

Mr David Glasgow
Principal Planning Officer
Key Sites Assessments
Department of Planning, Industry and Environment
GPO Box 39
Sydney NSW 2001

Dear Mr Glasgow

**Redevelopment of Harbourside Shopping Centre, Darling Harbour
Response to Submissions (SSD 7874)**

Thank you for your correspondence via Major Projects Portal on 1 April 2020, requesting Transport for NSW (TfNSW) to comment on the above.

Suggested draft conditions as part of any Stage 2 development for the protection of Inner West Light Rail corridor and the Construction Pedestrian and Traffic Management are included in **TAB A**. Additional conditions will be suggested following the review of any Stage 2 development application.

Sydney Light Rail – Inner West Line

Comment

The revised proposal refers to Light Rail services operating at predominantly 8 minute interval all day. It is advised that Light Rail only currently operates at 8 minute intervals during peak periods on weekdays (7-9am and 3-7pm).

The applicant's Response to Submission states the following:

"Ongoing consultation will be undertaken between the applicant, TfNSW, the light rail operator, and if required, Sydney Trains during the design and construction of the proposed development, with regard to all design elements of the proposed development that interface with the light rail corridor. In particular, this relates to the demolition and construction of the new pedestrian bridge links over the light rail corridor."

Recommendation

It is requested that the applicant be conditioned to the following:

The applicant shall undertake the following as part of any Stage 2 development application:

- *Consult with TfNSW, Sydney Light Rail Operator and Sydney Trains with regard to the details of the required documentation and all design elements of the proposed development that interface with the light rail corridor, in particular, demolition of and construction of the new pedestrian bridge links over the light rail corridor; and*
- *Prepare a report on how the development complies Asset Standards Authority (ASA) standard - External Developments - T HR CI 12080 ST and Development Near Rail Corridors and Busy Roads – Interim Guideline (NSW Department of Planning, 2008)*

Construction Pedestrian and Traffic Management

Comment

The Response to Submission states the following:

“Ongoing consultation will be undertaken between the applicant and the CBD Coordination Office within TfNSW during the design and construction of the proposed development with regard to an assessment of other potential cumulative construction activities that may be relevant at the time of the Harbourside development construction program.”

Recommendation

It is requested that the applicant be conditioned to the following:

The applicant shall prepare a draft Construction Pedestrian and Traffic Management Plan in consultation with Sydney Coordination Office within TfNSW and the Sydney Light Rail Operator as part of preparation of any Stage 2 development application.

Vehicular Management

Comment

The Response to Submission states the following:

“Traffic flow on the approach to the drop-off facility exit is governed by the existing traffic signal controls at the Pyrmont Bridge Road intersection. This will allow for controlled egress movements from the drop-off zone, in conjunction with random egress movements in breaks of traffic. Detailed traffic modelling will be undertaken during future development stages to assess the operation of the drop-off facility with regard to queue lengths of departing traffic from the drop off facility.”

It is advised that the vehicles queuing to access this drop off zone may cause delays and block vehicles on Darling Drive. In addition, any queuing due to vehicles accessing the car park and loading and servicing area may also cause delays and block vehicles on Darling Drive.

Recommendation

It is requested that the applicant be conditioned to the following:

The applicant shall undertake the following as part of any Stage 2 development application:

- *Queuing analysis and/ or traffic modelling to demonstrate the drop off area has adequate capacity and propose mitigation measures to ensure queuing on Darling Drive does not occur, to the satisfaction of TfNSW; and*
- *Prepare a draft drop off zone management plan to manage vehicles accessing the site and a draft car park and loading dock management plan.*

Coach Parking

Comment

The Response to Submission states the following:

“The cumulative future demand for coach parking for the SICEEP development and the Harbourside development and the identification of alternative locations for coach parking can be considered during the detailed design phase.”

Recommendation

It is requested that the applicant be conditioned to the following:

The applicant shall assess the likely cumulative future demand for the SICEEP development and the Harbourside development and identify alternative locations for coach parking if required, in consultation with the Sydney Coordination Office within TfNSW, as part of any Stage 2 development application.

Pedestrian Network

Comment

The Response to Submission states the following:

"Pedestrian modelling will be undertaken during future design stages to ensure that adequate capacity for pedestrian movements is provided at critical locations within the proposed development footprint and surroundings."

Recommendation

It is requested that the applicant be conditioned to the following:

The applicant shall undertake pedestrian modelling of the pedestrian network surrounding the proposed development, in consultation with Sydney Coordination Office within TfNSW, to demonstrate adequate capacity for pedestrian movements is provided with the proposed development, as part of any stage 2 development application.

