

Future City.G Mansfield. GM
Reference: 4030643
Phone: 02 49742767

20 December 2012

Mr Nick Fallon
Senior Planning Officer
Infrastructure Projects
Major projects Assessment
NSW Department of Planning and Infrastructure
GPO Box 391
SYDNEY NSW 2001

Dear Mr Fallon

TRANSITIONAL PART 3A MAJOR PROJECT-QR NATIONAL TRAIN SUPPORT FACILITY (MP07- 0171)

I refer to the Department's letter of 19 November, 2012 inviting Council to comment on the Environmental Assessment (EA) prepared by ADW Johnson in support of the abovementioned Project.

Council officers have examined the EA and it is requested that QR National be requested to submit supplementary information which satisfactorily addresses the following comments:

1. Newcastle Local Environmental Plan, (NLEP) 2012

It is acknowledged that in accordance with *State Environment Planning Policy (Major Development), 2005*, the application will be assessed as a transitional Part 3A project under of the *Environmental Planning Assessment Act, 1979*. Therefore, no legislation or other planning instruments have any effect on the permissibility of the proposed Project.

The EA has had regard to the Newcastle Local Environment Plan 2012 and identifies the subject site as partly zoned SP2 Infrastructure, E2 Environmental Conservation, and IN3 Heavy Industrial. In fact, the area of the site located within the SP2 zone is minuscule. It is appropriate that the EA discuss the permissibility of the Project in respect of the above zones and compliance with relevant objectives of the Plan.

2. Ecological

The EA notes two areas within the site are proposed to be negotiated with the Office of Environment and Heritage (OEH) as conservation offsets for the removal of native vegetation. The proposed conservation offset is located in two distinct areas to the north and south of the proposed development footprint. However, both areas are currently zoned as E2 Environment Conservation under the *Newcastle Local Environment Plan (LEP) 2012*. Therefore, the proposed conservation offsets are already afforded a form of protection and raises the issues regarding whether the proposed offset areas are appropriate. Furthermore, the proposed northern offset area is located directly next to the proposed extension of the F3 highway.

The proximity of the proposed northern offset to the proposed extension raises issues regarding whether the offset area will be required for future infrastructure works and the viability of the area as an appropriate conservation offset.

It is noted the proposed development is located within the Watagan to Stockton Green Corridor contained in the *Lower Hunter Regional Strategy*. Minimal information is provided regarding the use of the proposed corridor lands for the proposed development and the proposed deviation from the gazetted strategy.

The Ecological Investigations Report prepared by Ecological Australia Pty Ltd dated November 2012 has undertaken an analysis of the likelihood of threatened flora and fauna occurring within the proposed development area (Appendix A of the Ecological Investigations Report). It is noted that some species have been deemed unlikely to occur although suitable habitat appears to be present. Therefore, it is requested the inclusion of Comb-crested Jacana (*Irediparra gallinacea*) and Black Bittern (*Ixobrychus flavicollis*) within the test of significance.

The test of significance for the Green and Golden Bell Frog (*Litoria aurea*) notes the proposed development area is likely to be utilised by this amphibian, but the proposed development will not significantly impact upon this species. The proposed development represents a contraction of the available habitat for the local Hexham population of the Green and Golden Bell Frog and places the population at a potential higher risk of extinction. The loss of habitat for the Green and Golden Bell Frog within this area does not meet the objectives of the *Management Plan for the Green and Golden Bell Frog Key Populations in the Lower Hunter*.

Appendix E of the Ecological Investigations Report prepared by Ecological Australia Pty Ltd dated November 2012 shows the results of an unpublished hollow bearing tree survey conducted by EcoBiological. The survey appears to be confined to the stand of Swamp Oak (*Casuarina glauca*) proposed as part of the northern off-set area and does not include the entirety of the study area. Therefore, a hollow-bearing tree survey should be conducted for the study area to allow analysis of the loss of hollow bearing trees as a key threatening process. It is noted an analysis of key threatening processes has also not been undertaken as part of the ecological investigation.

