

Princes Highway, Berry to Bomaderry upgrade Croziers Road



Transport
Roads & Maritime
Services

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Q. What are the proposed access arrangements for Croziers Road as part of the Berry to Bomaderry upgrade?

A. The proposed access arrangements at Croziers Road are:

- Traffic from the south would be able to make a left turn into Croziers Road, as it can now.
- Traffic exiting from Croziers Road would be able to turn left onto the Princes Highway to travel north, as it can now.
- Traffic from the north would be able to turn right into Croziers Road, as it can now. A protected right turn bay would be constructed to make this movement safer.
- Traffic exiting from Croziers Road would no longer be able to turn right onto the Princes Highway to travel south. Right turn restrictions are proposed at all local road intersections along the upgrade.

Under the current proposal, traffic wanting to turn right onto the Princes Highway from Croziers Road would need to turn left, travel north, turn right into Mullers Lane via a proposed protected right turn bay and then use the proposed U-turn facility on Mullers Lane to travel south.

The additional travel distance required would be about 600 metres in each direction.

Q. Why can't overpass / underpass facilities be provided at both Croziers Road and Jaspers Brush / Strongs Roads locations?

A. The three overpass / underpass facilities proposed for the project at Jaspers Brush Road / Strongs Road, Morschels Lane / Devitts Lane, and Pestells Lane / Meroo Road are regularly spaced to provide a generally equitable level of access for the wider community from Berry to Bomaderry.

Only one facility is needed in Jaspers Brush and the provision of two expensive facilities that require large bridge structures, substantial road works and impacts to property including acquisition is not warranted.

Reasons for selecting the Jaspers Brush Road and Strongs Road location are provided by other answers in this information document.

Q. Why is Roads and Maritime not making use of the topography for an overpass at Croziers Road and the Princes Highway?

A. An overpass / underpass facility between Jaspers Brush Road and Strongs Road would provide a more equitable level of access for the wider community of Jaspers Brush.

An overpass at Strongs Road was chosen because:

- The location is consistent with the spacing of overpass / underpass facilities.
- The benefits of reducing additional travel for the wider community are greater.
- The existing local road network is such that one overpass would serve both Strongs Road and Jaspers Brush Road.

- The highway would be in cutting and an over bridge would be relatively simple to construct and therefore more cost effective.
- There would be less physical and visual impacts on properties compared to a Croziers Road option.

Croziers Road was not chosen for an overpass because:

- The location is not as beneficial as Strongs Road in terms of reducing additional travel for the wider community.
- The existing local road network is less favourable because an overpass would only serve one local road.
- The topography would increase construction costs due to the high ground on the western side and the low ground on the eastern side.
- There would be greater physical and visual impacts on properties than at Strongs Road.

In terms of topography, the western side of Croziers Road would be suitable for the supporting structure for a local road overpass. However, the low ground on the eastern side reduces the feasibility of constructing a supporting structure and connecting road, due to the substantial earthworks that would be required.

The height of these earthworks would have a considerable visual presence, require a large footprint, and would potentially sever driveway accesses for affected properties.

Attempting to connect the affected driveways to the overpass or the upgraded highway would add to the footprint and would further increase property impacts.

In response to recent submissions from the Croziers Road community, three layout options were examined to clarify the anticipated impacts of an overpass at Croziers Road. Two of these layouts are based on preliminary work done earlier by Roads and Maritime during the development of the project. The third is based on an option proposed by the community.

The results of the examination are summarised above.

Q. Why is Roads and Maritime not considering an underpass at Croziers Road and the Princes Highway?

- A. The current proposal would lower the vertical alignment of the Princes Highway at Croziers Road by about 4.5 metres. An underpass below the upgraded highway would be below the 1 in 100 year flood level and would not guarantee flood free access for Croziers Road.

An underpass at that level would require substantial earthworks, to tie-in to the existing terrain, and additional property acquisition west along Croziers Road.

An underpass is therefore not considered practical or feasible in terms of flood free access and constructability.

Q. What would be the impacts on property acquisition due to an overpass at Croziers Road?

- A. An assessment of two overpass layouts at Croziers Road indicated a need for additional property acquisition of about five acres, affecting three properties. One of the layouts would require a house to be demolished.

An assessment of a larger scale option, including local access road links between Mullers Lane and O'Keeffes Lane, would require additional acquisition of about 10 hectares, affecting six properties.

Q. What would the visual and noise impacts be for the local area due to an overpass at Croziers Road?

- A. The noise impacts of an overpass at Croziers Road have not been assessed.

There may be some highway noise reduction for properties close to the overpass due to the earth mounds that would need to be constructed. The addition of a local road may introduce additional noise impacts from local traffic.

The visual impact of an overpass at Croziers Road would be substantial. A new bridge structure and earthworks on the eastern side of the highway would be a major feature. Street lighting would also result in potential light spill.

