

March 2020

# Palm Beach to Tugun – Package C

## Pacific Motorway (M1) Varsity Lakes to Tugun Upgrade

### About the Palm Beach to Tugun (PB2T) package

The \$1.03 billion Pacific Motorway Varsity Lakes to Tugun (VL2T) project is jointly funded by the Australian and Queensland governments. The VL2T upgrade will widen 10 kilometres of the M1, support 837 jobs over the life of the project, and be constructed in packages to ensure faster delivery and best value for money.

Design is underway for the section between Palm Beach (Nineteenth Avenue) and Tugun (Exit 95), and this package will see significant improvements to the way locals commute and move around their neighbourhoods.

The PB2T section will widen the M1 to a minimum of three lanes in each direction, preserve a rail corridor, replace the road surface and install smart motorway technologies. It will also:

- construct the southern section of a new two-way western service road between Tallegbudgera (Exit 89) and KP McGrath Drive
- widen and upgrade the Nineteenth Avenue overpass and approaches, including a new signalised intersection to connect to the new service road
- construct a new signalised intersection at KP McGrath Drive
- combine the southbound off-ramps at Palm Beach (Exit 92) and Currumbin (Exit 93)
- continue improvements for active transport connections by extending facilities for the full length of the western service road, upgrading the existing access across the Nineteenth Avenue overpass, and improving paths through the Palm Beach Interchange (Exit 92) and beyond to Guineas Creek Road.

### Key features include



**5 kilometres of  
road widening**



**New two-way  
western  
service road**



**Widen and upgrade  
Nineteenth  
Avenue overpass**



**New intersection  
Nineteenth Avenue  
and western  
service road**



**New combined  
Exit 92/Exit 93  
southbound  
off-ramp**



**New and improved  
active transport  
facilities**



Australian Government

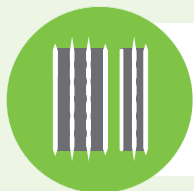
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Queensland Government

# What you've said...

Feedback from the community for the VL2T upgrade has been incorporated into the design.



*“The M1 needs service roads to provide alternative travel options off the motorway”*

The VL2T upgrade will deliver a new two-way western service road between Tallebudgera Interchange (Exit 89) and Palm Beach (Exit 92)



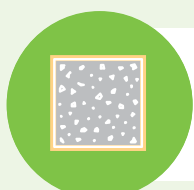
*“There is a dangerous entry near Caltex, Exit 92 northbound”*

Safety will be improved at the northbound Exit 92 on-ramp at KP McGrath Drive by installing a signalised intersection



*“There are not enough lanes from Exit 71 to Tugun”*

The VL2T upgrade will deliver a minimum of three lanes in each direction, with four and five lanes in particularly congested areas



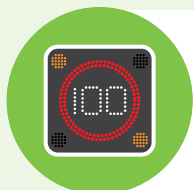
*“Traffic noise needs to be reduced”*

A new stone mastic asphalt will be used on all motorway lanes, replacing current concrete surfaces, while new, improved and relocated noise barriers (where required) will help reduce road traffic noise