Impacts on local fauna from noise and lighting at the proposed development have not been included within the ecological impact assessment. It is requested that impacts on fauna from noise and lighting associated with the proposed development be addressed as part of the assessment.

3. Noise

The EA indicates the proposed development will not result in an increase in train movements on the Great Northern Railway. However, the Noise Impact Assessment prepared by SLR Consulting Australia Pty Ltd dated 26 September 2012 notes QR National has forecasted a growth in train movements. Therefore, the proposed development will assist in increasing train movements along the existing railway. The increased movements have the potential to generate adverse noise impacts for landuses located along the railway. Therefore, the assessment of noise associated with the proposed development should include the resultant increase in train movements as part of the operations of QR National and/or other trains/clients using the proposed servicing facility.

4. Contamination

The Remediation Action Plan (RAP) prepared by GHD Australia dated 25 September 2012 proposes a combination of remediation methods as the preferred remediation strategy. The proposed methods include cap and contain, bioremediation and off-site disposal. However, no additional detail is provided regarding how these methods are utilised or which areas the methods will be undertaken. Therefore, clarification of the remediation techniques and where the methods are applied should be undertaken.

The RAP prepared by GHD Australia notes the proposed remediation is developed for the proposed train servicing facility only. If remediation action is intended for the development footprint only it raises the issue of how on-going contamination, both soil and groundwater, associated with the remainder of the site is proposed to be managed. Therefore, it is requested that clarification of the extent of remediation proposed and how remaining contamination at the site is proposed to be managed.

The bioremediation of total recoverable hydrocarbons will include the release of emissions and odour. The RAP prepared by GHD Australia does not address these potential emissions and potential emissions have not been included within the air quality assessment. It is requested that any emissions from remediation activities be appropriately assessed and management measures incorporated into construction documents.

5. Sewage

The proposed development intends to be serviced by an on-site sewage management system. The proposed system includes a package sewer pump station and treatment plant with irrigation of wastewater. The proposed sewage management system has considerable constraints such as proximity to sensitive receivers such as wetlands, a high groundwater table and existing issues such as the presence of nutrients and faecal coliforms in both groundwater and surface water.

The site is less than ideal for on-site effluent disposal as shown by the various limiting factors identified in Table 2 of the Effluent Disposal Assessment. Furthermore it is noted that groundwater in the area is already suffering pollution impacts (Environmental Assessment section 9.9.1).

It is appreciated that the references 1 and 2, for 'single households' and 'domestic' assessment respectively are used due to the lack of more appropriate guidance for a proposal of this scale. The extrapolation of assessment techniques for single households and domestic situations to cover a situation such as the TSF must however at least introduce some uncertainty into the conclusions and reduce confidence that on-site disposal will be free of adverse environmental impacts.

Connection to reticulated sewer would provide a long-term, low risk solution to the environmental issues associated with on-site effluent disposal. The proponent should investigate all possible means to make connection to sewer and demonstrate that the feasibility of this has been thoroughly assessed.

Assuming there is no alternative to on-site effluent treatment and disposal, Council holds concerns regarding the approval process described for the package wastewater treatment system. The opportunity for Council to make independent assessment and determination of an application for a wastewater treatment (including the possible option of refusal) would be less than ideal if approval for the Project had already been granted by the Minister for Planning and Infrastructure.

The specific makeup of the principal wastewater flows as shown in Table 6 of the Effluent Disposal assessment is not provided. These flows are described as 'domestic' – a confusing terminology considering the nature of the development. The 'domestic' description suggests that flows are a result of staff with toilet / washing / kitchen type activities, however the flow increases allowed for during wet weather suggests some other source. Clarification with regards to the nature of these flows is requested.

Therefore, it is recommended the proponent investigate alternative options, including connection to reticulated sewer, to facilitate the wastewater requirements of the proposed development.