Q. Would the properties immediately adjacent to an overpass be able to directly access it?

- A. It may be possible to design an overpass at Croziers Road that allows direct access for properties next to and directly affected by the overpass.

There would likely need to be extensive works to realign the current driveway arrangements and there may be substantial earthworks required to achieve the necessary height for driveways to connect to the overpass. This would result in a larger impact on properties.

In some cases the geometry may not suit a connection with a driveway due to sight distance constraints.

Q. What is being proposed to ensure safe access to Penwood Railroad?

- A. The location of the future driveway access for Penwood Railroad is yet to be determined. Under the current proposal it is likely to remain in a similar location to the existing access. It is unlikely that traffic from the Penwood Railroad would be able to access a U-turn bay on Croziers Road, so traffic wanting to travel north on the Princes Highway would first need to perform a U-turn at the proposed Strongs Road overpass.

If an overpass were to be provided at Croziers Road, it would be difficult to provide direct access to the Penwood Railroad.

Q. Why won't Roads and Maritime allow traffic to turn right out of any local roads?

- A. A key objective of the proposal is to improve road safety along the upgraded section of highway. Roads and Maritime has not allowed traffic to turn right out of any local roads directly onto the highway on safety grounds.

Right turns out of side roads directly onto the highway pose a much higher safety risk than any other turning movement.

This is due to the greater number of decisions a driver must make to complete the manoeuvre safely. The number of potential collision points, where the travel paths of different vehicles cross, is also larger.

The safety risk is heightened further by the high speed road environment due to the 100km/h speed limit for this main road arterial.

It is on this basis, that Roads and Maritime made the decision to restrict right turn access out of local roads onto the highway for the overall Berry to Bomaderry upgrade.

Q. The additional travel for traffic exiting Croziers Road to travel south would be unacceptable.

- A. The additional distance from Croziers Road to travel south under the current proposal, via Mullers Lane, is about 600 metres in each direction. This adds around 1.2 kilometres to a southbound trip from Croziers Road. This is not unusual on projects where main roads are upgraded to multiple lane highways.

Roads and Maritime considers the current proposal acceptable and one that provides balance between local amenity, through traffic efficiency and improved road safety.

Q. Why do Croziers Road residents have to travel further than other residents along the upgrade?

- A. The proposed local road and property access arrangements are based on an access strategy. Roads and Maritime's intention is to provide appropriate spacing of turning facilities along the highway to keep the additional travel for the overall community as low as possible, whilst achieving an acceptable level of traffic flow efficiency on the highway.

Under the current proposal:

- The average increase in travel for all access points along the Berry to Bomaderry upgrade alignment would be approximately 3.3 kilometres. The additional distance for Croziers Road residents would be approximately 1.2 kilometres.
- About 50 per cent of access points would experience additional travel in excess of 3.0 kilometres.
- About 70 per cent of access points would experience additional travel in excess of 2.4 kilometres, double the distance that would be experienced by Croziers Road residents.

Q. What actions would be taken to reduce the blind spot to the south of Croziers Road caused by the dip on the current Princes Highway?

- A. The proposed upgrade of the Princes Highway near Croziers Road would involve some straightening of existing bends, as well as flattening the crests and dips. The crest at Croziers Road would be lowered by about 4.5 metres, and the dips at Mullers Lane and Flying Fox Creek would be raised.

The resulting alignment would meet safe road design standards for a 100 km/h rural arterial highway, with improved sight distance at all access points, including Croziers Road.

Q. There have been fatalities on the Princes Highway. The proposed changes at Croziers Road will not be safer.

- A. In the last five years on the Princes Highway between Berry and Jaspers Brush there has been one crash occurrence which resulted in two fatalities. The crash occurred in 2012 and was the result of a head on collision.

In the last five years near the intersection of Croziers Road there have been two serious crashes resulting in four injuries. One of these crashes involved a vehicle turning right off the Princes Highway and the other was a "run off road" type crash.

The proposed upgrade would specifically address the factors that contributed to these types of crashes:

- The divided carriageway would reduce the likelihood of head on collisions.
- The improved alignment, road shoulders and line marking would reduce the likelihood of run off road crashes. In addition, barriers would also reduce the risk of this crash type.
- The prevention of right turns to driveway accesses by the median and the provision of protected right turn bays at limited side roads would reduce the risk of rear end impacts.

A protected right turn bay is proposed for vehicles to turn right from the highway into Croziers Road.

Q. The distance to change lanes between Croziers Road and Mullers Lane would be a road safety concern.

- A. Roads and Maritime has checked the distance available between Croziers Road and Mullers Lane for vehicles to move into the outside lane and enter the protected right turn bay. It is in line with guidelines provided in the Highway Capacity Manual.

A distance of approximately 350 metres is desirable. The distance that would be available between Croziers Road and Mullers Lane would be about 600 metres.

