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August 24th, 2021

Attention: Director – Transport Assessments,

Planning & Assessment, Department of Planning Industry and Environment,
Locked Bag 5022, Parramatta NSW 2124.

**Re: Submission by RVRT Inc. – Major Projects (Application SSI-7319): M1 Pacific Motorway
Extension to Raymond Terrace [Public Exhibition of Environmental Impact Statement (EIS) and
accompanying documents: July 28th, 2021 to August 24th, 2021]**

Thank you for providing an opportunity to comment on the EIS for the proposed M1 Extension to Raymond Terrace. Please find attached a brief submission on behalf of members of Richmond Vale Rail Trail (RVRT) Inc., the community-based RVRT Supporters' Group.

As outlined in the attached submission, we strongly support the proposed M1 upgrades as they will improve the overall safety and efficiency of the road network, provide opportunities for regional growth, reduce traffic volumes on local roads, and potentially facilitate enhanced access by Hunter communities to cycleways, recreational and other facilities. We also identify some specific issues and opportunities relating to future connections between the regional road network and the RVRT, which we would like to be seriously considered.

Should you require clarification about the issues/opportunities that we have identified, please do not hesitate to contact us. From our perspective, the sooner this section of the M1 is approved and upgraded, the better.

Yours faithfully,

Terry J. Lewin
Vice-president, RVRT Inc.

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Submission by: Richmond Vale Rail Trail (RVRT) Inc.

August 24th, 2021

Contact Information - Email: rvrt.inc@gmail.com Telephone: +61 433 570 920

Major Projects (Application SSI-7319): M1 Pacific Motorway Extension to Raymond Terrace – Environmental Impact Statement (EIS) Exhibition

1. About Our Group:

RVRT Inc., the community-based RVRT Supporters' Group, started as an informal group of cycling enthusiasts in the late 1990's and was registered as a not-for-profit organisation in 2015. Our members have long-standing interests in developing the RVRT as a key Hunter Region shared pathway and community resource, promoting a broad range of lifestyle, recreational, environmental, cultural/heritage, business and tourist activities. Collectively, we have detailed knowledge about the RVRT, other cycleways and trails, their associated benefits, and current community views and expectations. RVRT Inc. is committed to working with local communities, other organisations and stakeholder groups, to help promote and deliver this important regional initiative.

2. Current Status of RVRT Proposal:

Background. The RVRT is identified as a priority in both the Hunter Regional Plan (October, 2016) and the Greater Newcastle Metropolitan Plan (September, 2018). It will provide a 40km continuous (off-road) shared cycling and walking pathway from Shortland to Kurri Kurri, connecting 4 Hunter Region LGAs. The Hexham to Kurri Kurri trail section follows the alignment of the former Richmond Vale Railway (a private coal line that closed in 1987), while disused water pipeline corridors are utilised from Shortland to Tarro and for the Fletcher connection. The RVRT will uniquely link metropolitan and rural areas, showcase an array of environmental and heritage features, promote healthier, active lifestyles, and facilitate regional tourism and development. Hopefully, it will also form the centrepiece in future networks, helping to link regional communities, the beach and the vineyards.

Approvals. Development approvals are currently being sought for the RVRT [Newcastle LGA segment: DA and EIS was exhibited in August, 2020 (DA2020/00641); first Cessnock LGA segment: approved in April, 2021 (DA 8-2020-204631); remaining Cessnock and Lake Macquarie LGA segments: will be exhibited shortly, as Reviews of Environmental Factors (REFs)].

3. General Comments about Proposed M1 Motorway Extension:

For convenience, the expression '*M1 Extension EIS*' is used throughout this submission when referencing the 28-Chapter Environmental Impact Statement (July, 2021; Publication No.: 21.171) and its associated documentation and Appendices (A to U).

Potential benefits and mitigation measures. Planning for the proposed 15-kilometre M1 Extension has been underway for almost two decades. Clearly, this sub-region within the Lower Hunter needs an **improved strategic junction** between the M1 Pacific Motorway, John Renshaw Drive, the New England Highway and the Pacific Highway – not just to **improve traffic flows** within the National Land Transport Network, but to **improve the lives of local Hunter communities** by reducing traffic volumes and congestion on local roads and enhancing day-to-day access to a broad range of resources, including cycleways, recreational, commercial, employment, tourism and other facilities.

As detailed throughout the M1 Extension EIS, the **main benefits of the project** include: improved travel times and road network efficiency; improved long-term route reliability (e.g., better flood immunity, reduced congestion during holiday travel periods); overall road safety improvements; improved conditions for

pedestrians and cyclists; more efficient access to regional facilities (e.g., regional airport, Newcastle port, regional employment areas); and further opportunities for regional economic growth.

