediment controls would be in place prior to the commencement of work and maintained until all works are completed.	ESC1
During construction	
Where practicable, construction works would be staged to minimise the area of disturbance at any one time.	ESC2
Works would be stopped if unsuitable weather conditions are predicted, such as during and after heavy rain.	ESC4
The condition of sediment control structures would be monitored and maintained in proper working order throughout the time they are in place. They would be kept clear of debris at all times and cleared of sediment if filled >50% capacity.	ESC5
Stockpile sites would be located in existing cleared areas away from drains and surface water flows and protected with an upslope diversion bund and down slope sediment fencing (if required).	ESC6
'Clean' run-on water would be diverted around the disturbance area.	ESC7
Post-construction	
Following completion of construction works, the site would be cleared of all debris, waste soil and foreign matter.	ESC11
All disturbed surfaces would be reinstated and stabilised as soon as possible after completion using turf and/or grass seed.	ESC12
All temporary erosion and sediment control structures would be removed once the site is stabilised.	ESC13

Water quality management	Code
During construction	
There is to be no release of dirty water into drainage lines and/or waterways.	WQ9
Water quality control measures are to be used to prevent any materials (e.g. concrete, grout, sediment etc.) entering drain inlets or waterways.	WQ11

Land use and amenity	Code
During construction	

Land use and amenity	Code
The proposed activity would be managed such that the development footprint is limited to the extent necessary to complete the scope of works.	LUA1
All plant, equipment, materials and waste would be removed from the site at the completion of works.	LUA2

Public access	Code
To ensure public safety during works, standard construction site access restrictions would apply.	PA1
The works alignment would be fenced in nominated locations to restrict public access.	PA2
Alternate pedestrian access would be provided where works impact upon pedestrian infrastructure such as footpaths or cycleways.	PA3
Signage would be utilised along the alignment to direct and inform the public regarding access to and around the site.	PA4

Noise and vibration	Code
Pre-construction	
Closely affected residents would be notified accordingly of the works being performed in close proximity and informed of the process for making a complaint. For this project, complaints would be made to the constructor.	N&V1
During construction	
Ensure site workers are aware of the process for receiving complaints and direct complainants to the responsible site supervisor.	N&V2
The operation of plant and equipment would be restricted to standard hours of 7 am to 6 pm Monday to Saturday. No work would be undertaken on Sunday or public holidays.	N&V3
Trucks and equipment would not arrive or queue outside the site before 7 am Monday to Saturday.	N&V4
Operating periods for particularly noisy activities (i.e. rock breaking/drilling, if required) would be reduced where possible to provide respite periods.	N&V5
Machines/equipment would be turned off when not in use or throttled down to a minimum.	N&V6

Noise and vibration	Code
Reversing of vehicles would be minimised where possible to alleviate the annoyance of beeping reverse alarms (or less tonal 'broadband' or 'quacker' type alarms would be utilised).	N&V7

All reasonable steps shall be taken to muffle and acoustically baffle all plant and equipment. In the event of complaints from the neighbours, which Council deem to be reasonable, the noise from the construction site is not to exceed the following:
• Short Term Period – 4 weeks.
  ○ LAeq, 15 min noise level measured over a period of not less than 15 minutes when the construction site is in operation, must not exceed the background level by more than 20dB(A) at the boundary of the nearest likely affected residence.
• Long term period – the duration.
  ○ LAeq, 15 min noise level measured over a period of not less than 15 minutes when the construction site is in operation, must not exceed the background level by more than 15dB(A) at the boundary of the nearest affected residence.
	N&V8

All plant would be maintained in good condition, with all reasonable and feasible acoustic treatments (i.e. residential mufflers and plant enclosures) installed and maintained (refer to AS 2436 – 1981 ‘Guide to noise control on construction, maintenance and demolition sites’).	N&V9
Any stationary equipment (e.g. generators) would be located as far as possible from residential receptors.	N&V10
Plant operators would be instructed to operate equipment in a manner that does not generate unnecessary noise, such as: • avoiding excessive revving • avoiding dragging objects or dropping objects from a height • minimising impact with solid objects where possible • using excavator bucket heads or rock claw attachment to move solid objects • using excavator bucket, claw or rock ripper pick in preference to rock drillers or splitters, where possible • turning off machines/plant equipment when not in use or throttled down to idling.	N&V11
Complaint based noise monitoring would be performed throughout construction as required to confirm the effectiveness of noise management controls.	N&V12
A noise complaint register would be maintained throughout construction. The register would record all complaints including: • Complainant contact details • Source/type of noise causing disturbance • Time and duration of noise causing disturbance • Times when the noise would cause least disruption • Measures taken to address the complaint	N&V13

Noise and vibration	Code
Complaints handling is to occur in a prompt and responsive manner.	
Where there are complaints about noise from an identified work activity, it would be reviewed and, where feasible and reasonable, actions additional to those in place implemented to minimise noise output and disruption to sensitive receptors (e.g. reschedule activity causing disturbance to a time which causes least disruption to the complainant and other receptors).	N&V14

Air quality management	Code
During construction	
All plant and machinery would be serviced at regular intervals to minimise exhaust emissions.	AQ1
The constructor would observe local meteorological conditions and predicted forecasts on a daily basis and prepare site for extreme weather events (i.e. high winds, rainfall).	AQ2
Works would be staged, where practicable, to minimise the area of disturbance at any one time.	AQ3
All necessary precautions shall be taken to minimise impacts from dust during construction works and from construction vehicles.	AQ4
Dust dispersion would be managed via stockpile control (e.g. soil stockpiles covered during high wind conditions), erosion and sediment controls, and wetting down if required.	AQ5
Any transport trucks would be covered during journeys to and from the site.	AQ6
Vehicles would be switched off when not in use.	AQ7
All stockpiles, exposed areas, unsealed trafficable areas and compound areas will be covered where practicable (using plastic, mulch, hydromulch, etc.) or wet down as required to minimise wind-blown and traffic generated dust. Wetting down of these areas should not be done to the extent that run-off occurs.	AQ9
Post-construction	
Disturbed areas would be stabilised once works are complete, or progressively where appropriate.	AQ10

Contaminated lands	Code
During construction	
Works are to cease immediately if any potential source of contamination is uncovered during works (e.g. chemical drums). In such an instance remediation in accordance with a Council approved Remediation and Validation Action Plan would be required.	CLM1
All imported fill material shall be from an approved source. Prior to commencement of construction, details of the source of the fill, description of the material, and evidence that the material is free of contaminants, must be produced.	CLM2

Hazard management	Code
During construction	
Appropriate spill kits, advocated for use in association with fuels and chemicals are to be maintained on-site. These are to include spill booms and other methods aimed at the containment of fuels and chemicals spilled within the aquatic environment.	HAZ5
Fuels and chemicals are to be stored off-site, however, if required to be stored on-site, they are to be located in a bunded area away from drainage lines.	HAZ6
No refuelling is recommended within the subject site. If however, refuelling is required at the subject site, areas designated for the storage, refuelling and maintenance of plant are to be established where native vegetation has previously been cleared and at least 30 m from a waterway.	HAZ7
Forecast checks of the Bureau of Meteorology site would be undertaken daily. In the event that heavy rain is predicted, arrangements are to be made immediately to remove any plant and equipment from within the banks of the waterway prior to the rain event. All plant and equipment would be removed to higher ground above the 1 in 100 year flood level.	HAZ8
In the event of flooding, no workers would be directed into flood waters.	HAZ9
Any debris and spoil accumulated within the works site as a result of flooding would be removed to the designated stockpile area.	HAZ10
All environmental controls would be reinstated as soon as possible following flooding.	HAZ11

Cultural heritage management	Code
During construction	
If an Aboriginal object or objects, or any cultural heritage material is identified during the works, all works would stop immediately and the Manager Infrastructure Deliver,	CH1

Cultural heritage management	Code
Tweed Shire Council (TSC) notified. The TSC contact is to advise the Tweed Byron Local Aboriginal Land Council (TBLALC) Aboriginal Sites Officer (on 07 553601926) and OEH. No works or development may be undertaken until the required investigations have been completed and any permits or approvals obtained, where required, in accordance with the *National Parks and Wildlife Act 1974*. It is possible that in such a case there may be a necessity to apply for an AHIP and further investigations may be required. The *National Parks and Wildlife Act* requires that, if any person finds an Aboriginal object on land and the object is not already recorded on AHIMS, they are legally bound under Section 89A of the Act to notify OEH as soon as possible of the object's location.	
In the event that objects suspected of being of Aboriginal Cultural Heritage significance are uncovered, the TSC ACHMP unexpected finds procedure must be followed.	CH2
If human remains are found during the works, then all works shall cease immediately. The area must be secured within an exclusion zone to prevent unauthorised access and the NSW Police and OEH must be informed as soon as possible.	CH3
If non-aboriginal heritage is discovered, work should stop and the item demarcated. An in-situ heritage assessment is required to determine whether the item is a relic. If the item is concluded to be a relic, the NSW Heritage Council are to be contacted as soon as practical. The NSW Heritage Council would advise the appropriate course of action to be taken. N.B. The Heritage Act 1977 defines '*Relic'* as meaning any deposit, artefact, object or material evidence that: (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and is of State or local heritage significance.	CH4

Biosecurity management	Code
Suspicious sightings of red imported fire ants or their mounds that have been identified within a site must be reported to NSW Department of Primary Industries immediately on 1800 680 244 or via their online form https://www.dpi.nsw.gov.au/biosecurity/forms/report-exotic-ants. If red imported fire ants are suspected, do not: • disturb the ants or nests • treat the infestation yourself. If red imported fire ants are suspected, do (if safe to do so): • take a photo of the suspicious ants including a scale (use coin or key) and attach it to the report	BM1

Biosecurity management	Code
• keep a sample in a jar or zip lock sandwich bag in case it needs to be submitted for further investigation	
Restrictions apply on the movement of fire ant carrier material. Anyone bringing organic mulch, compost, growing media, manure, soil, hay, straw, chaff, silage, potted plants, turf, agricultural equipment, earth moving equipment, sand, gravel, chitters, coal fines, coal stones, overburden and decomposed granite into NSW from Queensland must comply with the current NSW Biosecurity (Fire Ant) Emergency Order. Noting that fire ant infested areas include both Queensland and New South Wales locations.	BM2
Moving material out of the fire ant control area in South Murwillumbah also must comply with the current Emergency Order.	BM3

Waste minimisation and management	Code
During construction	
All waste materials generated by the project should be managed in accordance with the project Waste Management Plan.	WM1
All reasonable efforts will be made to avoid and minimise waste and to reuse or recycle where possible.	WM2
Separate waste and recycling bins will be provided on site for the removal of workers and building rubbish.	WM3
All waste bins on site will have self-closing lids preventing waste from being airborne.	WM4
All general rubbish and construction waste would be removed from the site and disposed of in an appropriate bin or Council waste recovery facility.	WM5

11.0 Figures and plates

Figure 1: Locality

Figure 2: Subject site

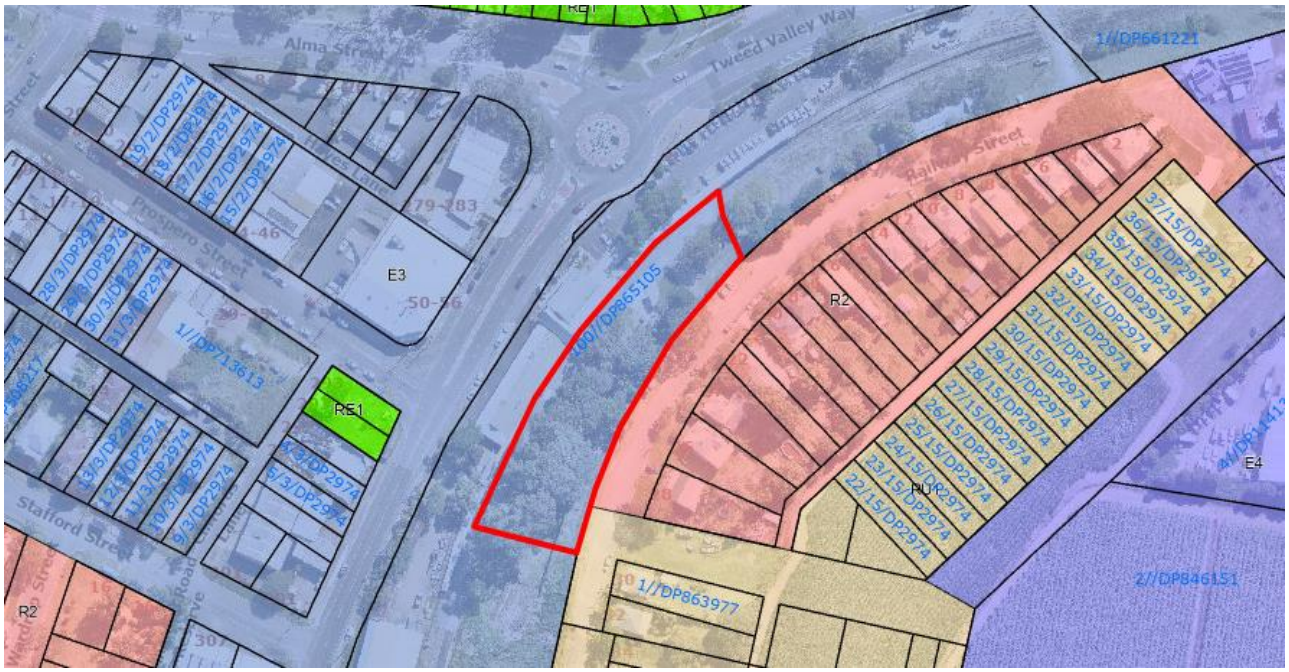

Figure 3: TLEP land zoning (E3 = Productivity Support; E4 = General Industrial; R2 = Low Density Residential; RE1 = Public Recreation; RU1 = Primary Production)

Figure 4: Tenure (bule shading = Government Owned Land; grey shading = Freehold; yellow shading = Community Land (Council Owned); pink shading = Operational Land (Council Owned))

Historical imagery – the white cross hairs identifies the Murwillumbah Railway Station in the following historical aerial imagery

Figure 5: Imagery from 1961 (source: NSW Historical Imagery Viewer)

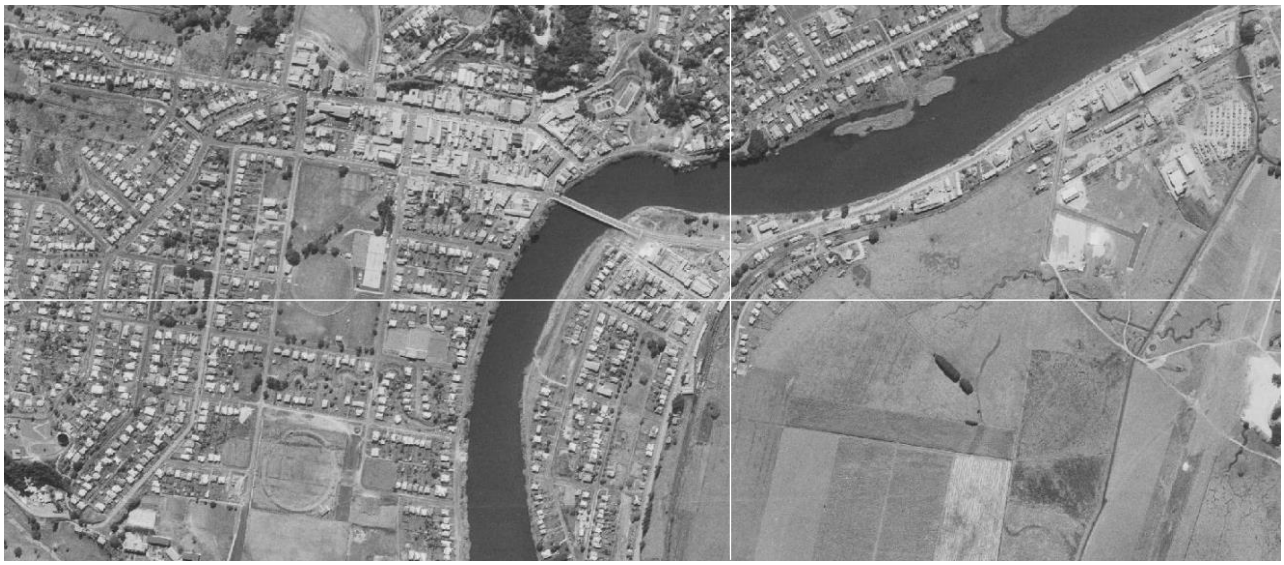

Figure 6: Imagery from 1970 (source: NSW Historical Imagery Viewer)

Figure 7: Imagery from 1978 (source: NSW Historical Imagery Viewer)

Figure 8: Imagery from 1986 (source: NSW Historical Imagery Viewer)