6. Flood Management

The site is identified as a floodway in Council's adopted 'Newcastle City-wide Floodplain Risk Management Study and Plan'

The Newcastle Development Control Plan, 2012 has the following objective and controls in relation to Floodways:

4.01.01 Floodways

Objectives

- 1. Retain floodways in a condition capable for the conveyance of essential flood flow.*

Controls

- 1. No building or structure erected and no land filled by way of the deposition of any material within any area identified as a floodway except for minor alterations to ground levels which do not significantly alter the fundamental flow patterns for:*

- (a) roads*
- (b) parking*
- (c) below ground structures*
- (d) landscaping.*

The information in the EA shows that the proposed development will significantly alter the fundamental flow patterns and not retaining the floodway in a condition that is capable for the conveyance of essential flood flow. The Project will increase depths and velocities in a number of areas, contrary to Council's requirements.

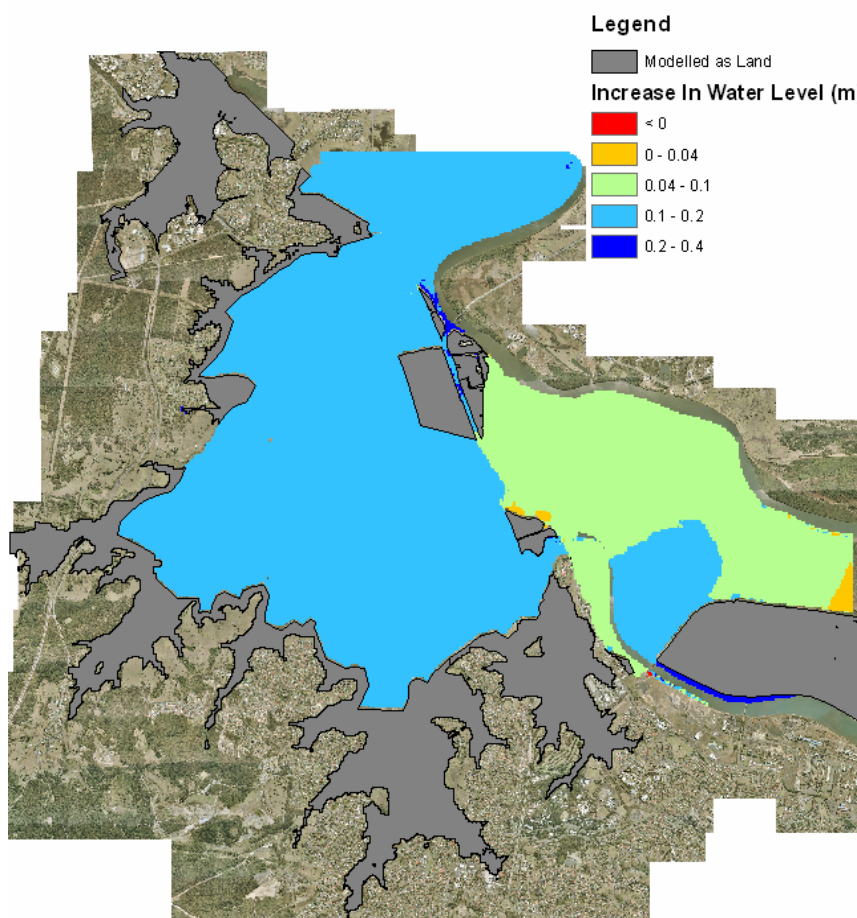
It is recommended the proponent is required to address the principles of the NSW Government Floodplain Development Manual (2005) and a flood study is to be prepared to this extent. This Study needs to address a broad range of issues to the same depth as the existing management plan and associated studies. Cumulative impact must be addressed at the global rather than the development specific level.