*“Trucks must be restricted to the left lane only at all times”*

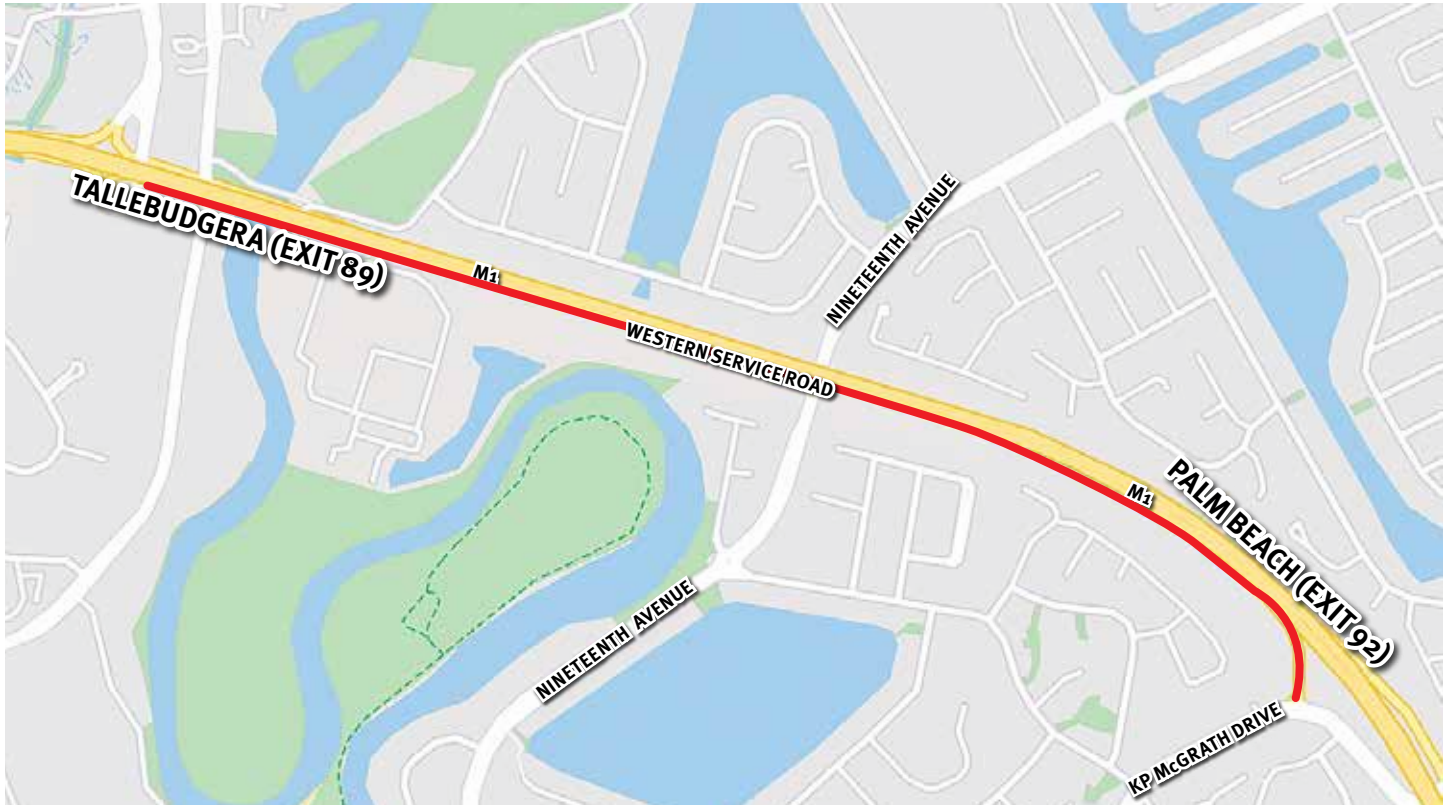
Signage directing trucks to use left lanes will be installed in both directions for the length of the VL2T upgrade



*“We need smart signage warnings for traffic hazards and safety alerts, and active speed monitoring”*

Smart motorway technologies will be installed on the VL2T upgrade, including new electronic message boards, variable speed limit signs and traffic signals at all on-ramps to control the flow of traffic entering the M1 during incidents and peak times

# Western service road



The upgrade will include constructing a new western service road, with one lane in each direction, between Tallebudgera (Exit 89) and Palm Beach (Exit 92), including a four-way signalised intersection with Nineteenth Avenue.

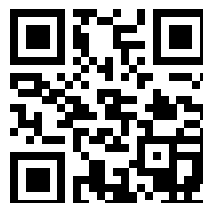
The new two-way service road will provide alternative travel options for local traffic. This change will improve routes for residents in the following areas:

- **Burleigh and Tallebudgera** – local traffic heading south to Palm Beach, Currumbin and beyond will have the choice of using the M1 or the new western service road.
- **Elanora and Palm Beach** – residents will be able to travel north or south on the western service road using a new signalised intersection that directly connects to the Nineteenth Avenue overpass on the western side of the M1, removing the heavy reliance on the Palm Beach Interchange at Exit 92.
- **Currumbin and Tugun** – motorists can expect reduced congestion on this southern section of the motorway resulting from the above changed journeys.

Depending on your destination, local trips will have the option to avoid the motorway altogether, including those choosing the more active options of walking and bike riding.

