



>> REPORT

>> RESPONSE TO PUBLIC SUBMISSIONS

>> **UPDATED SOCIAL IMPACT ASSESSMENT
(INCORPORATING A REVISED SOCIAL IMPACT
SCORECARD)**

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1 INTRODUCTION

This document presents an updated social impact assessment in response to issues raised during the EIS public consultation, and in particular to the impact on residents of the proposed development.

Rather than revise the entire Social Impact Assessment, this document restricts its response to specific issues raised during the public consultation period post-EIS lodgement, together with a review of feedback and commentary from various sources of public input in the preparation of the original Social Impact Assessment.

1.1 ISSUES

The original Social Impact Assessment Report was presented in two volumes:

- Volume I presented an overall assessment, incorporating assessments of a broad range of inputs including a number of community engagement processes; and
- Volume II presented the detailed statistical findings of a quantitative survey of community attitudes towards the proposed Townsville Ocean Terminal project.

Submissions raised a number of issues, as follows:

1. The accuracy of the survey results was queried, particularly in relation to sampling issues and methods;
2. Residents in the proposed Breakwater Cove residential development are likely to be older and therefore more prone to dust and noise impacts and other port activities, intensifying negative health impacts;
3. The impacts on visual amenity have been under-stated, and that the proposed acoustic wall will have a major negative visual amenity impact for residents of North Ward, Yarrowonga and Castle Hill in that the view of the Port will be obstructed;
4. There is need for quantification of inconvenience to other residents from the temporary bridge, traffic congestion and access during construction;
5. Potential for pollution impacts from various sources e.g. heavy metal dust, on residents has not been adequately addressed;
6. Social benefits have been over-stated and social costs under-stated;
7. There is a lack of recommendations about how to address changes in amenity; and
8. Public access to parkland diminished from original TCC proposal for Port precinct.



2 RESPONSES

2.1 COMMUNITY SURVEY

Issues related to the quantitative telephone survey of community attitudes have been addressed separately (Transpac Consulting 2008a: *Sampling Related Issues and Questionnaire Design in the Community Attitudes Survey* – at Appendix A29 of this Supplementary EIS). Suffice to note that the Consultants remain confident that the survey results are an accurate capture of community attitudes at the time of survey implementation (July 2007). This conclusion is confirmed by the peer review undertaken by Dr Gerd Haberkern of Enhance Management Pty Ltd (Appendix A36).

2.2 IMPACT ON HEALTH OF OLDER RESIDENTS

The acoustic and air quality impact assessment reports concluded that existing emissions from the Port of Townsville and forecast emissions of same have been, and are expected to be on the whole within accepted nuisance and health limits and regulatory standards (Refer to various Supplementary Reports from Air Noise Environment at Appendixes A1-A6, the Supplementary Acoustic Report at Appendix A7 and Transpac Consulting 2008b: Port Compatibility at Appendix A33). That being the case, provided that emission levels are within acceptable national standards for nuisance and health, there is no evidence to indicate that there are likely to be any health implications for future Breakwater Cove residents *irrespective of their likely age*.

The emission impact assessments identified three activities that exceed the appropriate emission nuisance standards, namely:

- Noise emissions from the loading and unloading of motor vehicles;
- Noise emissions from ship's horns; and
- Odour emissions from the loading of live cattle.

None of these is health threatening. A range of performance-based mitigation measures have been proposed. On the basis that the proposed mitigations are effective, the *Social Impact Assessment* concluded that the potential for amenity impacts arising from proximity to the Port of Townsville are typically within acceptable nuisance limits in any case, and on occasions where exceedances are expected, mitigation measures can be implemented.

It can be further noted that as the likely future residents are anticipated to be of relatively high socio-economic status, these persons are also more likely to have better health status. Consultations by Transpac Consulting with Queensland Health – Townsville (Dr A. Johnson) during the study period indicated that there was no expectation that the demographics of the Breakwater Cove residential precinct would give rise to any special demographic-related health concerns beyond the norm for persons of particular age groups and socio-economic status.

2.3 IMPACTS ON VISUAL AMENITY

The extent to which a development or a facility represents a visual amenity or disamenity is to some extent a function of personal (subjective) preferences and tastes. The original visual



amenity impact assessment (Chenoweth) indicates that the impacts of the proposed development are not considered to be adverse. As social impact assessors, we have deferred to the professional judgments and conclusions of the visual amenity expert in evaluating the potential visual impact of the proposed development.

2.4 QUANTIFICATION OF INCONVENIENCE TO RESIDENTS (CONSTRUCTION TRAFFIC)

Submissions specifically raised concerns about the inconvenience impacts on residents of the temporary bridge, traffic congestion and general access issues during the construction of the project. Such impacts relate to residents at #1 and #7 The Strand and residents living along Sir Leslie Thies Drive.