We **strongly support the proposed M1 upgrades**. We also applaud all efforts to “... **avoid and minimise environmental and social impacts**” (e.g., minimising impacts on coastal wetlands, utilising already-cleared land adjacent to existing developments, floodplain viaducts, provisions for fauna connectivity, noise and vibration treatments, optimising the fit with existing and proposed regional developments, and reducing cumulative impacts).

Vision and objectives. Adoption of appropriate ‘**urban design and landscape strategies**’ is also important. In this regard, we **support the overall vision and identified objectives** (EIS, Section 15.3): **Vision** - “... *Provide a flowing green corridor that integrates sensitively with the natural environment and community setting of the area. The project will capitalise on its setting with expansive views over the Hunter River floodplain with simple and well-designed project elements*”; **Objectives** - “... *a flowing road alignment that is responsive and integrated with the landscape*”; “... *a landscaped Motorway that integrates with the adjoining natural setting*”; “... *an enjoyable, interesting motorway*”; and “... *value the communities and towns along the road*”. Providing **well integrated, attractive links to the RVRT** and other regional/local cycleways also needs to be an explicit part of these project design objectives, if this vision for the M1 Extension is to be fully realized.

Finalised plans. From an RVRT perspective, it is **clearly advantageous to have approved finalised plans for the M1 Extension**, as well as for the Lower Hunter Freight Corridor (LHFC), which is also currently on public exhibition (Project No.: PS124841; July, 2021). Hopefully, finalisation of RVRT planning approvals, completion of detailed RVRT concept designs (including linkages to the road network), and actual construction of the RVRT will all become that little bit easier and smoother with confirmed plans in place for the M1 Extension and an identified and protected future freight rail corridor.

Of course, it is also critical that the proposed design features, mitigation measures, and construction controls all materialise when the M1 Extension work is actually undertaken (currently scheduled for 2023 to 2028), and that they are **not jettisoned in future cost cutting exercises**, post EIS and other approvals.

4. Cumulative Impacts and Protection of Local Amenity:

The M1 Extension EIS addresses ‘Cumulative impacts’ in a few different ways:

Traffic from other developments. Firstly, Table 7-16 (Section 7.6) examines **potential traffic impacts for relevant identified projects**. On the western side of the Hunter River, four relevant projects are identified: Emerging Black Hill Precinct; Hexham Straight; LHFC; and the RVRT (‘Shortland to Tarro cycleway’).

With respect to the Emerging Black Hill Precinct, the following is noted (in Table 7-16):
“... *the development [two adjacent IN2 Industrial Estates] substantially impacts the performance of the network in future horizon years due to the magnitude of traffic generated out of the development*”, accounting for “... *about 12 per cent of all trips in the study area by 2048*”.

Based on our local knowledge about these developments [Newcastle LGA estate, DA2020-01497, approved July, 2021; Cessnock LGA estate, DA No. 8/2018/539/1, under appeal], and their recent modified Development Applications, these projected impacts will be mediated somewhat by future developer-funded improvements to the eastern end of John Renshaw Drive and its existing intersection with the M1. As correctly noted in the M1 Extension EIS documentation, all access to these Industrial Estates will “... *come from John Renshaw Drive west of the Weakleys Drive intersection which is outside the construction footprint*”. However, the local community seeks **further reassurance** from Transport for NSW that it will **never approve southern access to**

these industrial estates via future M1 modifications and Blackhill Road, which would severely compromise the lifestyles and amenity of this quiet, semi-rural community. Such restrictions would also be consistent with Cessnock Council's Development Control Plan for this area [Chapter E18 (Black Hill Employment Area) - Section 18.1.8], which expressly prohibits any access between Blackhill Road and the IN2 estate within Cessnock LGA.

With respect to the RVRT, the following is noted (in Table 7-16):

*"This project is **not expected to result in cumulative impact with the project**. The Richmond Vale Rail Trail to Shortland would encourage additional pedestrian and cyclist use within the study area. The Shortland to Tarro Bike Trail would intersect with the project and provide an additional pedestrian and cyclist routes within the study area. Overall, it **would have minimal impact on the traffic within the study area**".*

Combined impacts. Secondly, Chapter 23 of the EIS further examines 'Cumulative impacts' by assessing the **combined contributions** of the M1 Extension Project and a range of existing and proposed local developments. However, it is also noted that: "As the alignment for the Lower Hunter Freight Corridor development has not yet been determined, this development is not shown on Figure 23-1" (Page 23-2). While the final LHFC alignment was not known at that time, and has not yet been approved, a well-argued case is now available for the **preferred corridor** (Transport for NSW's Draft Strategic Environmental Assessment, July, 2021).

