



RailCorp Property PO Box K349 Haymarket NSW 1238

Tel: (02) 8922 4062 Fax: (02) 8922 4890

Email: kelly.mckellar@railcorp.nsw.gov.au

2 August 2011

Department of Planning & Infrastructure GPO Box 39 Sydney NSW 2001

ATTENTION: Megan Fu

Department of Planning Received 4 AUG 2011

Scanning Room

Dear Sir/Madam.

DEVELOPMENT APPLICATION - MP 10 0027 Site 3 Australia Avenue, Sydney Olympic Park

I refer to the Department of Planning & Infrastructure's letter dated 29 June 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 & Infrastructure 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. Services Searches

It is imperative that the Applicant identifies the existence of any existing RailCorp services (such as pipes and cables) and structures within their development area by initiating the appropriate service searches. Where RailCorp services exist within the development site, the Applicant must enter into discussion, and reach agreement with RailCorp regarding the accommodation of the services.

In addition, where physical intrusion into the corridor is required (e.g. stormwater connections, rock anchors) there may be conflict with existing RailCorp services in



the corridor. It is imperative that the Applicant identifies the existence of any RailCorp services and structures within the area of the corridor affected. It is therefore requested that the Department of Planning & Infrastructure include the following condition of consent:

Prior to the issue of a Construction Certificate the applicant shall undertake a services search to establish the existence and location of any rail services. Persons performing the service search shall use equipment that will not have any impact on rail services and signaling. Should rail services be identified within the subject development site the Applicant must discuss with the Rail Authority as to whether these services are to be relocated or incorporated within the development site.

3. <u>Dilapidation Surveys</u>

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 & Infrastructure 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.

4. 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 & Infrastructure is therefore requested to impose the condition of consent:

An acoustic assessment is to be submitted to Council 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".

5. 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 & Infrastructure 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.

6. 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 & Infrastructure 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

7. 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.

8. 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 & Infrastructure include the following condition of consent:

A risk analysis, which shall determine the required level of derailment protection (if any), shall be carried out in consultation with the Rail Authority. This risk analysis will determine the redundancy requirements or the minimum collision loads specified in Australian Standard AS5100 that need to be complied with. The risk assessment is to be prepared in accordance with the Rail Authority's Safety Management System.

The Principle Certifying Authority shall not issue the Construction Certificate until it has received written confirmation from the Rail Authority that the risk analysis has been prepared and the Principle Certifying Authority has also confirmed that the measures recommended in this risk analysis have been indicated on the Construction Drawings.

9. 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 & Infrastructure 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.

10. <u>Demolition, Excavation and Construction Impacts</u>

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 & Infrastructure 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.

11. 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 wring 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 & Infrastructure 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.

12. Drainage

RailCorp wishes to advise that run-off or stormwater discharge from the development site onto the rail corridor is unacceptable, both during and after construction and installation. Any run-off or waste arising from the development activities needs to be properly disposed of and must not be allowed to enter the rail corridor.



RailCorp looks to the Department of Planning & Infrastructure to ensure that stormwater is not diverted onto the rail corridor as a result of the development. Alternatively, the Department of Planning & Infrastructure may choose to include the following condition of consent:

- Given the site's location next to the rail corridor, drainage from the development must be adequately disposed of/managed and not allowed to be discharged into the corridor unless prior approval has been obtained from RailCorp.
- Rainwater from the roof must not be projected and/or falling into the rail corridor and must be piped down the face of the building which faces the rail corridor.

13. Physical Access to RailCorp's Facilities

The Applicant appears to need physical access to the rail corridor in order to undertake the construction and installation works. RailCorp needs to ensure that if any access to or works within the rail corridor are required, that this is done in a safe and controlled manner. In this regard the Department of Planning & Infrastructure is requested to include the following conditions of consent:

No work is permitted within the rail corridor, or its easements, at any time unless prior approval or an Agreement has been entered into with the Rail Authority.

Where the Applicant proposes to enter the rail corridor, the Principle Certifying Authority shall not issue a Construction Certificate until written confirmation has been received from the Rail Authority confirming that its approval has been granted.

14. 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 council 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.

15. 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 & Infrastructure 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. 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.

16. Maintenance of Development

Maintenance activities must not impact adversely on RailCorp's facilities or operations. It is requested that the Department of Planning & Infrastructure include the following condition of consent:

The developer must provide a plan of how future maintenance of the development facing the rail corridor is to be undertaken. The maintenance plan is to be submitted to the Rail Authority prior to the issuing of the Occupancy Certificate. The Principle Certifying Authority shall not issue an Occupation Certificate until written confirmation has been received from RailCorp advising that the maintenance plan has been prepared to its satisfaction.

17. Carparking and Promotion of Public Transport

Developments near railway stations provide an opportunity to promote the use of public transport and a reduction in private vehicle usage. Department of Planning & Infrastructure's attention is drawn to Clause 9(e) (ii) and Clause 12(1) of Draft SEPP66 which deal with parking requirement and transport implication for DAs.

The development proposes 800 car parking spaces for the residential, commercial, retail and visitor use to be built on this site. RailCorp believes that this is a superfluous amount of car parking spaces, especially given its close proximity, 250 metres, to a major transport node i.e. Olympic Park Station. RailCorp encourages the Department of Planning & Infrastructure to consider a reduction of car parking spaces for this particular development in order to meet the objectives of Draft SEPP66.

In particular, there is an opportunity to reduce the provision of visitor parking as the requirement for 1 space per 4 apartments, resulting in 147 visitor parking spaces, is not appropriate for a site with good public transport access. RailCorp believes that visitors will be able to access the development by public transport or utilise existing parking provided within the Olympic Park precinct.

18. Bicycle Parking Provision

The Sydney Olympic Park Masterplan 2030 indicates that "on-site bicycle parking should be provided at the same rates as for cars". However 245 Bicycle parking spaces has been allocated, as opposed to a proposed 800 car parking spaces. RailCorp believes that the proponent should strongly consider increasing the amount of on site bicycle parking spaces to reflect the objectives of the masterplan.



RailCorp believes that implementing the above noted measures will assist in encouraging users of the development to utilise sustainable transport modes such as rail and reduce car dependency.

Finally, it is asked that the Department of Planning & Infrastructure 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,

Kelly McKellar

Assistant Town Planner

RailCorp Property