Material haulage would cause inconvenience to these residents as well as road users if the preferred route and proposed usage regime resulted in unacceptable levels of traffic congestion and disruption to existing patterns and ease of access to-and-from the residences in question.

The traffic reports and modelling (Holland Traffic Consultants and Veitch Lister – at Appendix A23 and also the original EIS Reports) indicate that the expected volumes of truck traffic along Sir Leslie Thies Drive would result in *insignificant* impacts on the local road network and levels of congestion, which would result in inconvenience impacts on local residents. The traffic analysis indicates that Sir Leslie Thies Drive has sufficient capacity for materials haulage traffic. As such, on the advice of the traffic consultants, we conclude that there are unlikely to be discernible *inconvenience* or *congestion-related* impacts on local residents or other road users as a result of construction haulage traffic.

Similarly should trucks be required to wait for the temporary bridge to close, this would be achieved by having them queue on the project site (away from nearby residents and other road users). Queuing on the south side of Ross Creek can also be effected so as to ensure existing road users are not impacted (see Flanagan Consulting Group 2008a – Appendix A7).

In any regard, since the original EIS and in response to public submissions, members of the engineering and construction project consulting team have further examined materials haulage options from the point of view of undertaking a more explicit multi-criteria assessment of options. The multi-criteria assessment of haulage route options, undertaken by Flanagan Consulting Group (2008b – Appendix A8) concludes that:

The analysis of the haul options by the multi criteria analysis has shown that the preferred route, Route 1 [temporary bridge over Ross Creek], is a reasonable compromise between increased cost to the project (when compared to Routes 2 and 3 [effectively involving traffic through the CBD or through the Strand precinct respectively]; reduced environmental impacts (when compared to Route 4 [road and barge with the barge point being at the junction of Boundary Street and Benwell Road]; and reduced social impacts (when compared to Routes 2 and 3) (p. 36).

In undertaking this assessment, a new previously unconsidered possibility has emerged, which would involve the barging of trucks across Ross Creek to a position near to or at the project site, thereby averting any road traffic impacts on the above-mentioned residents. This is described as Option 1A for material haulage.

From a purely social impact perspective, this option would effectively obviate any potential



haulage impacts on these persons and would be highly desirable. However, as noted, the re-assessment has been undertaken from a multi-criteria perspective and other considerations will need to be taken into account prior to a final determination on the final preferred route option.

2.5 POLLUTION IMPACTS

One submission argued that pollution impacts from sources such as heavy metal dust have not been adequately addressed. From a social impact perspective, the consultants have deferred to the professional scientific assessments of air quality impacts arising from the proposed development and the Port as a basis for assessing the potential social impacts on future Breakwater Cove residents.

In terms of potential residential exposure to elevated lead levels, the *Supplementary Report: Metals Emissions* concludes that “the most recently available monitoring data indicate levels of lead deposition within the World Health Organisation indicator level”, and that further modelling found that “even at maximum export capacity, maximum predicted ground level lead concentrations are likely to be well below both the annual average and 3 monthly average goals” (p. 12).

As noted above, occasions when noise or odour exceedances are expected represent the exception rather than the norm. To this end, the potential pollution impacts, particularly from a nuisance point of view, have been adequately assessed and addressed.

However, we note that should future ongoing monitoring of air quality emissions from the Port and its users indicate exceedances of acceptable nuisance and subsequently health limits, it can be reasonably expected that the Port and or the relevant user(s) will be required to address the activities that have given rise to the exceedances particularly in event that such exceedances are a result of non-compliance with relevant operating conditions. This would likely be the case regardless of whether the proposed Breakwater Cove residential precinct proceeded.

2.6 SOCIAL BENEFITS AND DIS-BENEFITS

Another submission makes the general comment that the social benefits have been over-stated and dis-benefits or costs have been understated in the study. Specific examples were not provided as part of this broad statement.

At a broad level, it can be noted that the Social Impact Assessment undertaken was specifically in response to requirements stipulated in the EIS Terms of Reference (TOR). The Social Impact Assessment did not specifically provide weightings on the identified benefits (short and long-term) or the dis-benefits (short and long-term).

The overall assessment identified a number of potential adverse impacts during the construction phase including:

- Public access to the existing breakwater will be denied during construction;
- Some residents on the proposed haulage route (in particular at southern end of the Strand and Sir Leslie Thiess Drive) will be impacted by truck haulage issues. As noted above, the impacts are not likely to be in the form of increased congestion or access inconvenience. Rather, impacts are likely to be related to noise and vibration; and
- Nearby residents may also be impacted by noise and dust emissions from the



construction site, which would require mitigation.