With respect to the RVRT and the LHFC, the following is stated in Chapter 23: "The design of the project [M1 Extension] **allows for the Lower Hunter Freight Corridor**" and "The Richmond Vale Rail Trail **has been considered in the design** of the project" (Pages 23-5 and 23-6). It is also noted in this Chapter that: "... the identified developments with the potential to interact with the project are in various stages of delivery and planning, with a number of developments yet to be approved by the relevant authority. The likely impacts of these developments will be **assessed by the relevant approval authority** as part of the development consent process for each development" (Page 23-8).

*"Following construction, the [M1 Extension] project is expected to have **positive cumulative impacts in relation to road access and transport efficiency**, particularly for **freight and commercial vehicles**. The project would support existing land uses and future industrial and commercial growth and development in the area, for example in the Emerging Black Hill Precinct"* (Page 23-13).

Noise impacts. The only other amenity impact that we would like to briefly comment on relates to **noise - both during the construction and operational phases**. Figure 8-4 in the M1 Extension EIS shows the 'highly noise affected residential receivers' during the construction phase, which are mainly located on the northern side of the New England Highway at Tarro. Other public locations that could be noise affected include Tarro Public School and the Hunter Region Botanic Gardens. Many of the same properties will also be impacted during operation of the completed M1 Extension. Existing and proposed noise barriers are shown in Figure 8-5, which predominantly reduce noise impacts on the Black Hill, Beresfield and Tarro communities. We **trust that these barriers will be installed as soon as possible, monitored, and refined over time**, with additional noise mitigation measures offered to impacted residences and non-residential properties, if required.

5. Links to Regional Cycleways Network:

While RVRT Inc. members are primarily focused on advocacy, planning, promotion, and development of the actual Richmond Vale Rail Trail, the **opportunities for connection to existing and proposed future cycleways and trails** are a very important consideration. In our case, these can be framed as connections to the North, West, and South-East of the RVRT: to the North are connections to the Tarro/Beresfield area, and the wider Maitland LGA; to the West are connections from Kurri Kurri into the wider Cessnock LGA [and to the current and proposed trails identified in Cessnock's recent 'Trails Strategy' (May, 2020)]; and to the South-East are connections to Minmi, Fletcher, the University of Newcastle, and the broader Newcastle *CycleSafe* Network.

Regional connections. Development of the M1 Extension presents a further **positive opportunity to establish safe and enduring regional cycleways connections**, for both ‘active transport’ and ‘recreational’ cyclists.

There are several sections of the M1 Extension EIS that address cycling and pedestrian activities, with the key sections being: 5.3.16 and 7.3.7 (*‘Walking and cycling’*); 7.4.3 (*‘Other transport modes’*); and Appendix G (Transport and Traffic Working Paper), section 4.8 (*‘Pedestrian and cycling facilities’*).

Some noteworthy cycling-related information and summary statements in the EIS include the following:

Existing local cycling infrastructure (by difficulty level) is presented in **Figure 4-13**, while the existing and proposed cycling networks within the study area are shown in **Figure 5-13** (Appendix G).

*“Cyclists would be able to use the 2.5 metre to three metre wide **shoulders provided on the motorway** and two metre to 2.5 metre wide sealed shoulders provided on ramps. This would **improve cycle connectivity through the study area**” ...“Overall, the project would provide **additional cycling routes and enhanced safety for cyclists**” (Section 7.5.9, Page 7-44; Section 22.4.2, Page 22-14).*

*“The project would deliver **improved pedestrian access** ... and improved access to cyclist connectivity and crossing points. These infrastructure changes coupled with **a reduction of traffic volumes on the existing road network** would reduce the interaction between vehicles, pedestrians and cyclists, resulting in improve safety outcomes in the study area” (Section 7.5.8, Page 7-43).*

Connection checks. There are **five sub-maps within Figure 5-13** (Appendix G), which illustrate some of the existing and proposed cycle routes. The first three of these sub-maps include pathways ‘along’, ‘up’ or ‘down’ selected future M1 batters to allow cyclists to **move from one part of the road network to another** (e.g., southbound from the M1 Extension to Lenaghans Drive, or up the batter from the realigned Aurizon access road to connect with the westbound access from the M1 Extension to the New England Highway). **Whether these pathways actually provide sufficient and workable linkages** between parts of the road network is **hard to determine** at first viewing. Consequently, we encourage Transport for NSW to undertake ongoing consultation with Newcastle Cycleways Movement Inc., and other local cycling groups, to **confirm the likely utility of these connections**.