Figure 9: Imagery from 1996 (source: NSW Historical Imagery Viewer)

Figure 10: Imagery from 2004 (source: TSC Weave)

Figure 11: Imagery from 2015 (source: TSC Weave)

Figure 12: Imagery from 2024 (source Nearmap)

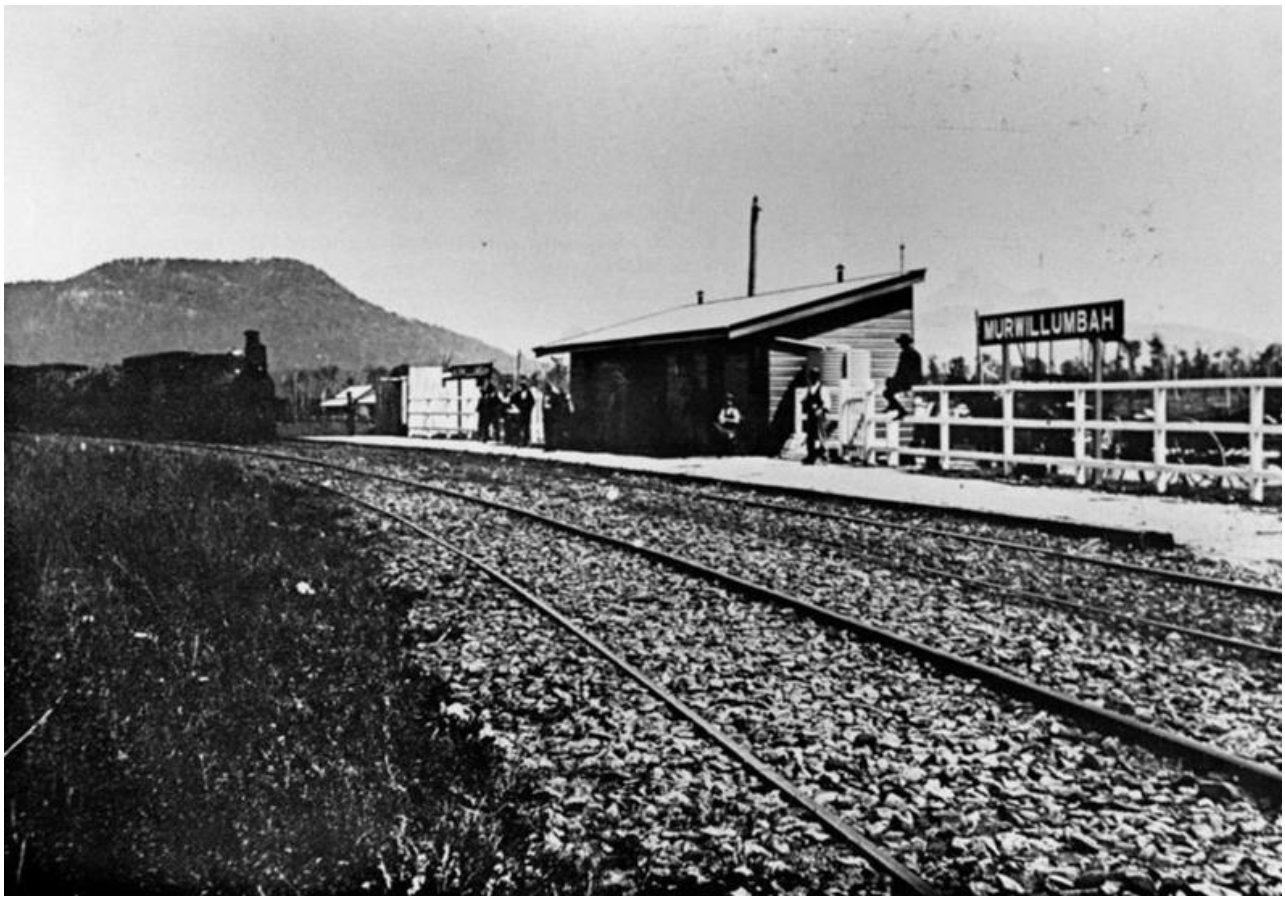

Plate 1: Photograph of Murwillumbah Railway Station circa 1904 (source: Tweed Regional Museum)

Plate 2: Photograph of Murwillumbah Railway Station circa 1905 (source: Tweed Regional Museum)

Plate 3: Example of proposed location of furniture identified by arrow and is located outside of structural root zones (more information on locations in Appendix A)

Plate 4: Example of proposed location of furniture identified by arrow and is located outside of structural root zones (more information on locations in Appendix A)

12.0 References

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13.0 Appendices

Appendix A Design Plan

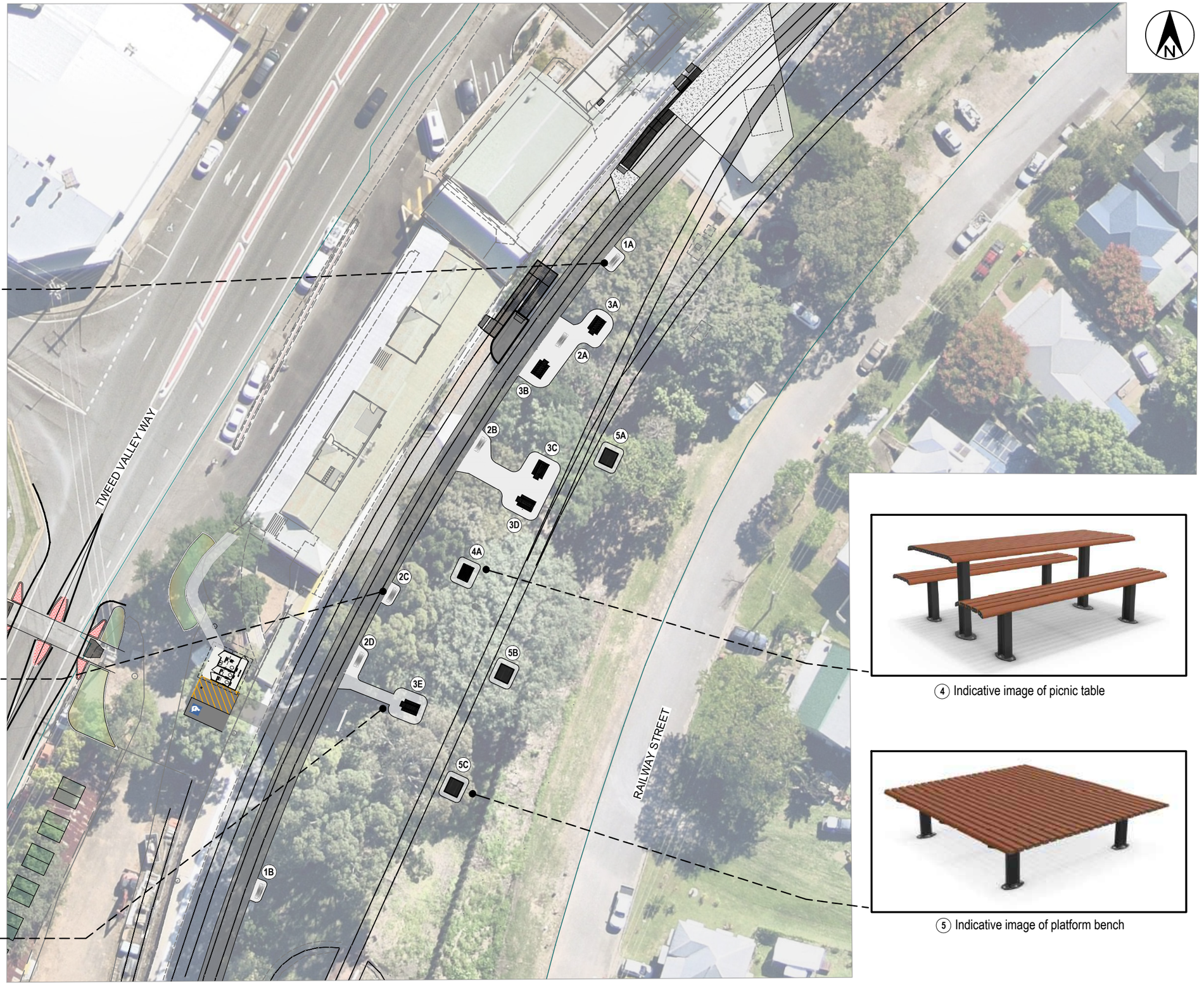
- LEGEND

1. Bench seat along Rail Trial edge
2. Park seat along the Rail Trial edge
3. Accessible table and connecting path
4. Picnic table on grass
5. Platform bench

(1) Indicative image of Bench Seat for the Rail Trail edge

(2) Indicative image of Bench Seat for the Rail Trail edge

(3) Indicative image of accessible table



(4) Indicative image of picnic table

(5) Indicative image of platform bench

PRELIMINARY
NOT FOR CONSTRUCTION

ISSUE	AMENDMENT DETAILS	DRAWN	CHECK	DATE
A	ORIGINAL ISSUE	A.L.K	J.M.M	31.10.24

SCALE: A1 SHEET 1:375, A3 SHEET 1:750
0 7.5 15 22.5 30 37.5m

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE.

DESIGN UNIT
COUNCIL OFFICES
TUMBULGUM ROAD,
MURWILLUMBAH NSW 2484.

PHONE 02 66702400
EMAIL tsc@tweed.nsw.gov.au
WEBSITE www.tweed.nsw.gov.au

TWEED SHIRE COUNCIL

DESIGN ENGINEER ..... DATE .....

DESIGNED			COORDS ADOPTED	
DRAWN	A.L.K	31.10.24	EASTING	
CHECKED	J.M.M	31.10.24	NORTHING	
HORIZONTAL DATUM	GDA		R.L.	
			VERTICAL DATUM	AHD

PROJECT:
NORTHERN RIVERS RAIL TRAIL
TRAIN STATION, MURWILLUMBAH

PLAN TITLE:
OVERALL SEATING PLAN

ROAD SEGMENT: -
JOB NUMBER: A4371
PROJECT NUMBER: **INF10**
DRAWING NUMBER **INF10-108**
ISSUE **A**

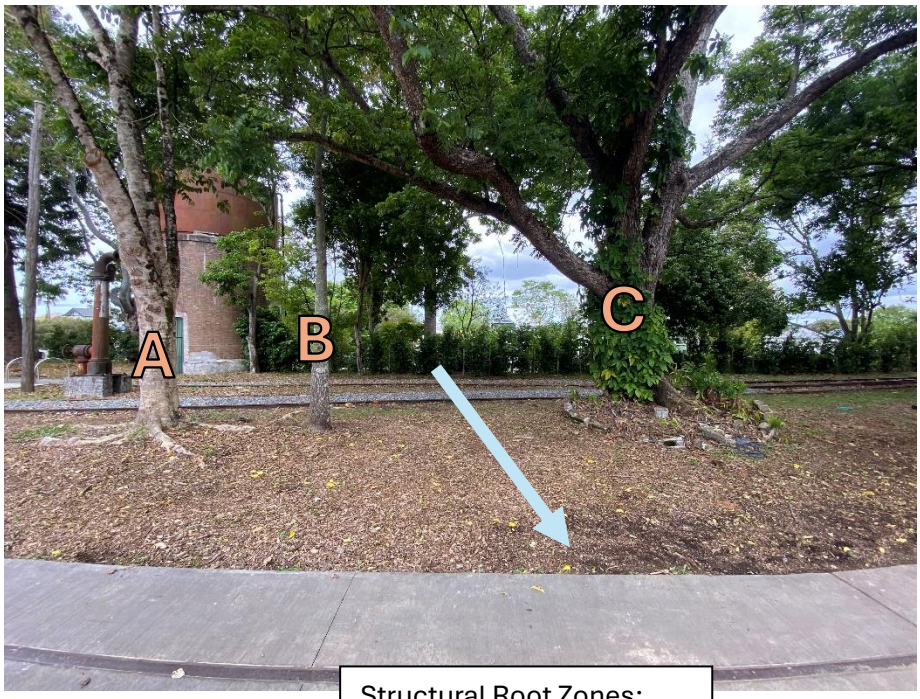
ACAD FILE No: G:_AAA DESIGN PROJECTS\INF\INF10-2_NRRT-PILOT-MURWILLUMBAH TO REGIONAL ART GALLERY_ALL MC FILES DEMOUNTABLE_STAGING AREA\Drawings\A_SKETCH - TENDER DRAWINGS\INF10_BASE_MASTER PLAN.dwg

Blue arrows indicate proposed location of furniture.

Bench 1A

Northernmost bench seat (near large Red Cedar with garden edge)

Seat at edge of trail. 100mm concrete slab with road base. No excavation required other than removing build up of leaves and scraping top soil near trail edge. No footings or pavement to be within structural root zones.



Structural Root Zones:

A (Melicope) – 2.5m

B (Bottle Tree) - 2.1m

C (Red Cedar) – 3.2m

Park Seat 2A / Accessible Table's 3A and 3B

Option for up to two accessible picnic tables and a park seat with arms on pavement. Opposite to Ramp and toilets. 100mm concrete slab with road base. Very minimal /no excavation required. No pavement or footings within structural root zone.

Structural Root Zones:
C (Red Cedar) – 3.2m
D (Abutilon) – 1.9m
E (Silk Floss Tree) – 3.0m
(beyond visible surface roots)
F (Durobby) - 2.3m
G (Flame Tree) - 2.3m

Park Seat 2B / Accessible Table's 3C and 3D

Option for up to two accessible picnic tables and a park seat with arms on pavement. Opposite to stairs. 100mm concrete slab with road base. Very minimal /no excavation required. No pavement or footings within structural root zone.

Structural Root Zones:
E (Silk Floss Tree) – 3.0m (beyond visible surface roots)
F (Durobby) 2.3m
G (Flame Tree) 2.3m
H (Jacaranda) 3.3m
I (Red Cedar) – 2.7m

Park Seat 2C

Park Seat with arms at edge of trail. 100mm concrete slab with road base. No excavation required. Ecologist reviewed. Not within any structural root zones.

Accessible Table, Seat and Connecting Path 3B

Southern proposed wheelchair access and table (open space behind/north of streetlight)

100mm concrete slab with road base. No excavation required other than removing build up of leaves and scraping top soil near trail edge. Plenty of space, ecologist reviewed, not within any structural root zones.

Structural Root Zones:
I (Paperbark) 2.9m
J (Silk Floss Tree) 2.9m
K (Crepe Myrtle?) 2.6m

Picnic Table 4A

Picnic table in grassed area behind “share the trail” sign. Plenty of space, ecologist reviewed, not within any structural root zones.

Structural Root Zones:
O (Red Cedar) 2.5m
P (Liquidambar) 2.6m
Q (Kauri Pine) 2.6m

Bench 1B

Southernmost seat at edge of trail near information sign.

100mm concrete slab with road base. No excavation required. Not within any structural root zones.

Structural Root Zones:
L (Tallowwood) 2.5m
M (Eucalypt) 3.3m
N (Crows Ash) 2.1m

Platform 5A / 5B / 5C

Optional Platform benches in grassed area behind between rail tracks and fence. Plenty of space, ecologist reviewed, not within any structural root zones.

Appendix B Matters of National Environmental Significance

Table B1 Matters of National Environmental Significance and their relevancy to the proposed activity

Matter of National Environmental Significance	Relevancy to the proposed activity
World Heritage Properties	1 identified. The subject site and proposed works are outside of and would not impact the Gondwana Rainforests of Australia (Qld) World Heritage Property.
National Heritage Places	1 identified. The subject site and proposed works are outside of and would not impact the Gondwana Rainforests of Australia (NSW) National Heritage Place.
Wetlands of International Importance (RAMSAR Wetlands)	None.
Great Barrier Reef Marine Park	None.
Commonwealth Marine Areas	None.
Listed Threatened Ecological Communities	6 identified: • Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community • Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland • Dunn's white gum (*Eucalyptus dunnii*) moist forest in north-east New South Wales and south-east Queensland • Grey box-grey gum wet forest of subtropical eastern Australia • Lowland Rainforest of Subtropical Australia • Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions These vegetation communities are not mapped as being present at the site. The proposed works would not impact upon any TECs.
Listed Threatened Species	117 identified. Given the disturbed nature of the site, lack of vegetation and that works would be undertaken within an existing disturbed area, threatened species identified from the search are considered unlikely to be impacted by the proposal.
Listed Migratory Species	43 identified. All species are marine species (birds, cetaceans, sharks and turtles) or terrestrial or wetland birds. These species are highly mobile and the disturbance footprint represents a small area relative to their home ranges. Furthermore, no suitable habitat is available for these species at the site and therefore no impacts are considered likely to occur. Accordingly, these species are not expected to be significantly impacted upon.

Additional matters protected under the EPBC Act identified in the EPBC Protected Matters report are summarised and the relevancy of these matters to the proposal are discussed in Table B2.

