



Australian Government

**BUILDING OUR FUTURE**



# M1 Pacific Motorway extension to Raymond Terrace

## Project update - Environmental Impact Statement

July 2021

**You are invited to make a submission on the M1 Pacific Motorway extension to Raymond Terrace Environmental Impact Statement (EIS).**



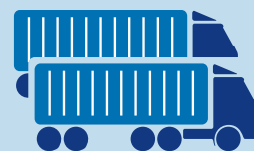
The Australian and NSW governments have committed \$2 billion to deliver the M1 Pacific Motorway extension to Raymond Terrace and Hexham Straight projects. The extension would boost the regional economy and improve connectivity, road transport efficiency and safety for local and interstate motorists.

The project addresses a key national motorway 'missing link' between Sydney and Brisbane as the existing M1 Pacific Motorway, New England Highway and Pacific Highway carry some of the highest traffic volumes across the Hunter.

Once complete, the extension would remove up to 25,000 vehicles a day from key congestion and merge points along this corridor and would help keep freight, commuters and tourists moving.

The project includes 15 kilometres of dual carriageway and provides motorway access from the existing road network from four new interchanges at Black Hill, Tarro, Tomago and Raymond Terrace.

The project also includes a 2.6 kilometre viaduct over the Hunter River and floodplain, the Main North Rail Line, and the New England Highway. It would also provide new bridge crossings over local waterways at Tarro and Raymond Terrace, and an overpass for Masonite Road at Heatherbrae.



**Better movement of freight**



**Saving motorists up to 9 minutes during peak time**



**Bypass up to 5 traffic lights**



## Key benefits

On opening, the M1 Pacific Motorway extension to Raymond Terrace would save motorists between seven and nine minutes of travel time during peak periods, bypass up to five sets of traffic lights and reduce traffic demand on existing key routes across the road network.

The project is a priority for the Australian and NSW governments as the M1 Pacific Motorway and Pacific Highway are major contributors to Australia's economy, forming part of the National Land Transport Network. The extension would be a key link in this vital piece of the nation's infrastructure, connecting Melbourne, Sydney and Brisbane.

The project's objectives of improving road safety, road freight efficiency for heavy vehicles and easing congestion all support the NSW Government's Future Transport 2056 Strategy.

The M1 Pacific Motorway extension to Raymond Terrace project complements the recently completed Pacific Highway upgrade program and meets the Australian and NSW governments' strategic planning for regional NSW.

The project would provide safer road conditions, reduce travel times for all road users, improve transport efficiency, ease congestion, improve flood immunity and support economic development.

The key benefits of the proposed extension include:

- Improved connection between the M1 Pacific Motorway and Pacific Highway
- Improved traffic flow for motorists and freight for more reliable travel times
- Improved access to the surrounding road network
- Improved safety for all road users
- Reduced traffic volumes on the existing road network, thereby improving conditions for pedestrians and cyclists
- More efficient access to facilitate economic growth for the Lower Hunter and key regional employment areas such as the Port of Newcastle, Newcastle Airport, Tomago, Beresfield and Black Hill.