The new western service road will include an off-road cycle path and a concrete pedestrian path starting at Tallebudgera (Exit 89), connecting through the new Nineteenth Avenue signalised intersection and continuing down to Palm Beach (Exit 92). Cyclists and pedestrians heading further south will then move to a dedicated active transport path that continues to Guineas Creek Road. Travel beyond this point will be via local road pathways.

For a virtual tour of the new western service road, scan the QR code using your smart phone, or view the video at [www.tmr.qld.gov.au/projects](http://www.tmr.qld.gov.au/projects) and search for the Pacific Motorway Palm Beach to Tugun upgrade.



Use your smart phone on the QR code to view the western service road video.

# Nineteenth Avenue overpass




The Nineteenth Avenue overpass will be upgraded to improve access to the M1 and help ensure that side roads continue to support the local road network.

Changes to the overpass will cater for the alternative route options provided by the new western service road.

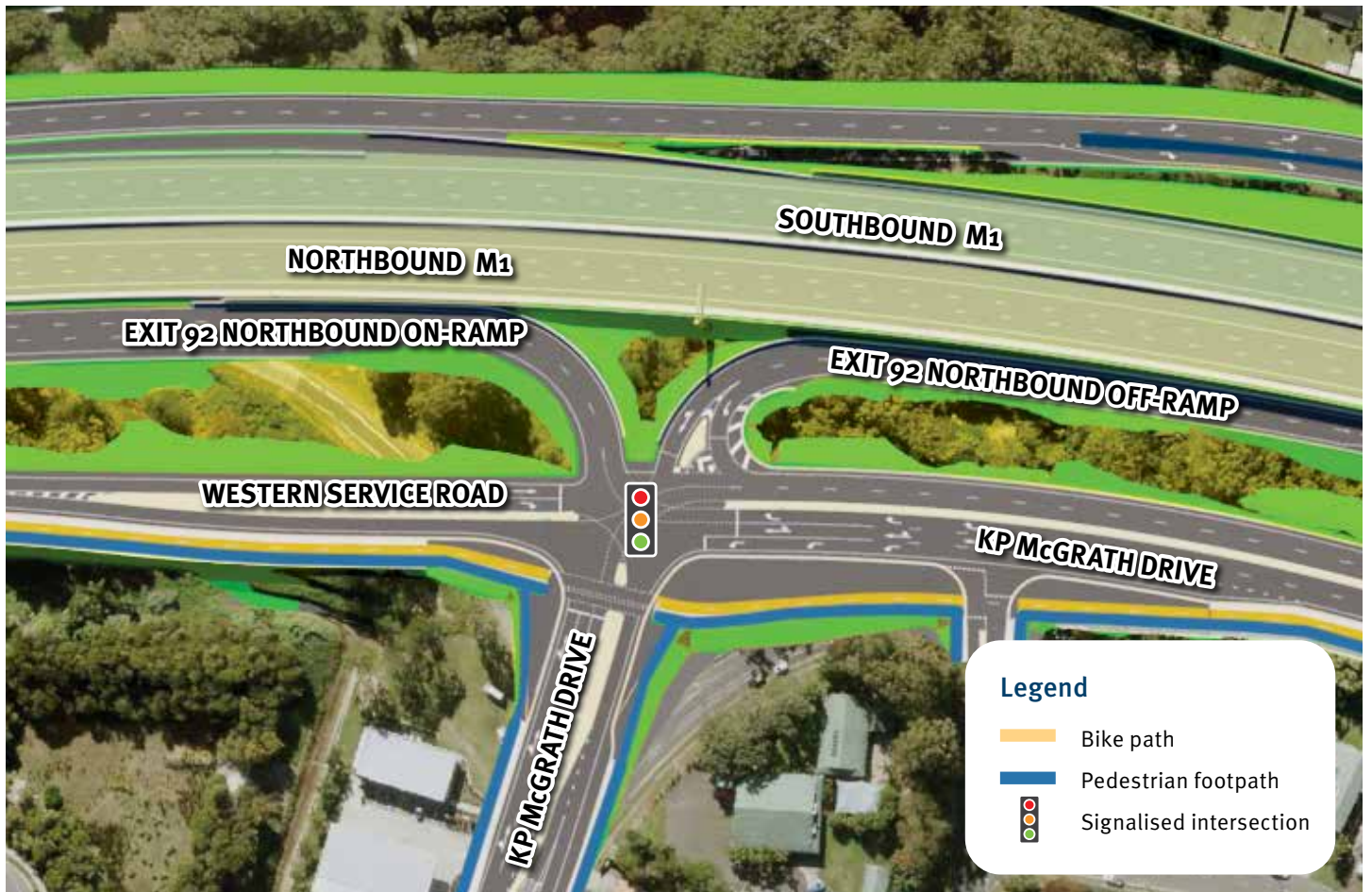
- Nineteenth Avenue will be upgraded on both sides approaching the overpass.
- A new signalised intersection will be constructed on the western side of the overpass to directly connect to the new two-way western service road. TMR will monitor traffic patterns through the intersection and adjust the traffic signal timings as required to achieve optimum traffic flows on both Nineteenth Avenue and the new western service road.
- Travelling from the eastern side, the overpass will widen to three lanes on the approach to the new intersection, with:
  - one straight-through lane to continue on Nineteenth Avenue towards Elanora
  - one dedicated left-turn lane to travel south on the new service road towards KP McGrath Drive and Palm Beach Avenue
  - one dedicated right-turn lane to travel north on the service road and join the motorway at the new Tallebudgera (Exit 89) on-ramp.
- Travelling from the western side and approaching the new signalised intersection before the overpass, the same turn lanes will be provided:
  - a straight-through lane to cross the overpass and continue on Nineteenth Avenue towards Palm Beach
  - a dedicated left-turn lane to access the service road north to join the motorway at the new Tallebudgera (Exit 89) on-ramp
  - a dedicated right-turn lane to join the service road and head south towards KP McGrath Drive and Palm Beach Avenue.
- The overpass bridge will be reconstructed to allow for the motorway widening.
- Active transport paths will be provided across the overpass and on the new western service road.



