Northconnex EIS Submission – Construction - SSI 13_6136

Spoil Disposal resulting from the Northconnex proposal is a major issue in terms of its impact on Pennant Hills Road traffic and local amenity.

The size of the excavation and the spoil disposal tasks have not been quantified within the EIS but, as described in the following pages, they are huge. The truck movement numbers are difficult for the community at large to visualise, but they do understand that the reality of Pennant Hills Road traffic makes the Northconnex spoil disposal impact a very serious additional imposition.

Traffic consultants habitually reduce the traffic generated by any new building project to the marginal increase percentage compared to the existing traffic, in this case, on Pennant Hills Road. However, in this case, the nature of the increase needs to be carefully considered.

Truck movements along Pennant Hills Road fall into two categories, interstate / inter-regional traffic passing through and local delivery traffic to commercial and industrial centres few of which are sited on Pennant Hills Road. The Northconnex project potentially introduces a new and different component, the 27 month continuous and voluminous movement of trucks in and out of 4 construction sites along Pennant Hills Road.

This new component, by its nature, contains an inherent risk to public safety. Time has not allowed a detailed study of the EIS in this regard, but sufficient to say that one serious or fatal incident is one too many.

This submission addresses the following topics:

- Spoil Excavation and Disposal
- Roadway and Intersection LoS Impact
- Spoil Disposal Sites
- Haulage Routes
- Wilson Road Site

Conclusion

With RMS being the proponent we understand that the Department, the Minister and the Government accept responsibility for the EIS and they will be addressing all the matters raised in this submission.

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Spoil Excavation and Disposal

The twin Northconnex tunnels are 9 kilometres long, 14 metres wide and 8 metres high accumulating to **2016000 cube metres of spoil.**

The EIS provides spoil removal volumes by excavation site:

- Southern Interchange	613900 cubic metres
- Wilson Road	441950
- Trelawney Road	492600
- Northern Interchange	743150
Total cubic metres	**2291200** - including in and out ramps, excavation shafts etc.

The EIS does not convert these cubic metres into truck movements but –

- assuming a dump truck capacity of 6 cubic meteres
- **381867 truck loads will be required**
- a massive exercise – on a road system already under major stress. .

Table 7.2 refers to the 'excavation phase' and the 4 construction sites with

- AM peak and PM peak vehicles/ hour between 23 and 29, and
- daily vehicles of between 570 and 740 per site, and 2630 for the 4 sites
- converting to truck turnarounds at the sites of between 23 and 30 per hour

- Are the AM/PM peaks a single hour or the 0600-0900 and 1600-1900 realistic peaks?
- Are the above truck turnarounds realistic?

Tables 7.8, 7.9, 710 and 7.11 refer to the 4 site construction programs

- if overlain they show 27 months of tunneling activity
- ranging from 15 months to 27 month per site
- with all 4 sites tunnelling during the 12 months Oct 2016 to Sept 2017
- this is **959950** truck loads based on Table 7.2's 2630 daily truck loads.

- what explains this 959950 versus 381867 disconnect?

Conclusion - although the EIS states that the volume of construction traffic is indicative and subject to change, this is such a critical element of the proposal and the anomalies within the above analysis must be reconciled within the EIS , or the proposal must be refused.

Pennant Hills District Civic Trust Inc.

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Roadway and Intersection Los Impact

Irrespective of the foregoing Spoil Volume and Trucking detail and questions which may impact on the roadway and intersection performance levels, the following is a summary of the EIS forecast performance analysis (ref. Tables 7.19 and 7.20) along with comparative 'existing' data from our Traffic and Transport submission.

Question – What explains the selection of 2016 when 2017 is the busiest spoil haulage year?

Extracts from EIS	**Existing - 2013**					**2016 with construction**			
	AM Peak		PM Peak			AM Peak		PM Peak	
Roadway LoS	N/Bd-S/Bd		N/Bd-S/Bd		I	N/Bd-S/Bd		N/Bd-S/Bd	
					I				
- M2 to CH Rd	D	E	E	E	I	D	E	E	E
- CH Rd to Bee Rd	D	D	D	D	I	D	D	D	D
- Bee Rd to Comen	E	E	E	E	I	**F**	E	E	E
- Comen to Pac Hwy	D	D	D	D	I	D	D	D	D

Questions – In view of the massive spoil disposal task how can there be only the one rating deterioration? The AM peak northbound F rated Beecroft to Comenarra section.
Has the true impact of trucks entering and exiting the 4 compounds, in the volume and turnaround times previously shown, during the 3 hour peak periods been assessed?