As a general principle, we commend the attempt to provide better cycleways connections for the Black Hill, Beresfield/Tarro and Heatherbrae communities – we just **need to be reassured** that the actual proposals meet the specific needs of these communities, as well as those of the broader Hunter cycling community.

6. Future Connections between Road Network and RVRT - Specific Issues/Opportunities:

The major (direct) point of connection between the RVRT and the M1 Extension occurs at Tarro. This is a complex sub-area that involves lots of **intersections between different transport routes and modes**, including: the M1 Extension; the New England Highway and Tarro interchange; the Aurizon access road; the Main North Rail Line and Tarro station; the RVRT; and the LHFC (preferred route). It is essential that we carefully work through the associated constraints and the various potential connections, to arrive at an optimal solution. However, as noted below, there are new connection and construction opportunities that arise from the midst of this complexity.

RVRT Tarro connection – requirements and preliminary RVRT documentation. With respect to the RVRT, **the northern connection at Tarro is critical** – as it will help to meet some of the trail’s key regional objectives, including facilitating links between Hunter communities and provision of safe, off-road cycling and walking

connections to Newcastle's north-western suburbs (Tarro and Beresfield) and onto the wider Maitland LGA [i.e., away from the busy New England and Pacific Highways].

To better appreciate the nature of the RVRT connections that are required, it is useful to identify the **various types of potential users** for this multi-purpose trail:

- 1) 'Active transport' (experienced) cyclists, seeking to regularly commute between the extended Tarro area and Sandgate/Newcastle, Fletcher, Minmi, etc, or to undertake longer recreational rides (e.g., to Kurri Kurri);
- 2) 'Recreational' cyclists and families seeking to explore Hunter Wetlands National Park, the Hunter Wetlands Centre, Blue Gum Hills Regional Park, Stockrington State Conversation Area, etc, mainly via shared cycleways and low-difficulty routes (e.g., Anderson Drive, Tarro);
- 3) Walkers and Bird Watchers seeking to have similar experiences to the recreational cyclists and their families (who may well seek to access the area from Tarro station); and
- 4) Individuals or families with mobility constraints (e.g., wheelchair users, families with younger children, or children in prams, etc).

All four of these user groups need to be able to safely access the RVRT at Tarro.

Although the DA and EIS for the Newcastle LGA section of the RVRT have been publicly exhibited by Newcastle City Council (DA2020/00641, August, 2020), only **preliminary documentation about possible RVRT connections** at Tarro was provided (in part, due to uncertainties about the proposed M1 to Raymond Terrace Extension, the LHFC, and other local land users, such as the Aurizon facility).

Figure 1 has been prepared to further highlight some of the Tarro RVRT connection features that have been discussed previously (*without consideration of the M1 Extension*). Importantly, it was considered desirable to establish a safe connection between the end of the water pipeline corridor route and Anderson Drive; thereby, facilitating connections to existing low-difficulty cycling routes, to Tarro station, and to Tarro Park (and a potential Parking area). This is illustrated on the right-hand side of **Figure 1**, which shows a direct connection from the pipeline corridor to Anderson Drive (via a long span footbridge over the New England Highway).

The left-hand side of **Figure 1** shows a different connection option, which was originally presented as Figure 2-2 from Appendix H of the 2020 RVRT EIS. Although Tarro connection options were not described or evaluated in the exhibited EIS, Figure 2-2 is consistent with the preferred option outlined in the draft Concept Design Report (Section 5.3.5, GHD, January 2018). In that Report, several options were considered for the Tarro Overpass Bridge, based on discussions in September 2016. The preferred option included: a separate concrete structure adjacent to the existing road bridge over the highway, which also extended over the Tarro entry ramp that provides eastbound access to the New England Highway.

RVRT and M1 Extension at Tarro – current considerations and new opportunities. The design of the M1 Extension includes a mixture of embankments and viaducts, with the viaducts (over the coastal wetlands sections) beginning near the existing Tarro interchange. Consequently, it is proposed to relocate parts of the Aurizon access road (eastward) and to use the same M1 Extension underpass for connecting the RVRT to the regional road network. This configuration is presented in **Figure 5-13 (map 2) from Appendix G of the M1 Extension EIS**, which shows the existing and proposed cycle routes, and the realigned Aurizon access road.