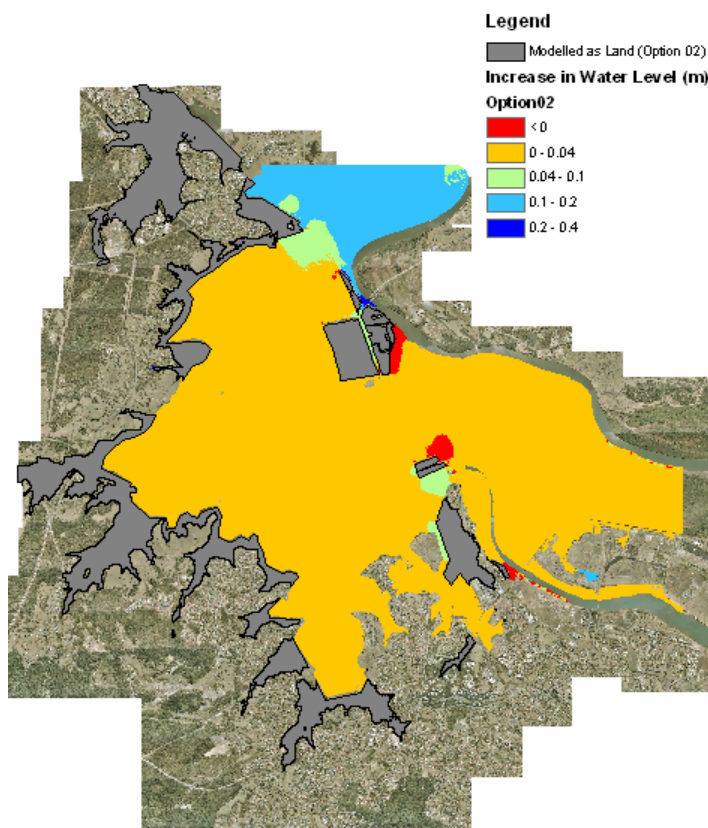
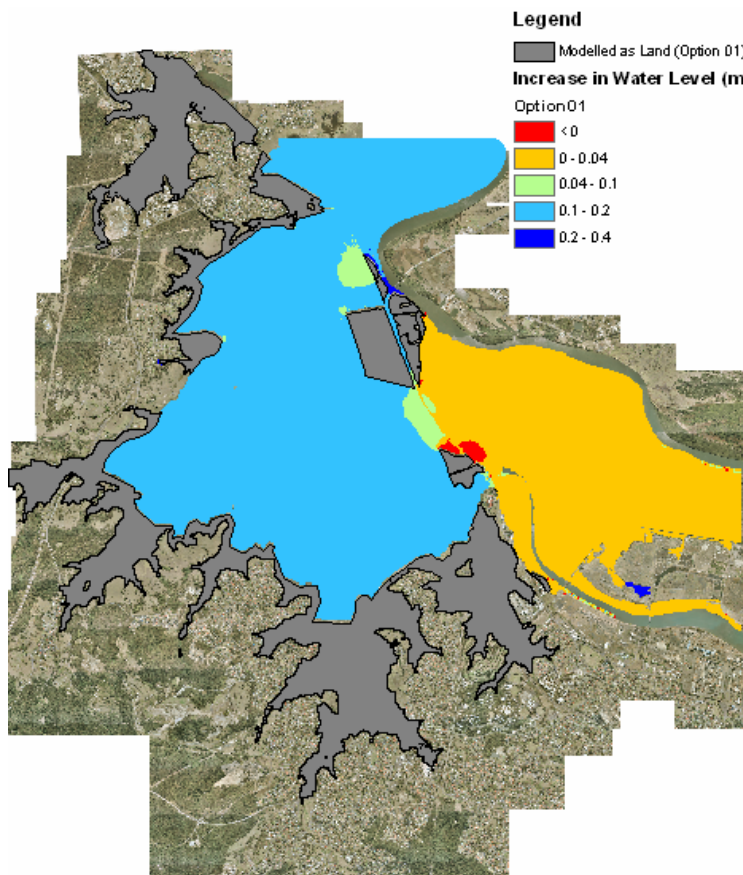
The proposed development has potential to adversely impact on the flood plain, as well as downstream and adjoining properties with in the Hunter River catchment. The development is located in a key location in which flood levels can be greatly affected by any changes in how the flood regime will function in that location. The additional

details supplied show that there are significant and unacceptable impacts on the adjoining properties.

