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Phone: 02 4974 2000

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Reply by upload to major project portal: https://majorprojects.planningportal.nsw.gov.au

Dear Mr Gorgioski

M1 PACIFIC MOTORWAY EXTENSION TO RAYMOND TERRACE (SSI-7319)

I refer to your email dated 28 July 2021 advising City of Newcastle ('CN') of a State significant infrastructure development (SSI-7319) submitted by Transport for NSW (TfNSW) for the above project and seeking CN's comments.

The submitted Environmental Impact Statement (EIS) has been reviewed and the following advice is offered for your consideration:

1 Project integration with Emerging Black Hill Precinct

It is requested TfNSW give greater consideration to the future integration between the Project and the Emerging Black Hill Precinct. The Hunter Regional Plan 2036 (DPE 2016) and Greater Newcastle Metropolitan Plan 2036 (DPE 2018) recognise this Precinct of strategic importance to the region.

Appendix G to the EIS identifies that the Black Hill Precinct is not yet approved. This is not correct as a portion of the overall anticipated development for the Emerging Black Hill Precinct has recently been approved by CN under DA2020/01497, being a one lot into 62 lots subdivision. This has followed on from Council's endorsement of the Staging Plan and Indicative Lot Layout at its June meeting to satisfy Condition 1.10 of the Concept Approval (MP 10_0093). On this basis, it is recommended that the EIS be updated to acknowledge that the precinct has already commenced and reconsider if the anticipated timing of delivery of the Precinct may need to be bought forward.

Chapter 7 – Traffic and Transport of the EIS (Page 7-35) states:

> *'The Emerging Black Hill Precinct would be a major traffic generating development within the study area and is located south of John Renshaw Drive and west of M1 Pacific Motorway. The development is about 300 hectares of net development area, which is expected to generate substantial traffic volumes onto the adjacent road network. The Emerging Black Hill Precinct has been included in the traffic modelling for future horizon years (2028, 2038 and 2048). The development is a key generator of traffic in the region for future horizon and accounts for about 11 per cent of all trips in the study area by 2038 and 12 per cent by 2048.'*

Concerns are raised that TfNSW may not have incorporated the most recent modelling data and analysis for the Emerging Black Hill Precinct as provided in the *Traffic Analysis Report – Black Hill Traffic Modelling by SMEC, prepared for TfNSW, dated 9 October 2020*.

For example, Table 4-4 of Appendix G to the EIS displays the growth rate assumptions and trips generated from the Black Hill development used to develop the traffic demand matrices for the modelled years. It is unclear if these rates represent a one hour or three hour peak periods.

Table 4-4 Traffic growth rate assumptions

Modelled year	Background growth (both peaks)	Black Hill development	Morning peak Black Hill development trips	Evening peak Black Hill development trips
2017 (base)	N/A	0% of development complete	0	0
2028 (opening year)	1.5%	25% of development complete	1,882	2,159
2038 (future horizon)	1.5%	75% of development complete	5,646	6,476
2048 (future horizon)	1.5%	100% of development complete	7,528	8,635

In contrast the SMEC 2020 report identifies a total 2,952 vehicles for AM peak (1-hour) and 3,084 vehicles for PM peak (1-hour). The project documentation should include the assumptions made regarding gross floor area (GFA) and trip generation rates for the Emerging Black Hill Precinct in order to confirm that the EIS has utilised the most recent and reliable data in the traffic study.

Notwithstanding potential discrepancies in traffic generation, Chapter 7 of the EIS identifies that the Project generally improves overall performance of the network. However, given the high traffic generation of the Emerging Black Hill Precinct that the performance of the M1 Pacific Motorway / Weakleys Drive / John Renshaw Drive intersection reaches an unsatisfactory level of performance by 2038.