Table B2 Additional matters protected under the EPBC Act and relevancy to the proposed activity

Additional matter protected under the EPBC Act	Relevancy to the proposed activity
Commonwealth Lands	5 identified. All Commonwealth Lands are either Telecommunications Commission or Corporation land or Defence Land. The subject site is not with these Commonwealth Lands and the proposed works would not impact these areas.
Commonwealth Heritage Places	None.
Listed Marine Species	48 identified. Given the small disturbance footprint of the proposal, the distance the subject site is from the marine environment and the nature of the proposed activity, marine species are unlikely to be impacted upon.
Whales and Other Cetaceans	1 identified. Given the small disturbance footprint of the proposal, the distance the subject site is from the marine environment and the nature of the proposed activity, the Australian Humpback Dolphin is unlikely to be impacted upon.
Critical Habitats	None.
Commonwealth Reserves Terrestrial	None.
Australian Marine Parks	None.
Habitat Critical to the Survival of Marine Turtles	None.
State and Territory Reserves	9 identified: • Duroby Nature Reserve, NSW • Hattons Bluff Nature Reserve, NSW • Mooball National Park, NSW • Mount Jerusalem National Park, NSW • Mount Nullum Nature Reserve, NSW • Nicoll Scrub National Park, Qld • Springbrook National Park, Qld • Stotts Island Nature Reserve, NSW • Tomewin Conservation Park, Qld The subject site is sufficiently removed from the listed state and territory reserves and therefore the proposed works would not impact upon them.
Regional Forest Agreements	1 identified. North East NSW RFA applies over the broader study area; however, none of the reserves included in the RFA occur within the study area.
Nationally Important Wetlands	1 identified**.** Stotts Island Nature Reserve, NSW is sufficiently removed from the subject site and is not expected to be impacted upon by the proposed works.
EPBC Act Referrals	11 identified. The referrals listed have all completed or post-approval assessment statuses or are unrelated to the proposed disturbance footprint and proposal.
Key Ecological Features (Marine)	None.
Biologically Important Areas	None.
Bioregional Assessments	None.

Geological and Bioregional Assessments	None.

Based on the assessment provided in Table B1 and B2 above, matters protected under the EPBC Act are unlikely to be significantly impacted upon by the proposal and the proposal does not require referral to the Commonwealth Minister of the Environment.

Appendix C Preliminary Flora and Fauna Assessment

TWEED SHIRE COUNCIL

Preliminary Flora and Fauna Assessment

NRRT004 – Seating for Murwillumbah Railway Station precinct – South Murwillumbah

December 2024

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Introduction

The flora and fauna assessment included a review of the project brief, survey plans, and environmental planning legislation to consider the likely impacts of the proposed activity on native flora and fauna.

Reviews of Tweed Shire Council Weave GIS information including relevant environmental layers were carried out along with searches of State and Commonwealth ecological databases, followed by site visits to assess the potential impacts of the development.

For the purposes of this assessment, the following terms of reference are used:

- Disturbance footprint – refers to the direct footprint subject to development, including any disturbance associated with ancillary works (e.g. temporary access tracks or stockpile sites).
- Study area – the study area includes the disturbance footprint and any additional lands approximately 50 m either side of the disturbance footprint that could be affected directly or indirectly from the proposal. The objective of the assessment would ensure that impacts beyond the direct disturbance footprint are also considered where relevant.
- Subject site – refers to the parcel/s of land on which the development is proposed.
- Broader study area – lands within 10 km of the local study area and includes the BioNet Atlas of NSW Wildlife and Commonwealth Protected Matters database search areas.
- Bioregion – as classified by the Interim Biogeographic Regionalisation for Australia (IBRA) v 6 mapping (Thackway and Cresswell 1995). A bioregion is an area of common climate, geology, landform, native vegetation and species information. This project is located within the South East Queensland bioregion and Burringbar-Conondale sub-region.

Direct and indirect impacts are defined in accordance with OEH (2018) as follows:

- Direct impacts are those that directly affect the habitat of species and ecological communities and of individuals using the study area. They include, but are not limited to, death through predation, trampling, poisoning of the animal/plant itself and the removal of suitable habitat.
- Indirect impacts occur when project-related activities affect species or ecological communities in a manner other than direct loss within the subject site. Indirect impacts may sterilise or reduce the habitability of adjacent or connected habitats. Indirect impacts can include loss of individuals through starvation, exposure, predation by domestic and/or feral animals, loss of breeding opportunities, loss of shade/shelter, reduction in viability of adjacent habitat due to edge effects, deleterious hydrological changes, increased soil salinity, erosion, inhibition of nitrogen fixation, weed invasion, noise, light spill, fertiliser drift, or increased human activity within or directly adjacent to sensitive habitat areas.

Assessment aims

The principal aim of the assessment was to determine the potential impact of the proposed activity on significant flora, fauna and ecological communities using the following legislation and planning and management policies:

- NSW *Environmental Planning and Assessment Act 1979* (EP&A Act)
- NSW *Biodiversity Conservation Act 2016* (BC Act)
- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- *Fisheries Management Act 1994* (FM Act)
- Tweed Coast Comprehensive Koala Plan of Management
- Threatened species recovery plans.

Specifically, the aims of the study were to:

- identify vegetation communities, flora and fauna species, and habitats within the study area
- undertake field and desktop assessments to identify the likelihood of conservation significant species and communities occurring within the study area
- assess the conservation status of the site
- identify impacts associated with the proposal pursuant to section 7.3 of the BC Act, if required
- determine whether there is a need to conduct a Species Impact Statement or make a referral to the Commonwealth Department of Agriculture, Water and the Environment (DAWE)
- provide recommendations to minimise impacts on conservation significant species and biodiversity generally.

Desktop assessment methodology

The desktop assessment involved a review of the following information:

- BioNet Atlas of NSW Wildlife database to identify any known records of significant flora and fauna species
- DAWE EPBC Act Protected Matters online database to identify any Matters of National Environmental Significance
- NSW EES and Department of Primary Industries registers of critical habitat (also referred to as Areas of Outstanding Biodiversity Value under the BC Act)
- NSW EES regional and subregional fauna corridor and key habitat mapping
- NSW and Commonwealth lists of Key Threatening Processes
- NSW EES threatened species website for existing Recovery Plans and Threat Abatement Plans
- Atlas of Living Australia wildlife records
- Tweed Coast Comprehensive Koala Plan of Management (TSC, 2014)
- Koala habitat mapping (TSC Weave GIS)
- Tweed Shire Council vegetation mapping (OEH 2012) to identify the potential presence of any Endangered Ecological Community (EEC) or Threatened Ecological Communities (TECs) listed under the BC Act or EPBC Act, respectively
- Tweed Shire Roadside Vegetation Management Plan (Tweed RVMP) (Bushland Restoration Services Pty Ltd & Landmark Ecological Services Pty Ltd, 2013)

- Tweed Shire Council GIS layers such as the contour mapping, slope and soils
- Past fauna survey and assessment reports for the area.

Database searches were undertaken using a 10 km radius of the subject site.

Desktop assessment results

The results of the desktop assessment are summarised in Table 1 as follows:

Table 1: Desktop assessment results

Attributes	Comments
Vegetation communities	The Tweed Shire Council vegetation mapping identifies two vegetation communities as occurring within the disturbance footprint: substantially cleared of native vegetation (veg code: 1099) and not assessed. Kingston et al (2004) describes the substantially cleared of native vegetation community as forming approximately half of the area of the Shire which includes areas cleared for agriculture, recreation facilities, roads and urban development. Vegetated areas occurring in this community type are generally dominated by exotic grass species. If native vegetation is present it is very sparse and highly disturbed. The not assessed vegetation community was not ground-truthed when the mapping and TVMS was completed and therefore the dominant species within the community is unknown via desktop investigations. Refer to Figure 1 below.
Threatened ecological communities	None of the vegetation communities identified above are analogous with any threatened ecological communities listed under the BC Act or EPBC Act.
Threatened flora records	A search of threatened flora species on the BioNet Atlas of NSW Wildlife and Commonwealth Matters of National Significance databases was undertaken based on a 10 km buffer of the subject site. A total of 57 threatened flora species were short-listed from these searches. Of these 57 short-listed threatened flora species, a likelihood of occurrence assessment concluded none were likely to occur within the subject site.
Corridor mapping	The subject site is not mapped as being within a regional or sub-regional corridor.
Osprey nests	[redacted]
Flying-fox camp	
Marine vegetation	No marine vegetation occurs within the study area.
Koala habitat	No koala habitat occurs within the study area.

Attributes	Comments
Threatened fauna	A search of threatened fauna species on the BioNet Atlas of NSW Wildlife and Commonwealth Matters of National Significance databases was undertaken based on a 10 km buffer of the subject site. A total of 94 threatened fauna species and 2 populations were short-listed from these searches (marine and pelagic species were immediately dismissed on account of the absence of such habitat in the study area). Of these 92 short-listed threatened fauna species, none were considered likely to occur in the study area including: Neither of the short-listed populations (koala and spotted-tail quoll) were considered likely to occur within the study area.

Figure 1: Tweed Shire Council vegetation mapping, proposed disturbance footprint alignment in red

Field assessment methodology

Preliminary diurnal field assessment was undertaken during October 2024. The field assessment involved traverses over the disturbance footprint to validate the results of the desktop study and assess the potential impacts of the development in the study area. In summary, this involved carrying out searches for the following:

- Characterisation of vegetation communities within the development footprint.
- Identification of retained vegetation which may be impacted upon by root damage from construction works.
- Potential fauna habitat likely to be affected by the proposal such as burrows, hollow-bearing trees, flowering trees, nests, and other general signs of fauna activity such scats, tracks, and traces.
- The impact of disturbance on fauna movement and bushland linkages.
- Potential sources of erosion and sediment loss.

- Receiving waterways and the potential impacts on these aquatic habitats.

Field assessment results

Flora

The site assessment identified that the subject site has many planted native and exotic mature trees. The groundcover is maintained (mown) lawn. The tree species have been identified and are shown in a map and the tree register in Attachment A. The vegetation is a mixture of planted, native and exotic tree species and is not analogous with any vegetation communities within the TVMS and no naturally occurring vegetation communities are present within the subject site.

Of the 57 short-listed threatened flora species, a likelihood of occurrence assessment concluded no species were likely to occur within the study area. No threatened species were identified during field survey and no disturbance is proposed within vegetation within the study area.

Overall, the vegetation within the disturbance footprint is reflective of the historic clearing and use as a railway line and station. No vegetation communities present within the study area are considered to be consistent with any TECs listed under the NSW BC Act or the EPBC Act.

Fauna

Fauna habitat within the disturbance footprint was found to be limited on account of the area being highly disturbed with planted amenity trees and mown lawn. Diurnal field investigations did not record any threatened species at the site. Common species adapted to urban areas would likely utilise the subject site for foraging and nesting.

An assessment of specific habitat attributes within the study area is provided in Table 3 below.

Table 3: Fauna habitat attributes associated with the subject site

Fauna habitat attributes	Comments
Rock features including cracks, sheets, shelters, outcrops	None observed within the study area. There are rock crevices present amongst rock revetment in the Tweed River banks.
Autumn - winter - early spring flowering eucalypts	None observed within the study area. Present within the broader study area.
Summer flowering eucalypts	None observed within the study area. Present within the broader study area.
Acacia shrubs-trees	None observed within the study area. Present within the broader study area.
Other flowering and fruiting resources	Present within the study area are native and exotic species in the form of amenity trees which provide blossom and fruit resources.
Allocasuarina spp. and *Casuarina* spp. resources for Glossy Black Cockatoos	None observed within the study area.

Fauna habitat attributes	Comments
Koala feed trees	None observed within the study area.
Open grassy patches	None observed within the subject site. Cleared mowed grassland is present within the study area (e.g. parkland, suburban yards and nature strip. Given the intensive maintenance regime for these areas, they provide limited habitat value in terms of shelter or nesting habitat, even for open land species.
Cracks, crevices, and other roosting sites (man-made or otherwise) for insectivorous bats	The station buildings and surrounding residential houses provide potential micro-bat roosting habitat in the form of roof cavities.
Ephemeral water bodies	None observed within the study area.
Permanent water bodies	None observed within the study area. The Tweed River occurs in the broader study area.
Drainage lines and/or soaks and/or man-made water bodies	None observed within the study area.
Understorey cover for ground dwelling mammals	This resource was generally scarce within the study area.
Fallen fine and coarse vegetative litter	This resource was generally scarce within the study area.
Hollows in live and dead trees	None observed within the study area.
Marine Vegetation	None observed within the study area.
Riparian vegetation	None observed within the study area. Occurs as estuarine vegetation communities in the broader study area associated with the Tweed River.
Flying-fox camps	[redacted]
Osprey and/or other raptor nests	
Exposed coastal fore dunes and beaches	Not present within the study area.
Oceanic habitats	Not present within the study area.
Areas of Outstanding Biodiversity Value pursuant to NSW legislation	None present within the study area. Stotts Island Mitchell's Rainforest Snail critical habitat occurs ~8 km to the north-east.

Impact assessment

Flora

The proposed seating and other furniture installation and footpath construction at Murwillumbah Railway Station has been designed to avoid vegetation their structural root zones. Therefore, no impacts to vegetation is considered likely to occur. Refer to Attachment B for location of furniture in relation to trees.

Fauna

As previously discussed, the habitat values within the disturbance footprint are limited on account of the absence of native vegetation communities and the land use of a railway station. The proposed works are relatively low impact and the design has managed to avoid vegetation and other habitats.

As previously stated, the likelihood of occurrence (LOC) assessment concluded that no species were likely to be found in the study area.

It is expected that the proposed works would proceed without any significant direct or indirect impact upon fauna species breeding or foraging habitat. Given the disturbed nature of the disturbance footprint, the limited habitat features and avoiding impacts to vegetation, none of the species considered likely to occur within the study area are expected to rely upon the habitat contained within the footprint of direct disturbance. Accordingly, it is anticipated that there would be no impact upon threatened fauna as a result of the proposed activity.

Requirement for Part 7 (BC Act) Assessments

Section 7.8 of the *Biodiversity Conservation Act 2016* (BC Act) outlines the biodiversity assessment requirements for Part 5 activities under the EP&A Act and notes a Part 5 activity is to be regarded as having a significant effect on the environment if it is likely to significantly affect a threatened species. Section 7.3 of the BC Act outlines the test for determining whether an activity is likely to result in a significant impact on threatened species or ecological communities (test of significance).

The Threatened Species Test of Significance Guidelines – The Assessment of Significance (OEH, 2018) explain that a species does not have to be considered as part of the assessment of significance if adequate surveys or studies have been carried out that clearly show that the species:

- does not occur in the study area
- will not use on-site habitats on occasion
- will not be influenced by off-site impacts of the proposal.

Otherwise, all species likely to occur in the study area (based on general species distribution information), and known to use that type of habitat, should be considered in the rationale that determines the list of threatened species, populations and ecological communities for the assessment of significance (OEH, 2018).

With the above in mind, species considered to warrant further consideration pursuant to Section 7 of the BC Act are those that have a high likelihood of occurrence within and adjacent the study area and could be either directly or indirectly impacted by the proposal. That is, these species are

considered likely to interact with those habitats directly and or indirectly impacted by the development proposed. For example, species with specific lifecycle requirements such as hollow dependent species that may be impacted through loss of hollow bearing trees would be included within the Section 7.3 assessment. In contrast, those species which have broad home ranges and do not have specific habitat elements within the study area, may not be considered further.

Based on the discussion provided above, further consideration by way of test of significance pursuant to Part 7 of the BC Act was not considered warranted for any species. This conclusion is based on the limited scale and extent of the disturbance footprint relative to the home ranges of each of the species and the limited interaction anticipated between the short-listed species and the habitat features provided within the study area. The habitat provided within the disturbance footprint is not considered to constitute critical habitat for the species and the proposed temporary disturbance is unlikely to place any species at risk of extinction.

Flora and fauna assessment conclusion

In summary, this preliminary flora and fauna assessment suggests that the conservation values of the disturbance footprint are low given the extent of existing disturbance and lack of native vegetation communities.

The assessment has determined that the proposed activity is unlikely to result in a significant impact upon threatened species, populations or communities and that the activity does not require referral to the Commonwealth DAWE for assessment under the EPBC Act.

Environmental safeguards to mitigate impacts on the receiving environment are proposed within Section 10 of the REF.

