

NSW Department of Planning & Environment  
Attention: Daniel Gorgioski  
GPO Box 39  
SYDNEY NSW 2001

Your Ref: SSI 6878  
Our Ref: DE-2015/16  
Date: 9 December 2015

Dear Daniel

**Albion Park Rail Bypass State Significant Infrastructure Proposal (SSI 6878)**

Thank you for the opportunity to comment on the accompanying Environmental Impact Statement (EIS) for the above proposal. Council has reviewed the documentation and provided commentary for the Department's consideration at Attachment A.

If you have any enquiries or wish to discuss these matters further, please contact Nicole Ashton, Senior Development Project Officer on (02) 4227 7111.

Yours faithfully



David Farmer  
**General Manager**  
Wollongong City Council

## **Attachment A Comments to the Environmental Impact Statement**

### **1 Planning**

Within the Wollongong LGA the route is located in a road reservation zoned SP2 – Infrastructure – Road, zoned for purpose of the bypass. It is noted that some of the land affected by the proposal is currently identified by Wollongong Local Environmental Plan 1990 and Wollongong Local Environmental Plan No 38 as being “deferred matter”. The Yallah- Marshall Mount Planning Proposal involves the rezoning of some of that land to E2 – Environmental Conservation. Roads are not a permissible use in the E2 zoning.

The proposal necessitates a deviation of Yallah Road whereby the location of Yallah Road is shifted south and will go over the bypass, and then intersect with the Princes Highway. Given the causative effect of the deviation is the bypass, it is considered the RMS be accountable for costs of the deviation works.

### **2 Traffic and Transport**

#### **Calderwood & Impacts**

Council previously stated it was concerned with the significant forecast future traffic volumes using Marshall Mount Rd following both the implementation of the bypass and the expected development of Calderwood. Further, Council recommended that further infrastructure upgrades to improve the level of service for access for Calderwood traffic to/from the new bypass and to alleviate the above local road impacts of through traffic should be considered.

It appears that the EIS has not considered any such additional infrastructure, and instead is reliant upon the implementation of the Tripoli Way extension to cater for the traffic demands of the new development area.

The Technical Paper 1 – Traffic & Transport (section 6.5.2.4) notes that the intersection of Tongarra Rd and Terry St will have unacceptable operation by 2020 unless the Tripoli Way upgrade is completed. The uncertain timing of the Tripoli Way extension is of concern to Council, because any increase in congestion and delays at Tongarra Rd/Terry St will further redistribute and encourage northbound traffic to short cut along Marshall Mount Rd/Yallah Rd. Any potential adverse impacts in this regard have not been identified in the EIS.

The Technical Paper tables results of intersection analysis of Tongarra Rd/Terry St intersection (with Tripoli Way extension in place), however doesn't include any analysis or commentary on the operation or proposed layout of the Tripoli Way/Terry St intersection, which is hoped to cater for the majority of traffic to/from Calderwood. Whilst Council supports the provision of the Tripoli Way connection, there are some obvious challenges with providing this intersection, for example southbound weave manoeuvres from the M1 northbound off-ramp to Tripoli Way, and possible queuing of southbound traffic due to the opposing northbound on-load traffic demand at the Tripoli Way intersection. If RMS is relying on Tripoli Way to address the substantial performance issues at Tongarra St/Terry St, then it is very important that the EIS confirms the acceptable design and operation of the new Tripoli Way/Terry St intersection. This also has ramifications for the future traffic demands on Marshall Mount Rd which is a serious concern for Council, as detailed above.

#### **Cycle Facilities**

Council previously questioned whether cycling would be permitted on the new bypass and connectivity across the bypass at Illawarra Highway. It appears from Section 6.7.3 and Figure 6-21 of Technical Paper 1 – Traffic & Transport, that cycling will be permitted on the APRB, and a cycle connection from Tripoli Way to the cul-de-sac in Illawarra Highway has been included.