Page 7-36 of the EIS states:

> *'M1 Pacific Motorway / Weakleys Drive / John Renshaw Drive intersection: The project would improve the performance of this intersection, as traffic travelling to or from the east of the model extent would reroute to use the project in 2028. However, the intersection is expected to perform at LoS E from 2038 onwards.*
>
> *The high volume of vehicles generated from the Emerging Black Hill Precinct contributes substantially to the poor performance of the M1 Pacific Motorway / Weakleys Drive / John Renshaw Drive intersection at Black Hill in future years.'*

Similarly, Chapter 7 identifies unsatisfactory performance of the Black Hill interchange southbound merge leading from Weakleys Drive onto the M1 Pacific Motorway (i.e. southbound traffic).

Page 7-39:

> *'The Black Hill interchange southbound merge between Weakleys Drive and the M1 Pacific Motorway operates at LoS F during each of the assessed evening peak periods. This is due to the demand on the entry ramp exceeding its capacity during the assessed 15-minute peak period. The excess demand results in queueing on Weakleys Drive which extends to the M1 Pacific Motorway / Weakleys Drive / John Renshaw Drive intersection. This queueing impacts all southbound movements at the intersection and results in extensive queuing in 2038 onwards for the northern, eastern and western*

approaches. In 2048, the extensive queueing from the eastern approach increases in the evening peak to reach as far as the Tarro Interchange – Westbound Diverge."

It is evident that further works to the network, above and beyond the Project scope, will be required to manage traffic volumes from this strategically important Precinct. It is welcomed that the EIS has included sensitivity analysis which explores possible options to improve network performance as the Emerging Black Hill Precinct developments over time. This involved modelling the inclusion of additional southern access / egress to the Emerging Black Hill Precinct gained via northbound and southbound access ramps at the Black Hill Road interchange. Chapter 7 identifies that:

Page 7-41

'The provision of south-facing ramps connecting Black Hill Road to the M1 Pacific Motorway was found to improve the performance of the road network, particularly during the evening peak. Improvements were evident at the M1 Pacific Motorway / Weakleys Drive / John Renshaw Drive and Black Hill interchange southbound merge, in the vicinity of the Emerging Black Hill Precinct. These improvements are a result of more direct access to the site from the south, which reduces the distance travelled by vehicles accessing and departing the site. This consequently reduces the number of vehicles travelling the network surrounding the Emerging Black Hill Precinct and improved the southbound M1 Pacific Motorway ramp operation to LoS B.'

It is promising to see that there would be opportunity to achieve both the objectives of the M1 Pacific Motorway extension to Raymond Terrace while also supporting the future of the Emerging Black Hill Precinct. However, concern is raised that a southern access to the Precinct gained from Black Hill Road may not be viable to achieve in practice, thereby placing at risk the future of the Precinct. Currently there are private properties between Black Hill Road and the southern boundary of the Emerging Black Hill Precinct that do not form part of either project. A private developer does not have the same range of acquisition powers as government to secure access through this land. The distance of any access roads, in the order of 1km, may also be somewhat cost prohibitive to the developers of the Precinct. While the EIS suggests that there could be other equivalent southern access options it is not apparent what these options may entail or how this would be achieved.

In June 2021 CN, with the support of TfNSW, approved an indicative road and lot layout to guide development of the eastern part (Lot 30 DP870411) of the Emerging Black Hill Precinct. On the recommendation of TfNSW, allowance has been made for a potential southern connection across the eastern site boundary to the M1 Motorway that would not rely on other private landholdings or upgrading/closure of Black Hill Road. As the Emerging Black Hill Precinct has now progressed, including approval of the first development application on the site, the EIS needs to acknowledge and ensure the future southern connection can be provided.

In addition to the M1 extension to Raymond Terrace Project TfNSW are also currently exhibiting the Lower Hunter Freight Corridor project. However, it is noted that Appendix G to the EIS does not fully consider this, stating:

'The construction of a rail freight corridor would reduce the demand for road freight in the study area. However, as the scale and alignment of the Lower Hunter Freight Corridor (LHFC) are undetermined, the cumulative operational impact of this project is unknown. The design of the project allows for the LHFC."