Attachment A Map of tree locations and tree species register

NRRT, Murwillumbah Station - Vegetation Plan

Legend

- Threatened Plant Locations
- Property Boundaries
- Surveyed Tree (generally >25cm DBH)
- Tree Cover Areas
- VMU02_Trees_Surveyed
- Murwillumbah Station

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W E
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Civic and Cultural Centre
3 Tumbulgum Road
Murwillumbah NSW 2484
PO Box 816
Murwillumbah NSW 2484

T | (02) 6670 2400 | 1300 292 872
F | (02) 6670 2429

W | www.tweed.nsw.gov.au
E | planningreforms@tweed.nsw.gov.au

Coordinate System
MGA Zone 56
GDA Datum - GDA 94

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Date Printed: 23 October, 2024
Author:
Filepath: K:\Environmental Approvals\Current staff projects\JBS\PROJECT MAPS\Murwillumbah Station C

Numbe	X	Y	Species	Common_Name	Heigh	DBH	Stems	Survey Comment	Location
1	539514	6866202	*Araucaria bidwillii*	Bunya Pine	19	60	1	Main patch N	Murwillumbah Station, VMU02
2	539516	6866193	*Corymbia torelliana*	Cadaghi	16	70	1	Fenceline near Tower	Murwillumbah Station, VMU02
3	539506	6866189	*Archidendron lovellei (?)*	Lace Flower Tree	18	35	1	Fenceline near Tower	Murwillumbah Station, VMU02
4	539504	6866187	*Syzygium luehmanniii*	Riberry	12	15	3	Fenceline near Tower	Murwillumbah Station, VMU02
5	539506	6866187	*Harpullia pendula*	Tulipwood	4	10	1	Fenceline near Tower	Murwillumbah Station, VMU02
6	539502	6866185	*Syzygium luehmanniii*	Riberry	14	30	1	Fenceline near Tower	Murwillumbah Station, VMU02
7	539504	6866184	*Diploglottis campbellii*	Small-leaved Tamarind	12	15	3	Fenceline near Tower	Murwillumbah Station, VMU02
8	539502	6866182	*Gmelina leichhardtii*	White Beech	18	70	1	Fenceline near Tower	Murwillumbah Station, VMU02
9	539493	6866194	*Melicope elleryana*	Pink Doughwood	15	45	1	Main patch N	Murwillumbah Station, VMU02
10	539490	6866190	*Brachychiton rupestris*	Narrow-leaved Bottle Tree	6	25	1	Main patch N	Murwillumbah Station, VMU02
11	539487	6866185	*Toona ciliata*	Red Cedar	16	90	1	Main patch N	Murwillumbah Station, VMU02
12	539486	6866180	*Abutilon sp unconfirmed (?)*	Abutilon sp unconfirmed (?)	8	20	1	Main patch N	Murwillumbah Station, VMU02
13	539485	6866175	*Ceiba speciosa*	Silk Floss Tree	14	70	1	Main patch N	Murwillumbah Station, VMU02
14	539500	6866176	*Brachychiton rupestris*	Narrow-leaved Bottle Tree	6	30	1	Main patch N	Murwillumbah Station, VMU02
15	539498	6866174	*Harpullia pendula*	Tulipwood	8	30	2	Main patch N	Murwillumbah Station, VMU02
16	539491	6866167	*Brachychiton acerifolius*	Flame Tree	8	30	1	Main patch N	Murwillumbah Station, VMU02
17	539475	6866168	*Brachychiton acerifolius*	Flame Tree	8	30	1	Main patch centre	Murwillumbah Station, VMU02
18	539477	6866166	*Syzygium moorei*	Durobby	8	30	1	Main patch centre	Murwillumbah Station, VMU02
19	539488	6866163	*Ceiba speciosa*	Silk Floss Tree	8	70	1	Main patch centre	Murwillumbah Station, VMU02
20	539489	6866158	*Ficus pyrata*	Fiddlewood Fig	16	45	1	Main patch centre	Murwillumbah Station, VMU02
21	539469	6866158	*Toona ciliata*	Red Cedar	17	45	1	Own garden patch	Murwillumbah Station, VMU02
22	539476	6866156	*Toona ciliata*	Red Cedar	14	50	1	Main patch centre	Murwillumbah Station, VMU02
23	539474	6866153	*Cassia marksiana*	Mark's Cassia	14	35	1	Main patch centre	Murwillumbah Station, VMU02
24	539481	6866153	*Jacaranda mimosioides*	Jacaranda	15	60	2	Main patch centre	Murwillumbah Station, VMU02
25	539480	6866149	*Jacaranda mimosioides*	Jacaranda	3	5	2	Main patch centre	Murwillumbah Station, VMU02
26	539459	6866154	*Liquidambar*	Liquidambar	17	45	1	Main patch centre	Murwillumbah Station, VMU02
27	539459	6866148	*Agathis robusta*	Kauri Pine	20	55	1	Main patch centre	Murwillumbah Station, VMU02
28	539455	6866146	*Melaleuca quinquenervia*	Broad-leaved Paperbark	8	20	1	Main patch S	Murwillumbah Station, VMU02
29	539452	6866139	*Eucalyptus microcorys*	Tallowwood	18	50	1	Main patch S	Murwillumbah Station, VMU02
30	539460	6866142	*Cassia marksiana*	Mark's Cassia	7	15	3	Main patch S	Murwillumbah Station, VMU02
31	539464	6866144	*Stenocarpus sinuatus (?)*	Firewheel Tree	9	20	2	Plus 5 young stenocarpus in clump nea	Murwillumbah Station, VMU02
32	539467	6866144	*Quercus sp unconfirmed (?)*	a Maple (?)	7	20	1	Main patch S	Murwillumbah Station, VMU02
33	539469	6866139	*Tipuana tipu*	Tipuana	18	120	1	Main patch S	Murwillumbah Station, VMU02
34	539470	6866135	*Liquidamber*	Liquidamber	8	25	1	Main patch S	Murwillumbah Station, VMU02
35	539472	6866131	*Ceiba speciosa*	Silk Floss Tree	15	80	1	Main patch S	Murwillumbah Station, VMU02
36	539462	6866129	*Lagerstromea sp cv*	Crepe Myrtle	7	30	2	Deciduous (uncertain ID)	Murwillumbah Station, VMU02
37	539458	6866122	*Eucalyptus saligna (?)*	Sydney Blue Gum	18	70	1	Main patch S	Murwillumbah Station, VMU02
38	539450	6866121	*Stenocarpus sinuatus (?)*	Flame Tree	9	20	3	Main patch S	Murwillumbah Station, VMU02
39	539445	6866120	*Jacaranda mimosioides*	Jacaranda	7	30	1	Main patch S	Murwillumbah Station, VMU02
40	539444	6866115	*Eucalyptus microcorys*	Tallowwood	18	35	1	Main patch S	Murwillumbah Station, VMU02

41	539451	6866117	*Stenocarpus sinuatus (?)*	Flame Tree	7	25	3	Main patch S	Murwillumbah Station, VMU02
42	539456	6866116	*Melaleuca quinquenervia*	Broad-leaved Paperbark	7	30	2	Main patch S	Murwillumbah Station, VMU02
43	539442	6866110	*Eucalyptus microcorys*	Tallowwood	18	40	1	Main patch S	Murwillumbah Station, VMU02
44	539447	6866109	*Eucalyptus sp unconfirmed*	Eucalyptus sp unconfirmed	25	85	1	Main patch S	Murwillumbah Station, VMU02
45	539451	6866110	*Eucalyptus sp unconfirmed*	Eucalyptus sp unconfirmed	16	40	1	Main patch S	Murwillumbah Station, VMU02
46	539440	6866103	*Flindersia australis*	Crows Ash	7	20	2	Main patch S	Murwillumbah Station, VMU02
47	539440	6866098	*Syzygium luehmannii*	Riberry	7	25	4	Main patch S	Murwillumbah Station, VMU02
48	539401	6866091	*Callistemon viminalis*	Weeping Bottlebrush	4	10	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
49	539401	6866095	*Koelreuteria paniculata*	Golden Rain Tree	8	30	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
50	539403	6866096	*Murraya paniculata*	Mock orange	5	10	3	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
51	539404	6866100	*Heptapleurum arboricola*	Dwarf Umbrella Tree	3	5	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
52	539405	6866101	*Banksia integrifolia*	Coastal Banksia	4	15	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
53	539405	6866103	*Mallotus philippensis*	Red Kamala	5	8	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
54	539407	6866105	*Syzygium luehmannii*	Riberry	8	25	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
55	539407	6866107	*Lepiderema pulchella*	Fine-leaved Tuckeroo	4	8	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
56	539409	6866110	*Ficus rubinigosa*	Port Jackson Fig	6	35	1	Will be big problem under power lines	Rail shed, Tweed Valley Way frontage, Murwillumbah S
57	539410	6866113	*Syzygium luehmannii*	Riberry	5	20	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
58	539411	6866113	*Lepiderema pulchella*	Fine-leaved Tuckeroo	4	10	2	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
59	539411	6866116	*Syzygium luehmannii*	Riberry	6	25	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
60	539415	6866122	*Syzygium luehmannii*	Riberry	5	20	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
61	539416	6866126	*Syzygium luehmannii*	Riberry	6	25	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
62	539418	6866129	*Syzygium luehmannii*	Riberry	8	40	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
63	539420	6866132	*Syzygium moorei*	Durobby	7	25	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
64	539422	6866133	*Tibouchina sp cv*	Tibouchina	4	18	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
65	539425	6866134	*Tibouchina sp cv*	Tibouchina	5	15	1	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
66	539425	6866131	*Cinnamomum camphora*	Camphor Laurel	6	30	3	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
67	539425	6866130	*Cinnamomum camphora*	Camphor Laurel	6	30	3	Rail shed road front	Rail shed, Tweed Valley Way frontage, Murwillumbah S
68	539436	6866130	*Jacaranda mimosioides*	Jacaranda	10	40	3	Front platform S end	Murwillumbah Station, VMU02
69	539440	6866138	*Banksia integrifolia*	Coastal Banksia	6	25	1	Front platform S end	Murwillumbah Station, VMU02
70			*Not allocated*					Not allocated	Not allocated
71	539436	6866144	*Mischarytera lautereriana*	Corduroy Tamarind	5	8	1	Front garden at S entry	Murwillumbah Station, VMU02
72	539432	6866146	*Glochidion ferdinandi*	Cheese Tree	8	30	1	Front garden at S entry	Murwillumbah Station, VMU02
73	539438	6866147	*Syzygium corynanthum*	Sour Cherry	10	40	1	Front garden at S entry	Murwillumbah Station, VMU02
74	539432	6866149	*Delonix reginae*	Poinciana	8	45	1	Front garden at S entry	Murwillumbah Station, VMU02
75	539436	6866154	*Gmelina leichhardtii*	White Beech	6	15	2	Front garden at S entry	Murwillumbah Station, VMU02
76	539405	6866157	*Delonix regia*	Poinciana	5	15	3	Buckley Park	Buckley Park, Murwillumbah South
77	539393	6866169	*Delonix regia*	Poinciana	7	45	3	Buckley Park	Buckley Park, Murwillumbah South
78	539497	6866223	*Melicope elleryana*	Pink Doughwood	12	40	2	Main North entry walkway to station	Murwillumbah Station, VMU02
79	539499	6866225	*Archontophoenix cunninghamii*	Bangalow Palm	10	30	4	Main North entry walkway to station	Murwillumbah Station, VMU02
80	539499	6866227	*Uncertain*	Uncertain	4	5	5	Main North entry walkway to station	Murwillumbah Station, VMU02
81	539501	6866227	*Koelreuteria paniculata*	Golden Rain Tree	10	25	2	Main North entry walkway to station	Murwillumbah Station, VMU02

82	539501	6866229	*Flindersia schottiana*	Bumpy Ash	12	30	1	Main North entry walkway to station	Murwillumbah Station, VMU02
83	539502	6866230	*Spathodea campanulata*	African Tulip	10	40	1	Main North entry walkway to station	Murwillumbah Station, VMU02
84	539502	6866230	*Glochidion ferdinandi*	Cheese Tree	10	30	1	Main North entry walkway to station	Murwillumbah Station, VMU02
85	539506	6866231	*Melia sp unconfirmed (?)*	Melia sp unconfirmed (?)	10	40	4	Main North entry walkway to station	Murwillumbah Station, VMU02
86	539507	6866232	*Koelreuteria paniculata*	Golden Rain Tree	8	30	1	Main North entry walkway to station	Murwillumbah Station, VMU02
87	539504	6866234	*Citharexylum spinosum*	Bangalow Palm	10	30	1	Main North entry walkway to station	Murwillumbah Station, VMU02
88	539509	6866234	*Koelreuteria paniculata*	Golden Rain Tree	6	20	1	Main North entry walkway to station	Murwillumbah Station, VMU02
89	539508	6866236	*Melicope elleryana*	Pink Doughwood	6	15	1	Main North entry walkway to station	Murwillumbah Station, VMU02
90	539507	6866237	*Melia sp unconfirmed (?)*	Melia sp unconfirmed (?)	10	40	4	Main North entry walkway to station	Murwillumbah Station, VMU02
91	539505	6866240	*Archontophoenix cunninghamii*	Bangalow Palm	7	25	2	Main North entry walkway to station	Murwillumbah Station, VMU02
92	539504	6866241	*Archontophoenix cunninghamii*	Bangalow Palm	6	20	2	Main North entry walkway to station	Murwillumbah Station, VMU02
93	539506	6866242	*Archontophoenix cunninghamian*	Bangalow Palm	6	20	1	Main North entry walkway to station	Murwillumbah Station, VMU02
94	539508	6866242	*Archontophoenix cunninghamian*	Bangalow Palm	6	20	1	Main North entry walkway to station	Murwillumbah Station, VMU02
95	539512	6866237	*Elaeocarpus eumundii*	Eumundi Quandong	12	50	1	Main North entry walkway to station	Murwillumbah Station, VMU02
96	539512	6866240	*Uncertain*	Compound Leaf (?)	10	30	1	Main North entry walkway to station	Murwillumbah Station, VMU02
97	539512	6866242	*Syzygium luehmannii*	Riberry	7	20	2	Main North entry walkway to station	Murwillumbah Station, VMU02
98	539514	6866242	*Flindersia schottiana*	Bumpy Ash	9	25	1	Main North entry walkway to station	Murwillumbah Station, VMU02
99	539506	6866249	*Flindersia australis*	Australian Teak	10	20	1	Tweed Valley Way Footpath	Tweed Valley Way Footpath
100	539523	6866223	*Koelreuteria paniculata*	Golden Rain Tree	10	60	1	N patch, main track area	Murwillumbah Station, VMU01
101	539526	6866227	*Tristaniopsis laurina*	Water Gum	4	10	2	N patch, main track area	Murwillumbah Station, VMU01
102	539531	6866232	*Araucaria cunninghamii*	Hoop Pine	17	55	1	N patch, main track area	Murwillumbah Station, VMU01
103	539538	6866237	*Koelreuteria paniculata*	Golden Rain Tree	9	50	1	N patch, main track area	Murwillumbah Station, VMU01
104	539543	6866242	*Koelreuteria paniculata*	Golden Rain Tree	9	50	1	N patch, main track area	Murwillumbah Station, VMU01
105	539552	6866233	*Libidibia ferrea*	Leopard Tree	7	40	2	Railway St Frontage	Murwillumbah Station, VMU01
106	539545	6866228	*Libidibia ferrea*	Leopard Tree	6	20	3	Railway St Frontage	Murwillumbah Station, VMU01
107	539543	6866221	*Lophostemon confertus*	Brush Box	4	8	1	Fenceline north of Tower	Murwillumbah Station, VMU01
108	539540	6866218	*Lophostemon confertus*	Brush Box	4	8	1	Fenceline north of Tower	Murwillumbah Station, VMU01
109	539536	6866214	*Lophostemon confertus*	Brush Box	4	8	1	Fenceline north of Tower	Murwillumbah Station, VMU01
110	539533	6866211	*Lophostemon confertus*	Brush Box	4	8	1	Fenceline north of Tower	Murwillumbah Station, VMU01
111	539530	6866208	*Lophostemon confertus*	Brush Box	4	8	1	Fenceline north of Tower	Murwillumbah Station, VMU01
112	539527	6866205	*Lophostemon confertus*	Brush Box	4	8	1	Fenceline north of Tower	Murwillumbah Station, VMU01
113	539564	6866242	*Quercus sp unconfirmed (?)*	Uncertain	6	45	1	Carpark Garden N End	Murwillumbah Station, VMU01
114	539578	6866253	*Calodendrum capense (?)*	Cape Chestnut	6	18	1	Carpark Garden N End	Murwillumbah Station, VMU01
115	539583	6866257	*Koelreuteria paniculata*	Golden Rain Tree	6	18	1	Carpark Garden N End	Murwillumbah Station, VMU01
116	539530	6866275	*Corymbia ptychocarpa*	Swamp Bloodwood	4	15	1	Tweed Valley Way Footpath	Tweed Valley Way Footpath
117	539549	6866285	*Corymbia ptychocarpa*	Swamp Bloodwood	6	25	1	Tweed Valley Way Footpath	Tweed Valley Way Footpath
118	539549	6866281	*Archontophoenix cunninghamii*	Bangalow Palm	8	25	7	8 stems 6-8m high	Murwillumbah Station, VMU01
119	539569	6866295	*Syzygium australe*	Brush Cherry	7	30	4	Carpark Garden N End	Murwillumbah Station, VMU01
120	539573	6866294	*Lepiderema pulchella*	Fine-leaved Tuckeroo	4	10	2	Carpark Garden N End	Murwillumbah Station, VMU01
121	539574	6866295	*Mischarytera lautereriana*	Corduroy Tamarind	6	15	1	Carpark Garden N End	Murwillumbah Station, VMU01
122	539576	6866297	*Lepiderema pulchella*	Fine-leaved Tuckeroo	5	15	1	Carpark Garden N End	Murwillumbah Station, VMU01