Referring to Figure 6-21 specifically, it would appear that access from the major east-west cycleway crossing points to/from the M1 shoulder cycleway could be improved. For example, access from Yallah Road bridge shared user path to the M1 southbound is not provided. It would also appear that there is no southbound access to the M1 from the northern cul-de-sac section of Illawarra Highway. Providing infrastructure to allow improved cyclist access to/from the APRB would allow greater convenience and flexibility in route choice for more competent cyclists.

### Yallah Rd connection to A1

Since the previous concept plan was presented to Council for feedback in November 2014, RMS has developed concept plans for an interim and ultimate Yallah Road connection to the A1 (Princes Highway), which Council supports.

Council has undertaken further Tracks, Sidra and Paramics modelling of the Yallah-Princes Highway-Haywards Bay proposed interim and final upgrades and forwarded a copy of the report to RMS (refer *"Princes Highway-Yallah Road Connection – Tracks Modelling Summary Sept 2015"*). The report concludes that the interim connection scenario has at least a 10 year life given the development forecasts, and that beyond 10 years, the ultimate 4-way signalised intersection would operate acceptably.

The EIS report includes the 'interim' upgrade at Yallah Road/Princes Highway, however the Traffic & Transport technical note states that the upgrade will cater for 2041 (ultimate) demands, but only includes an analysis of the existing 'Give Way' intersection with the service road. It does not consider the two closely spaced intersections either side of Haywards Bay bridge, which Paramics Modelling shows to be the critical factor in safe and satisfactory operation of the interchange. Bitzios Consulting undertook a Paramics microsimulation analysis of the Haywards Bay bridge under 2031 forecast traffic demands, concluding that it could operate effectively, however would fail under further 15-45% traffic demand increases. It is noted that the 2036+ (ultimate development) demands in this area are some 59% - 138% higher than the 2031 demands, meaning the Haywards Bay interchange will not operate acceptably with the interim upgrade (existing Give Way intersection) soon after 2031.

The Traffic & Transport technical paper states that RMS will monitor traffic performance of the Yallah-Princes intersection to determine when the ultimate signalised intersection should be provided. However, given the above traffic operational and resultant safety concerns with Haywards Bay bridge, it is likely that the signalised upgrade would be required much earlier than the 2041 stated in the EIS.

Apart from the impacts of traffic congestion on Haywards Bay bridge and adjacent intersections, cycle and pedestrian access and safety is also a significant concern for Council. The bypass design proposes a shared user path on Yallah Road over the M1 – cyclists and pedestrians heading between the development area of Yallah-Marshall Mount and Albion Park, Tallawarra or Haywards Bay will be required to use the Haywards Bay bridge and adjacent intersections. Haywards Bay bridge is only approx. 7 metres wide and given the significant volume increases expected up to and beyond 2031 under the EIS 'interim' upgrade arrangement, this will present safety issues for cyclists & pedestrians due to the need to cross busy intersections and the lack of appropriate width paths. The proposed ultimate 4-way signalised intersection would address this issue by providing safe crossing of the A1 Princes Hwy.

Consequently, Council urges RMS to consider progressing the concept for the ultimate 4-way signalised intersection of Yallah Rd and the A1, including confirmation of property acquisition for the important 4<sup>th</sup> (eastern) leg of the intersection. This will ensure that an appropriate level of future access can be provided for the Yallah-Marshall Mount and West Dapto land release to the M1, via the A1 Princes Hwy.

### Tallawarra (Yallah) Interchange

Council remains supportive of the proposed Tallawarra (Yallah) interchange, including the interim left-in/left-out at Cormack Ave. The following comments are provided based on Council's previous feedback:

- Weave issues on Princes Hwy (southbound) south of Yallah Bay Road – the technical paper considers merging sections (i.e. M1 southbound entry ramp merge), however the weave of traffic across two lanes to enter the M1 southbound off ramp appears not to have been considered. It is essential that RMS address these issues as part of the detailed design process.
- Given the unopposed eastbound traffic movement at the eastern roundabout, Council has concerns with queues/delays to the M1 southbound offload traffic at the roundabout. Whilst the technical paper Sidra analyses shows an average LOS B at 2041 PM peak, the delay at the off ramp leg is not shown. Council has also undertaken Sidra modelling of the proposed roundabout under 2036+ (ultimate) traffic demands (refer *"Princes Highway-Yallah Road Connection – Tracks Modelling Summary Sept 2015"*). The results show poor LOS and lengthy queues in the PM peak

on the southbound off-ramp. Again, it is essential that RMS address these issues as part of the detailed design process.