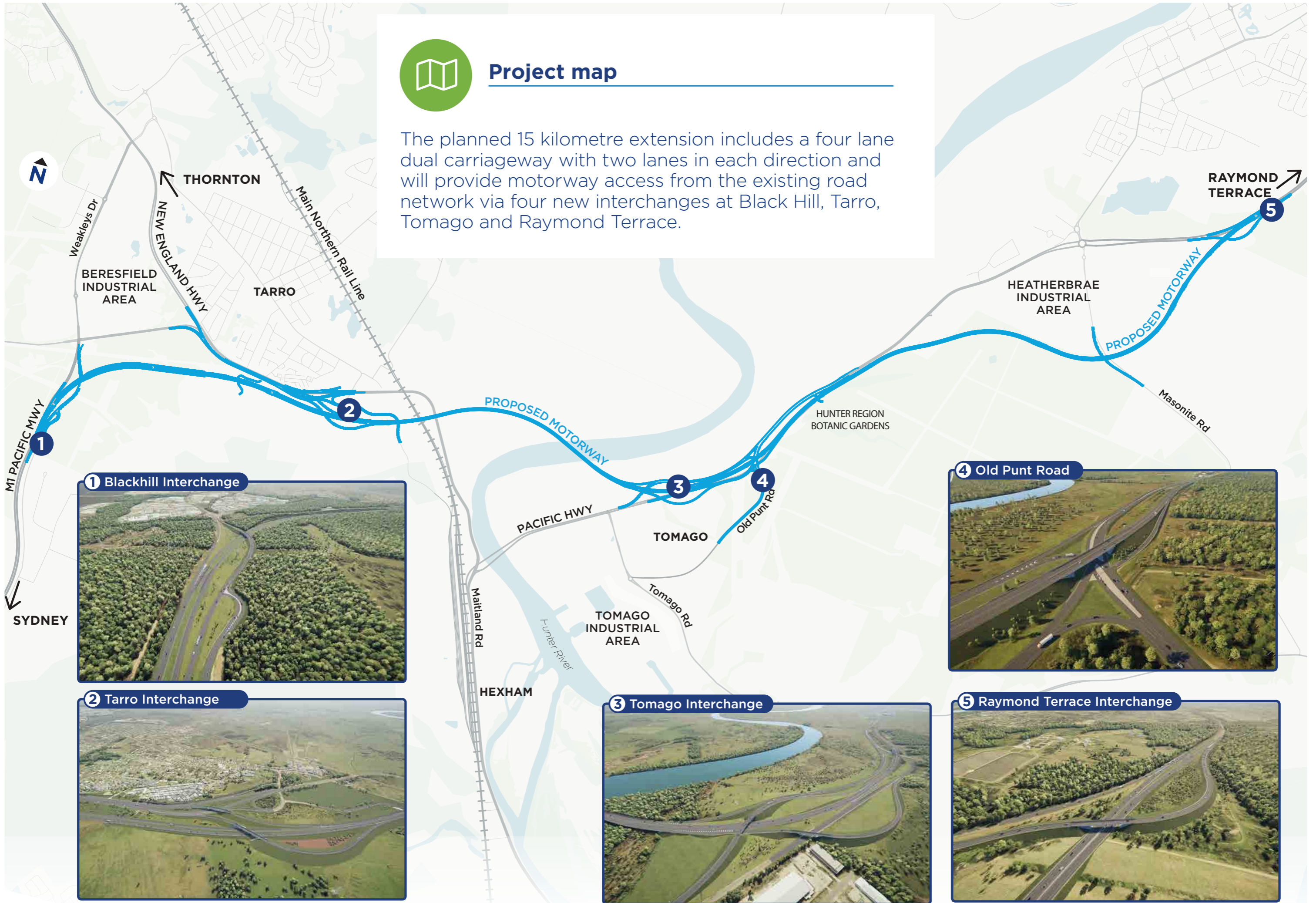


Artist's impression looking south approaching Hunter Region Botanic Gardens



## Project map

The planned 15 kilometre extension includes a four lane dual carriageway with two lanes in each direction and will provide motorway access from the existing road network via four new interchanges at Black Hill, Tarro, Tomago and Raymond Terrace.





# Construction

The M1 Pacific Motorway extension to Raymond Terrace is expected to take around four years to build and open to traffic in 2028.

During construction there would be some disruption to traffic on the road network surrounding the project, in particular sections of the M1 Pacific Motorway, New England Highway, John Renshaw Drive, Masonite Road, Tomago Road, Old Punt Road, and the Pacific Highway.

Construction activities are expected to be completed while maintaining through-traffic on existing roads.

The successful contractors would develop construction, environmental and traffic management plans to deliver the project with impacts minimised on local residents, the existing road network and the environment.

## Construction hours

Standard construction hours in NSW are:

- Monday to Friday 7 am to 6 pm
- Saturday 8 am to 1 pm

We are seeking approval for extended construction hours to allow the project to be completed as quickly as possible to reduce impacts on road users and the community.

The proposed extended hours would be:

- Monday to Friday 6 am to 7 pm
- Saturday 7 am to 5 pm
- Sunday and public holidays 7 am to 5 pm

The proposed extended construction hours would only apply to normal construction activities. If required, blasting would only be carried out Monday to Friday between 9 am and 5 pm and Saturday between 9 am and 1 pm.