123	539577	6866302	*Corymbia torelliana*	Cadaghi	10	50	1	Tweed Valley Way Footpath	Tweed Valley Way Footpath
124	539572	6866283	*Elaeocarpus eumundi*	Eumundi Quandong	2	5	1	Carpark Garden N End	Murwillumbah Station, VMU01
125	539575	6866285	*Elaeocarpus eumundi*	Eumundi Quandong	2	5	1	Carpark Garden N End	Murwillumbah Station, VMU01
126	539579	6866287	*Lepiderema pulchella*	Fine-leaved Tuckeroo	2	5	1	Carpark Garden N End	Murwillumbah Station, VMU01
127	539581	6866289	*Archontophoenix cunninghamii*	Bangalow Palm	6	25	2	Carpark Garden N End	Murwillumbah Station, VMU01
128	539583	6866291	*Archontophoenix cunninghamian*	Bangalow Palm	6	25	1	Carpark Garden N End	Murwillumbah Station, VMU01
129	539585	6866293	*Brachychiton rupestrus*	Bottle Tree	5	30	1	Carpark Garden N End	Murwillumbah Station, VMU01
130	539587	6866294	*Flindersia australis (?)*	Crows Ash	9	30	1	Carpark Garden N End	Murwillumbah Station, VMU01
131	539589	6866294	*Corymbia citriodora*	Lemon-scented Gum	12	40	1	Carpark Garden N End	Murwillumbah Station, VMU01
132	539590	6866292	*Xanthostemon chrysantha*	Golden Penda	6	15	1	Carpark Garden N End	Murwillumbah Station, VMU01
133	539592	6866294	*pathodea campanulata*	African Tulip	3	5	1	Carpark Garden N End	Murwillumbah Station, VMU01
134	539593	6866297	*Glochidion sumatranum*	Cheese Tree	10	40	1	Carpark Garden N End	Murwillumbah Station, VMU01
135	539594	6866299	*Archontophoenix cunninghamian*	Bangalow Palm	5	15	2	Carpark Garden N End	Murwillumbah Station, VMU01
136	539596	6866299	*Flindersia brayleyana*	Queensland Maple	7	25	1	Carpark Garden N End	Murwillumbah Station, VMU01
137	539599	6866300	*Syzygium moorei*	Durobby	7	25	1	Carpark Garden N End	Murwillumbah Station, VMU01
138	539601	6866303	*Archontophoenix cunninghamii*	Bangalow Palm	8	25	2	Carpark Garden N End	Murwillumbah Station, VMU01
139	539613	6866312	*Corymbia ptychocarpa*	Swamp Bloodwood	8	30	1	Tweed Valley Way Footpath	Tweed Valley Way Footpath
140	539619	6866314	*Corymbia ptychocarpa*	Swamp Bloodwood	8	30	1	Tweed Valley Way Footpath	Tweed Valley Way Footpath
141			*Not allocated*					Not allocated	Not allocated
142			*Not allocated*					Not allocated	Not allocated
143	539600	6866258	*Callistemon sp unconfirmed (?)*	a Bottlebrush	6	25	1	Railway Cottage Road Frontage	NRRT Murwillumbah LMU01
144	539603	6866259	*Callistemon sp unconfirmed (?)*	a Bottlebrush	8	35	1	Railway Cottage Road Frontage	NRRT Murwillumbah LMU01
145	539601	6866260	*Salix sp unconfirmed*	Weeping Willow	8	45	1	Railway Cottage Yard	NRRT Murwillumbah LMU01
146	539600	6866261	*Salix babylonica*	Weeping Willow	6	50	1	Railway Cottage Side Hedge	NRRT Murwillumbah LMU01
147	539599	6866260	*Guioa semiglauca*	Wild Quince	5	15	1	Railway Cottage Side Hedge	NRRT Murwillumbah LMU01
148	539598	6866260	*Lepiderema pulchella*	Fine-leaved Tuckeroo	4	10	1	Railway Cottage Side Hedge	NRRT Murwillumbah LMU01
149	539598	6866262	*Mallotus philippensis*	Red Kamala	5	7	1	Railway Cottage Side Hedge	NRRT Murwillumbah LMU01
150	539597	6866263	*Glochidion ferdinandi*	Cheese Tree	6	15	1	Railway Cottage Side Hedge	NRRT Murwillumbah LMU01
151	539598	6866268	*Callistemon viminalis*	Weeping Bottlebrush	8	50	1	Railway Cottage Yard	NRRT Murwillumbah LMU01
152	539596	6866272	*Callistemon viminalis*	Weeping Bottlebrush	7	40	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
153	539598	6866273	*Callistemon viminalis*	Weeping Bottlebrush	7	50	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
154	539603	6866275	*Callistemon viminalis*	Weeping Bottlebrush	6	25	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
155	539605	6866276	*Callistemon viminalis*	Weeping Bottlebrush	7	25	2	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
156	539609	6866277	*Melaleuca sp unconfirmed (?)*	Broad-leaved Paperbark	8	45	1	Railway Cottage back frontage	NRRT Murwillumbah LMU01
157	539613	6866279	*Callistemon viminalis*	Weeping Bottlebrush	6	20	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
158	539615	6866279	*Morus alba*	Mulberry	4	6	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
159	539618	6866281	*Callistemon viminalis*	Weeping Bottlebrush	8	35	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
160	539621	6866282	*Callistemon viminalis*	Weeping Bottlebrush	7	20		Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
161	539624	6866284	*Callistemon viminalis*	Weeping Bottlebrush	6	25	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
162	539625	6866284	*Callistemon viminalis*	Weeping Bottlebrush	7	30	1	Railway Cottage Back Frontage	NRRT Murwillumbah LMU01
163	539626	6866285	*Callistemon viminalis*	Weeping Bottlebrush	7	30		Railway Cottage Back Frontage	NRRT Murwillumbah LMU01

164	539629	6866283	*Callistemon viminalis*	Weeping Bottlebrush	8	50	1	Railway Cottage North Frontage	NRRT Murwillumbah LMU01
165	539630	6866280	*Callistemon viminalis*	Weeping Bottlebrush	8	35	1	Railway Cottage North Frontage	NRRT Murwillumbah LMU01
167	539631	6866278	*Callistemon viminalis*	Weeping Bottlebrush	8	35	1	Railway Cottage North Frontage	NRRT Murwillumbah LMU01
168	539632	6866275	*Callistemon viminalis*	Weeping Bottlebrush	8	35	1	Railway Cottage North Frontage	NRRT Murwillumbah LMU01
169	539633	6866273	*Callistemon viminalis*	Weeping Bottlebrush	8	40		Railway Cottage North Frontage	NRRT Murwillumbah LMU01
170	539632	6866271	*Callistemon viminalis*	Weeping Bottlebrush	4	10	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
171	539629	6866270	*Callistemon viminalis*	Weeping Bottlebrush	7	25	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
172	539627	6866269	*Callistemon sp unconfirmed (?)*	a Bottlebrush	7	20	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
173	539625	6866268	*Callistemon viminalis*	Weeping Bottlebrush	7	20	2	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
174	539624	6866267	*Callistemon viminalis*	Weeping Bottlebrush	8	50	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
175	539622	6866266	*Callistemon sp unconfirmed (?)*	a Bottlebrush	5	20	3	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
176	539619	6866265	*Callistemon viminalis*	Weeping Bottlebrush	8	45	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
177	539618	6866265	*Callistemon viminalis*	Weeping Bottlebrush	7	25	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
178	539617	6866264	*Callistemon viminalis*	Weeping Bottlebrush	7	35	2	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
179	539615	6866264	*Callistemon viminalis*	Weeping Bottlebrush	7	20	1	Railway Cottage Footpath Frontage	NRRT Murwillumbah LMU01
180	539662	6866268	*Delonix reginae*	Poinciana	12	50	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
181	539672	6866271	*Delonix reginae*	Poinciana	12	50	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
182	539685	6866270	*Archontophoenix cunninghamii*	Bangalow Palm	12	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
183	539686	6866269	*Archontophoenix cunninghamii*	Bangalow Palm	12	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
184	539691	6866263	*Archontophoenix cunninghamii*	Bangalow Palm	12	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
185	539693	6866262	*Archontophoenix cunninghamii*	Bangalow Palm	12	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
186	539652	6866263	*Callistemon viminalis*	Weeping Bottlebrush	4	30	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
187	539640	6866258	*Callistemon viminalis*	Weeping Bottlebrush	5	18	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
188	539634	6866257	*Callistemon viminalis*	Weeping Bottlebrush	4	25	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
189	539625	6866252	*Callistemon viminalis*	Weeping Bottlebrush	4	20	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
190	539622	6866251	*Callistemon viminalis*	Weeping Bottlebrush	4	20	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
191	539612	6866248	*Callistemon viminalis*	Weeping Bottlebrush	4	20	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
192	539584	6866233	*Callistemon viminalis*	Weeping Bottlebrush	4	25	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
193	539576	6866229	*Callistemon viminalis*	Weeping Bottlebrush	6	25	4	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
194	539566	6866221	*Callistemon viminalis*	Weeping Bottlebrush	5	20	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
195	539561	6866217	*Callistemon viminalis*	Weeping Bottlebrush	5	20	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
196	539548	6866206	*Callistemon viminalis*	Weeping Bottlebrush	5	20	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
197	539546	6866203	*Callistemon viminalis*	Weeping Bottlebrush	5	20	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
198	539545	6866199	*Callistemon viminalis*	Weeping Bottlebrush	5	20	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
199	539531	6866184	*Callistemon viminalis*	Weeping Bottlebrush	6	20	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
200	539525	6866178	*Callistemon viminalis*	Weeping Bottlebrush	6	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
201	539521	6866173	*Callistemon viminalis*	Weeping Bottlebrush	5	30	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
202	539521	6866166	*Pandanus tectorius*	Pandanus	5	10	3	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
203	539512	6866160	*Melicope elleryana*	Pink Doughwood	8	30	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
204	539511	6866159	*Callistemon viminalis*	Weeping Bottlebrush	6	20	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
205	539508	6866137	*Archontophoenix cunninghamian*	Bangalow Palm	8	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South

206	539506	6866133	*Archontophoenix cunninghamian*	Bangalow Palm	8	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
207	539505	6866130	*Archontophoenix cunninghamian*	Bangalow Palm	8	25	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
208	539504	6866128	*Citharexylum spinosum*	Fiddlewood	13	90	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
209	539506	6866126	*Archontophoenix cunninghamian*	Bangalow Palm	8	25		Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
210	539489	6866088	*Jacaranda mimosoides*	Jacaranda	6	15	2	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
211	539488	6866085	*Morus alba*	Uncertain	4	10	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
212	539488	6866080	*Mallotus philippensis*	Red Kamala	6	10	4	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South
213	539492	6866081	*Cupaniopsis anacardioides*	Tuckeroo	12	40	1	Railway St Frontage	Railway Street Road Reserve, Murwillumbah South

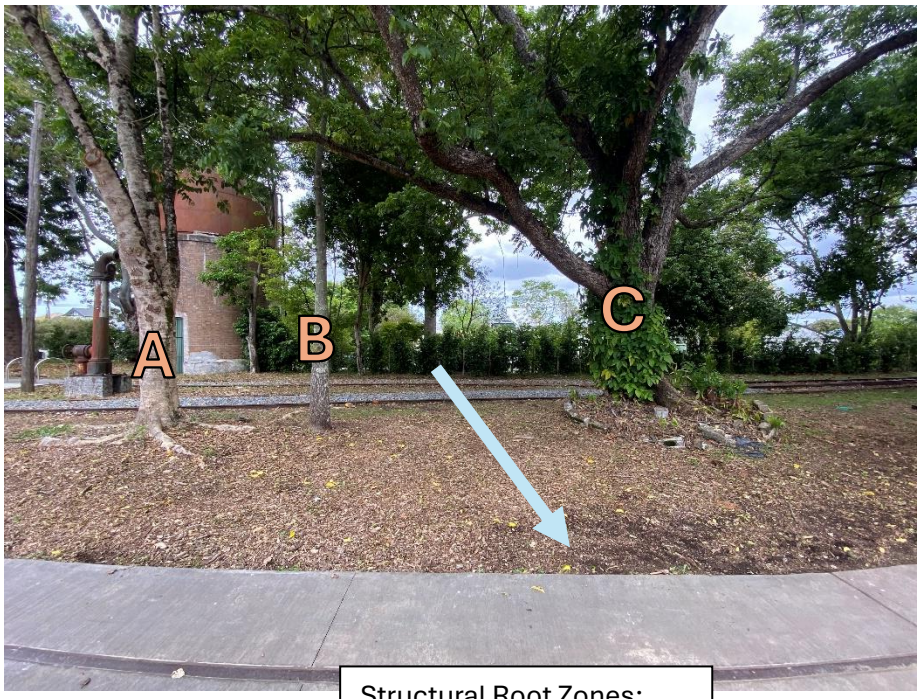
Attachment B Location of furniture to be installed

Blue arrows indicate proposed location of furniture.

Bench 1A

Northernmost bench seat (near large Red Cedar with garden edge)

Seat at edge of trail. 100mm concrete slab with road base. No excavation required other than removing build up of leaves and scraping top soil near trail edge. No footings or pavement to be within structural root zones.



Structural Root Zones:

A (Melicope) – 2.5m

B (Bottle Tree) - 2.1m

C (Red Cedar) – 3.2m

Park Seat 2A / Accessible Table's 3A and 3B

Option for up to two accessible picnic tables and a park seat with arms on pavement. Opposite to Ramp and toilets. 100mm concrete slab with road base. Very minimal /no excavation required. No pavement or footings within structural root zone.

Structural Root Zones:
C (Red Cedar) – 3.2m
D (Abutilon) – 1.9m
E (Silk Floss Tree) – 3.0m
(beyond visible surface roots)
F (Durobby) - 2.3m
G (Flame Tree) - 2.3m

Park Seat 2B / Accessible Table's 3C and 3D

Option for up to two accessible picnic tables and a park seat with arms on pavement. Opposite to stairs. 100mm concrete slab with road base. Very minimal /no excavation required. No pavement or footings within structural root zone.

Structural Root Zones:
E (Silk Floss Tree) – 3.0m (beyond visible surface roots)
F (Durobby) 2.3m
G (Flame Tree) 2.3m
H (Jacaranda) 3.3m
I (Red Cedar) – 2.7m

Park Seat 2C

Park Seat with arms at edge of trail. 100mm concrete slab with road base. No excavation required. Ecologist reviewed. Not within any structural root zones.

Accessible Table, Seat and Connecting Path 3B

Southern proposed wheelchair access and table (open space behind/north of streetlight)

100mm concrete slab with road base. No excavation required other than removing build up of leaves and scraping top soil near trail edge. Plenty of space, ecologist reviewed, not within any structural root zones.

Structural Root Zones:
I (Paperbark) 2.9m
J (Silk Floss Tree) 2.9m
K (Crepe Myrtle?) 2.6m

Picnic Table 4A

Picnic table in grassed area behind “share the trail” sign. Plenty of space, ecologist reviewed, not within any structural root zones.

Structural Root Zones:
O (Red Cedar) 2.5m
P (Liquidambar) 2.6m
Q (Kauri Pine) 2.6m

Bench 1B

Southernmost seat at edge of trail near information sign.

100mm concrete slab with road base. No excavation required. Not within any structural root zones.

Structural Root Zones:
L (Tallowwood) 2.5m
M (Eucalypt) 3.3m
N (Crows Ash) 2.1m

Platform 5A / 5B / 5C

Optional Platform benches in grassed area behind between rail tracks and fence. Plenty of space, ecologist reviewed, not within any structural root zones.

Contact and connect

02 6670 2400

tweed.nsw.gov.au
tsc@tweed.nsw.gov.au
PO Box 819 Murwillumbah NSW 2486

Appendix D Statement of Heritage Impact and Section 60 Heritage Act application

URBIS

14 November 2024

Heritage NSW
Department of Premier and Cabinet
heritage@dpc.nsw.gov.au

Dear Heritage NSW,

APPLICATION UNDER SECTION 60 OF THE HERITAGE ACT 1977 MURWILLUMBAH RAILWAY STATION AND YARD GROUP (SHR #01206)

Tweed Shire Council (Council) have engaged Urbis Ltd (Urbis) to prepare this application for proposed works within the heritage curtilage of the Murwillumbah Railway Station and Yard Group (SHR #01206). Please find the information below to support an application for approval under section 60 of the Heritage Act 1997.

