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Major Projects Assessment  
Department of Planning  
GPO Box 39  
Sydney NSW 2001



**ATTENTION: Simon Truong**

Dear Sir/Madam,

**MAJOR PROJECT APPLICATION – MP08\_0207 & MP10\_0219**  
**Exhibition of Environmental Assessment for residential development at Avon,**  
**Beechworth and Arilla Roads, Pymble**

I refer to The Department of Planning's letter dated 13 December 2011 regarding the proposed development at the above address.

Rail Corporation New South Wales (RailCorp) has reviewed the proposal and asks that the following issues be addressed in the conditions for this proposed development.

**1. Property & Title Search and Survey**

In order to protect RailCorp's facilities, it is important that the Applicant accurately defines and locates the property boundaries between the development and RailCorp's facilities, and defines the location of the proposed works/development in relation to RailCorp's facilities. This requires the Applicant to undertake a full Property & Title search and physical surveys and to provide the information to RailCorp. This information is critical to the assessment by RailCorp of all aspects of the development proposal. It is therefore requested that The Department of Planning include the following condition of consent:

- *The Applicant shall provide an accurate survey locating the development with respect to the rail boundary and rail infrastructure. This work is to be undertaken by a registered surveyor, to the satisfaction of RailCorp's representative.*

**2. Dilapidation Surveys**

It is imperative that the construction and installation activities do not affect RailCorp's facilities, such as tunnels or embankments etc. Such activities will require full-time monitoring during the course of the works. It is therefore requested that The Department of Planning include the following condition of consent:

- *Prior to the commencement of works and prior to the issue of the Occupation Certificate, a joint inspection of the rail infrastructure and property in the vicinity of the project is to be carried out by representatives from RailCorp and the Applicant. These dilapidation surveys will establish the extent of any existing damage and enable any deterioration during construction to be observed. The submission of a detailed dilapidation report will be required unless otherwise notified by RailCorp.*
- *Prior to the commencement of works, during the works, prior to the issue of the Occupation Certificate, and following occupation, a joint inspection of the rail infrastructure and property in the vicinity of the project is to be carried out by representatives from RailCorp and the Applicant. These dilapidation surveys will establish the extent of any existing damage and enable any deterioration during and after construction to be observed. The timing of the surveys is to be agreed with RailCorp. The submission of a detailed dilapidation report will be required unless otherwise notified by RailCorp.*

### **3. Noise and Vibration**

RailCorp is concerned that the future occupants of the development will encounter rail-related noise and vibration from the adjacent rail corridor. Rail noise and vibration can seriously affect residential amenity and comfort, jeopardise the structural safety of buildings, and thus should be addressed early in the development process.

The Department of Planning has released the document titled "Development Near Rail Corridors and Busy Roads- Interim Guidelines". The document is available on the Department of Planning's website.

The Department of Planning is therefore requested to impose the condition of consent:

- *An acoustic assessment is to be submitted to The Principal Certifying Authority prior to the issue of a construction certificate demonstrating how the proposed development will comply with the Department of Planning's document titled "Development Near Rail Corridors and Busy Roads- Interim Guidelines".*

### **4. Stray Currents and Electrolysis from Rail Operations**

Stray currents as a result of rail operations may impact on the structure of the development. Electric currents on overhead wiring pass through the train's motor and return to the power substation via the rail tracks. Occasionally, these currents may stray from the tracks and into the ground. Depending on the type and condition of the ground, these may be passed to the nearest conductive material (concrete reinforcement, piling, conduits, pipework and earthing rods) accelerating corrosion of metals and leading to concrete cancer. Therefore, the Applicant should consider this possible impact, and engage an expert consultant when designing its buildings. It is requested that The Department of Planning include the following condition of consent:



- *Prior to the issue of a Construction Certificate the Applicant is to engage an Electrolysis Expert to prepare a report on the Electrolysis Risk to the development from stray currents. The Applicant must incorporate in the development all the measures recommended in the report to control that risk. A copy of the report is to be provided to the Principal Certifying Authority with the application for a Construction Certificate.*

## **5. Geotechnical and Structural Stability and Integrity**

RailCorp needs to be assured that the development has no adverse effects on the geotechnical and structural stability and integrity of RailCorp's Facilities. It is requested that The Department of Planning impose the following condition of consent.