Given that the preferred alignment of the Freight Corridor Project is now known the EIS should consider such. In particular, the proposed rail alignment along the western side of the M1 may pose further constraints on access / egress options into the Emerging Black Hill Precinct that need to be considered.

It is critical that the three strategically significant projects including the M1 extension to Raymond Terrace, Lower Hunter Freight Corridor and the Emerging Black Hill Precinct integrate and leverage off the other rather than pose barriers to success. Therefore, it is recommended TfNSW investigate in more detail access to the Emerging Black Hill Precinct as part of both the M1 Pacific Motorway Extension Project and the Lower Hunter Freight Corridor Project and confirm the preferred option for southern access ramps and access connecting to the Emerging Black Hill Precinct. While the construction of access ramps / access may not fall within the Projects briefs, the inclusion of such within Projects design stage could ensure that a viable access is achievable and integrated between the Projects.

2 Cycleways

CN is currently planning for a cycleway connection from Hexham Junction (intersection of the Minmi to Hexham rail line corridor and the pipeline corridor) to Tarro. Feasibility assessment of several options has been undertaken, including:

- Alignment on the pipeline corridor and Aurizon access road and connection to Tarro via the Tarro interchange;
- Alignment on the pipeline corridor with a separate bridge structure over the New England Highway;
- Alignment on the pipeline corridor and use of the Hunter Water culvert to pass under the New England Highway.

In the interim, design of the M1 to Raymond Terrace motorway has progressed. Options for the connection to Tarro require reassessment in light of design details provided and having regard to the proposed alignment of the Lower Hunter Freight Corridor.

It is noted TfNSW recognises the important role of active transport, in adoption in February 2021 of *Providing for Walking and Cycling in Transport Projects* Policy, which indicates that '[provision] *for walking and cycling must be delivered from the outset of every transport project*'. It is acknowledged that there are few current walking links in the project area, but it is considered that this project and CN's project for the Shortland to Tarro cycleway offer significant potential for improvement of regional cycleway connectivity. We look forward to ongoing liaison with TfNSW to ensure that active transport links between residential areas and key employment and education nodes can be realised.

It is noted the EIS documentation (Page.5-52) proposes a permanent diversion of the Aurizon access road, with the diversion traversing the viaduct abutment, passing under the viaduct then tying into the existing access road south of the main alignment embankment, and that this would serve as the new route for the Shortland to Tarro cycleway. Consultation undertaken for preparation of CN's adopted Cycling Plan and its predecessor indicate strong community preference for separation of cycling facilities from motorised traffic. As far as is practicable, design of the cycleway connection is to address the requirement for separation.

From discussion with members of the M1 Pacific Motorway extension to Raymond Terrace (M12RT) Project Team regarding potential cycleway options on 13 August 2021, it is understood that:

- TfNSW will be acquiring land to meet operational requirements of the M12RT. Transport can work with CN to determine the best cycleway alignment under the M12RT.
- A culvert under the M12RT (in the vicinity of the proposed drainage culvert), is not feasible.
- Further realignment of the Aurizon Access Road to allow the future cycleway between the M12RT abutment and the realigned road could be considered.

- A simpler option would be to align the future Tarro to Shortland cycleway to the north-eastern side of the realigned Aurizon Access Road separate from the road between the next set of piers for the M12RT viaduct.
- TfNSW is proposing a cycleway connection to the M12RT from the realigned Aurizon Access Road for cyclists to travel south along the road shoulders of the new M12RT. A similar cycleway connection would be provided for northbound cyclists from the existing Tarro interchange to travel north along the road shoulders of the new M12RT. The future Shortland to Tarro cycleway would be able to connect to these cycleway connections to the M12RT.
- TfNSW would continue to liaise with CN on the design in this area to ensure the future Shortland to Tarro cycleway can be provided for (e.g. extension of drainage culvert at Purgatory Creek to allow for simpler construction in future).