## Out of hours work

Out of hours work, such as night work, would be required where construction activities would otherwise severely impact traffic flow, stakeholders or worker safety. We would carry out targeted consultation with potentially affected residents before work starts.

## Information for local residents

The majority of construction would be away from residents, and be carried out in the construction corridor. This would minimise impacts on the existing route and surrounding road network.

Temporary detours and construction traffic management measures would be used to ensure the safety of motorists, pedestrians, cyclists and workers.

Lane closures and temporary short-term diversions may be required if full road closures are needed to carry out critical construction activities which could not otherwise be carried out.

We would work closely with directly impacted residents and nearby neighbours, including residents at Tarro. A 24-hour information line would be staffed throughout construction. Residents would be regularly consulted and informed through emails, letters and the project website.

## Information for motorists

The contractors would work with the Transport Management Centre to manage all planned and unplanned incidents during construction. Traffic changes would be communicated to motorists through electronic message signs and **livetraffic.com**

Motorists would be advised of temporary changed traffic conditions via construction signage.

## Construction compounds

Secured temporary construction compounds would be located close to the project. Compounds would potentially be used for:

- Offices and parking
- Materials handling and storage
- Crushing, batching and precasting equipment
- Deliveries

 For more information go to **Chapter 5 in the EIS.**



Artist's impression facing north towards Black Hill interchange



## Traffic and transport

The project is predicted to boost the regional economy and improve connectivity, road transport efficiency and safety for local and interstate motorists.

The existing road network of the M1 Pacific Motorway, New England Highway, John Renshaw Drive and the Pacific Highway currently experiences high levels of traffic congestion and delays for motorists during peak periods, particularly the school holidays.

Extensive traffic modelling has been carried out to primarily assess the predicted traffic performance of the project and the forecast redistribution of traffic on the road network in the study area.

The M1 Pacific Motorway extension to Raymond Terrace is expected to carry up to 25,000 vehicles per day when it opens to traffic in 2028, reducing traffic volumes on the existing road network by about 13 to 50 per cent depending on the location.



**The project would result in a shift in traffic flow off the Pacific Highway, reducing traffic through Heatherbrae.**

Traffic relief on key parts of the surrounding road network is expected when the project opens to traffic, including the nearby key intersections.

The project would provide a motorway standard bypass of the existing congested road network and save motorists up to nine minutes of travel time during peak periods. It would help achieve road safety outcomes by providing a free flowing road which would bypass five sets of traffic lights and reduce the potential for rear-end or congestion related crashes.

The project would deliver improved access to the Hunter Region Botanic Gardens and Masonite Road, as well as to cyclist connectivity and crossing points. Together with the reduction of traffic volumes on the existing road network, the project is expected to improve road safety in the area.

 For more information go to **Chapter 7 in the EIS.**



## Noise and vibration

Vehicle engines, exhausts, tyres and brakes can create traffic noise for people working and living near roads.

As part of the EIS, the potential noise and vibration impacts during construction and operation of the project have been assessed in accordance with relevant NSW noise and vibration guidelines.

### How we assessed noise

A detailed noise assessment was carried out to evaluate and predict the potential impact of construction and operation. Noise monitoring and traffic counts were carried out to measure traffic noise from the existing road network.

A computer-based noise model was used to simulate the existing noise environment, predict future traffic noise levels and assess the need for noise mitigation measures.

### Managing construction noise

Practical steps would be taken to minimise noise on construction sites including switching off engines when not in use, keeping machinery well maintained and avoiding continuous work at one location. Additionally:

- Work which must be done at night to avoid heavier traffic conditions would be carefully managed and residents would be advised/consulted in advance
- Simultaneous use of loud machines or construction methods would be avoided where possible.

A Construction Noise and Vibration Management Plan would be prepared for the project. This would:

- Identify nearby sensitive receivers
- Include a description of construction equipment and working hours
- Identify relevant sleep disturbance screening levels and outline measures to manage these
- Include noise and vibration monitoring and reporting requirements
- Include construction timetabling to minimise noise impacts
- Include procedures for consulting residents and business owners likely to be affected by noise and vibration
- Detail contingency measures to be implemented in the event of non-compliance and/or noise complaints.

