

TAB B - EIS - Proposed Hornsby Quarry Road Construction Spoil Management Project Feedback

The Northern Sydney Institute, Hornsby Campus, will be significantly impacted by the proposed Hornsby Quarry Road Construction Spoil Management Project. The highest risk is to the campus' business continuity, resulting from the impacts of high intensity heavy vehicle traffic adjacent to buildings housing specialised teaching facilities. The proposed project poses a major risk of market share, revenue and loss of reputation. As well as the risks to business continuity, the Institute has a duty of care to its students, staff and visitors and the project also presents risks to their health and safety.

The Institute has identified disruptions due to:

Proposed closure and interruption of traffic flows on Bridge Road

1. Buildings J, H, and U are only accessible by Bridge Street. These buildings house the campus' delivery of traditional trades – Carpentry and Joinery, Automotive, Electrotechnology, Floristry and Eco Skills.
2. All the teaching materials such as timber and car parts required to teach these subjects must be delivered via Bridge Street.
3. Students and staff park their cars in the lower car park accessed via Bridge Street. As this will no longer be accessible, alternative parking arrangements will be required.
4. Students attending classes are required to bring their own heavy and expensive tools. Alternative arrangements will be required if students cannot use the lower car park.
5. Bridge Street provides access for emergency services to the staff and students in Buildings J, H and U.
6. There is a canteen located on the lower campus which could potentially lose business and face difficulties with deliveries. This canteen is operated by a contractor and the Institute has contractual obligations.

Impact of noise and dust on educational delivery in Buildings J H, D and U on the lower campus

1. The constant heavy vehicle noise will make it impossible for students to hear clear audible teacher instructions. This is unsafe and has WHS risks which make it untenable.
2. Buildings J, H and U house immobile specialised facilities and dust sensitive equipment.
3. These hazards may be mitigated in buildings H, D and U through engineered solutions - noise reduction and air conditioning for example, but this will not be possible in Building J.
4. Building J houses the delivery of Carpentry and Joinery. There are WHS requirements to have cross ventilation of fresh air as well as strong air extraction units while conducting the carpentry and joinery practical classes. Delivery of these classes will need to be relocated to an alternative location on Hornsby Campus.
5. Noise and dust will make it impossible for students and staff to undertake any outdoor learning activities, or enjoy student recreational or meal time (breakfast, lunch and dinner) activities.
6. The roof top delivery spaces of Building U if subject to noise and dust presents a WHS issue.

Safety hazard caused by heavy haulage vehicles on steeply graded access road

The constant movement of heavy haulage vehicles on Bridge Street creates a significant safety hazard for inexperienced teenage drivers, students and staff walking to and from classes increases the risk of accidents. The Institute has undertaken a comprehensive assessment of the key risks and these are identified as follows:

1. Social and economic

The Northern Sydney Institute operates in a competitive and market driven business environment in which it is dependent on student enrolments for business sustainability. Student enrolments generate the revenue required to operate the facility and as a consequence a reduction in student enrolments or an increase in student withdrawals risks business continuity.

The proposed project will significantly impact enrolments through restricting the campus' ability to deliver high quality industry and trade qualifications for apprentices, students and industry partners. Hornsby Campus works closely with local community and local small businesses, as well as the broader Sydney metropolitan area to provide practical hands on training for job seekers and employees in multiple industry sectors.

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The Institute has identified Buildings J, H, D and U as being most significantly impacted by the constant heavy vehicle traffic. These buildings are purpose built, containing specialist dust sensitive equipment and facilities that simulate best practice industry work environment.

Continuing educational delivery in Building J will be untenable. This building houses the delivery of Construction and Joinery. The disruption to learning caused by the noise from constant truck movements cannot be mitigated by glazing treatments, due to the specific WHS specific requirements of carpentry workshops to ensure adequate cross ventilation of fresh air as well as powerful air extraction units, due to the toxic nature of some treated timbers.

These classes will need to be relocated, workshops will need to be built and an additional high ceilinged practical teaching space will need to be constructed to accommodate student practical learning activities such as building roof trusses.

It may be possible to continue educational delivery in Building H, D and U but not without mitigating treatments - noise insulation and air conditioning, for example.

2. Air Quality

The emission of light and heavy particles from heavy haulage vehicles travelling downhill and uphill on Bridge Street at a frequency of less than every two minutes will have significant impact on the health of our students and staff. Poor air quality from the wind dispersal of dust and dust infiltration, will require increased cleaning, maintenance and other operating costs.