Based on a preliminary assessment, to achieve the connection to Tarro, CN is proposing travelling north from Hexham Junction on the pipeline corridor, including:

- Diversion of the cycleway from the main pipeline corridor to Pipeline Road;
- Crossing of the Aurizon Access Road in the vicinity of the proposed connection from M12RT to Aurizon Access Road;
- Shared path cycleway to pass under the M12RT elevated section on east side of Aurizon Access Road;
- The cycleway to generally follow the Aurizon Access Road (on east and north side) alignment with clear separation between the road and cycleway until re-joining the pipeline corridor;
- TfNSW extend the culvert over Purgatory Creek (as per M12RT project) to allow for future cycleway construction (nominally extension by two lengths, 4.8 metres);
- The cycleway to continue north on pipeline alignment and cross under the New England Highway in existing Hunter Water culvert.

Specifically, it is requested the M12RT project be modified to:

- Lengthen the culvert over Purgatory Creek by two lengths minimum;
- Align the Aurizon Access Road to allow the cycleway to pass under the M12RT on the east side of the diverted road.

It is also requested TfNSW:

- Negotiate with CN to ensure that the cycleway can be constructed and operated within the M12RT corridor;
- Continue discussions with CN regarding the status and ownership of the Aurizon Access Road.

3 Stormwater

Stormwater

It is recommended the following requirements are included as a condition of consent should the project be approved.

Stormwater discharge to CN existing network/land from the project must incorporate the following:

- Apply minimum treatment of stormwater as per CN's 'Stormwater and Water Efficiency for Development' Technical Manual
- Adequate scour protection/energy dissipation at all outlets
- Maintenance ease and accessibility of outlet
- Quantity changes to catchment characterises and the impact on upstream and downstream network. (i.e. Increase in quantity/peak stormwater flows to CN network)

Stormwater capacity and inundation

A hydraulic analysis is to be undertaken to confirm no impacts to both upstream and downstream to CN's drainage network, particularly:

- The headwall outlets discharging from Tarro drainage network to the south / southeast.
- The eastern end of Anderson Drive including 10% Annual exceedance probability (AEP) events (difficult to discern in maps provided).
- Viney Creek Tributary including waterbodies in the vicinity of Kinta Drive. Chapter 10-'Hydrology and flooding' of the EIS (Page10-77) notes a minor increase (less than 20 per cent increase) in the rate, volume and velocity of stormwater at the discharge point N1160B at unnamed tributary of Viney Creek.

  It is not clear what assumptions have been made to conclude this is a 'minor' impact. It is recommended TfNSW are required to confirm that analysis has been done to ensure no capacity impacts on the drainage network downstream of N1160B. Notwithstanding that the Newcastle Development Control Plan (NDCP) 2012 does not apply to State significant development, this analysis should consider the objectives to be met for CN's drainage networks in accordance with Section 7.02 -Stormwater and Section 7.07-Water efficiency of the NDCP 2012 and accompanying Technical Manual.

Increases in channel tailwater levels and inundation frequency generally increases sedimentation and reed growth thereby increasing CN's maintenance burden carrying out of works; securing approval for maintenance within 'coastal wetlands' identified under State Environmental Planning Policy (Coastal Management) 2018 ('Coastal SEPP Wetlands'); and resourcing coordination of efforts across all landholders and easement operators. Of concern are:

- Culverts under Woodberry Road on E2 land (13 Woodberry Rd).
- Culverts which drain waterbody on E3 land (81 Anderson Drive).
- Deterioration of Local Road e.g. due to subsidence.

It is not the responsibility of CN to resolve likely inundation impacts from this project on Coastal SEPP Wetlands on private lands, for example 13 & 16 Woodberry Road, Tarro.

It is recommended TfNSW are required to confirm that there will be no negative impacts on access to existing CN headwalls, culverts and pipe network and no increase in maintenance demands at the above locations. Details will be required on whether the wetlands connected to Purgatory Creek, for example near Woodberry Rd, will be generally wetter. Also, further details will be required regarding whether any changes to drying hydrology are anticipated, and how these issues will be mitigated and addressed.