Some properties would also be eligible for consideration of at house noise mitigation. These properties are identified in the EIS's noise and vibration assessment. Eligible property owners would be contacted by the project team to discuss possible mitigation measures before construction starts.

Another noise report would be produced during detailed design, to confirm operational noise mitigation measures. A post construction operational noise report would also be prepared. This report would check actual road traffic noise levels against those predicted in the EIS.

 For more information go to **Chapter 8 in the EIS.**

### Noise level comparison

People's perception of noise is subjective and strongly influenced by their surrounding environment. Generally, a change of less than 3dB is difficult for most people to detect. A 10dB change is an approximate doubling or halving of noise.

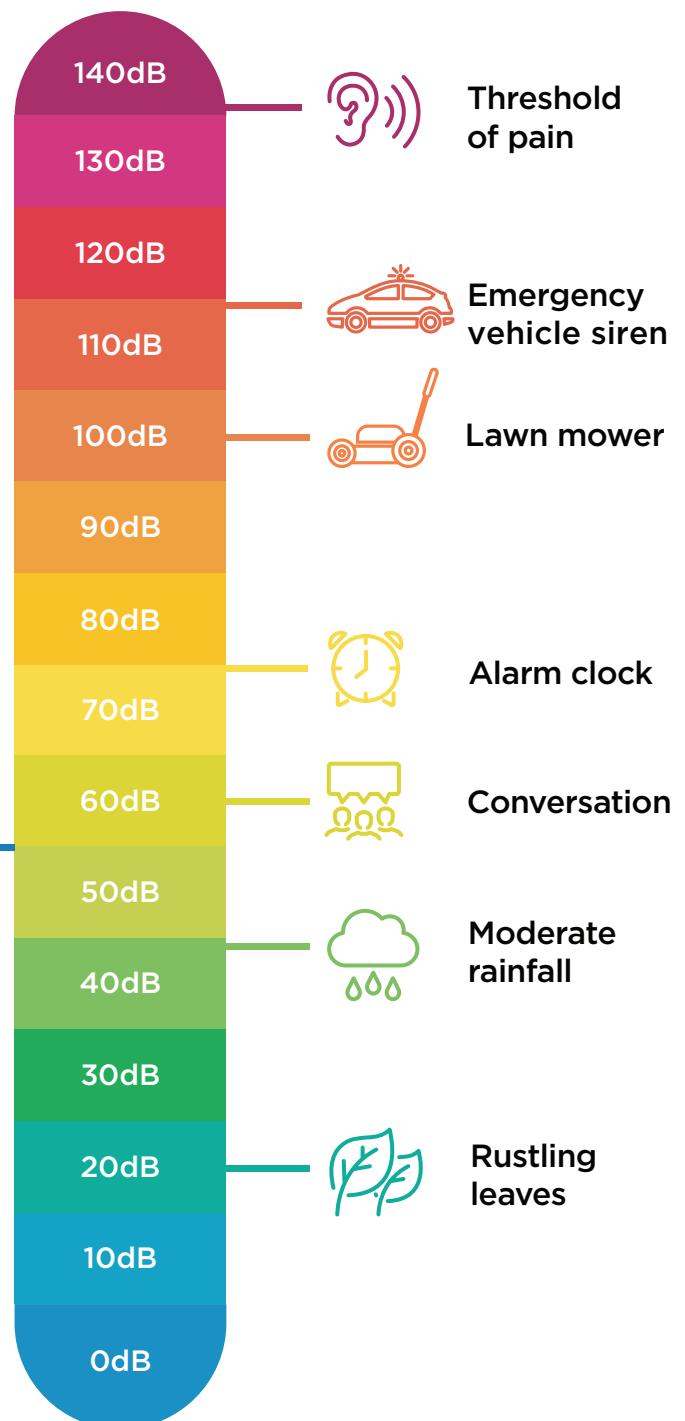
The noise report identifies 189 properties (including non-residential) which would be eligible for consideration of additional noise mitigation. Additional noise mitigation includes use of quieter road pavements, noise barriers and at-house noise mitigation.

Lower noise pavements are proposed where the project is close to residential receivers, including along the upgraded section of the New England Highway.