## Legend

-  Bike path
-  Pedestrian footpath
-  Signalised intersection

# Nineteenth Avenue to KP McGrath Drive



The new service road will continue south from Nineteenth Avenue and connect into a new signalised intersection joining KP McGrath Drive and the northbound on and off-ramps.

This new signalised intersection will have:

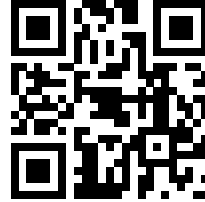
- Exit 92 northbound off-ramp from the motorway
- Exit 92 northbound on-ramp to the motorway
- New western service road
- KP McGrath Drive (west)
- KP McGrath Drive (south to Palm Beach Avenue).

Additional changes in this location include:

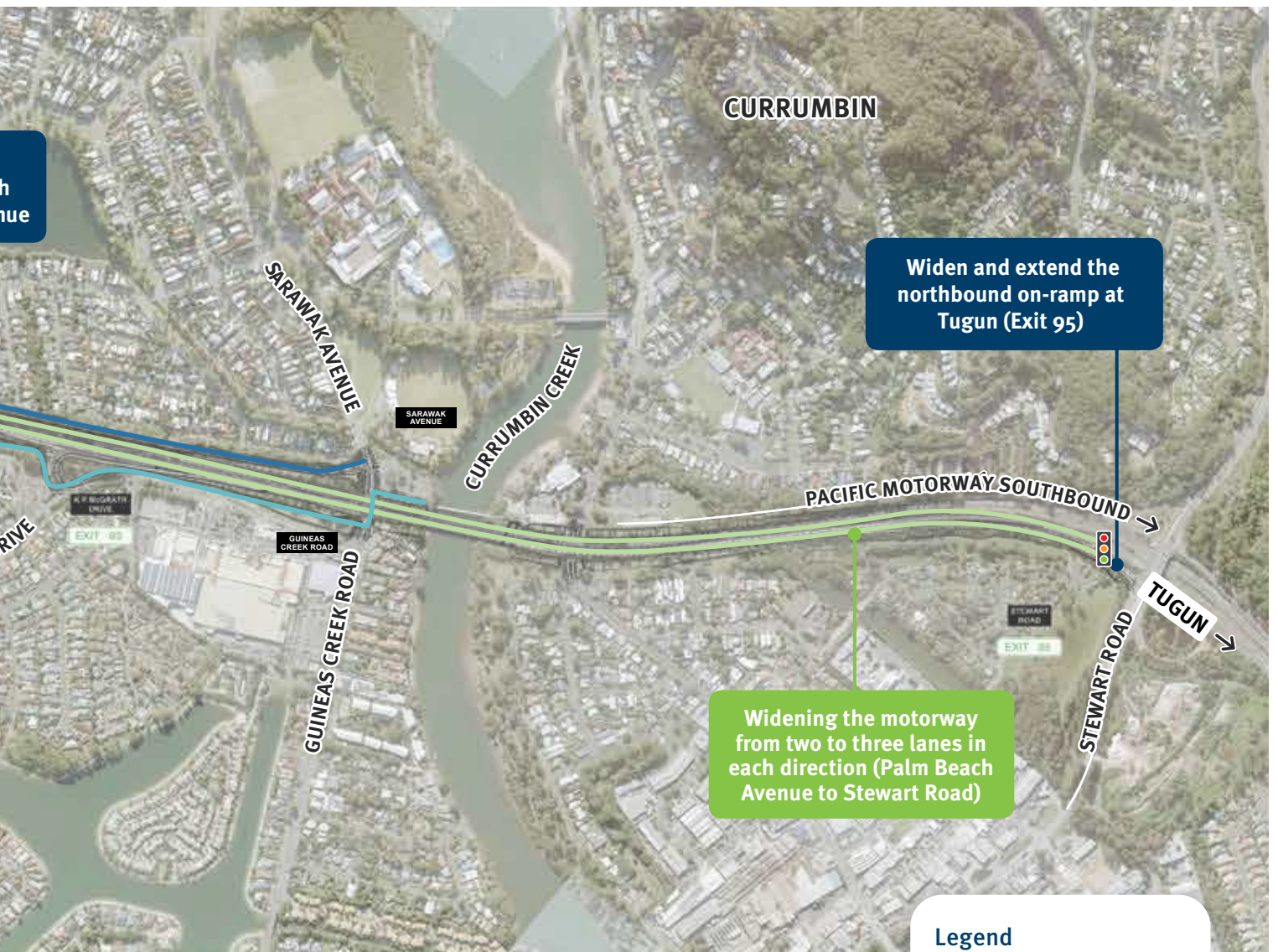
- relocating the off-ramp to north of the Palm Beach Avenue underpass to help improve pedestrian safety at the underpass (refer page 8 for more information).
- access to Kalamunda Close from KP McGrath Drive will be changed to left-in and left-out only, to safely cater for the additional lanes through the new intersection.
- residents can access Palm Beach Avenue via a new U-turn facility at the KP McGrath Drive intersection or use Seaview Parade for alternative routes.

# Palm Beach to Tugun – Package C









Use your smart phone to scan the QR code to see a video drive-through of the Package C upgrade.



**Legend**

-  Motorway widening
-  New service roads
-  Active transport connections
-  New traffic signals

# Palm Beach Interchange (Exit 92)

The Palm Beach Interchange will be upgraded to improve safety on both sides of the motorway for motorists, pedestrians and bike riders.

## On the western side of the motorway

The northbound off-ramp that currently ends at Pines Lane will be extended by approximately 400 metres to exit the motorway at the new KP McGrath Drive signalised intersection (refer page 5). This will minimise traffic volumes around Pines Lane and provide a safer environment for the many pedestrian and bike movements in this area.

Pines Lane itself will be changed to left-in and left-out only, again to improve active transport safety and to assist traffic flows along KP McGrath Drive and Palm Beach Avenue. Motorists will be able to U-turn at the new KP McGrath Drive signalised intersection to access Palm Beach Avenue on the eastern side. Emergency vehicles will be able to right-turn from KP McGrath Drive into Pines Lane via a dedicated 'emergency services only' access point.

A two-way, three-metre-wide cycle path will be included along the western service road and this path will connect through the new signalised intersection at KP McGrath Drive.