Darling Drive Cycleway

Comment

The Response to Submission states the following:

"This design interface will be considered in the future design development stages to consider cyclist safety. Design measures such as road line markings and road traffic signs will be considered in the future design to inform drivers of the potential presence of cyclists for vehicles entering the drop-off area. Road line marking, road traffic signs and consideration of appropriate sightlines will be considered for vehicles egressing from the drop-off area."

Recommendation

It is requested that the applicant be conditioned to the following:

As part of any Stage 2 development application, the applicant shall undertake a Road Safety Audit for the concept proposal to the cycleway/ drop off area, in accordance with Austroads Guide to Road Safety Part 6: Managing Road Safety Audits and Austroads Guide to Road Safety Part 6A: Implementing Road Safety Audits by an independent TfNSW accredited road safety auditor. Based on the results of the road safety audit, the applicant shall review the design drawings and implement safety measures if required, in consultation with the Sydney Coordination Office within TfNSW.

Wayfinding Strategies

Comment

The Response to Submission states the following:

"Wayfinding strategies and travel access guides to assist with increasing the mode share of walking and cycling will be developed during future design stages of the development."

Recommendation

It is requested that the applicant be conditioned to the following:

The applicant shall develop wayfinding strategies and travel access guides to assist with increasing the mode share of walking and cycling as part of any Stage 2 development application.

Thank you again for the opportunity of providing advice for the above development application. If you require clarification of any issue raised, please don't hesitate to contact Mark Ozinga, Principal Manager Land Use Planning and Development on 0439 489 298.

Yours sincerely



27/04/2020

Craig Moran
A/Coordinator General
Transport Coordination

Objective Number – CD20/03035

TAB A – Suggested Draft Conditions for any Stage 2 Development Application Protection of Inner West Light Rail corridor and Construction Pedestrian and Traffic Management

General

- The applicant must comply with all Altrac Light Rail Partnership (Altrac) or any subsequent operator of Sydney Light Rail (Sydney Light Rail Operator) policies, rules and procedures when working in and about the Sydney Light Rail corridor;
- The applicant must comply with the requirements of T HR CI 12080 ST External Developments version 1.0 and Development Near Rail Corridors and Busy Roads- Interim Guidelines;
- Activities of the applicant must not affect and/or restrict Sydney Light Rail operations without prior written agreement between the applicant, Transport for NSW (TfNSW), Altrac, and the Sydney Light Rail Operator, and it is a condition precedent that such written agreement must be obtained no later than two (2) months prior to the activity. Any requests for agreement are to include as a minimum the proposed duration, location, scope of works, and other information as required by the Sydney Light Rail Operator;
- The applicant must apply to Altrac and the Sydney Light Rail Operator for any required network shutdowns four (4) months prior to each individual required network shutdown event. Each request for network shutdown must include as a minimum the proposed shutdown dates, duration, location, scope of works, and other information as required by the Sydney Light Rail Operator. The Sydney Light Rail Operator may grant or refuse a request for network shutdown at its discretion;
- The applicant shall provide safe and unimpeded access for Sydney Light Rail patrons traversing to and from the Sydney Light Rail stops at all times;
- TfNSW, and persons authorised by it for this purpose, are entitled to inspect the site of the approved development and all structures to enable it to consider whether those structures on that site have been or are being constructed and maintained in accordance with these conditions of consent, on giving reasonable notice to the principal contractor for the approved development or the owner or occupier of the part of the site to which access is sought;
- During all stages of the development extreme care shall be taken to prevent any form of pollution entering the light rail corridor. Any form of pollution that arises as a consequence of the development activities shall remain the full responsibility of the applicant; and
- All TfNSW, Altrac and Sydney Light Rail Operator's costs associated with review of plans, designs and legal must be borne by the applicant.

Prior to the Issue of the Construction Certificate

Review and endorsement of documents

Prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier, the applicant should consult with TfNSW, Altrac and the Sydney Light Rail Operator to confirm the timing of the each construction certificate and associated documentation and activities prior to preparation of requested documentation. The applicant should provide the information to TfNSW for review and endorsement. The Principal Certifying Authority (PCA) is not to issue the relevant Construction Certificate until received written confirmation from TfNSW that the following conditions have been complied with.