The use of proposed quieter pavements reduces the number of properties requiring noise treatment by about 15 per cent.

The project also proposes to build noise barriers at key locations along the New England Highway.

With implementation of quieter pavements and noise barriers, the overall road traffic noise is expected to reduce for the majority of properties on opening.





Standard guidelines for noise are:

-  **50** decibels at night
-  **55** decibels during the day

for new **freeways or main roads**

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-  **55** decibels at night
-  **60** decibels during the day

for upgrades of **existing roads**



## Flooding and hydrology

The proposed project is located across the Lower Hunter River Floodplain and the Tomago Sandbeds Catchment Area.

As part of the EIS, flood models have been completed to assess the potential project impacts on flooding and hydrology.

The project incorporates a number of bridges and culverts which help to safely move water away from the road.

The proposal includes a 2.6 kilometre long viaduct crossing the Hunter River, substantially reducing upstream flooding impacts and improving flood



immunity and accessibility along the National Land Transport Network.

The completed project would be built to withstand a minimum one-in-20 year flood event and provides an alternative flood emergency and evacuation route to the existing road network.

Before construction, environmental management measures would be implemented to manage hydrological impacts, including the preparation of a Flood Management Plan, detailed construction staging plans to minimise flood risk during construction and further refining temporary and permanent works.



For more information go to **Chapter 10 in the EIS.**

Artist's impression of viaduct over the Hunter River



## Biodiversity

The concept design has been developed to avoid and minimise impacts on biodiversity wherever possible.

Transport takes its environmental responsibilities seriously and looks to avoid, minimise and mitigate the impacts of infrastructure on the environment as much as possible.

Sometimes, impacts cannot be avoided or mitigated. When this happens, we offset these impacts by protecting areas with similar plants and animals as the areas affected by the project.

To compensate for impacts to threatened ecological communities and species, biodiversity offsets would be provided in accordance with the NSW Biodiversity Offsets Policy for Major Projects.

The project would impact:

- About 174 hectares of native vegetation, including 136 hectares of threatened ecological communities
- Less than one hectare of Subtropical and Temperate Coastal Saltmarsh threatened ecological community
- Four threatened flora species, including *Diuris arenaria*, *Callistemon linearifolius*, *Eucalyptus parramattensis* subsp. *decadens* and *Persicaria elatior*, as well as the loss of fauna habitat features which are known to support locally occurring threatened fauna species.



Oaklands Diuris Orchid (*Diuris arenaria*)

During several years of survey between 2015 and 2019, no koalas or koala activity were identified in the construction footprint. The project has been designed to be located close to adjoining existing roads and industrial areas, minimising the impact on koala movement. However, 51.12 hectares of vegetation types which contain koala feed tree species in Tomago and Heatherbrae would be removed. The project is not expected to significantly impact the koala or its habitat, and has minimal impact to fauna connectivity.

Biodiversity impacts have been avoided and minimised, where possible, by locating the project within or next to existing development and infrastructure corridors, or in areas modified by agriculture. Additional measures and strategies proposed to avoid and minimise impacts include the provision of fauna connectivity structures, fencing to prevent injury to fauna, and appropriate revegetation of areas disturbed by construction.

A biodiversity offset strategy has been prepared for the project to address unavoidable residual impacts, including those to koala habitat.



Tall Knotweed (*Persicaria elatior*)

 Credit: Jackie Miles

A Construction Environmental Management Plan, including a Flora and Fauna Management Plan, would be developed to manage potential environmental impacts during construction. After construction, the site would be rehabilitated and landscaped.



For more information go to **Chapter 9 in the EIS.**

The project would provide

**5 overhead  
fauna crossing  
structures**

and more than

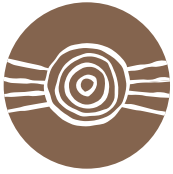
**6km of fauna  
exclusion fencing**

## We recognise highway projects can impact threatened species and native wildlife

We propose to implement a wide range of design and management measures to minimise impacts during and after the building of the project. These include pre-clearing surveys, a two-stage clearing process to reduce animal

impacts and relocating threatened plants. During the route selection stage for the proposed project, the preferred alignment was selected in part because of its reduced impacts on biodiversity compared to other options.