There is a danger of dust infiltration in learning areas resulting in instrumentation damage, impact on performance of precision measurement tools, equipment, machinery and other teaching resources. It is likely Building H, which delivers qualifications for the Automotive and Electrotechnology industry will require several mitigations and treatments, such as glazing and air conditioning due to the risks and impacts of air quality on dust infiltration in damaging sensitive expensive equipment.

There is an increased potential for staff and students' health to be effected by higher dust levels. Students and staff may also suffer exacerbation of existing respiratory conditions.

3. Noise and Vibration

The mode of educational delivery for the industry qualifications delivered in Buildings J, H and U relies primarily on face to face practical teacher instruction and assessments in simulated and purpose built specialist equipment and facilities. There is a significant risk that the noise generated by site establishment, road construction and heavy haulage trucks ascending and descending on a steep incline on a road adjacent to teaching classrooms and outdoor learning areas will significantly disrupt classes, to the point of making them untenable. In addition, chronic vibration resulting from these heavy vehicle movements risk affecting the building structure of multi-storey buildings.

There is a risk of students being injured as a result of not hearing teacher instructions, due to the noise and vibration from heavy vehicle movements in Bridge Road, conveyor operation from site establishment and operations.

There is an increased potential for staff and students' health to be effected by higher noise levels. Staff and students may also suffer exacerbation of existing hearing conditions.

4. Traffic

Due to the topography of the local area, Hornsby Campus is dependent on Bridge Road as the only vehicle access available to service the business needs of the lower campus. The proposed restrictions to access to this road will seriously impact on Hornsby Campus business operations.

Students and teachers require access by road to transport expensive and heavy tools and equipment. Students and teachers will be unable to manually carry this equipment across the steep terrain from the car park situated on the eastern half of the campus, over 500 meters metres away.

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Delivery of materials (wood, sand etc.) to these buildings is frequent throughout the day.

There are risks associated with the potential delay of access by emergency services to Buildings J, H & U that are delivering potentially high safety risk courses.

5. Landscape character and visual amenity

The education delivery associated with Carpentry and Joinery, Electrotechnology, Eco Skills Centre and Automotive also requires outdoor learning spaces. The combination of air quality, noise and vibration and safety risks associated with traffic hazards and the Hornsby Quarry site operations will also reduce and compromise the frequency and quality of the outdoor practical learning activities.

There will also be a loss of outdoor amenity - an essential feature of a high quality learning environment, recreation and egress to the site.

Conclusion and Recommendations

The broad community benefits of the projects are recognised in assisting in the delivery of a key improvement to the State and National Road network. It is also acknowledged that the selection of Hornsby Quarry as a land fill site would assist Council address the long term management and use of the Quarry as a recreational asset for the community. However, the proposed extension to Bridge Road to facilitate direct access and egress to the Quarry would result in significant operational impacts on the Hornsby Campus.

It is not appropriate to simply conclude that the noise, vibration and traffic impacts of the landfill operation would be acceptable as they are temporary and justified due to the high degree of community benefits following project completion. The Roads and Maritime Services should, as part of the proposal, incorporate a number of additional measures to avoid, minimise and mitigate the impacts associated with the movement of trucks and filling activities onsite. In summary, should the proposal be progressed, Institute representatives would seek further discussions regarding the implementation, as a minimum the following requirements as part of any approval granted:

1. Erection of acoustic fencing/barriers between the end of Bridge Road and along the eastern Quarry site boundary to a point that aligns with the southern-most point of the Hornsby Campus grounds.
2. Minimise noise from the movement of trucks and filling activities by:
 - 2.1 limiting filling activities to the proposed hours of operation;
 - 2.2 requiring that there be no queuing of vehicles on adjoining streets outside the approved hours;
 - 2.3 minimising the number of plant items in the Quarry at any one time; and
 - 2.4 designing the facility to minimise any requirement for trucks to reverse.
3. Provision of acoustic treatments to Buildings H, D and U, including installation of double glazing and air conditioning.
4. Specification of an agreed period during the day where TAFE vehicles may access buildings H and U to deliver tools and equipment.
5. Assist TAFE in the relocation of Building J teaching facilities for carpentry and joinery education modules to an alternative location on the Hornsby Campus.
6. Assist TAFE in the provision of an alternative safe pedestrian access to service Buildings H and U on the lower level of the Hornsby Campus.