The overall assessment also identified a range of longer-term social impacts post construction particular in relation to local residents' values and aspirations. The assessment found that the proposed development was seen by the majority of residents as being consistent with their values that favour sustained economic opportunity and security for the region, in which the TOT project is seen to contribute significantly, and their aspirations for sustainability in the quality of life offered by the City.

This notwithstanding, the social impact assessment – and in particular the Community Survey – also found that there was a proportion of residents (the minority) in Greater Townsville that did not believe that proposed project was consistent with their values and aspirations.

In making this statistical finding, the Social Impact Assessment did not privilege the attitudes of one particular group over another. The results simply indicate that at the time of the study, a larger proportion of residents saw the proposed development in favourable terms vis-à-vis their aspirations and values than otherwise. Refer also to a more detailed consideration of issues related to the Community Survey at Appendix A29 of this Supplementary EIS.

The nature of social impact assessments is to provide additional insights from a specific perspective into an overall project evaluation framework, in this case the EIS.

2.7 LIMITED CONSIDERATION OF MITIGATIONS OF ADVERSE SOCIAL IMPACTS

It is the Consultant's view that detailed mitigation responses should be and can be developed at later stages of project operational evaluations and assessments. At the EIS stage, two broad considerations were entered into:

1. First, potential impacts were scoped and assessed; and
2. Second, the extent to which such impacts could be considered to be extra-ordinary from the point of view of typical large-scale civil engineering or construction projects was evaluated. Should any impacts be considered extra-ordinary, then it would have followed that special attention would be paid to such impacts and how they may be mitigated.

On this basis, broad mitigation frameworks can be contemplated, but detailed mitigation actions are best dealt with through the development of instruments such as Environmental Management Plans, Construction Management Plans etc. that would be assessed at Operational Works and other operational approval and licensing stages. This approach is consistent with standard development practice where the level of specification is usually dealt with at operational approval stages of projects. In this regard, it can be noted that none of the identified impacts were extra-ordinary either in nature or type, or duration. As such, the Consultants are of the view that they would be amenable to standard project management and mitigation responses at operational approval stages. Such mitigations could include actions like:

- Establishing regular information distribution protocols to ensure impacted residents are fully aware of project progress, impending activities, changes to schedules etc.;
- Introduction of dust dampening interventions (spraying etc.); and



- Adding noise dampening design features to the temporary bridge, if required etc.¹

In summary, the Social Impact Assessment identified, scoped and evaluated potential impacts. In doing so did not identify impacts that were extra-ordinary and that were not – on the basis of available professional literature, the views of stakeholders that were interviewed, the opinions of technical experts involved in the EIS process and our experience and judgement – able to be effectively mitigated through detailed management plans and such like.

2.8 PUBLIC ACCESS TO PARKLAND

The proposed development includes provision for a large area of public open space/parkland together with public access to a breakwater bridge. One submitter raised concerns that the provision in the EIS master plan effective involved a reduction of the amount of parkland being provided when compared to the “original TCC proposal” for the precinct.

In addressing this submission, the Consultants have reviewed the Townsville CBD Master Plan (June 2002), in which a concept master plan for the so-called Breakwater Precinct was presented. This concept included provision for an international cruise ship terminal (with two berth pockets), an international marina and developments with a tourist, leisure and residential focus.

That concept master plan also provided for public open space/parkland, accessible from the existing Entertainment Centre/Casino area. No alternative linkage between the precinct and the Strand is envisaged in this concept.

On visual inspection, it appears that the 2002 concept master plan conceived of a development that was significantly more intensive and dense than the proposed master plan that has been the subject of the present EIS. On the basis of available documentation and noting its lack of detail, it is difficult to conclusively say that the 2002 concept provided more or less parkland than the most recent master plan.

¹ This is not meant to be exhaustive, but indicative of the kinds of ‘standard’ mitigation approaches that could be readily considered for this project.



3 CONCLUSIONS

On the basis of the above, the present conclusions remain fundamentally unaltered from those arrived at originally in the two Social Impact Assessment volumes after the original extensive investigations in response to the Terms of Reference. Specifically, the conclusion is that on the whole the project delivers significant long-term social benefits to the City and the region and meets an identified demand for the type of high quality residential opportunities that are being contemplated within Breakwater Cove; and that adverse social impacts are limited in both scale and duration, and are amenable to mitigation.

Indeed, in light of recent commentary in relation to (a) the adverse reputation impacts of not being able to accept cruise ship visitors except via an industrial arrivals area and (b) the significant difficulties of the region in attracting highly trained medical specialists, professionals and para-professionals, the proposed residential precinct will enhance the City's reputation as being conducive to tourist development and visitations, and competitiveness in attracting and retaining such skilled workers.