## Aboriginal heritage

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The project's construction footprint and surrounding region are important to, and are used by, Aboriginal people. The project team has been working closely with Aboriginal stakeholders to identify, manage and mitigate potential impacts to Aboriginal heritage.

Transport follows a four-stage process of consultation and investigation to assess known or potential impacts to Aboriginal cultural heritage. The process includes.

- Assessing if the project could impact Aboriginal cultural heritage, identifying if further assessment is necessary
- Surveying the project area
- Formal consultation and preparing a Cultural Heritage Assessment Report
- Post-approval implementation of management recommendations identified in the assessment and consultation.

At all stages, local Aboriginal stakeholders and a suitably qualified archaeologist have been engaged to assist the project team. The Aboriginal Cultural Heritage Report and Cultural Values Assessment report are included in the EIS.

An Aboriginal Cultural Heritage Management Plan would be prepared in consultation with all relevant Aboriginal groups and include:

- Details of investigations completed or planned
- Identification of areas of Aboriginal heritage value and protection measures to be applied during construction
- Procedures outlining salvage of Aboriginal objects, analysis and management of salvaged cultural material as agreed with Registered Aboriginal Parties
- Procedures to be implemented if previously unidentified Aboriginal objects are discovered during construction
- An induction program on the management of Aboriginal heritage values
- Opportunities for ongoing Aboriginal community engagement in the project.



For more information go to **Chapter 12 in the EIS.**



## Consultation

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We recognise the M1 Pacific Motorway extension to Raymond Terrace design is important to the community.

Since the release of the preferred route and concept design in 2016, we have engaged with many community members and stakeholders who live and work in and around our project area.

We have listened to better understand your concerns and have incorporated your feedback and suggestions into our design where possible.

Design refinements have been made as a direct result of consultation and reflect our long history of consultation as part of this project, which began in 2004 when the M1 Pacific Motorway Planning Strategy was announced.

Transport values consulting and engaging with the community because we know it leads to better outcomes for stakeholders.

### Design refinements

The design of the M1 Pacific Motorway extension to Raymond Terrace project has been updated since the project was displayed to the community in 2016. The EIS has been prepared based on this refined design.

The EIS exhibition is an opportunity for the community to make comment on the project, potential environmental impacts and proposed mitigation measures for the proposed extension.

Key design improvements outlined in the October 2020 community update included:

- Improved direct access from the Pacific Highway into and out of the Hunter Region Botanic Gardens for motorists, pedestrians and cyclists
- A centralised interchange located at Old Punt Road to improve connectivity, road transport efficiency and safety for all motorists, and minimise impact with the proposed AGL Power Plant infrastructure project
- Improved access to the northbound M1 Motorway entry ramp at Tomago which allows motorists from Newcastle to access the M1 Motorway sooner.



Artist's impression looking north from Tomago Road intersection towards the Pacific Highway northbound entry ramp



## How to make a submission

The Department of Planning, Industry and Environment (DPIE) has placed the EIS on public exhibition from **Wednesday 28 July until midnight on Tuesday 24 August**. You can make a submission on the EIS to DPIE either online or by mail.

### Written submissions

If you cannot lodge your submission online, you can write to:

**Attention: Director – Transport Assessments  
Planning and Assessment  
Department of Planning, Industry and Environment  
Locked Bag 5022  
Parramatta NSW 2124**

If you do not want your personal information disclosed, please make this clear at the top of your covering letter and do not include personal details in your attached submission.

If you post your submission, it needs to be received by DPIE before the close of the exhibition period and include the following:

- Your name and address, at the top of the letter only
- The name of the application and the application number: **SSI-7319**
- Your submission as a separate attachment
- In your submission include a statement on whether you support or object to the proposal and reasons why you support or object to the proposal
- A declaration of any reportable political donations made in the previous two years

To find out what is reportable, and for a disclosure form, go to

 [planning.nsw.gov.au/  
donationsandgiftdisclosure](https://planning.nsw.gov.au/donationsandgiftdisclosure)

or telephone **1300 305 695** for a copy. Note the disclosure requirements apply however a submission is made.

For more information on making a submission about this project, please call DPIE on **1300 305 695**.