The two currently proposed main changes (in the M1 Extension EIS) relating specifically to the RVRT are:

- 1) *"The proposed Shortland to Tarro shared path would be intersected by the project with a **possible diversion to the realigned Aurizon access road**. Where practical, minimum two metre shoulders have been adopted during construction to minimise disruption to cyclists. However, shoulders would be reduced at the Tarro interchange. Measures to maintain cyclist access (including communication, signage and alternative routes)*

will be implemented as part of the Traffic Management Plan and associated traffic control plans” (Section 7.4.3, Page 7-29); and

- 2) ***“Replacing the existing gore crossings at the Tarro interchange with new ramps which would create a link between the main alignment in both directions and the future Richmond Vale Rail Trail from Tarro to Shortland”*** (Section 5.3.16, Page 5-49; and Section 7.5.9, Page 7-44).

Facilitating connections between the RVRT and the New England Highway (and potentially the M1 Extension) is an **important first step**. However, such connections will primarily meet the needs of the ‘active transport’ group of (experienced) cyclists. To meet the needs of other potential RVRT users, **additional strategies and facilities are required**.

Figure 2 is a composite image that we have prepared to **facilitate further discussion about possible RVRT connections at Tarro**. It combines information from the M1 Extension EIS (Figure 5-13, map2), the recently released preferred LHFC route, and the preliminary RVRT documentation about the Tarro connection (from **Figure 1**), together with related possibilities.

Opportunity 1 – Safe RVRT connections for walkers and less experienced cyclists. A safe, accessible path is needed for this group of trail users between the end of the RVRT pipeline section and Anderson Drive, Tarro station and Tarro Park (for Parking). While a long span footbridge directly over the New England Highway is one possibility (the solid green line in Figure 2), the alternate proposal (the dotted green line in Figure 2) seems to offer greater flexibility, namely a **separate concrete structure adjacent to the existing road bridge over the highway**, with an extension over the eastbound Tarro entry ramp. This could also be blended with the currently proposed access route for eastbound experienced cyclists exiting from the New England Highway (i.e., at the top of the ramp, they could cross the existing bridge [at a formal crossing, if needed] onto the new footbridge). Ideally, discussions about such possibilities need to be undertaken soon, since, apart from the M1 Extension, additional lanes and other upgrades are planned concurrently for that section of the New England Highway. From a construction and disruption perspective, planning and undertaking all of these desired changes simultaneously would be preferable.

Opportunity 2 – Safe RVRT connections for individuals/families with mobility constraints. Clearly, the gradients associated with the proposed connections in Opportunity 1 would make RVRT access difficult for individuals or families with mobility constraints. However, some additional options now present themselves. By realigning the Aurizon access road, **parts of the existing sealed access road become available for other uses**. In particular, we suggest that a safe Parking area and turn around bay (for RVRT drop off purposes) could be provided for RVRT users. This would be prioritised for individuals/families with mobility constraints, but some additional spots could be available for general use. This solution is not unlike the most recent RVRT proposal (public correspondence between GHD and Newcastle Council dated June 24th, 2021), which adds a small DDA [Disability Discrimination Act 1992] compliant car park and driveway at Ironbark Creek [at the southern end of the pipeline corridor component of the trail] in order to overcome particular gradient restrictions. In that location, there are also constraints on the land available for a parking space, which is not the case here. This presents a clear opportunity to utilise some of the existing road infrastructure for a new, positive purpose.

Opportunity 3 – Additional RVRT connections to the M1 for experienced cyclists. Because there are batters on the M1 Extension immediately to the west of the realigned Aurizon access road underpass, there are **additional opportunities to connect the RVRT to the M1** – which would clearly be of benefit to experienced cyclists. For example, access paths from the RVRT could be provided up the batters on both sides, to enable experienced cyclists to head either east or west along the M1 Extension [connections to the New England Highway are already provided for via the reconfigured Tarro Overpass links]. This would benefit regular cycling commuters (e.g., linking locations like Black Hill and Heatherbrae to the RVRT), as well as weekend experienced recreational cyclists. Similar pathways at the M1 batters near Lenaghans Drive mean that an experienced

cyclist could in fact ride an interesting (and moderately challenging) RVRT-based loop route that crossed very few public roads – for example, riding from the Minmi RVRT connection, across the Minmi Junction segment of the trail to Hexham, then along the pipeline section to Tarro, with a return trip via the M1 Extension and Lenaghans Drive to Minmi – a 20+ km round trip.

Opportunity 4 – Property acquisitions that benefit both the M1 Extension and the RVRT. Planning for any major infrastructure requires consideration of current land uses and users, often requiring protracted discussions and negotiations. Where possible, the M1 Extension has utilised publicly owned land. However, some acquisitions (and temporary leases during the construction phase) are necessary. **Figure 3** illustrates the likely property acquisitions in the Tarro area associated with the M1 Extension. Some additional local acquisitions will probably also be needed for the LHFC, but well into the future. From our perspective, this represents a relatively unique opportunity for Transport for NSW and Newcastle City Council to **work closely together to finalise plans and approvals for both the M1 Extension and the RVRT Tarro connection**, and to work towards their completion as soon as possible. Both developments are clearly in the public interest and will benefit generations of Hunter residents well into the future.