4 Hydrology and biodiversity

The NSW Riverflow objective (Table 10-11) is '*Mimic natural drying in temporary waterways and wetlands'* applies to this project.

Despite the project's level of interaction with Coastal SEPP Wetlands there are no details in relation to any quantitative analysis on drying hydrology and potential impacts on receiving wetlands. Application of water quality targets alone – without hydrology targets – is not best practice.

All hydrological design targets must be consistent with TFNSWs 2017 guideline 'Applying water sensitive urban design principles to NSW transport projects*';* and the NSW Government's 'Risk-based Framework for Considering Waterway Health Outcomes'. CN's 'WSUD Above wetlands' targets within NDCP 2012 may also provide a useful reference point for such targets. This in turn is based on regional studies such as: https://www.hccrems.com.au/product/wsud-for-catchments-above-wetlands/ .
These factors need to be considered and included.

Chapter 10.6.4 -Sensitive receiving environments of the EIS (Page 10-106) that:

> **'*Hunter River Wetland**: Wetland areas in local catchments upstream of the project and within the HRBG may be affected by modified cross drainage arrangements. The proposed culverts under the upgraded highway are designed to be 0.2 metres higher than the existing culverts under the current highway. This may translate to increased permanent water levels in the wetlands of 0.2 metres. However, this is not expected to have any material impact on the wetland community.'*(my emphasis).

It is recommended that TfNSW provides advice from a wetland ecologist that supports the abovementioned claim in relation to the wetland community. Also, a map be prepared that clearly outlines where these effects are anticipated and what measures will be put in place to address the issues. Specific details need to be included that highlight and address impacts anticipated in the coastal wetlands on CN's land adjoining Purgatory Creek.

5 Flood impacts

Page 10-101 of the EIS states:

> *'Flood hazard during the 1% AEP event would be increased at:*
>
> - *Up to eight residential lots*
> - *No commercial lots*
> - *No industrial lots.*
>
> *There would be 17 lots comprised of residential and industrial uses which would be newly flooded in the 1% AEP flood event, to depths of 0.05 metres and up to 0.3 metres. Ten lots would experience afflux exceeding the adopted criteria during the 20% AEP or higher, and one building would experience afflux exceeding the adopted criteria.'*

Further clarification is required from TfNSW as to whether impacted lots are within the CN's Local Government Area and if so, what measures will be implemented to address any identified impacts.

It also is recommended TfNSW provide further information on the flooding impacts to the residential and commercial properties and clarify on how the Afflux parameters used in the flood management design objectives were determined. As per Table B-28 in the Hydrology and flooding working paper there are 108 residential lots and one industrial lot identified having a flood hazard condition increasing from low to high in a PMF event following the works. There are eight residential lots that will have an increased flood hazard from low/dry to high in the 1% AEP event.

Table B-28 Number of residential lots affected by different changes in flood hazard condition – operational case

Change in flood hazard	20% AEP	10% AEP	5% AEP	2% AEP	1% AEP	PMF
Was dry, now high	0	0	0	1	1	0
Was low, now high	0	2	8	7	7	108
Was dry, now low	7	6	6	6	13	43
No change	555	617	687	883	1179	6889
Was low, now dry	0	0	0	0	0	4
Was high, now low	2	2	2	2	3	38
Was high, now dry	0	0	0	0	0	0