#### Illawarra Hwy (Albion Park) interchange

Refer to previous comments above under “Calderwood and Impacts”, regarding possible southbound weaving and queuing issues on approach to the future Tripoli Way intersection.

#### Realignment of bypass near Croom Sporting Complex

Council has no further comments to add regarding the bypass alignment in the vicinity of Croom Sporting Complex.

#### General comments on EIS traffic modelling

Council has reviewed the modelled future (2041) network volumes presented in the EIS Traffic & Transport Technical Paper. It has become apparent that in parts there are some very significant differences when compared to Council’s modelling outputs. Council requests RMS liaise further to clarify the apparent modelled traffic volume output differences.

### **3 Environmental**

#### Vegetation Survey - Forest Red Gum – Thin-leaved Stringybark Grassy Woodland

In review of the vegetation survey, description and mapping of Derived Forest Red Gum – Thin-leaved Stringybark Grassy Woodland by ngh Environmental (2015), the following comments are provided:

- The VIS Classification 2.1 equates Forest Red Gum - Thin-leaved Stringybark grassy woodland on coastal lowlands, southern Sydney Basin Bioregion to the threatened ecological community (TEC) Illawarra lowlands grassy woodland in the Sydney Basin Bioregion. Whilst it is clear that the majority of the Derived Forest Red Gum – Thin-leaved Stringybark Grassy Woodland described and mapped by ngh Environmental (2015) would likely be considered planted or recruited from seed broadcast in areas of previous major earthworks for the Princes Hwy and associated roads, this will not be the case for all mapped polygons. For example, the two mapped polygons in the Old Golf Course site have been inspected by Council Officers and are not considered to be planted and this also accords with review of historic aerial images.
- The PCT Forest Red Gum - Thin-leaved Stringybark grassy woodland on coastal lowlands, southern Sydney Basin Bioregion equates to the Biometric Veg Type SR 545 which the Biometric Vegetation Types Database equates to Illawarra Lowlands Grassy Woodland in the Sydney Basin Bioregion.
- The Biometric Veg Type SR 545 equates to GW p34: South Coast Grassy Woodland by Tozer *et al* 2010 which identifies Illawarra Lowlands Grassy Woodland EEC as a ‘Related TEC’.

In relation to the survey effort for assessing vegetation communities, particularly replication of the plot data as opposed to actual sampling, it is understood from the Office of Environment and Heritage that additional vegetation survey work will be required.

Based on Council’s site inspections and aerial photo interpretation, some areas described and mapped as Derived Forest Red Gum – Thin-leaved Stringybark Grassy Woodland by ngh Environmental (2015) within the Wollongong LGA are considered to be consistent with the NSW Scientific Committee (1999) Final Determination for Illawarra lowlands grassy woodland in the Sydney Basin Bioregion, particularly with reference to Clauses 2 and 9. As such, it is recommended that further vegetation surveys be carried out in the Wollongong LGA to establish more clearly what is likely to be two separate vegetation zones of the PCT Forest Red Gum – Thin-leaved Stringybark Grassy Woodland, one of which is representative of Illawarra lowlands grassy woodland in the Sydney Basin Bioregion and one not.

#### Woollybutt – White Stringybark – Forest Red Gum and Eastern Flame Pea (*Chorizema parviflorum*)

It is understood the TransGrid site on Yallah Road is being considered as an offset site for Woollybutt – White Stringybark – Forest Red Gum and Eastern Flame Pea (*Chorizema parviflorum*). Collecting seed from representative individuals of *Chorizema parviflorum* whose removal cannot be avoided is suggested as an additional mitigation measure. Seed could be provided to the Wollongong Botanic Garden and the Australian PlantBank.