7. Ongoing Consultation:

A considerable amount of work has clearly been undertaken to bring planning for the M1 Extension to its current point, with many progressive refinements – and final approvals appear not to be too far away. However, we would like to encourage Transport for NSW to **maintain its level of engagement with the community and to undertake ongoing consultation** (including with groups such as Newcastle Cycleways Movement Inc., other local cycling and community groups, and with Newcastle City and Port Stephens Councils). Our specific interest is in the RVRT and the broader cycleways network – and we think that some modest adjustments are needed and some additional opportunities are there to be activated.

8. Project Staging:

Finalising plans for the M1 Extension is in everyone's interests, and the sooner this upgrade work is completed, the better. Ideally, construction can occur simultaneously on both sides of the Hunter River, in much the same way as the Hunter Expressway work was undertaken. Alternatively, the Black Hill Interchange to Tomago Interchange section could be prioritised, which would help to alleviate the existing bottlenecks sooner that occur between the end of the M1 in Black Hill and Hexham.

From our particular (RVRT focused) perspective, some of the preparatory work in and around the Tarro interchange (e.g., upgrades to the Tarro exits and entries, additional highway lanes, overpass bridge enhancements, relocation of the Aurizon access road, and so on) could also be undertaken as a separate project, in advance of the main M1 Extension upgrades.

Thank you for considering these issues/opportunities.

Figure 1. Extracted images from preliminary RVRT documentation about possible connections at Tarro

(Right-hand image) – Figure 3-1d from EIS for Newcastle LGA RVRT section (Proposal Overview, Page 45, GHD, October 2019) [Exhibited: August, 2020 - DA2020/00641], showing northern section of RVRT running along water pipeline corridor, across a purpose built long span footbridge over New England Highway, and on to Anderson Drive and Tarro Park (playing fields), where Parking would be available.

(Image below) – Figure 2-2 from “Appendix H – Traffic and transport assessment” of abovenamed EIS (Page 5, GHD, March 2019), showing another possible connection between RVRT and Anderson Drive. Although options for the Tarro connection were not documented in the exhibited 2020 EIS, Figure 2-2 is **consistent with the preferred Tarro Overpass Bridge option** from the draft Concept Design Report in 2018.

2.1.2 Tarro

The proposed rail trail would terminate south of the New England Highway, with a future potential connection to Anderson Drive, as shown in Figure 2-2.

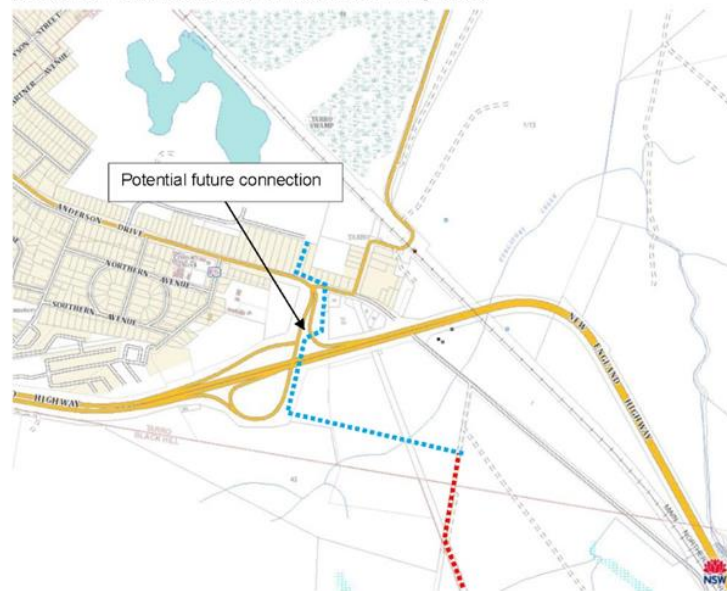


Figure 2-2 Local road network - Tarro

Base image source: NSW Spatial Services maps.six.nsw.gov.au



Figure 2. Composite image to facilitate discussion about possible RVRT connections at Tarro and M1 related issues/opportunities

Base image: Figure 5-13 (map 2) from Appendix G of M1 Extension EIS, showing existing and proposed cycle routes, and realigned Aurizon access road.

Superimposed image (Pink): Corresponding Lower Hunter Freight Corridor (LHFC) section, extracted from Page 9 of LHFC Maps for Consultation (July, 2021).