Q. How would the proposed Princes Highway upgrade perform under increased traffic volumes from the 'Sandtrack'? What would the impact be on Croziers Road?

- A. Currently there is about a 55:45 percentage split between traffic using the Princes Highway and the 'Sandtrack' when travelling between Gerringong and Nowra. Traffic modelling suggests that once the Princes Highway upgrade is complete to as far south as the Berry bypass, the percentage split would be closer to 80:20.

This equates to an increase in traffic between Berry and Bomaderry of almost 50% on top of existing volumes.

The upgrade of the Princes Highway between Berry and Bomaderry would provide the additional lane capacity necessary to cater for the expected increase in traffic volumes. The additional lane capacity would improve gaps in traffic to enable vehicles from local roads to more easily join the Princes Highway.

All intersections have been assessed under the anticipated future traffic volumes and are considered to operate satisfactorily.

Q. How would the proposed Princes Highway upgrade perform under increased traffic volumes during holiday periods? What would the impact be on Croziers Road?

- A. The Princes Highway upgrade between Berry and Bomaderry has been designed so that it would perform satisfactorily into the future under morning and afternoon commuter peaks.

Holiday peaks differ from commuter peak periods in that they are usually experienced at particular times of the year, rather than on a regular daily basis. It is not cost effective to design a road with capacity which would only be needed a few times each year. It is normal to design a road so that it caters for the regular daily occurring peak traffic flows. Traffic models calculate the best representation of the peak hourly traffic flow.

It is not uncommon for the road network, which includes Croziers Road, the highway and other local roads, in any regional coastal area to experience higher traffic volumes and increased travel times during holiday periods.

Q. Would there be acceleration and deceleration lanes northbound on the Princes Highway at Croziers Road?

- A. The current proposal includes deceleration lanes at all local roads, including Croziers Road to ensure vehicles can slow down on the highway in order to make the turn. Deceleration lanes therefore typically provide a greater safety benefit than acceleration lanes.

Acceleration lanes at local roads are not proposed at any side road (excluding interchanges) due to increased land acquisition, and additional cost. This is consistent with the approach on the whole project.

An acceleration lane from Croziers Road to the north would reduce the distance between Croziers Road and Mullers Lane available to allow vehicles to move into the outside lane to enter the protected right turn bay. This reduced distance would be considered unsafe and the inclusion of an acceleration lane would result in the removal of the protected right turn bay into Mullers Lane. This would mean that motorists wanting to travel south from Croziers Road would need to travel further north to either Schofields Lane or the Kangaroo Valley Road interchange in order to turn around and travel south.

The current proposal is considered safe in terms of road design and retains an acceptable level of accessibility for traffic on both Croziers Road and Mullers Lane.

Q. Would the proposed U-turn bays experience traffic congestion, increase road safety risk and result in excessive land acquisition?

- A. There are six U-turn bays proposed for the Princes Highway upgrade between Berry and Bomaderry.

Using forecast future 2039 traffic volumes, an estimated 20 vehicles per hour would use the Mullers Lane U-turn facility and 10 vehicles per hour would use the Croziers Road U-turn facility.

The relatively low volumes of traffic using the U-turn facility would not result in major delays for vehicles due to queuing.

The proposed U-turn bays would require property acquisition. Generally, U-turn facilities require about half an acre of land at each site, which is much less than interchange facilities.

Q. Would the proposed U-turn bays be suitable for use by heavy vehicles?

- A. The proposed U-turn bays have been designed to accommodate turning vehicles up to and including a 26 metre B-double.

Q. Pedestrian access has not been detailed in any of the concept designs, what plans do Roads and Maritime have for pedestrians?

- A. The proposed Princes Highway upgrade would create a high speed rural arterial highway connecting Sydney and the Illawarra with the Shoalhaven and NSW south coast. Pedestrian activity on such roads is not encouraged.

No specific pedestrian need has been raised during community consultation undertaken for the project to date. The current proposal can accommodate future provisions for pedestrians at the three grade separation locations of Strongs Road and Jaspers Brush Road, Devitts Lane and Morschels Lane, and at Meroo Road and Pestells Lane.

Q. How would the proposed upgrade cater for bus stops?

- A. The current proposal would relocate six bus stops from the Princes Highway onto local roads to improve road safety. One bus stop would need to be retained on the upgraded highway near Boxsells Lane.

The majority of the new bus stop facilities on local roads would be incorporated into the location of the proposed U-turn bays.

Q. What are the next steps and how can I continue to have my say?

- A. A review of environmental factors for the proposal will be on display for community comment later this year. Details of display locations will be provided closer to the display period.

The display will include concept plans showing all access arrangements for the proposal.

All submissions made during the display will be addressed by Roads and Maritime with responses published in a Submissions Report.

Issues raised will be considered by Roads and Maritime in finalising the concept design prior to project approval.