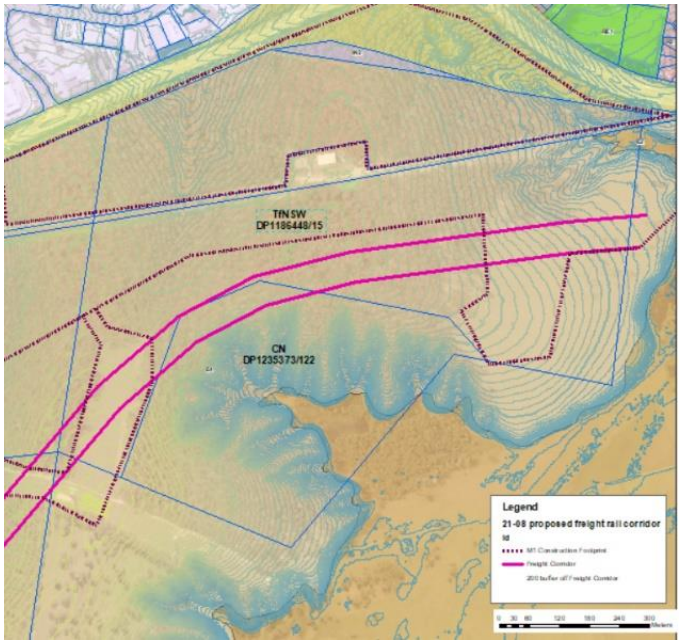
Of these properties table B25 identifies that 25 of these properties will have a change in peak flood depth greater than 0.3m in a PMF event and one property will have a change in peak food depth greater than 0.3m in a 1% AEP event.

Table 10-14 in Chapter 10 -Hydrology and Flooding states the proposed management measure is that *'Consultation will be carried out with landowners impacted by flood affects from the project which exceed the flood management objectives (afflux, change in flood hazard, change in time of inundation) about reasonable and feasible management measures.'*
Concern is raised whether the properties impacted by an increased flooding risk can be suitably addressed with management measures and what these management measures would be. There is concern that the changes in risk to life hazard and changes to the design minimum floor levels to these properties have not been suitably addressed and that the potential management measures have not clearly been explained.

In addition to this, it is unclear what is the basis for the Afflux Parameters) set out in Table 10-2-Quantitative flood management design objectives (Page 10-9) of chapter 10.2.3 of the EIS. Also, is not clear how these parameters were determined, and which relevant guides / manuals / flood studies were referenced to justify these qualitative parameters.

6 CN land Black Hill Interchange

CN's land (DP1235373 /122) at the Black Hill Interchange is identified on the diagram below.



The EIS does not specifically discuss the small Coastal SEPP Wetland and high potential groundwater dependent ecosystem on this lot. It is noted proposed drainage concepts do not discharge onto this lot and this is appreciated.

It is recommended the following requirements are included as a condition of consent should the project be approved.

- There are no changes to the catchment and hydrology of the wetland area contained in this lot.
- No point discharge of stormwater from the M1 extension project into the lot (DP1235373 /122) for both operational and construction phases.
- Any proposed/upgrades to drainage easements as part of this project make provision for future drainage needs (construction and operation) of the freight corridor.

As mentioned above, in addition to the M1 extension to Raymond Terrace Project TfNSW are also currently exhibiting the Lower Hunter Freight Corridor project. Given that the preferred alignment of the Freight Corridor Project is now known, the EIS for this project should consider such.

As shown on the above diagram, the proposed heavy rail freight corridor (pink lines) runs around the ridge approximately 120m uphill of the Coastal SEPP Wetland and occupies approximately 1.5ha of the CN land parcel.

It is recommended this section of the proposed freight corridor, including all construction batters, is completely relocated out of CN land. This is raised now as it is understood that it requires consideration of vertical alignment and other matters for both projects. Consideration should be given to co-locating the freight rail within the excavated corridor of the M1 project. This may also offer visual amenity and noise mitigation benefits to Black Hill residents from the construction and operation of the freight line.

The proposed freight rail alignment, Beresfield Expansion Project and M1 Extension is likely to clear 70ha of mature woodland / Endangered Ecological Community in the vicinity of the Black Hill interchange across all future projects. This will influence the viability of any project specific biodiversity mitigation controls applied to the M1 extension in this area. For example, why invest in fauna culverts, as proposed in the EIS, if the land on the other side of the expressway is cleared?

Having regard to the Department's commitments to investigate and invest in the Watagans to Stockton Wildlife Link / biodiversity corridor and relevant actions (Chapter 12) of the Greater Newcastle Metropolitan Strategy and consistency with CN's Local Environment Strategy 2015, it is desirable to get the best local biodiversity mitigation outcome from all project approvals.