Possible RVRT links (Dark Green): Modified versions of Figure 3-1d (solid line) & Appendix H Figure 2-2 (dotted line) from RVRT EIS (Newcastle LGA section).

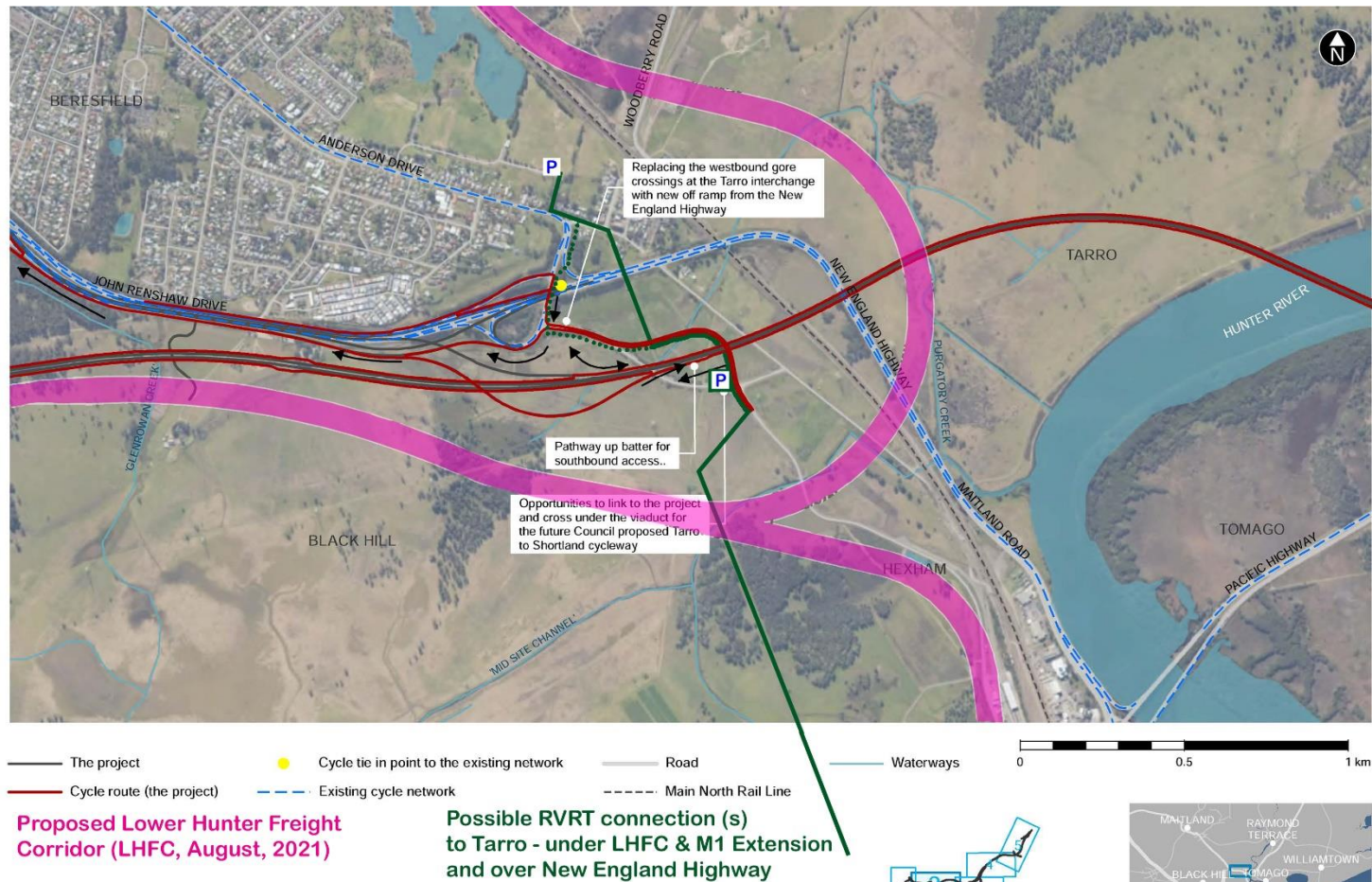


Figure 5-13 Existing and proposed cycle route (map 2 of 5)

Modified Figure 5-13 (August, 2021):
M1 Extension, proposed LHFC,
and possible RVRT connetions