BACKGROUND

In 2004 the Casino to Murwillumbah railway line ceased operation, and after many years of analysis, transport and feasibility studies, a decision was made that a rail trail would be built in stages as funding became available.

In 2015 a pilot study was undertaken by Council involving the establishment of a 2.6km section of the rail trail from Murwillumbah Railway Station to Tweed Regional Gallery. In 2017 a rail trail economic assessment and business case was prepared and led to the NSW government committing $6.5m in funding. In 2018 the federal government matched this funding to complete the first section of the

The Northern Rivers Rail Trail (NRRT) Murwillumbah to Crabbes Creek opened in 2023 and showcases a number of the region's heritage listed places, including original and early railway bridges, historic nineteenth century tunnels and the unique Interwar precast concrete station at Murwillumbah. In the first four months of use more than 70,000 people have used the trail, far exceeding expectations.

With the success of the trail some minor changes are now required to respond to the increased usage and also activate the former station buildings with new commercial tenancies.

This letter has been prepared in accordance with the NSW DPE Guideline and the Statement of Heritage Impact (SoHI) Guideline.

URBIS

HERITAGE LISTING

The Murwillumbah Railway Station is located along the former North Coast Railway Line east of the Murwillumbah CBD and the Tweed Valley Way. The physical curtilage for the subject site under the State listing is defined by Bray St to the west (Pacific Highway), Railway St to the east, the road crossing to the north, and a line crossing the tracks opposite the end Orme St connecting to the end of Railway St at the south end of the site. The listing incorporates Lot 100 DP 865105.

The subject site contains the main station building (1922), a goods shed and jib crane (1894), a platform (1922 brick platform face with c1985 extension), a cast-iron water tower on a round brick base (1894), barracks (1909 and c1949), banana loading siding (1919), goods shed and siding (1894), motorail siding (1985), and Collins Street Rail Bridge (mid 20th century).

Overall, the following heritage listings apply to the site:

- Murwillumbah Railway Station and Yard Group – NSW State Heritage Register;
- Murwillumbah Railway Station and Yard Group – Tweed Shire Council Local Environmental Plan Heritage Schedule; and
- Murwillumbah Railway Precinct – s170 NSW State Agency Heritage Register.

PROPOSED WORKS

Accessible picnic settings and tables, seating and platforms are proposed to be installed on the eastern side of the station adjacent to the rail trail at the Murwillumbah Railway Station trailhead.

Accessible furniture is proposed on concrete pads with connecting accessible pathways to the existing trail. Non-accessible furniture is proposed to be scattered in the trees and not connected by pathways to the trail.

Picnic benches and seating are proposed to be timber and aluminium construction and fixed to concrete. Concrete is proposed to match the colour and finish of the existing staging areas, and be clearly new. Locations of the proposed works is shown on the site plan at Figure 2.

Picnic benches, tables, platforms and seating are proposed to be timber and aluminium construction. Furniture will either require excavation for footings where furniture is proposed on grassed areas, and otherwise be fixed to new concrete pavement. In most locations, no excavation is required due to the trail already being slightly elevated from the ground level. It is expected that where some excavation is required, it will be no more than 50-100mm. Where this is required, it is noted on marked-up photographs in Appendix B. Details of the surface impacts to both approaches is shown at Picture 1 and Picture 2, and attached at Appendix C.

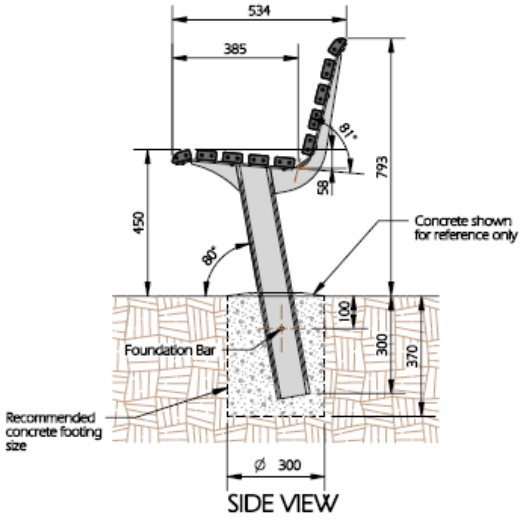
Concrete is proposed to match the colour and finish of the existing staging areas.

In summary the proposed works includes:

- **2 x bench seats along rail trail edge**
  - 1A , 1B - at the northern and southern ends of the trailhead
- **4x park seats (with arms) along rail trail edge**
  - 2A, 2B, 2C, 2D - east of the 1920s Station building
- **5 x accessible picnic tables and connecting path**
  - 3A*, 3B, 3C*, 3D, 3E* - east of the 1920s Station building
- **1 x standard picnic table with no connecting path**
  - 4A – picnic table on concrete footing in clearing
- **3 x Platforms**
  - 5A, 5B, 5C – east of the turntable siding.

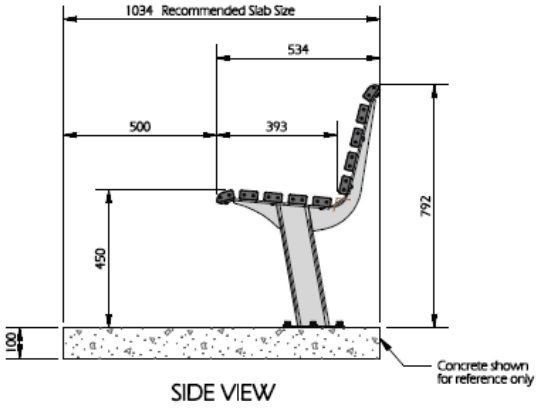
It is noted that 3A, 3C, 3E are shown as being accessible tables on concrete pavement (refer Figure 1 - INF10-108, Issue A). Approval is sought for these three settings to have the option of being installed as standard picnic settings on grass with concrete footings (as per the detail in Picture 2).

Locations of proposed works is at Figure 1, and current photographs of each works location in relation to individual tree species and root zones is attached at Appendix B.



Picture 1 Proposed footing detail

Source: GX Outdoors, Drawing #CPS-IG-TIM-004-PD Rev 0



Picture 2 Proposed pavement detail

Source: GX Outdoors, Drawing #CPS-SM-TIM-003-PD Rev 0

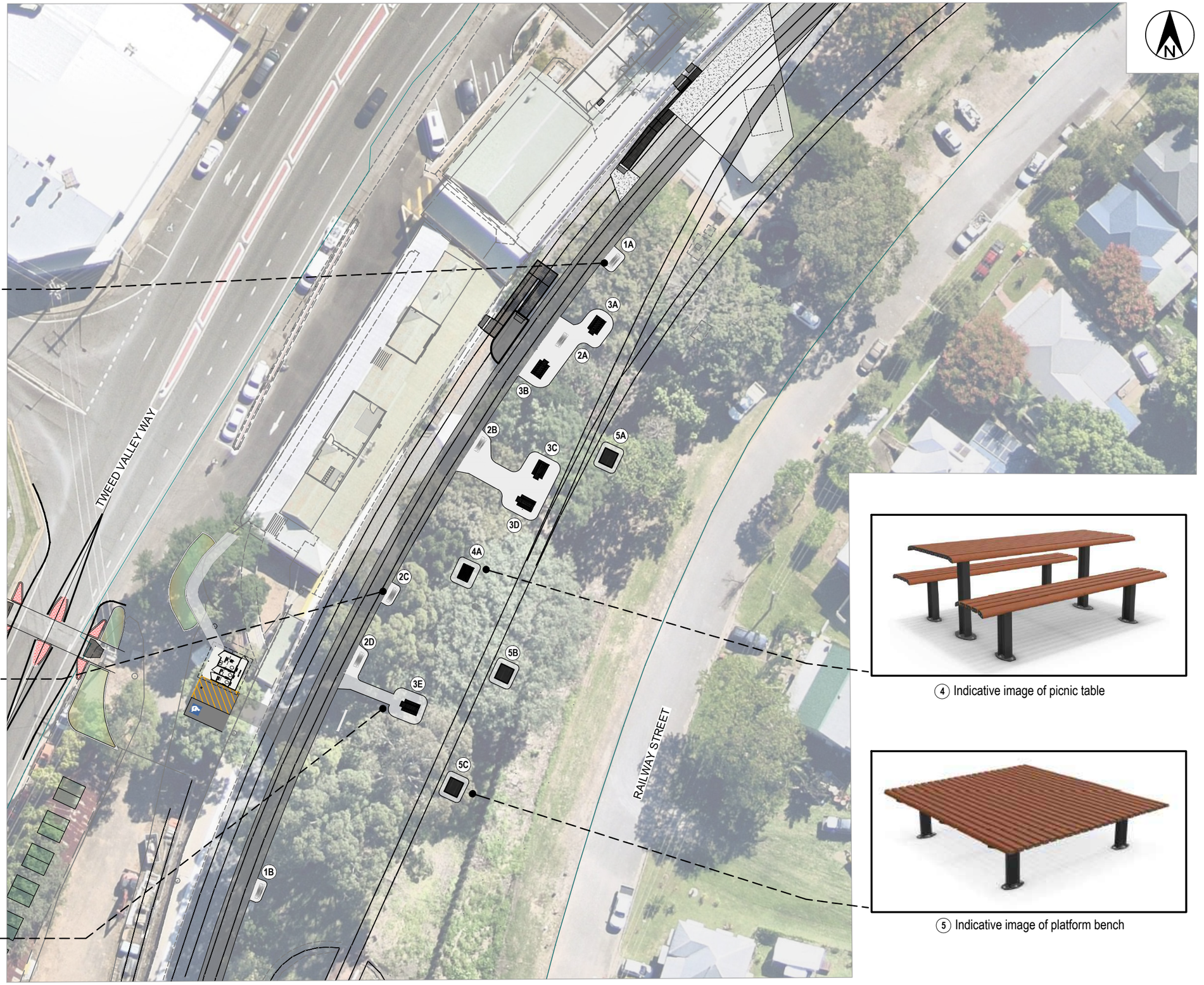
- LEGEND

1. Bench seat along Rail Trial edge
2. Park seat along the Rail Trial edge
3. Accessible table and connecting path
4. Picnic table on grass
5. Platform bench

(1) Indicative image of Bench Seat for the Rail Trail edge

(2) Indicative image of Bench Seat for the Rail Trail edge

(3) Indicative image of accessible table



(4) Indicative image of picnic table

(5) Indicative image of platform bench

PRELIMINARY
NOT FOR CONSTRUCTION

ISSUE	AMENDMENT DETAILS	DRAWN	CHECK	DATE
A	ORIGINAL ISSUE	A.L.K	J.M.M	31.10.24

SCALE: A1 SHEET 1:375, A3 SHEET 1:750
0 7.5 15 22.5 30 37.5m

USE FIGURED DIMENSIONS ONLY. DO NOT SCALE.

DESIGN UNIT
COUNCIL OFFICES
TUMBULGUM ROAD,
MURWILLUMBAH NSW 2484.

PHONE 02 66702400
EMAIL tsc@tweed.nsw.gov.au
WEBSITE www.tweed.nsw.gov.au

TWEED SHIRE COUNCIL

DESIGN ENGINEER ..... DATE .....

DESIGNED			COORDS ADOPTED	
DRAWN	A.L.K	31.10.24	EASTING	
CHECKED	J.M.M	31.10.24	NORTHING	
HORIZONTAL DATUM	GDA		R.L.	
			VERTICAL DATUM	AHD

PROJECT:
NORTHERN RIVERS RAIL TRAIL
TRAIN STATION, MURWILLUMBAH

PLAN TITLE:
OVERALL SEATING PLAN

ROAD SEGMENT: -
JOB NUMBER: A4371
PROJECT NUMBER: **INF10**
DRAWING NUMBER **INF10-108**
ISSUE **A**

ACAD FILE No: G:_AAA DESIGN PROJECTS\INF\INF10-2_NRRT-PILOT-MURWILLUMBAH TO REGIONAL ART GALLERY_ALL MC FILES DEMOUNTABLE_STAGING AREA\Drawings\A_SKETCH - TENDER DRAWINGS\INF10_BASE_MASTER PLAN.dwg

URBIS

STATEMENT OF HERITAGE IMPACT

The Murwillumbah Railway Station and Yard Group is of State level of significance. Its Statement of Significance (SHR#01206) is as follows:

> *Murwillumbah is a good example of a station constructed in the 1920's from pre cast concrete, the predominant material of the period of which relatively little has survived. The building is a substantial structure which has maintained the form of the earlier building with the change of material. It forms part of a group that contains a very good goods shed example and a rare water tank on a round brick base, only three of these were built, all on the north coast line.*
>
> *The station building has had some recent additions of poor quality which detract from significance.*
>
> *The site is also significant because of its connection with the carrying of vehicles on the Motorail service (no longer operating) and the facilities connected with that activity.*

The proposed works will not have any physical or visual impacts on the 1920s Station building, or the other structures assessed as being highly significant. The proposed works have been carefully sited to avoid any obstruction of views to these structures, and avoid removal of vegetation, and also impacts to tree roots.

Cumulatively the proposed works are also considered to be minor in nature with minimal impact to the Murwillumbah Railway Station and Yard Group. The works are considered to maintain and even enhance the heritage values of the place by ensuring the ongoing use of the Station complex which allows for maintenance and conservation, and promoting and allowing for a greater public appreciation of the history and significance of the place.

All locations of proposed works locations have been reviewed by an ecologist to ensure works will be outside of structural root zones.

The proposed works have been made designed in consultation with heritage professionals with principles of the Burra Charter in mind, specifically:

- Ensuring the complex continues to be used by ensuring facilities for the community to utilise;
- Ensuring new work does not mimic historic details but is clearly new, with new materials and finishes proposed that cannot be confused with original or historic details;
- Ensuring changes to the place are highly reversible, with bike rack and new pathways and structures minimising connections into original fabric.

An assessment against policies in the 2018 draft CMP are at Appendix A.

Please don't hesitate to contact me on (07) 3007 3849 should you have any questions relating to the proposed works.

Kind regards,

[redacted]

APPENDIX A – RESPONSE TO CMP Policy

#	Policy	Response
1	*Future works including conservation of the Murwillumbah Railway Station site should be carried out in accordance with best heritage conservation practice, and within the accepted principles and standards of the Burra Charter and associated guidelines.*	The proposed works have been designed in accordance with Burra Charter principles, including finding compatible uses, doing as much as necessary but as little as possible, and new work being sympathetic yet clearly new, and easily reversible.
2	*The Statement of Significance set out in this report is to be accepted as the basis for future conservation of the fabric and values of the place. Any works undertaken to the property should be sympathetic to the heritage values identified in this report.*	Works have been guided by the significance of the place and avoids interventions to highly significance elements.
3	*Unless otherwise stated in these policies, surviving original and early fabric and spaces identified as exceptional or high must be retained intact and conserved.*	Works have been guided by the significance of the place and avoids exceptional and high significance buildings and elements such as the 1920s station and platform.
4	*The rail corridor should be kept and no new structures erected within.*	The proposed facilities are designed to be highly reversible and will not fix into heritage fabric, nor be visually intrusive.
5	*Elements of exceptional or high significance must not be obstructed by new works, structures or services where possible and they must be clearly visible and interpreted as part of any new works.*	The siting of the proposed works has been carefully designed to ensure it is a distance from the 1920s station to minimise any visual impacts.
6	*No railway structures or buildings from other sites should be brought into the railway station precinct.*	N/A
7	*Any repair, conservation or reconstruction works to significant elements must be undertaken with appropriate supervision by a suitably qualified heritage consultant /architect and/ or relevant materials specialist/s or conservator and with reference to historical documentation.*	No repair, conservation or reconstruction works have been proposed.
8	*All contractors, consultants and project managers engaged to work on the place*	Contractors will be made aware of heritage considerations as part of their site induction.