- Prior to the issue of any Construction Certificates, the applicant is to confirm in writing with TfNSW what each Construction Certificate stage will involve;
- Prior to the issue of the relevant Construction Certificate, the applicant shall liaise with TfNSW to ascertain its requirements in relation to the protection of TfNSW's infrastructure. The applicant is to submit to TfNSW all relevant documentation as requested by TfNSW and obtain TfNSW's written endorsement; and
- Prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier, the following documentation shall be provided for the TfNSW endorsement:
 - Final geo-technical and structural report / drawings. Geotechnical reports should include any potential impact on the light rail corridor located adjacent to the subject development site, easement and substratum;
 - Final construction methodology with construction details pertaining to structural support during excavation or ground penetration;
 - Details of the vibration and movement monitoring system that will be in place before excavation commences;
 - Final cross sectional drawings showing ground surface, rail tracks, sub soil profile, proposed basement excavation and structural design of sub ground support adjacent to the Rail Corridor located adjacent to the subject development site. Cross sectional drawings should also include the accurate RL depths and horizontal distances from assets (tracks, overhead lines, structures and cables) to the nearest point of excavation or ground penetration works. All measurements are to be verified by a Registered Surveyor; and
 - Detailed survey plan.

Pre-construction Work Dilapidation Report

A pre-construction work Dilapidation Report of the Sydney Light Rail and its assets shall be prepared by a qualified structural engineer. The dilapidation survey shall be undertaken via a joint site inspection by the representatives of the Sydney Light Rail Operator, TfNSW and the applicant. These dilapidation surveys will establish the extent of existing damage and enable any deterioration during construction to be observed

Acoustic Assessment

Prior to the issue of the relevant Construction Certificate, the final acoustic assessment is to be submitted to PCA demonstrating how the proposed development will comply with the Department of Planning's document titled "Development Near Rail Corridors and Busy Roads- Interim Guidelines". All recommendations of the acoustic assessment are to be incorporated in the construction documentation.

Electrolysis Analysis

Prior to the issue of the relevant Construction Certificate, the applicant is to engage an Electrolysis Consultant 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 PCA with the application for the relevant Construction Certificate.

Reflectivity Report

Prior to the issue of the relevant Construction Certificate, the applicant shall design lighting, signs and surfaces with reflective materials, whether permanent or temporary, which are (or from which reflected light might be) visible from the rail corridor limiting glare and reflectivity to the satisfaction of Altrac, TfNSW and the Sydney Light Rail Operator.

Consultation Regime

Prior to the issue of the relevant Construction Certificate, a detailed regime is to be prepared for consultation with and approval by TfNSW for the excavation of the site and the construction of the building foundations (including ground anchors) for the approved development, which may include geotechnical and structural certification in the form required by TfNSW.

Insurance Requirements

Prior to the issue of the relevant Construction Certificate, the applicant must hold current public liability insurance cover for a sum acceptable to TfNSW. This insurance shall not contain any exclusion in relation to works on or near the rail corridor, rail infrastructure. The applicant is to contact TfNSW to obtain the level of insurance required for this particular proposal. Prior to issuing the relevant Construction Certificate the PCA must witness written proof of this insurance in conjunction with TfNSW's written advice to the applicant on the level of insurance required.

Works Deed / Agreements

Prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier, if required by TfNSW, Works Deed (s) between the applicant, TfNSW and/or Altrac and the Sydney Light Rail Operator must be agreed and executed by the parties. These agreements may deal with matters including, but not limited to, the following:

- Sydney Light Rail Operational requirements;
- Sydney Light Rail access requirements;
- Altrac and Sydney Light Rail Operator policies, rules and procedures compliance requirements;
- Indemnities and releases;
- Security of costs;
- Insurance requirements and conditions;

- TfNSW, Altrac and the Sydney Light Rail Operator's recovery of costs from the applicant for costs incurred by these parties in relation to the development (e.g. review of designs and reports, legal, shutdown /power outages costs including alternative transport, customer communications, loss of revenue etc) risk assessments and configuration change processes;
- Interface coordination between the Sydney Light Rail Operator and the subject development construction works, including safety interface;
 - A Safety Interface Agreement between the applicant and the Sydney Light Rail Operator must be agreed and executed by the parties. This agreement may deal with matters including, but not limited to, the following:
 - Pre and post construction dilapidation reports;
 - The need for track possessions;
 - Review of the machinery to be used during excavation/ground penetration / construction works;
 - The need for track monitoring;
 - Design and installation of lights, signs and reflective material;
 - Endorsement of Risk Assessment/Management Plan and Safe Work Method Statements (SWMS);
 - Endorsement of plans regarding proposed craneage and other aerial operations;
 - Erection of scaffolding/hoarding;
 - Light Rail Operator's rules and procedures; and
 - Alteration of rail assets such as the OHW along of track and associated hoarding demarcation system, if undertaken by the applicant.
- Altrac and the Sydney Light Rail Operator's reviews and impact assessment of the applicant's proposal, engineering design and construction works methodology on Sydney Light Rail Operations and assets;
- Attendance and participation in the construction works risk assessment of construction activities to be performed in, above, about, and/or below the Sydney Light Rail Corridor;
- Arrangements for shutdowns and Sydney Light Rail restricted operations related costs attributed to the applicant; and
- Sydney Light Rail site works access approval and access permit to work.