## On the eastern side of the motorway

Currently, the Palm Beach (Exit 92) southbound on-ramp is in close proximity to the Currumbin (Exit 93) off-ramp. This causes a high level of unsafe weaving and merging manoeuvres. With the additional lanes constructed on the motorway, combined with an increase in traffic flows, this unsafe weaving issue would be increased.

To improve safety for motorists, the off-ramps for Palm Beach and Currumbin will be combined into one off-ramp, leaving the motorway at Palm Beach (Exit 92). Access to Sarawak Avenue will be via the Palm Beach (Exit 92) off-ramp and through the signalised intersection. Motorists will then travel straight ahead on a new dedicated one-way service lane, directly adjacent to but separate from the motorway lanes, to exit at Sarawak Avenue. Advance signage will be in place to ensure road users are aware of the change. This is not expected to have any major impacts to local travel times.

Active transport users will also benefit from a safer environment through the interchange. A new three-metre-wide shared path will provide a safe, accessible connection between both sides of the M1. A signalised crossing at the southbound Exit 92 off-ramp and Palm Beach Avenue intersection will allow active transport users to safely access local destinations via the existing City of Gold Coast cycle network.



### Legend

-  Bike path
-  Pedestrian footpath
-  New access to Sarawak Avenue
-  Raised priority crossing



# Currumbin to Tugun

The combined Exit 92 and Exit 93 southbound off-ramps are a major change for this section of the upgrade that will improve safety for local traffic and motorway users.

## Combined Exit 92 and Exit 93 southbound ramps

The existing Exit 92 and Exit 93 southbound ramps will be merged into one southbound off-ramp at Palm Beach (Exit 92). This means motorists who would usually leave the motorway at Exit 93 will use Palm Beach (Exit 92) to access Sarawak Avenue. The new off-ramp will extend from Palm Beach Avenue to Sarawak Avenue and will be a dedicated lane to Exit 93, separated from the motorway by a one-metre-high concrete safety barrier.

Consolidating the two off-ramps is required to ensure road user safety and reduced M1 congestion. Appropriate signage will be in place to ensure road users are aware of the changes to access Sarawak Avenue. This is not expected to have any major impacts to local travel times and will ensure a safer exit off the motorway.

## Tugun (Exit 95)

The Exit 95 northbound on-ramp will be widened from two to three lanes at Stewart Road. As with all on-ramps within the VL2T upgrade, ramp traffic signal metering will feature on the northbound on-ramp, to manage traffic entering the M1.

There will be no changes to the existing off-ramp at Exit 95 southbound. The widened motorway will include three lanes over Currumbin Creek, before vehicles travelling in the left-most southbound lane, will be required to exit the M1 at Exit 95. Signage will be installed on approaches to the interchange, to allow sufficient time for road users to select their preferred lane.

## New bridges

The section of motorway between Palm Beach and Currumbin will include upgrading the existing bridges over Sarawak Avenue, Guineas Creek Road, Currumbin Creek and Currumbin Creek Road. The Sarawak Avenue bridge underpass will include a 1.5-metre-wide footpath on the northern side of the road, and a three-metre shared path on the southern side, that will connect with the existing shared use bike and pedestrian bridge over Currumbin Creek. The path connecting the active transport bridge on the eastern side of Currumbin Creek will be reinstated, and reconnected to existing paths.

During service relocations and main construction, some local car park spaces in community facilities, such as at Salk Oval, may be temporarily impacted but will be reinstated as soon as possible following construction.



# Road traffic and construction noise

The affects of noise can differ from person to person, but to ensure a uniform approach is adopted when assessing and treating noise issues, the *Transport Noise Management Code of Practice*, Nov 2013, provides guidance and instruction.

## Road traffic noise

To understand the current road traffic noise levels, acoustic engineers conducted noise assessments along the motorway. This was carried out at properties that were considered to best represent those most exposed to road traffic noise in that particular area. A VL2T noise model was also developed to predict future noise levels up to the year 2041, and the need for mitigation treatments, such as noise barriers. The modelling considered the upcoming changes in the road surface, vertical and horizontal road alignment, surrounding buildings, increased general and heavy vehicle traffic volumes.