It is recommended:

- All cumulative impacts be considered by all stakeholders as part of M1 project, so any project specific mitigation efforts are invested to directly support linkages between residual environmental lands in this area and broader wildlife corridors. Biocertification is not likely to achieve this local outcome.

- The Department's investigations consider the formation of a residual, integrated corridor of forested mature woodland of at least 200 metres width on the southern side of the proposed freight rail corridor. The primary function of this corridor is to be environmental conservation. This is appropriate given access constraints. It will also provide a buffer zone between the freight corridor and adjacent rural residential lots. With respect to public lands within this corridor, it requested the residual portion of TfNSW land DP879741/50 remains as bushland; and minor adjustments are made to

the boundaries of DP1235373/122 so the land formation better marries with the existing ecological, topographical, forested condition of the land and E2-Environmental Conservation zone wetland it supports.

7 Biodiversity protection on CN land

Construction Phase:

It is recommended the following requirements are included as a condition/s of consent should the project be approved.

1. For all trees >300 diameter at breast height or with habitat hollows on CN land (DP1235373 /122 and DP1235373 /121) within 15 metres of construction boundary or ancillary compound. CN requires preparation and submission of an Arboricultural Impact Assessment (AIA) and Tree Protection Plan (TPP) in accordance with *AS4970:2009 Protection of trees on development sites*. This is to be completed by a minimum AQF 5 Arborist with relevant experience. The AIA must:
    (i) detail all construction activities that are likely to impact trees. This is to include the location of site compounds, facilities, temporary services installations, vehicle access points and storage areas during the construction phase, and;
    (ii) describe design modifications and construction methodologies to minimise these impacts, and;
    (iii) detail all options from point (ii) above that have been explored and exhausted to retain trees, prior to recommending tree removal.
2. The TPP must:
    (i) clearly identify all trees that are to be retained on the site and;
    (ii) their Tree Protection Zones and Structural Root Zones, and;
    (iii) include types and locations of tree protection and identify areas where arboricultural supervision is required, and;
    (iv) include an inspection schedule that highlights milestone activities and inspection frequencies for the Project Arborist.
3. Installation of fencing to prevent encroachment and provide tree protection zones for all trees on CN land - informed by arborist assessment above.
4. Installation of ancillary facility lighting design and maintenance to prevent light impacts on the adjacent natural area in accordance with Tables within Australian Standard AS4282-1997-'Control of the Obtrusive Effects of Outdoor Lighting'.
5. Erosion and Sediment Control plans for adjacent ancillary compounds to include no discharge or concentrated or overland flows onto the CN Environmental Land Parcel CN 1235373/122.

Post Construction and Operation Phase

It is recommended the following requirement is addressed in the conditions of approval for the project:

- All ancillary facilities adjacent to CN land DP1235373/122 are ecologically restored, for example: Australian Standard AS4434 Mulch and high-density native vegetation planting (six tube stock per m2) for at least 20 metre minimum buffer perimeter around CN land at the closure of ancillary compound.

8 Access

It is recommended the following requirements are included as a condition of consent should the project be approved.

- Ecological restoration of any informal tracks into CN land.
- Installation of fencing, gates and tall rock fences to reduce unwanted access, in particular 4WD and trailbike access, from adjacent TfNSW corridors onto CN land.

9 Bushfire

It is recommended the following requirement is included as a condition of consent should the project be approved:

- Ensure co-location of any required fire trails within existing easements and cleared land, particularly power easements, as determined by the bushfire risk assessment of operational phase.

10 Traffic impacts on CN roads

Potential impacts on CN roads are either discussed in the EIS or should be able to be addressed at the next stage (e.g. fine-tuning temporary traffic control schemes on local roads). While *'temporary short-term [traffic] diversi*ons' will likely be required during the construction stage, significant traffic is not to be diverted along local roads (e.g. eastbound traffic: (start) M1 west - Quarter Sessions Rd, Anderson Drive, M1 east (end)). Diversions of motorway traffic for construction activity are to use roads / tracks provided within the motorway land corridor.