- *The Applicant shall provide a Geotechnical Engineering report to RailCorp for review by RailCorp's Geotechnical section prior to the commencement of works. The report shall demonstrate that the development has no negative impact on the rail corridor or the integrity of the infrastructure through its loading and ground deformation and shall contain structural design details/analysis for review by RailCorp. The report shall include the potential impact of demolition and excavation, and demolition- and excavation-induced vibration in rail facilities, and loadings imposed on RailCorp Facilities by the development*
- *The rail corridor at this location is situated inside a cutting with an embankment bordering the subject site. A geotechnical report should be prepared to evaluate the stability of the embankment from the excavation and the impact of vibration on the rail corridor. The report should be submitted to RailCorp for review and appropriate measures such as the use of anchors are adopted to ensure the safety of the rail corridor.*

## **6. Building, Balconies and Window Design**

The placement of buildings and structures in relation to RailCorp's facilities should enable continued access for maintenance of RailCorp's facilities.

To ensure the safety of passenger rail services, balconies and windows in the proposed development, must be designed to prevent objects being thrown onto RailCorp's facilities. Alien objects can damage overhead power lines, cause injury to others and initiate derailment.

In order to maintain the safety of the occupants of the new development, all balcony and window design should meet the relevant BCA standards, and the RailCorp Electrical Standards. These standards will provide appropriate separation of the building and its occupants from the electrified infrastructure.

Balconies overlooking RailCorp's facilities should not be serviced with outside taps, and rainwater should be piped down the face of the building overlooking the RailCorp's facilities.

RailCorp has concerns with the design of the balconies/windows as objects can be thrown onto the rail corridor risking passenger safety. RailCorp requests that the

Applicant be required to re-design the balconies/windows to ensure that this risk is minimised. Alternatively, the following condition of consent can be included:

- *Given the possible likelihood of objects being dropped or thrown onto the rail corridor from balconies, windows and other external features (eg roof terraces and external fire escapes) that face the rail corridor, the Applicant is required to install measures (eg awning windows, louvres, enclosed balconies etc) which prevent the throwing of objects onto the rail corridor. The Principle Certifying Authority shall not issue the Construction Certificate until it has confirmed that these measures are to be installed and have been indicated on the Construction Drawings.*

## **7. Derailment Protection of Structures**

RailCorp's prime requirement is to prevent crushing of a train by a collapsed structure in the event of derailment and collision. It is requested that The Department of Planning include the following condition of consent:

- *The development must be designed and constructed so that supporting elements comply with the redundancy requirements or the minimum collision loads specified in Australian Standard AS5100.*

*Prior to the issue of a Construction Certificate the Applicant is to provide the Rail Authority with a report from a qualified structural engineer demonstrating that the structural design of the development satisfies the requirements of AS5100. The Principle Certifying Authority shall not issue the Construction Certificate until it has received written confirmation from the Rail Authority that it has received this report and the Principle Certifying Authority has also confirmed that the measures recommended in engineers report have been indicated on the Construction Drawings.*

## **8. Use of Lights and Reflective Materials**

It is essential that lights and reflections do not distract train drivers in the course of their job. Thus RailCorp requests that The Department of Planning include the following condition of consent:

- *The design, installation and use of lights, signs and reflective materials, whether permanent or temporary, which are (or from which reflected light might be) visible from the rail corridor must limit glare and reflectivity to the satisfaction of Rail Authority.*

*The Principle Certifying Authority shall not issue the Construction Certificate until written confirmation has been received from the Rail Authority confirming that this conditions has been satisfied.*

## **9. Demolition, Excavation and Construction Impacts**

During demolition, excavation and construction, there is a need to ensure that there will be no adverse impact on the integrity of RailCorp's facilities, or the operation of the network. It is requested that The Department of Planning include the following condition of consent:.



- *Prior to the issue of a Construction Certificate a Risk Assessment/Management Plan and detailed Safe Work Method Statements (SWMS) for the proposed works are to be submitted to the Rail Authority for review and comment on the impacts on rail corridor. The Principle Certifying Authority shall not issue the Construction Certificate until written confirmation has been received from the Rail Authority confirming that this condition has been satisfied.*
- *No metal ladders, tapes and plant/machinery, or conductive material are to be used within 6 horizontal metres of any live electrical equipment. This applies to the train pantographs and 1500V catenary, contact and pull-off wires of the adjacent tracks, and to any high voltage aerial supplies within or adjacent to the rail corridor.*

#### **10. Crane and Other Aerial Operations**

During construction, the use of cranes and other equipment capable of intruding into the airspace above the corridor and of operating over any overhead wiring or transmission lines must be strictly controlled. The developer must demonstrate to the satisfaction of RailCorp that all crane and other overhead operations are properly managed, and enter into an agreement with RailCorp for such operation. It is requested that The Department of Planning include the following condition of consent:

- *Prior to the issuing of a Construction Certificate the Applicant is to submit to the Rail Authority a plan showing all craneage and other aerial operations for the development and must comply with all RailCorp requirements. The Principle Certifying Authority shall not issue the Construction Certificate until written confirmation has been received from the Rail Authority confirming that this condition has been satisfied.*

#### **11. Environmental Conditions**

Environmental conditions of consent on all third party works are necessary to ensure compliance with environmental legislation and regulations. There are many environmental sensitivities within and adjacent to the railway corridor (e.g. Threatened species, wetlands, erosion and acid prone soils, natural and cultural heritage areas, etc.).