Construction Pedestrian and Traffic Management

- Prior to the issue of any construction certificate or any preparatory, demolition or excavation works, whichever is the earlier, the applicant shall:
 - Prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Sydney Coordination Office within TfNSW and the Sydney Light Rail Operator. The CPTMP needs to specify matters including, but not limited to, the following:
 - A description of the development;
 - Location of any proposed work zone(s), noting Darling Drive is not a suitable location;

- Details of crane arrangements including location of any crane(s) (if any);
 - Haulage routes;
 - Proposed construction hours;
 - Predicted number of construction vehicle movements and detail of vehicle types, noting that vehicle movements are to be minimised during peak periods;
 - Details of specific measures to ensure that closure pedestrian bridges during the construction does not cause pedestrian/passenger safety issues at the light rail stop with increased pedestrian movements at the light rail stop;
 - Pedestrian and traffic management measures;
 - Construction program and construction methodology;
 - A detailed plan of any proposed hoarding and/or scaffolding;
 - Measures to avoid construction worker vehicle movements within the CBD;
 - Consultation strategy for liaison with surrounding stakeholders, including other developments under construction;
 - Any potential impacts to general traffic, cyclists, pedestrians and light rail and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works;
 - Cumulative construction impacts of projects including Sydney Metro City and South West. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the surrounding road network; and
 - Proposed mitigation measures. Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP.
- Submit a copy of the final plan to the Coordinator General, Transport Coordination within TfNSW for endorsement; and
 - Provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, public transport, freight, servicing and pedestrian access during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.

During Construction

- All piling and excavation works are to be supervised by a geotechnical engineer experienced with such excavation projects;
- No rock anchors/bolts (temporary or permanent) are to be installed into the light rail corridor;
- No metal ladders, tapes and plant/machinery, or conductive material are to be used within 6 horizontal metres of any live electrical equipment unless a physical barrier such as a hoarding or structure provides separation;

- During all stages of the development extreme care shall be taken to prevent any form of pollution entering the light rail corridor. Any form of pollution that arises as a consequence of the development activities shall remain the full responsibility of the applicant;
- The applicant must mitigate all noise and vibration to the extent possible and provide vibration monitoring equipment and provide the results to the Sydney Light Rail Operator at intervals required by TfNSW and the Sydney Light Rail Operator, and immediately implement corrective actions in the event that the noise or vibration exceeds acceptable limits;
- Rainwater from the roof must not be projected and/or falling into the rail corridor/assets and must be piped down the face of the building which faces the rail corridor. Given the site's location next to the rail property, 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 TfNSW and the Sydney Light Rail Operator (or the delegated authority); and
- No scaffolding is to be used within 6 horizontal metres of the rail corridor unless prior written approval has been obtained from the Sydney Light Rail Operator and TfNSW and a physical barrier such as a hoarding or structure provides separation. To obtain approval the applicant will be required to submit details of the scaffolding, the means of erecting and securing this scaffolding, the material to be used, and the type of screening to be installed to prevent objects falling onto the rail corridor.

Prior to the Issue of the Occupation Certificate

Post--construction Dilapidation Report

Prior to the Issue of the Occupation Certificate, a post-construction dilapidation survey shall be undertaken via a joint inspection with representatives from TfNSW, Altrac, the Sydney Light Rail Operator and the applicant. The dilapidation survey will be undertaken on the rail infrastructure and property in the vicinity of the project. 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 to TfNSW and the Sydney Light Rail Operator will be required unless otherwise notified by TfNSW. The applicant needs to undertake rectification of any damage to the satisfaction of TfNSW and the Sydney Light Rail Operator and if applicable the local council.

Reflectivity Report

Prior to the Issue of the Occupation Certificate, the applicant shall demonstrate that lights, signs and reflective materials, whether permanent or temporary, which are (or from which reflected light might be) visible from the rail corridor were installed limiting glare and reflectivity to the satisfaction of TfNSW, Altrac and the Sydney Light Rail Operator.