#	Policy	Response
	should have appropriate conservation skills, experience and techniques appropriate to the trade, fabric or services, and should work within the guidelines of this CMP.	
9	*A heritage impact statement/statement of heritage impact and / or an archaeological assessment should be prepared for all proposals for new development within the property.*	This assessment responds to this policy.
10	*The Revised Statement of Significance set out in this report is to be accepted as the basis for future conservation of the fabric and values of the place. All future works to the place should be cognisant of the significant built elements, fabric, spaces, views, landscape and archaeological resource identified in this CMP, together with any additional detailed research and assessment.*	Works have been guided by the significance of the place.
11	*All repair, conservation and reconstruction works to significant elements must be undertaken with appropriate supervision by a suitably qualified heritage specialist or relevant materials specialist or conservator, with reference to historical documentation, and in accordance with any relevant legislative or statutory constraints.*	No repair, conservation or reconstruction works have been proposed.
12	*Unless otherwise stated in these policies, surviving original and early elements and fabric identified as exceptional or high must be retained intact, and conserved. Elements of exceptional or high significance must not be obstructed by new works, structures or services where possible, and they must be clearly visible and interpreted as part of any new works.*	Works have been guided by the significance of the place and avoids exceptional and high significance buildings and fabric as much as possible.
13	*Where elements of exceptional or high significance have been damaged, they are*	Works have been guided by the significance of the place and avoids exceptional and high

#	Policy	Response
	to be repaired with sympathetic materials in preference to replacement. Significant elements should be repaired in-situ wherever possible.	significance buildings and fabric as much as possible.
14	*If changes to elements of exceptional or high significance are required, they should be carefully considered and the approach should be one of minimal intervention; as much as necessary, as little as possible.*	Works have been guided by the significance of the place and avoids exceptional and high significance buildings and fabric as much as possible.
15	*Intervention for purposes other than conservation of the fabric is to occur in areas of lower rather than higher significance.*	Priority has been given to siting new work, such as signage, in areas that have previously been disturbed, and areas of no or low significance.
16	*Any elements of significance proposed for demolition, removal or alteration, should be subject to archival photographic recording, copies of which should be retained on site and provided to the relevant consent authorities (TSC and the NSW OEH Heritage Division).* *This should include photography and / or measured drawings as deemed necessary. Archival recordings should be undertaken in accordance with the NSW OEH Heritage Division's Guidelines for 'Photographic Recording of Heritage Items Using Film or Digital Capture'.*	No elements of high significance are proposed to be removed or altered, and archival recording is not being undertaken.
17	*No new structures should be built in areas identified as having significant views.*	The proposed locations of seating and picnic benches are outside of the trail corridor in areas that are currently heavily vegetated and will not obstruct any view corridors.
18	*The overall form and principal facades to the 1922 station building are to be retained, without change. Changes to elements already altered may be contemplated.*	N/A
19	*Consideration could be given to the removal or replacement of the 1990s*	N/A

#	Policy	Response
	building to open up views to the passenger station from the north and Alma Street intersection.	
20	*Balustrading on the platform should be avoided where possible, instead using tactile markers to prohibit access onto the track.*	N/A
21	*Obtain specialist advice from an arborist regarding removal of weed species in the yard.*	N/A
22	*New uses should enhance the appreciation of the site's values and significance, ensure the conservation of the identified significant building structures, items and spaces and context; and accommodate the activities, services and fittings which are essential to the new use without damaging significant spaces, elements or fabric.*	The rail trail is a compatible use for the heritage place.
23	*The requirement for any remediation action plan for the site should be addressed in consideration of the cultural significance of the station and the end use in mind in order to minimise potential heritage impacts.*	N/A
24	*The preferred use of the station building is commercial/retail. The way the place is used must maximise the conservation of the fabric considering the effects of:* Structural loadings; Statutory requirements; Code compliances; Service installations; and Meeting access needs.	The proposed works complement the commercial use of the precinct, and have been designed to minimise impact to fabric while ensuring necessary services and DDA compliant access to amenities.
25	*The area has a history of significant flooding, and any landscaping works and changes to levels need to take this into*	N/A

#	Policy	Response
	consideration and ensure that appropriate drainage is implemented around the site.	
26	*The goods shed and adjacent shed may continue to be used for industrial purposes, however these are robust buildings and sympathetic future uses may also include commercial or retail uses.*	N/A
27	*The yards area including sheds and banana loading siding comprises a large area that may also be suitable for temporary event space or markets.*	N/A
28	*Opportunities for re-use of the room inside the water tower should also be investigated.* *Potential sympathetic uses include bike workshop, coffee shop, bar, museum display space or similar.*	N/A
29	*Barracks should continue to be used for accommodation purposes.*	N/A
30	*The Colin Street bridge should be reused as part of the proposed rail trail.*	N/A
31	*Additional historical features including tracks, cranes, pumps, switches and signage should also be retained in-situ and incorporated into the redevelopment aiding in the interpretation of the history and significance of the place.*	N/A
32	*Prior to occupancy, the water tower, goods shed and banana loading platform awning should be*	N/A
33	*Once the use for the site and individual buildings is established, it is important that signage should be erected at the northern and southern approaches to encourage visitors to the place.*	N/A
34	*In association with the proposed new use, a signage strategy should be developed that respects the significance of the*	N/A

#	Policy	Response
	station and is consistent with the proposed rail trail.	
35	*Opportunities to link the Station to the town via bikeway should be investigated.*	N/A
36	*Reconfiguration of current bus and carparking facilities should be investigated, particularly to include parking for caravans and RVs, encouraging visitors to stop. As the carpark is included in the heritage curtilage, care needs to be taken in the design to minimise any heritage impacts.*	N/A
37	*When designing and undertaking modification works to the heritage structures, it is strongly recommended that owners work with a suitably qualified and experienced heritage professional with proven skills and experience, to guide works projects from the planning phase through to construction supervision and certification.*	N/A
38	*Any potential alterations and additions are to be designed and constructed in a way that conserves, maintains and interprets the property. This will require detailed consideration of the location, form, height and scale, as well as the colours and materials proposed and the impact they will have on the existing place and building fabric in terms of its significance, fabric changes and use.*	The proposed works are considered to be minimal.
39	*New buildings in the precinct should be well designed, contemporary in character but respect the setting of the place.*	N/A
40	*New works should comply with the BCA/ NCC and Australian Standards unless the heritage significance determines that the matter will be professionally determined under performance standards. Where necessary, alternative solutions and*	N/A

#	Policy	Response
	performance-based outcomes should be pursued to ensure the intent of the code is met without adversely impacting on significant fabric. Professional advice should always be obtained. Due to the complex nature of heritage buildings, 'deemed to comply' design solutions approved by BCA or access consultants may be used to satisfy the intent of the Standard.	
41	*Unsympathetic alterations and additions or alterations that dominate the heritage character of the place are discouraged.*	All proposed works are considered to be sympathetic to the heritage place.
42	*Removal of intrusive fabric (as identified in the CMP) should be considered and is encouraged.*	N/A
43	*New work to the 1922 station building should be confined to areas where refurbishment works occurred in the 1980s and 1990s.*	N/A
44	*Where works to the roof of the 1922 station building are proposed to occur, the gablets on the western elevation must not be removed.*	N/A
45	*New signage must have regard to heritage significance and should be appropriately scaled.*	N/A
46	*Further investigation of the interior spaces of the goods shed and barracks should be undertaken prior to any new works being proposed in these locations.*	N/A
47	*New fitouts within the 1922 station building should involve installation of material that is easily reversible, does not fix into original and early fabric, is readily identifiable as new work, and does not detract from existing historical fabric.*	N/A
48	*New fitouts within the water tower should not impact on the central pipe, and care*	N/A

#	Policy	Response
	should be taken to avoid impacts to the sub-floor pipe work.	
49	*New services should be sympathetically located to mitigate heritage impacts. This includes no new services to the primary facades.*	N/A
50	*New fixings for external lighting should, where possible, reuse existing services and fixing points into the façades.*	N/A
51	*The upgrading of services within the heritage buildings on site should comply with the following approach:* *Minimise impact on significant fabric by maximising the exposure of heritage fabric and minimising penetrations and fixings through heritage fabric, utilising existing penetrations where feasible;* *New services should be located in areas of lesser significance, in areas that are not visible or that have been previously modified or in the area of existing services;* *New services should not be chased into existing significant masonry and instead should be surface mounted if required;* *New services should not conflict with window and door openings; and* *Should be complementary to the interiors.*	N/A
52	*New internal and external colour schemes may be considered. These should be based on investigations of the building's early paint layers and historical colour schemes. Preparation for new colour schemes should where possible retain evidence of early colour schemes.*	N/A
53	*New colour schemes for the station buildings should be consistent with the TfNSW Heritage Paint Schemes Engineering Standard for external colour*	N/A

#	Policy	Response
	schemes and should also consider original finishes.	
54	*Existing unpainted surfaces on the original platform face and water tank should remain unpainted.*	N/A
55	*Existing ramps to the north and south of the passenger station do not contribute to the significance of the place and may be replaced if required.*	N/A
56	*Provision of a ramp from the platform to the track should not impede views of the brick platform face, and options for an equitable access ramp should be investigated that involve replacement of the 1980s platform with a ramp that continues in this alignment instead of extending out into the track.*	N/A
57	*Provision of a DDA compliant ramp from the permanent train carriage onto the track should also be investigated and should be readily reversible.*	N/A
58	*Where the turntable is put back into use and used as an interpretive device, new handrails will be required for compliance. Handrails*	N/A
59	*The form, scale, general configuration and principal facades of significant historic structures including the pre-cast concrete station, water tank, goods shed and banana loading awning should be retained and conserved.*	N/A
60	*Elements of little, neutral or intrusive significance as presented in Section 4.6 of this CMP may be removed, replaced in future with a modern, sympathetic alternative, as long as the place's overall heritage significance is not adversely affected.*	N/A

#	Policy	Response
61	*The station building and water tank have the highest integrity of all heritage structures, and changes to fabric should be minimised.*	N/A
62	*Works to the station building should conserve the original layout and avoid changes to historic fabric.*	N/A
63	*The original platform face should not be covered or concealed by the construction of new structures.*	N/A
64	*The 1980s platform extension contributes to the development of the site, but is of little significance and may be modified or removed.*	N/A
65	*While not of historical significance, the mature vegetation around the platform contributes to the picturesque setting and may be retained where it does not impact on historic structures.*	The proposed works will sit amongst the vegetation and will not require removal of any mature trees or significant vegetation.
66	*The turntable and crane should be conserved by specialists with experience in restoration of historic machinery, and put back into used as interpretive devices.*	N/A
67	*Tracks should remain in-situ where possible, and ground levels may be built up around to allow for a level surface*	N/A
68	*Investigate the extent of damage to metal surfaces of cranes and pumps and treat surface rust as required.*	N/A
69	*All repairs to the structures and items on site should be detailed to minimise the visual and aesthetic impacts, and records of the repairs be retained by the property owner for future reference.*	N/A
70	*Repairs to the building should be undertaken in order of priority, ensuring that the source of the problem is fixed before making repairs. The Conservation*	N/A

#	Policy	Response
	Works Schedule at Section 8.1 of the CMP is to be used as a guide.	
71	*Any reconstruction or restoration works should be based on historical documentation rather than speculation.*	N/A
72	*Materials used for repair and reconstruction should preferably be traditional materials used in the construction of the place. Missing or damaged fabric will be replaced observing the 'like for like' principle. For example, replace with similar fabric (e.g. timber with timber) or replace with new fabric of similar appearance, or replace with different fabric of similar profile and dimensions (whilst remaining apparent as new work).*	N/A
73	The goods shed and banana loading platform awning are in need of significant repairs including repairs to framing, roof and wall cladding.	N/A
74	*Existing timber framed doors and windows are to be retained and repaired in preference to removal/replacement with aluminium or other modern alternatives, and should be repainted regularly.*	N/A
75	*Retain the roof form of significant buildings and repair cladding as required.*	N/A
76	*Replace gutters, downpipes and rainwater heads using profiles and sizes to match the originals where required by condition and based on documentary and on-site evidence.*	N/A
77	*Where inappropriate repairs have been made in the past, such as use of wrong materials or profiles these should be rectified where opportunity exists in future.*	N/A

#	Policy	Response
78	*The industrial character of the site should be a key factor in public realm and landscaping works.*	N/A
79	*Redundant trackwork including timber sleepers and steel rails should be reused in landscaping, and materials including timber sleepers, rails and corrugated iron cladding be used in signage and street furniture.*	N/A
80	*Professional and trade skills with heritage experience appropriate to the site or building's fabric and significance is to be employed to carry out maintenance and works. This is essential to ensure protection of heritage fabric and values as well as optimal use of funding to carry out works.*	Contractors will be made aware of heritage considerations as part of their site induction.
81	*A regular maintenance program such as that at Section 8.2 of this CMP should be implemented to conserve and maintain the Murwillumbah Railway Station for the future.*	N/A
82	*If the majority of the site continues to be vacant for an extended period of time, further works should be undertaken to secure buildings to prevent unauthorised access, and monthly inspections undertaken to identify any additional maintenance and/or repair requirements.*	N/A
83	*If objects are found and suspected to be Aboriginal archaeological material, works in the vicinity of the find should cease, and OEH to be notified of the find, in accordance with s87A of the NPW Act. A suitably qualified archaeologist may be required to assess and record the find.*	N/A
84	*Where ground disturbance works are proposed in areas of identified historical archaeological potential as demonstrated in Figure 15, and outside of the area*	N/A

#	Policy	Response
	considered to be railway permanent way formation, archaeological advice should be sought and an archaeological assessment may be required.	
85	*In the event that unexpected archaeological material is encountered during works, it would be necessary to stop all work in the immediate vicinity of the identified deposits. The NSW Heritage Office should be notified, and a qualified archaeologist should be engaged to assess the significance of the material and recommend whether further investigation and/or permit application(s) are required.*	The proposed works are not within an area of archaeological potential, however a chance finds procedure is to be implemented to ensure contractors levelling the site and excavating for footings for the proposed furniture are aware of this requirement.
86	*In the unlikely event that human remains are identified in any future works, all site works must cease, NSW Police and OEH notified. Works must not recommence until directed by the Police.*	N/A
87	*Any significant elements proposed for demolition or removal should be subject to archival photographic recoding, copies of which should be retained on site and provided to the consent authority. This should include photography and/or measured drawings.* *Archival recording should be undertaken in accordance with the Heritage Council of NSW Guidelines for Photographic Recording.*	No elements of high significance are proposed to be removed or altered.
88	*All significant changes to the place should be carefully recorded and incorporated into a separate report or addendum to this CMP as appropriate.*	N/A
89	*A heritage interpretation strategy should be prepared for the Murwillumbah Railway Station, to investigate the options available for communication of the significance of the overall place, and its*	N/A

#	Policy	Response
	constituent elements. This should include consideration of both onsite and offsite opportunities, and should also consider the opportunities for object display and use of oral histories currently held by the Tweed Regional Museum.	
90	*Any interpretation that considers the Murwillumbah Railway Station as part of a heritage trail should be thoroughly planned as part of a trail-wide strategy to ensure a consistent approach to interpretive elements (including signage and branding) throughout the rail trail experience.*	N/A
91	*Installation of any interpretive element, such as signage, should be located in a way that does not impact on significant fabric, or interfere with any important sightlines or views.*	N/A
92	*Consultation with the Tweed Regional Museum should occur as part of planning for interpretation of the Railway Station site, to investigate opportunities for cross-promotion or collaboration to potentially increase visitor numbers of each place.*	N/A
93	*Consideration should be given to a loan arrangement between the Museum and the Railway Station, to afford display of artefacts or relics that interpret the historical activities of the Railway Station.*	N/A
94	*Should objects be displayed at the Railway Station, environmental conditions will need to be maintained that are appropriate to individual object types, to minimise potential for deterioration.*	N/A
95	*Opportunities should be investigated for a small display of museum objects within the Railway Station, to encourage visitation to the Museum. Displays could be changed on a rotating basis, to*	N/A

#	Policy	Response
	highlight key collection items, or to display items that coincide with city or regional events or anniversaries.	
96	*The oral histories collection at the Tweed Regional Museum should be analysed and transcriptions made of any stories relating to the Murwillumbah Railway Station. The histories should be used in interpretive devices at the Station, either as transcribed texts in various interpretive media, or used as audio elements in exhibitions or displays.*	N/A
97	*This CMP should be provided to and adopted by present and future owners and occupants of the place, and used as a guide for management and conservation, and in conjunction with any proposals for future development or adaptive re- use of the place. A copy of this CMP is to be retained on site at all times for use by those responsible for the management and conservation of the place.*	N/A
98	*This CMP should be reviewed and updated every 5-10 years, or following any major adaptive re-use or development proposal, to remain relevant to ongoing change and use of the place, and achieve statutory compliance.*	N/A

Appendix E Preliminary Aboriginal Cultural Heritage Assessment

TWEED SHIRE COUNCIL

Preliminary Aboriginal Cultural Heritage Assessment (PACHA)

NRRT004 – Seating for Murwillumbah Station precinct – South Murwillumbah

December 2024

Version control

Version	Title	Date
1.0	Preliminary Aboriginal Cultural Heritage Assessment (PACHA)	13/11/2024

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Definitions

AAC:	**Aboriginal Advisory Committee**
ACH:	**Aboriginal cultural heritage**
ACHA:	**Aboriginal Cultural Heritage Assessment**
ACHAR:	**Aboriginal Cultural Heritage Assessment Report**
ACHMP:	**Tweed Shire Aboriginal Cultural Heritage Management Plan 2017**
AHIP:	**Aboriginal Heritage Impact Permit** The statutory instrument that OEH issues under section 90 of the NPW Act to manage harm or potential harm to Aboriginal objects and places.
AHIMS:	**Aboriginal Heritage Management Information System** AHIMS is a part of OEH and maintain the NSW records database of Aboriginal objects/sites, declared Aboriginal Places and archaeological reports submitted either voluntarily or as part of compliance-related submissions.
Disturbed land:	Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks. Refer also to Clause 58 of the NPW Reg.
Due Diligence code:	Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECC&W, 2010)
EIS:	**Environmental Impact Statement**
PACHA:	**Preliminary Aboriginal Cultural Heritage Assessment** Process to assess whether Aboriginal objects will or are likely to be harmed, and whether further investigation and impact assessment is required. Determines whether an ACHA is required and, subsequently, whether an AHIP is required.
DPE:	**Department of Planning and Environment, NSW Government**
EP&A Act:	**Environmental Planning and Assessment Act, 1979**
NPW Act:	**National Parks and Wildlife Act, 1974**
NPW Reg:	**National Parks and Wildlife Regulation, 2019**
OEH:	**Office of Environment and Heritage, NSW Government**
Study area:	For the purpose of this PACHA, the study area is the spatial extent in which the proposed works could potentially directly and indirectly impacts on the ACH values of the site. For this particular assessment, the study area is defined as the lands and waters within 200 m of the subject site.
TBLALC:	**Tweed Byron Local Aboriginal Land Council**
TSC:	**Tweed Shire Council**

1.0 Introduction

The aim of this Preliminary Aboriginal Cultural Heritage Assessment (PACHA) is to ensure Council infrastructure projects minimise the risk of harm to Aboriginal places and objects of cultural heritage significance.