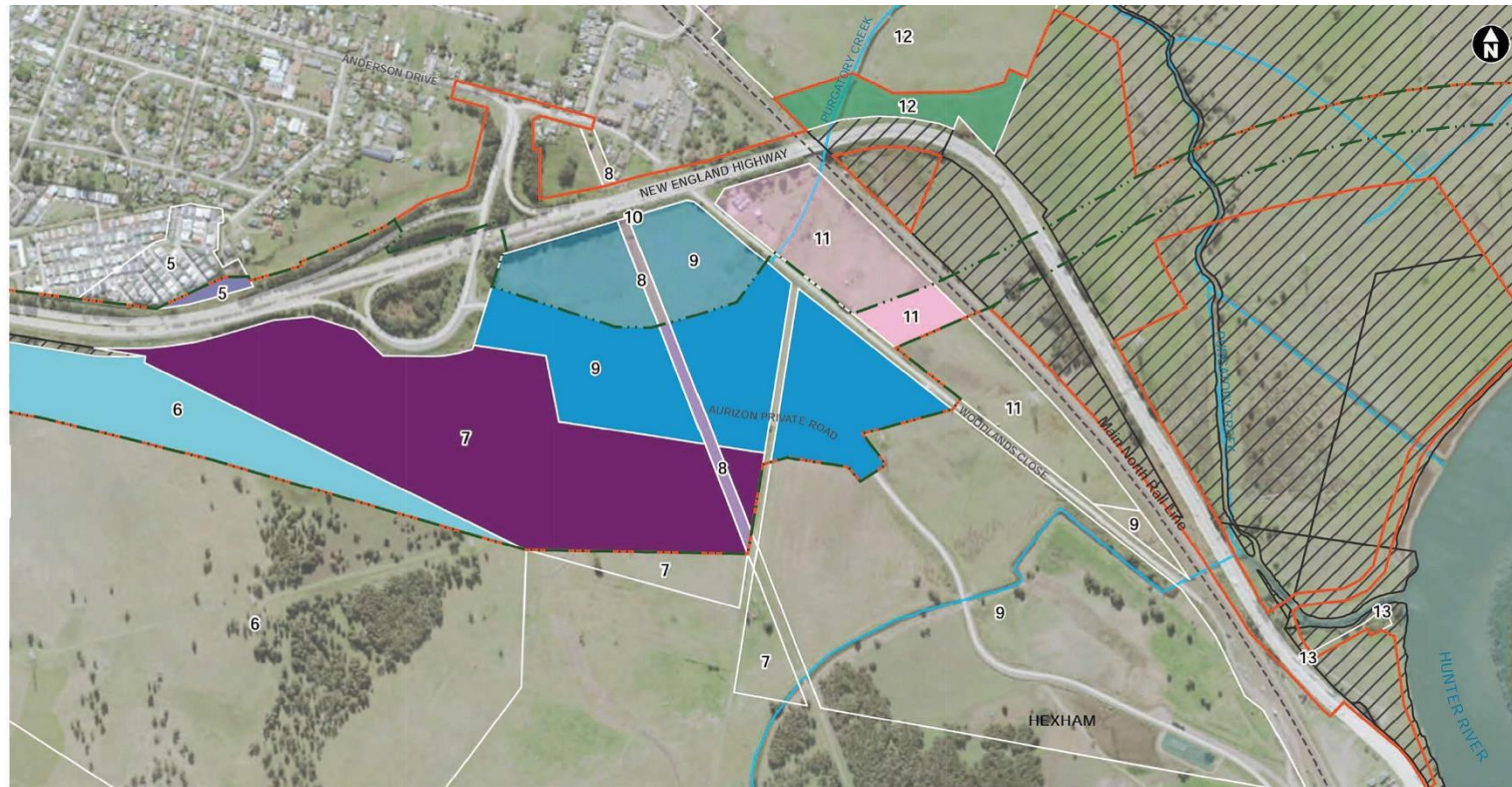
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Figure 3. Likely property acquisitions associated with Tarro section of M1 Extension

Extracted from Table 5-1 and Figure 5-1 (map 3), Appendix N of M1 Extension EIS. Shaded properties 6, 7 and 11 (privately owned) and 8 (Hunter Water Corporation pipeline corridor) are scheduled to be acquired as part of the M1 Extension project, as are parts of property 9 (Aurizon Operations Limited).



Construction footprint
Operational footprint

Properties impacted by acquisition or leasing have a unique property ID number and may include more than one lot

Project land owned by Transport

Waterways

0 150 300 m

Note: Sections of the properties that are impacted by acquisition are shown in unique full colour and sections of the properties impacted by lease arrangements are shown in the same colour at 30% transparency.

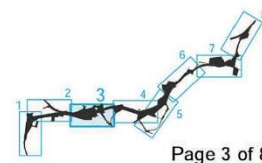


Figure 5-1 Properties to be acquired or leased (map 3 of 8)

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