In areas where road traffic noise levels are predicted to exceed the relevant noise criteria from the Code, noise treatments are being considered. This may include installing new, upgrading or relocating existing noise barriers, to mitigate noise levels for the foreseeable future, as required under the Code. The VL2T project team is currently meeting with residents that may be directly impacted by noise treatments.

In addition to noise barrier treatments, the VL2T upgrade will use Stone Mastic Asphalt (SMA) as the new road surface. This material has a number of advantages, including helping to reduce road surface noise, while being more durable and longer-lasting than open-graded asphalt.

## Construction noise and vibration

During construction, all contractors are required to comply with the Code through an accepted Noise and Vibration Management Plan (NVMP). The NVMP is a way of demonstrating compliance with the General Environmental Duty under the Environmental Protection Act. The VL2T project team will frequently monitor and review each contractor's NVMP throughout construction.

The project team is investigating whether existing noise barriers can be replaced during early works to reduce the impact of construction noise. Reduced speed limits and concrete safety barriers will also be in place to help reduce noise during construction.

### Vegetation removal

Some vegetation will also need to be removed as part of the upgrade, to accommodate service utilities and noise barrier relocations, motorway widening, and ramp extensions. While some residents may perceive that any existing vegetation absorbs and shields motorway noise, the density of the existing vegetation does not provide effective minimal noise mitigation.

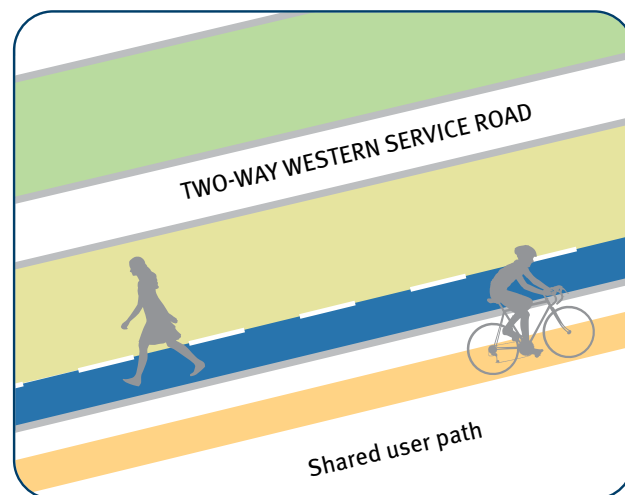


# Active transport

When people choose to walk and bike ride more often, not only are they increasing their health, they also help to improve our transport system. The VL2T upgrade includes a number of facilities that will enable safer and better connections for a more active lifestyle.

Active transport features include:

- a three-metre-wide bike and pedestrian path adjacent to the northbound motorway lanes. This path, separated by a concrete safety barrier, will start at the new northbound off-ramp at Reedy Creek at Exit 85 and continue to Tallebudgera Interchange at Exit 89. (Refer to Package A Varsity Lakes to Burleigh web page for further information on the changed off-ramp at Reedy Creek).
- additional active transport facilities included along the new two-way western service road between Tallebudgera (Exit 89) and Palm Beach (Exit 92) interchanges.
- a bike and pedestrian path installed from the Palm Beach (Exit 92) Interchange to the northbound off-ramp at Exit 93 (KP McGrath Drive) which transitions to a shared path to Guineas Creek Road.
- all intersections at interchanges will include modifications to improve access for both pedestrians and bike riders.





## Have your say

Your feedback on the VL2T design is important. In order to consider your comments, feedback must be received by the end of April 2020.

The community is invited to subscribe to the free SMS and email traffic alert service to remain informed about the VL2T upgrade. To register for these services, or for further information, contact the project team on the below details.

**Freecall:** 1800 799 824\*  
(during business hours, 9am–5pm, Monday to Friday)

**Email:** VL2T@tmr.qld.gov.au

**Website:** www.tmr.qld.gov.au

**Post:** Department of Transport and Main Roads  
PO Box 442, Nerang QLD 4211

\* Check with your service provider for call costs.

## Community information sessions

Meet the project team and see the design plans for the PB2T package at a location near you.



Visit the TMR website for details on session times and locations, or scan the QR code to be taken to the website.

## PB2T project timeline