Intersection LoS	**Existing – 2013**		**2016 w/o construction**			**2016 with construction**		
- Peak	AM	PM	I	AM	PM	I	AM	
PM				I			I	
- PHRd / Beecroft (s)	C	E	I	E	**F**	I	**F**	**F**
- PHRd / Boundary	D	C	I	D	C	I	C	C
- PHRd / Yarrara	D	C	I	C	D	I	D	E
- PHRd / Comen	E	**F**	I	**F**	**F**	I	**F**	**F**

Questions - How can the Boundary 2016 AM rating improve with the construction traffic?
How can the Yarrara AM rating improve between 2013 and 2016?
How is the difference in Boundary and Comenarra ratings explained?
Should there be a range of F ratings? – see Comenarra in particular
Rating variances in the 2016 'with construction' section above needs explanation?

Comment – the above Roadway LoS assessments would appear to replicate the traffic consultant's mantra that, in spite of the size of the task, "it's all question of margins" but in this case the nature of the 'margin' would seem to have been overlooked.

Conclusion

Given the previous questions on truck volumes and the above questions, the impact of the spoil disposal task has yet to be adequately assessed, and without it the project should be refused.

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Spoil Disposal Sites

The EIS lists 6 sites noting that further sites need to be identified in order to meet the space required. The specific locations, other than the Hornsby Quarry, are not shown **but it is imperative that disposal is split approximately 50/50 between north and south of the project site.**

The **Hornsby Quarry** site is mentioned and the filling of the quarry would be a beneficial offshoot of the project. **We submit that the NSW Government should ensure that this option is secured while protecting the amenity of the local community.**

Haulage Routes

Figure 7.2 shows -

- the north and south bound spoil haulage routes as the Pennant Hills route from the M2 west of the Pennant Hills Road intersection to the F3 (M1) north of the Pacific Highway intersection. **And, this is how it should be! However -**

Figure 7.3 shows, at the Southern Interchange site –

- a daytime inbound route through West Pennant Hills residential streets that are heavily used by suburban and commuter traffic. These streets are unsuited to such usage and the plan for their use over 27 months is **unacceptable** in terms of residential amenity and traffic impact.

Figure 7.4 shows, at the Wilson Road site –

- two haulage route circling around Observatory Park at the northern end of Beecroft Road. This routing involves crossing two or three lanes of traffic, sharp bends, school bus stops, all close to the Wilson Road site and the F rated Pennant Hills Road / Beecroft Road intersection. This routing is **unacceptable.**

Figure 7.5 shows, at the Trelawney Street site **–**

- a northern haulage route complicating an already complicate intersection and circling through the Central Park business, restaurant and station traffic precinct, with an adjacent motel and community centre. This routing is **unacceptable.**

Figure 7.6 shows, at the Northern Interchange site –

- an inbound route southbound from the F3 (M1) north of the site and an outbound route to the south along Pennant Hills Road which is how it should be. The inbound route is circuitous however, apparently running through the Waitara, Hornsby, Asquith and Mount Colah commercial and retail precincts, but makes sense when considering the Hornsby Quarry (see above).

Conclusion

- **the spoil disposal task is massive and ideally it should be managed on a conveyor belt principle. To make it passably acceptable, in terms of the impact upon Pennant Hills Road, spoil sites to the north must cater for the Southern Interchange and Wilson Road excavations and spoil sites to the south must cater for the Northern Interchange and Trelawney excavations. This must be part of the EIS.**
  And if not – the proposal should be refused.

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Wilson Road Construction and Support Facilities Site.

Figure 7.4 shows –

- this site location is located within the busiest section of Pennant Hills Road and very close to one of the busiest intersections
- a single entry / exit access from Pennant Hills Road, and
- an anti-clockwise truck path through the compound

- What explains the fact that the Tunnel Support Facility schematic in a Northconnex Factsheet (July 2014) shows separate entry and exit access points and a clockwise truck path? This should be the case during the construction phase.

- this site is located close to St Benedict's Girls College and many students walk past this site to and from school

- **What measures will be taken to ensure their safety?**

- the EIS shows that 100 vehicles (200 movements) using local roads during the construction phase, with access via congested Boundary or New Line Roads.

- **Why so many worker movements when there is a bussing service proposed from the Duffy Avenue site? What policing will be undertaken to avoid excessive worker parking in the local streets?**

Smoke Expulsion

- from information received in the event of a fire in the tunnel smoke will expelled from the top of a two storey facilities building

- What assurance to local residents have that the smoke will not invade their properties? and
- What warning or alarm system will there be alert local residents of a smoke expulsion event?

Tunnel Air Expulsion

- if there is a facility to expel smoke, why not 'polluted' tunnel air in the event of a tunnel emergency or equipment failure

- What measures will be in place to avoid such a possibility?

Excavation Shaft

- the excavation shaft will do only be deep but also wide considering the activity

- **What are the exact dimensions? Will it be largely filled on completion of the tunnelling? What in-shaft facility will there be in the operational phase? Has the remaining security/safety risk associated with the operational shaft been assessed?**

Support Facility Buildings

- the Wilson Road and other Northconnex buildings along Pennant Hills Road must respect the amenity of the local residents.

Conclusion – this is not a good site, the other side of Wilson Road might be preferable. The EIS needs to address the above questions before approving this site.