### Online submissions

To make a submission online, create a user account on DPIE's Major Projects website at

 [planningportal.nsw.gov.au/projects/  
on-exhibition](https://planningportal.nsw.gov.au/projects/on-exhibition)

To create a user account, click the 'Sign In' icon in the top right of the homepage or under the 'Services' tab and then click the 'Make a Submission' link.

When you are logged in, find the M1 Pacific Motorway extension to Raymond Terrace project and click the 'Make a Submission' icon.

Anyone can make a submission about the project during the exhibition period, which runs from Wednesday 28 July until midnight on Tuesday 24 August.

Before making your submission, please read DPIE's Privacy Statement at

 [planning.nsw.gov.au/privacy](https://planning.nsw.gov.au/privacy)

or telephone **1300 305 695** for a copy. DPIE will publish your submission on its website in accordance with its Privacy Statement.

## Project approval

At the end of the EIS exhibition, DPIE will provide Transport with a copy of all submissions received. We will then prepare a submissions report to respond to the issues raised during the public exhibition.

The submissions report will be made publicly available on DPIE's Major Projects website for stakeholders and the community to view. The report will be submitted to DPIE and helps to inform the Minister for Planning's decision on the project.

If the project is approved by the Minister for Planning, it will be constructed and operated in accordance with the mitigation measures described in the EIS, our response to submissions report and the Minister's Conditions of Approval.

The plans proposed in the EIS may evolve, depending on several factors including community feedback and the construction methodologies developed by the contractors once appointed.

## Community information sessions

We recognise the M1 Pacific Motorway extension to Raymond Terrace design is important to the community and we are committed to continuing to work with you and adapting to the changing circumstances around COVID-19.

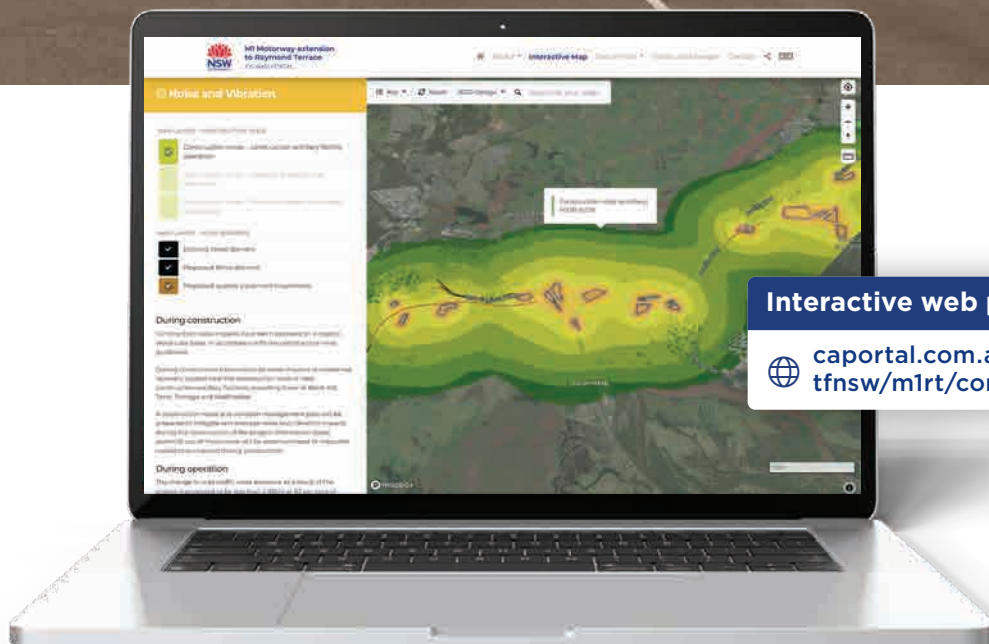
To ensure you have the opportunity to learn more about the EIS and to ask our project team questions, we will arrange to hold either a virtual information session or a staffed display in the week commencing 9 August.