The objective is to identify those projects with a significant risk of harm to Aboriginal cultural heritage (ACH) and those projects for which the risk is low.

Those projects determined to have a high risk of harm to ACH require a more detailed assessment in the form of an Aboriginal Cultural Heritage Assessment Report (ACHAR) and potentially an Aboriginal Heritage Impact Permit (AHIP).

Those determined to have a low risk of harm to ACH may proceed with caution without an ACHAR or AHIP.

The PACHA is suitable for incorporation into TSC environmental planning assessments for works deemed:

- permissible with consent
- permissible without consent
- exempt activities under the EP&A Act, with the exception of projects requiring an Environmental Impact Statement (EIS) for which the assessment requirements are directed by the Secretary's Environmental Assessment Requirements (SEARs).

2.0 Planning considerations under the NPW Act/Reg

The following clauses were considered to determine whether any of the exemptions or defences identified under the NPW Act/Reg apply.

Planning consideration	Response
Are the works exempt under s87A of the NPW Act (e.g. specified emergency or conservation activities)	☐ Yes ☒ No
Are the works exempt under s87B of the NPW Act (e.g. traditional Aboriginal cultural activities)	☐ Yes ☒ No
Is the activity a low impact one for which there is a defence under Clause 58 of the NPW Reg? (e.g. maintenance of existing infrastructure on disturbed land; 'disturbed land' is defined in the definitions section) **N.B.** If yes, there is still a responsibility to not harm or desecrate an object that a person knows is an Aboriginal object; stop works procedures still apply to any unexpected finds.	☐ Yes ☒ No

3.0 Scope of work

The following questions were addressed to clarify the type and scale of works proposed.

Scope/scale of works	Response
Is the work trivial or negligible? (e.g. picking up and replacing a small stone artefact, breaking a small Aboriginal object below the surface when you are gardening, crushing a small Aboriginal object when you walk on or off a track, picnicking, camping or other similar recreational activities)	☐ Yes ☒ No
Will the works involve ground disturbance?	☒ Yes ☐ No
What is the scale of excavation works? (refer to ACHMP page 105 for definitions of minimal, moderate and major)	☒ Minimal ☐ Moderate ☐ Major
Will the works impact upon any known or suspected culturally modified trees? (e.g. scar trees)	☐ Yes ☒ No

4.0 Assessment methodology

The following desktop and site assessments were performed and used to determine the level of community consultation required, if any.

Assessment type	Response
Desktop assessment	☒ Review ACHMP mapping GIS layer ☒ Search AHIMS database Review site cards relevant to the study area: ☐ Y ☒ N/A ☒ Search NSW Heritage database for Aboriginal Places ☒ Review topographic GIS layers (e.g. contours) Review previous ACHARs relevant to the study area: ☐ Y ☒ N/A
Site assessment	☒ Walkover by TSC Environmental Scientist

5.0 Desktop results

The results of the desktop assessment are detailed below.

Desktop resource reviewed	Response
Does an Aboriginal Place (as declared under the NPW Act) apply to the study area?	☐ Yes ☒ No
What ACHMP mapping designations apply to the study area? (refer to TSC GIS layer under Planning Strategies and Policies)	☐ Known ☐ Predictive ☒ Not mapped
Are there any registered AHIMS site records identified within the study area?	☐ Yes (specify AHIMS reference numbers) _____ _____ _____ ☒ No
What ACH values apply or potentially apply to the study area? (refer to site cards, previous ACHARs and ACHMP mapping attribute data)	☐ Artefacts ☐ Midden ☐ Camp sites ☐ Pathways ☐ Ceremonial site ☐ Burial ☐ Story place ☐ Scar tree ☐ Grinding grooves ☐ Fish traps ☐ Charcoal deposit ☐ Other (specify) _____ ☐ Unknown ☒ None known
Do any of the following landscape features apply to the study area?	☐ Ridgelines ☐ Coastal headland ☐ Sand dunes ☐ Rock shelters (within 20 m) ☒ Waterways (within 200 m) ☐ Other (specify) _____
Are the works proposed on disturbed land? ('disturbed land' is defined in the definitions section)	☒ Yes ☐ No

Desktop resource reviewed	Response
Is the site in proximity to the Holocene high stand shore line? (refer to contours and AHD 1.5 m for indication)	☐ Yes ☒ No

6.0 Site inspection findings

The results of the site inspection are detailed below.

Site inspection conditions/findings	Response
How was the ground surface visibility?	☐ Good ☒ Moderate ☐ Poor
Were any Aboriginal objects/values identified during the site assessment?	☐ Yes ☒ No
Were any potential ACH objects/values identified/recorded during the site visit? (e.g. artefacts, scar trees, midden material, burials, grinding grooves, charcoal deposits) Note: attach photos to plates section where appropriate – seek permission from the TBLALC for potentially sensitive matters.	☐ Yes (please specify) _____ _____ _____ _____ ☒ No
What evidence of previous ground disturbance was observed within the proposed works area?	☐ Built road ☐ Fence construction ☐ Imported fill ☐ Construction of buildings/structures ☒ Construction/installation of utilities ☐ Earthworks/reformed land ☒ Other (please specify) Murwillumbah Railway Station and railway line

7.0 Consultation outcomes

The desktop assessments and site inspections which indicate potential for harm, or a high degree of uncertainty regarding potential for harm, to ACH are required to seek further information and expertise through consultation with community members/cultural heritage experts.

Consultation outcomes	Response
Do the results of the desktop assessment and site inspection indicate potential for harm, or a high degree of uncertainty regarding potential for harm?	☐ Yes (stakeholder consultation is required, see below) ☒ No (specify why and then proceed to Section 8) Justification: Earthworks (landshaping) was required to construct the railway line and associated station area. The proposed earthworks are located in the existing railway line area. Given the extent of earthworks previously undertaken at the site, and the minor scope of ground disturbance proposed, the likelihood of encountering ACH objects is considered low.
Stakeholders consulted	☐ TBLALC ☐ AAC ☐ OEH Archaeologist ☐ Consultant Archaeologist ☒ N/A
Did any stakeholders request additional site inspections?	☐ Yes ☐ No ☒ N/A
Did representatives request to have site monitors present during construction?	☐ Yes ☐ No ☒ N/A
Did representatives recommend an Archaeologist inspect the site?	☐ Yes ☐ No ☒ N/A
Did representatives recommend an ACHAR be prepared and an AHIP be applied for?	☐ Yes ☐ No ☒ N/A
Did representatives request any project-specific mitigation measures?	☐ Yes (list recommendations) _____ _____ _____ _____ _____ ☐ No ☒ N/A

8.0 Recommendations and conclusion

Recommendations and conclusion	Response
Does a desktop and site assessment confirm that there are Aboriginal objects or that they are likely?	☐ Yes ☒ No ☐ Uncertain
Does consultation confirm that there are Aboriginal objects or that they are likely?	☐ Yes ☐ No ☐ Uncertain ☒ N/A
Can harm to Aboriginal places and objects be avoided?	☒ Yes ☐ No ☐ Uncertain
Are site monitors required during construction?	☐ Yes ☒ No
Is an ACHAR and AHIP required?	☐ Yes. Engage a consultant Archaeologist to undertake ACHA and, if deemed necessary, apply for an AHIP. Refer to OEH Guidelines. ☒ No. The project is to proceed with caution. If any potential Aboriginal objects are found, work is to stop and the stop works procedure provided in the ACHMP – Appendix 7 is to be applied. N.B. If human remains are found, work is to stop, the site secured and the NSW Police notified. All staff and contractors on site are to be notified that it is an offence under the Coroners Act to interfere with the materials/remains.

9.0 Figures and plates

Figure 1: Aerial photograph showing study area (red polygon)

[redacted]

Figure 2: ACHMP mapping within the study area (yellow polygons represent known ACH sites)

Appendix A – ACHMP Stop works procedure

7. Stop Work Procedure

It is an offence to harm an Aboriginal object or place under the NPW Act. Immediate Stop Work procedures are to be implemented when an activity or works reveal any Aboriginal object or remains so as to avoid harm (see definition of harm in Section 7). The following outlines the Stop Work Procedures:

Inadvertent discovery of an object

On discovery of any surface or buried sub-surface cultural material (other than human remains, which is addressed following) the following actions should occur as soon as practicable:

- All work should cease at the location and if necessary, an appropriately qualified Aboriginal sites officer or experienced archaeologist, with expertise in Aboriginal cultural heritage is to be notified, if not already present at the location. The area is to be made safe and cordoned off to prevent access and to protect the object. Construction workers and operational personnel will comply with the instructions of the qualified Aboriginal Sites Officer and/or experienced cultural professional (archaeologist).
- The TBLALC and OEH North East Region Planning Unit are to be notified.
- An Aboriginal cultural heritage assessment of the object and surrounding locality is to be undertaken. A written report of the archaeologist's findings and recommendations is to be provided to registered Aboriginal parties and the OEH for their consideration.
- No further works or development may be undertaken at the location until the required investigations have been completed and permits or approvals obtained as required by the NPW Act and receipt of written authorisation by the OEH North East Region Planning Unit. Upon further advice, construction may be able to continue at an agreed distance away from the site.
- Aboriginal cultural heritage objects are to be registered to the AHIMS.

Inadvertent discovery of a burial or human remains

Burials or human remains are controlled by the following legislation:

- Coroners Act 2009 (NSW)
- Crimes Act 1900 (NSW) and Federal Crimes Act 1914
- National Parks and Wildlife Act 1974 (NSW) covers Aboriginal human remains
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW, 2010 by OEH

Should human remains be found during the activity or works, the following procedure should be followed. On discovery of the remains the following actions should occur as soon as practicable:

- All work should cease at the location. The Police must be notified, and all personnel and contractors on site should be advised that it is an offence under the Coroners Act to interfere with the material/remains.
- If necessary, an appropriately qualified Aboriginal or experienced archaeologist, with expertise in Aboriginal cultural heritage is to be notified, if not already present at the location. The area is to be cordoned off to access and to protect the remains. Construction workers and operational personnel will comply with the instructions of the qualified Aboriginal sites officer or archaeologist.
- The TBLALC and the OEH North East Region Planning Unit are to be notified.
- No further works or development may be undertaken until the required investigations have been completed and permits or approvals obtained where required in accordance with the NPW Act. Upon further advice, construction may be able to continue at an agreed distance away from the site.
- Burial remains are to be registered to the AHIMS if found to be Aboriginal cultural remains.

Note: A Stop Work Order or Interim Protection Order may also be directed by the Chief Executive under S91AA of the NPW Act.

Contact and connect

02 6670 2400

tweed.nsw.gov.au
tsc@tweed.nsw.gov.au
PO Box 819 Murwillumbah NSW 2486

Appendix F Waste Management Plan

TWEED SHIRE COUNCIL

Waste Management Plan

NRRT004 – Seating for Murwillumbah Railway Station precinct – South Murwillumbah

December 2024

Version control

Version	Title	Date
1.0	Waste Management Plan	13/11/2024

Introduction

The following pre-classification of waste streams to be generated during the installation of seating works of the Murwillumbah Railway Station are based on the following:

- review of the preliminary site contamination investigation
- communication with Council Design Unit Engineering and Drafting personnel
- waste classification of waste streams in accordance with the NSW Waste Classification Guidelines and relevant current NSW EPA resource recovery exemptions
- review of the Stott's Creek Resource Recovery Centre 2023/2024 commercial fees and charges.

Waste streams and associated disposal options are presented in Table 1 below.

Red imported fire ants (*Solenopsis invicta*) biosecurity

Restrictions apply on the movement of fire ant carrier material. Anyone bringing organic mulch, compost, growing media, manure, soil, hay, straw, chaff, silage, potted plants, turf, agricultural equipment, earth moving equipment, sand, gravel, chitters, coal fines, coal stone, overburden and decomposed granite into NSW from Queensland must comply with the current NSW Biosecurity (Fire Ant) Emergency Order. Noting that fire ant infested areas include both Queensland and New South Wales locations.

Moving material out of the fire ant control area in South Murwillumbah also must comply with the current Emergency Order.

Table 1: Waste streams and associated disposal options

Waste stream	Likely sources within the subject site	Pre-classification	Re-use/disposal options without license	Disposal cost (Stott's waste facility)/tonne
Concrete	Discarded slurry, concrete off-cuts.	General solid waste (non-putrescible) - Building and demolition waste	• Re-use within the subject site • Re-use on private property (less than 200 tonnes) • Dispose	$60.00
Excavated soil material (imported soil)	Excavated material from levelling works: • is naturally occurring rock and soil • contains at least 98% (by weight) natural material • does not meet the VENM definition	Excavated Natural Material (ENM)	• Re-use within the project • Re-use as ENM in accordance with resource recovery exemption (e.g. ENM, 2014) • Dispose to licensed landfill validation testing	$263.00
Excavated native soil	Excavated material from levelling works (natural material in situ): • that are not contaminated with manufactured or process residues as a result of industrial, commercial, mining or agricultural • does not contain sulphidic ores or soils	• Material is identified as Virgin Excavated Natural Material (VENM)	• Re-use on council land or private property subject to approval • Dispose to licensed landfill	$164.00

Waste stream	Likely sources within the subject site	Pre-classification	Re-use/disposal options without license	Disposal cost (Stott's waste facility)/tonne
Excavated soil material (imported soil)	Excavated material from trenching works: • is naturally occurring rock and soil • contains at least 98% (by weight) natural material does not meet the VENM definition	• Excavated Natural Material (ENM)	• Re-use within the project • Re-use as ENM in accordance with resource recovery exemption (e.g. ENM, 2014) • Dispose to licensed landfill validation testing	$263.00
General construction waste	Discarded sediment fencing etc.	General solid waste (non-putrescible) - Building and demolition waste	• Re-use within the subject site • Re-use on private property (less than 200 tonnes) • Dispose to licensed landfill	$263.00
General rubbish litter	Food scraps, paper, cardboard, plastics etc.	General solid waste (putrescible and non-putrescible)	Dispose	$263.00

NB: Disposal costs are current at the time of publication. Disposal costs need to be confirmed at the time of construction.

Note the following conditions applicable to Table 1:

Re-use on private property (soil material and concrete):

- Land holder may require development consent for filling.
- Section 143 forms required to be completed.

Building and demolition waste

Building and demolition waste means unsegregated material (other than material containing asbestos waste or liquid waste) that results from:

- the demolition, erection, construction, refurbishment or alteration of buildings other than
    - chemical works
    - mineral processing works
    - container reconditioning works
    - waste treatment facilities
- the construction, replacement, repair or alteration of infrastructure development such as roads, tunnels, sewage, water, electricity, telecommunications and airports

and includes materials such as:

- bricks, concrete, paper, plastics, glass and metal
- timber, including unsegregated timber, that may contain timber treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP)

but does not include excavated soil (for example, soil excavated to level off a site prior to construction or to enable foundations to be laid or infrastructure to be constructed).

Contact and connect

02 6670 2400

tweed.nsw.gov.au
tsc@tweed.nsw.gov.au
PO Box 819 Murwillumbah NSW 2486

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PO Box 819 Murwillumbah NSW 2486