Employees, contractors and operators are obligated to protect the environment at their worksites. This can be accomplished through the assessment and management of risks, and implementation of adequate controls to prevent environmental harm. It is requested that The Department of Planning include the following condition of consent:

- *During all stages of the development, environmental legislation and regulations will be complied with.*
- *During all stages of the development extreme care shall be taken to prevent environmental harm within railway corridor. Any form of environmental harm to areas within the railway corridor or legislative non-compliance that arises*

*as a consequence of the development activities shall remain the full responsibility of the Applicant.*

- *During all stages of the development extreme care shall be taken to prevent any form of pollution entering the railway corridor. Any form of pollution that arises as a consequence of the development activities shall remain the full responsibility of the Applicant.*

## **12. Graffiti, Screening and Landscaping**

RailCorp wishes to improve the overall condition of its facilities for passengers and public. With adjacent developments it is important to carefully consider the options for reducing graffiti and vandalism at the design stage, thereby reducing long-term costs and improving the aesthetic appearance of RailCorp's facilities and the development. It is requested that The Department of Planning include the following condition of consent:

- *To ensure that graffiti can be easily removed, the Applicant is to ensure that fencing along the rail corridor is coated with anti-graffiti paint or other coating.*
- *To improve the comfort of future occupants, the landscaping and fencing in the plan should be designed to screen views of the rail tracks and reduce exposure to passing trains.*
- *There is a need to ensure that the roots and foliage of trees being planted beside the rail corridor do not have an impact on the rail corridor. The development landscaping and planting plan should be submitted to RailCorp for review.*

## **13. Fencing**

To ensure that unauthorised entry into the rail corridor is prevented from this development, RailCorp considers it appropriate to replace\retain the current fencing. Thus RailCorp requests that The Department of Planning include the following condition of consent:

- *Prior to the commencement of works appropriate fencing shall be installed along the rail corridor to prevent unauthorised access to the rail corridor under the supervision of a Protection Officer. Details of the type of fencing and the method of erection are to be to the Rail Authority's satisfaction prior to the fencing work being undertaken. The Rail Authority may provide supervision, at the developer's cost, for the erection of the new fencing.*

## **14. Carparking and Promotion of Public Transport**

The development of Stage 1 currently proposes 86 car spaces. The maximum spaces permissible under State Environmental Planning Policy No 53—Metropolitan Residential Development and the Ku-ring-gai Sites Report is 82 spaces and the minimum required 52. Therefore, the current provision of parking exceeds the maximum permissible.



RailCorp requests that the developer reduce the provision of parking to at least 82 and possibly even lower. A restrained approach to parking provision, with regard to the minimum requirement, will reflect greater consideration of the development's proximity to Pymble Station.

#### **15. Accessibility**

Large-scale developments need to provide safe and convenient access to railway stations for pedestrians. It is requested that The Department of Planning include the following condition of consent:

- *The development, as designed, currently lacks safe and convenient access to Pymble Station. The Principal Certifying Authority needs to ensure that upon completion adequate pedestrian links are established. The Principal Certifying Authority may consider the imposition of developer contributions for the provision of such access.*

#### **16. Impact on Stations**

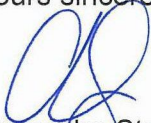
Large-scale developments will increase railway station patronage and RailCorp needs to ensure that this increased patronage can be accommodated on existing stations in an efficient and safe manner. RailCorp needs to ensure that these large-scale developments contribute to the augmentation of the station to cater for this increased patronage. It is requested that The Department of Planning include the following condition of consent:

- *RailCorp is concerned with the impact that this large-scale development will have on Pymble Station with regard to its ability to accommodate the increased resulting patronage in a safe and efficient manner. RailCorp is concerned that this station may require augmentation to cater for the resultant increased patronage and as such the Applicant is requested to contact RailCorp to negotiate possible developer contributions for this work.*

Finally, it is asked that The Department of Planning forward to RailCorp a copy of the final development consent to enable RailCorp to monitor the Applicant's compliance with rail related conditions of consent.

Thank you for providing RailCorp the opportunity to comment and please contact me if you have any further enquires.

Yours sincerely,



Alexandra Stathakis  
Assistant Town Planner  
RailCorp Property