The 'Newcastle City-wide Floodplain Risk Management Study and Plan' outlines the basis of the scenario testing to achieve a maximum variation within a 40mm target. Generally any impacts of increase in depth greater than 0.04m have been considered unacceptable. The modelling of the Project shows increases of up to 0.50m on the Pacific Highway and adjoining properties with similar unacceptable velocity changes above 1m/s. These are unacceptable impacts on the surrounding road network and the adjoining properties.

Inadequate information has been provided of the affects upstream and down stream. Modelling of filling on that part of Hexham revealed impacts on the flows up stream in the Hunter River, Hexham, Hexham swamp, as well as on Kooragang Island. Refer to the fill scenarios below:





While the above modelling did not include the fill for a rail line and the associated works in them, they do demonstrate that the filling and potential blocking of the floodway and limiting the flows down stream can have impacts on a wider catchment.

The EA consideration of the maximum amount of changes to the flood system and what event this occurs is inadequate. No modelling has been provided for events between the 1% AEP and the 2% AEP to determine the maximum impact.

Design changes are required to the Project to ensure that there is no increased impacts (or minimum increases within acceptable limits) within the Hunter River flood plain for all flood events.

7. Traffic Generation and access

The submitted traffic report assesses the impacts of the traffic generated by the Project during the both the construction and operational phases concurrently with the adjoining ARTC Relief Roads Project. This assessment concluded that all intersections including the new intersection connecting with the Tarro Interchange, performed at acceptable levels of service with minimal delays. It also identified that the majority of the traffic generated by the Project will occur during the construction phase. Furthermore, it is likely that Roads and Maritime Services (RMS) will place restrictions on the start and finish times for construction to ensure this activity occurs outside the highway peak period.

It is noted that the proponents' representatives have had discussions with the RMS concerning access to the New England Highway. RMS has accepted restricted access during the construction period to facilitate this Project. The terms of this restricted access will form the basis of the Works Authorisation Deed Agreement entered into by the proponent with the RMS

The proposed access road linking with the Tarro Interchange is to be constructed generally in accordance with the design criteria detailed for a Local Industrial Road under Section 7.04 -Movement Networks of the Newcastle DCP, 2012, such being completed prior to any operation of the facility.

A dilapidation survey will be required for Woodlands Close pre and post development to ensure Council roads are not adversely impacted upon during the construction phase of this project and any road pavement deterioration during this period is repaired at the developer's expense.

A construction traffic management plan will be required to be submitted to RMS and Council for approval prior to the commencement of site works. This plan is to detail installation of advance warning signs for motorists in the public road reserve of construction traffic / truck movements. These signs are to be installed in accordance with AS 1742.3 – *Traffic Control Devices for Works on Roads*.

Any consent granted to this application should include a condition requiring a 'right of public access' to accommodate the construction of the proposed cycleway that traverses the site.

8. Section 94A Contributions

The submitted EA does not acknowledge that the Newcastle section 94A Contributions Plan, 2009 is applicable to the Project. This Plan authorises the consent authority to grant consent to the development subject to a condition requiring the proponent to pay to The City of Newcastle a levy on the proposed cost of the development. Clause 25J of the Environmental planning and assessment Regulation 200 sets out how the proposed cost of carrying out the development is to be determined. The levy rate is 1.0% of the cost of carrying out the development.

9. Design Details

Concern is expressed at the lack of design details submitted in support of the application with only a single 'typical site cross section' included in the EA for a project that extends over some 2800m.

I trust these comments are of assistance to you in your consideration of this application. Council looks forwards to receiving the proponent's response to the various issues canvassed in this letter. In the meantime, if you have any questions, I can be contacted on 02 4972767.

Yours faithfully

Geof Mansfield
PRINCIPAL PLANNER (DEVELOPMENT)