It is recommended TfNSW be required to investigate the radius of the curve (bend) at the entrance of Lenaghans Drive from the M1 extension. A bigger radius could be more desirable with a longer taper or deceleration lane from the M1extension to Lenaghans Drive.

11 Heritage

<u>European Heritage</u>

The project directly impacts or is in the vicinity of eight listed heritage items on Schedule 5 of the Newcastle Local Environmental Plan 2012. The exhibited Non-Aboriginal Heritage Working Paper (NAHWP) has assessed the impact of the development on these listed sites as ranging from minor to negligible.

Direct physical impacts to listed heritage items are found to be unlikely. However, concern is raised that the setting of these items will be irreversibly impacted both during construction and following completion of the new M1 extension, including associated infrastructure such as noise walls. Impacts to setting has not been adequately addressed in the NAHWP. Where noise walls are required adjacent to the curtilage of heritage items, these should be designed in consultation with a heritage architect to minimise visual and amenity impacts where possible. The NAHWP recommends that an archival photographic record is undertaken of a section of the Glenrowan Homestead site, however this recommendation should extend to all heritage items where the current rural setting is to be significantly changed.

Due to potential noise and vibration impacts, the NAHWP has specified that a number of heritage items are eligible for architectural noise treatment. There is no information provided on what form that treatment would take or any adverse impact that may result. Details of a sympathetic architectural noise treatment should be resolved in consultation with a heritage architect.

Due to the proximity of the works to listed heritage items over a large geographical area, it is recommended that a Construction Heritage Management Plan is prepared prior to commencement of any works. The plan should include actions to avoid, minimise and manage impacts to heritage items during construction of the project, and procedures to manage unexpected archaeological finds. The matter could be addressed by an appropriate condition on the approval for the project.

Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) is included with the documentation. Within the Newcastle LGA there are 26 Aboriginal sites that will be impacted by the proposed development. This is not a satisfactory outcome in relation to impacts on Aboriginal cultural heritage. Opportunities to reduce adverse impacts to areas of known sensitivity should be further explored.

It is noted that the ACHAR provides management measures for Aboriginal cultural heritage impacted by the development. These management strategies are to be included as conditions of consent should the project be approved.

All staff, contractors and sub-contractors should be made aware of local heritage items, Aboriginal cultural heritage matters, unexpected finds procedures and their statutory obligations for heritage as part of a heritage site induction.

12 Ancillary Facilities

The project includes the establishment and operation of concrete and asphalt batching plants within the ancillary facilities for the project. The EIS does not provide details of the locations of these facilities.

13 Cranes and tall structures

It is recommended the following requirement is included as a condition of consent should the project be approved.

The route of the project traverses land located within the protected airspace of Newcastle Airport. If it is proposed to erect a structure or use a mobile crane having a height exceeding 30m above ground level, it will be necessary to obtain the prior approval of the Air Base Command Post of RAAF Base Williamtown in accordance with the **'***The Operation of Cranes and Tall Structures in the Vicinity of Newcastle Airport'* (Department of Defence, 2013)**.** For further enquiries about the document or the requirements please contact RAAF Base Williamtown by phone: 02 4034 7888 or email at WLM.ABCP@defence.gov.au .

14 Property ownership

The EIS has been reviewed from the perspective of CN land affected by the project. It being noted that any use of such land will be under a Licence for the duration of the project.

It is noted there is an inconsistency in some of the property ownership details and use of a property at Tarro which it is understood TfNSW want to occupy, however, there is a 20-year lease to Optus. These matters will need to be resolved. (Refer to Attachment 1).

If you have any questions in relation to the various matters raised in this letter, please contact Geof Mansfield, Principal Planner on 4974 2767 or gmansfield@ncc.nsw.gov.au .

Yours faithfully

Michelle Bisson
MANAGER REGULATORY, PLANNING AND ASSESSMENT

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ATTACHMENT 1.