**For more information, and to pre-register to attend, scan the QR code**



**or call 1800 094 895 during business hours**

Artist's impression looking south from Pacific Highway towards bridge over M1 Motorway and the Raymond Terrace interchange



**Interactive web portal**

[caportal.com.au/  
tfnsw/m1rt/consultation](https://caportal.com.au/tfnsw/m1rt/consultation)



Artist's impression facing west from the Hunter Region Botanic Gardens entry towards M1 Motorway bridge and Pacific Highway intersection

## Find out more

For more information on this project scan this code, or visit [nswroads.work/m12rt](https://nswroads.work/m12rt)



## Contact us

For more information on the M1 extension to Raymond Terrace or to join our mailing list (email or post), please contact our project team:

📞 1800 094 895 (business hours)

@ M1RT@jacobs.com

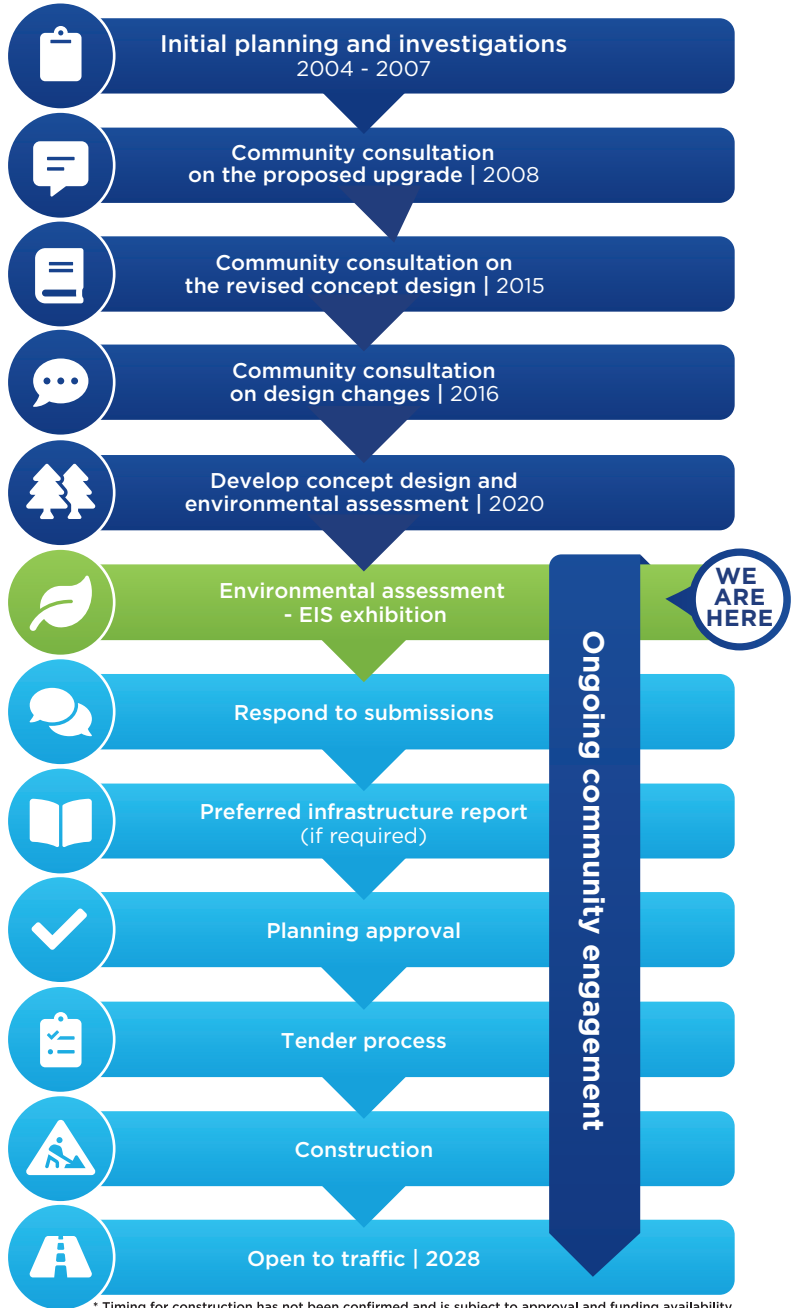
🌐 [nswroads.work/m12rt](https://nswroads.work/m12rt)

✉ M1 to Raymond Terrace Project Manager  
Locked Bag 2030,  
Newcastle NSW 2300



If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 094 895

## What happens next?



\* Timing for construction has not been confirmed and is subject to approval and funding availability.