#### Biodiversity Offset Strategy

Page 25 of the Biodiversity Offset Strategy prepared by NHG Environmental dated 9 October 2015 states Site 18 (park at the end of Wollingurry Street) is Council owned land. At present this parcel of RE1 zoned land (Lot 65 DP 1058949) is in private ownership, with the future intention for it to be handed over to Council, the date for which is yet to be confirmed.

### **4 Stormwater and flooding**

- The adopted performance criteria for the proposed Bypass relating to flood immunity, being the 20 year ARI event is considered inappropriate for a major section of road infrastructure. This performance criterion should be increased to a minimum 100 year ARI event, to be consistent with major urban release areas such as West Dapto, such that accessibility is available to manage emergency response in existing/future residential areas for major flood events.
- The predicted flood impacts to adjoining lands as a result of the proposed Bypass are considered to have a detrimental effect and therefore should be further mitigated.
- In particular, the predicted 2.5m flood level increase in the Duck Creek catchment in the 100 year event is likely to reduce the future development potential for existing agricultural land which is earmarked for future residential/industrial zoning as part of the Yallah Marshall Mount Precinct.
- The predicted impacts of up to 400mm in the Horsley Creek catchment in the 100 year event on existing recreational/agricultural land may also reduce the future development potential of this land.
- The predicted 54-83mm flood level increase for dwellings identified in the Macquarie Rivulet catchment in the 100 year event will potentially increase the economic and social costs to the residents and overall community in the event of such a flood, being contrary to the requirements of the NSW Floodplain Development Manual.
- Consideration should be given to the incorporation of multiple stormwater detention facilities within the proposed Bypass project for each affected catchment (i.e. Duck Creek, Macquarie Rivulet, Horsley Creek) to assist in mitigating stormwater impacts to downslope catchments due to the proposed increase in paved area associated with the bypass.
- The potential for cross-catchment stormwater flows to occur for any storm event due to the proposed Bypass does not appear to have been considered in the EIS. This item needs to be further investigated to ensure that flooding impacts due to any cross-catchment flows as a result of the proposed Bypass alignment does not occur for any storm event.

### **5 Property Services**

The RMS have advised verbally that portions of three parcels of Council land will be affected by the proposal and will need to be acquired by the RMS via future negotiations. The parcels affected are: Lot 134 DP 1015310 Semillon Place, Dapto, Lot 100DP 216769 Princes Highway, Yallah and Lot 20 DP 1075828 Larkins Lane, Yallah.

## 6 Heritage

### Aboriginal

The proposed major project is supported by an Aboriginal Archaeological and Cultural Heritage Assessment by Artefact Heritage and Waters Consultancy. The report appears to provide a reasonable assessment of the Aboriginal Archaeological and Cultural Heritage values and impacts. The recommendations of the report should be implemented through relevant conditions of consent and throughout the course of the project.

- Council would encourage the careful consideration of any forthcoming comments from the Office of Environment and Heritage Archaeologists and Aboriginal heritage specialists in finalising the assessment.
- Council would also encourage the notification of the local Aboriginal Community groups of the proposal and the provision of adequate opportunities for comment. Council would also encourage the involvement of local Aboriginal groups in the process of pursuing works, where there are relevant Aboriginal Cultural Heritage matters identified in the report.

The recommendations of the report should be implemented through relevant conditions of consent and throughout the course of the project.

### European

The proposed development has been determined to be in the vicinity of 1 listed heritage item of the Wollongong Local Environmental Plan 2009 – 6437 House Princes Highway Yallah. This is acknowledged in the report by Artefact Heritage and discussed in the table on page 58.

It is noted that the report refers to discussions to be held with Wollongong City Council to determine the most appropriate location of any tree planting and the responsibility for planting and maintenance. These discussions are yet to commence. Council would welcome opportunities for input in relation to the mitigation of potential heritage impacts on views to and from this significant building as part of the project.

Careful consideration should be given to the location, placement, etc. of sound barrier walls and other such potentially avoidable impacts as part of the finalisation of the plans.

The recommendations of the Non-Aboriginal Heritage Assessment should be implemented through relevant conditions on any future consent for the proposed works.