On this basis, the following is an updated Social Impacts Scorecard. The Scorecard is presented as it was originally shown at Page 2:2 of the EIS, with additional comments or observations shown in *Italics*.

Table 1: Social Impact Scorecard

Anticipated Positive Impacts	Potential Adverse Impacts*
<p>Enhanced public amenity on the new breakwater in the form of public open space and continuation of the Strand via the new pier.</p> <p>Additionally the extended northern pier is conceived with dedicated fishing opportunities for recreational angling usage.</p> <p><i>In response to feedback from the State, we are advised the extent to which dedicated fishing piers can be created along the northern pier will require further detailed consideration.</i></p>	<p>Potential adverse amenity impacts on existing nearby residents during construction, particularly residents living at #1, 3 and 7 The Strand and on Sir Leslie Thiess Drive who will be impacted by increased traffic movement resulting from material haulage to the project site. This involves some 120 dwellings.</p> <p><i>Given the results of the traffic evaluations, we would anticipate that the potential impacts of haulage along the original preferred route (involving a temporary bridge across Ross Creek) are amenable to effective mitigations, which would be detailed at the appropriate operational approval stages.</i></p> <p><i>Such mitigations would include establishing a robust community communication program to ensure impacted residents are fully aware of traffic movements and planned traffic movements and construction events, bridge surface treatments etc. However, this anticipation would require validation via more detailed assessments from an acoustics engineer.</i></p> <p><i>It should, however, a new alternative has been raised during the post EIS period, namely the possible use of a vehicle barge to transport loaded and unloaded trucks across Ross Creek without the need for a bridge structure. This option would</i></p>



	<p><i>effectively obviate the potential impacts on nearby residents, as well as upstream users of Ross Creek.</i></p>
<p>The project is expected to result in enhanced public perceptions of Townsville as a mature, dynamic and progressive city.</p> <p>The community survey confirms that the majority of greater Townsville residents are favourable towards the proposed development and its impact on the city's reputation and residents' 'sense of place'.</p>	<p>Future Breakwater Cove residents' amenity may be impacted due to proximity to operating Port. In particular noise and odour impacts arising from port activities may impact these residents.</p> <p>Anticipated noise impacts are expected to be within acceptable limits or can be mitigated within the design of the dwelling. Odour impacts, particularly during movement of live cattle, are expected but can be mitigated to some extent through appropriate building design.</p> <p>Odour and noise impacts are also expected to be seasonally variable given changes to prevailing wind directions.</p> <p><i>Both noise and odour impacts are capable of mitigation through appropriate Codes associated with the Port Protection Measures.</i></p> <p><i>Future Breakwater Cove residents' amenity may be impacted by proximity to the Port, in particularly in terms of nuisance dust. The air quality assessment found that anticipated nuisance dust impacts would be within acceptable EPA criteria for nuisance.</i></p>
<p>Reinforces public perceptions of Townsville as a tropical, relaxed maritime city.</p>	<p>Future Breakwater Cove residents' amenity may be impacted by proximity to the Ocean Terminal. The main source of impact will be noise associated with docked vessels. These impacts are capable of being mitigated.</p>
<p>Employment created by the project – both during construction and future operations – is expected to enhance lifestyles of residents into the future.</p>	<p>Public access to the existing Breakwater will be prohibited during the project's 3-year construction period.</p>
<p>The project can potentially improve Townsville's reputation as a desirable residential destination and contribute the city's competitiveness in attracting and retaining skilled workers.</p> <p><i>The importance of this to the ongoing competitiveness of Townsville has been reinforced through recent public commentary on the challenges faced by the local hospital in recruiting key personnel. High quality accommodation options in Townsville can only assist the city in being an attractive place to live (and work). This finding is consistent with a vast body of international literature that identifies the various factors that go toward enhancing a city's competitiveness to highly trained, mobile (global) workers.</i></p>	
<p>Additional Oceanside and marina residential opportunities are expected to meet evident needs and aspirations for this kind of 'active' residential lifestyle environment.</p>	



The project is consistent with the values shared by the majority of greater Townsville residents of sustained economic opportunity and security for the region into the future.

Providing employment opportunities in the construction and building sectors – at a time when the national economy is experiencing some contraction – can assist local families mitigate the potential adverse effects of increased increase rates and cost of living.



4 REFERENCES

- Air Noise Environment Pty Ltd (2008a) *Townsville Ocean Terminal: Supplementary Report: Deposited Dust*
- Air Noise Environment Pty Ltd (2008b) *Townsville Ocean Terminal: Supplementary Report: Gaseous Emissions*
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