Ms May Patterson
Team Leader
Planning and Assessment
Department of Planning, Industry and Environment
GPO Box 39
Sydney NSW 2001

Dear Ms Patterson

Powering Sydney's Future (SSI-8583)

Thank you for your correspondence dated 11 October 2019, requesting Transport for NSW (TfNSW) to review and comment on the above. Please accept this response letter as a combined TfNSW, Roads and Maritime Services, Sydney Metro and Sydney Trains (Transport Cluster).

The Transport Cluster appreciates the opportunity to provide comments on the above State Significant Infrastructure (SSI) application and the efforts of TransGrid for consulting with the Transport Cluster during the preparation of this SSI application.

Unmitigated, the TransGrid Potts Hill to Alexandria transmission cable project has the potential to adversely impact on the following corridors:

- Various Classified Roads;
- Heavy Rail Network;
- Sydney Metro;
- Inner West Light Rail; and
- Bus Service Routes.

Detailed comments and suggested Conditions of Consent are included in **TAB A**.

If you require clarification on the above, please don't hesitate to contact Mark Ozinga, Principal Manager, Land Use Planning and Development on 0439 489 298.

Yours sincerely

18/11/2019

Mark Ozinga
Principal Manager, Land Use Planning and Development
Customer Strategy and Technology

Objective Reference CD19/08201

TAB A – Detailed Comments on the SSI

1. Classified Roads

The proposed TransGrid Potts Hill to Alexandria transmission cable project traverses along parts of the classified road network as shown in the following table:

State Roads	Regional Roads
Rookwood Road, Yagoona	Waterloo Road, Greenacre
Hume Highway, Chullora	Burwood Road, Belmore
Juno Parade, Greenacre	Burwood Road/Fifth Avenue, Campsie
Roberts Road, Greenacre	Brighton Avenue, Campsie
Punchbowl Road, Lakemba	King Street, Canterbury
Old Canterbury Road, Summer Hill	Wardell Road, Marrickville South
New Canterbury Road, Dulwich Hill	Addison Road, Marrickville
Sydenham Road, Marrickville	Enmore Road, Marrickville
	Llewllyn Street, Marrickville
	Edgeware Road, St Peters
	May Street, St Peters
	Campbell Street, St Peters

It is advised that

- Once the project is approved, but before works commence, the applicant would need to obtain concurrence (from Roads and Maritime Services) in accordance with the terms of Section 138 of the Roads Act 1993. Such concurrence would not be unreasonably be withheld but works would need to be undertaken under terms agreed between Roads and Maritime Services and the applicant;
- Roads and Maritime Services will be able to grant concurrence under the Roads Act 1993 once the following information is provided and has been agreed to by Roads and Maritime Services;
- Based on information provided in the SSI application, without appropriate mitigation measures, the proposed works have the potential for significantly impacting both the asset condition and operations of the classified road network. It is noted that the Environmental Impact Statement (EIS) details that construction is planned over a 24 month period. However, no specific details have been provided as part of the information on how the works will be staged so as to ensure any impacts are minimised. As such, it is requested that details on how the work will be staged inclusive of an estimated time frame for each stage be provided so as to ensure impacts are minimised;
- The proposed cable works will impact upon a number of existing traffic signals. Noting the importance of these signals at each of the locations impacted, Roads and Maritime requires more detail on what works are specifically proposed at all the signals that are going to be impacted as part of the construction inclusive of Campbell Rd/Euston Rd (a new site);

- All proposed cabling should go under existing drainage infrastructure that is located within the classified road reserve. This is required so as not to reduce the cover. Existing drainage infrastructure will need to be manually located as it is not identified by Dial Before You Dig. All existing infrastructure located within any classified road reserve that will be impacted must be accurately shown on the plans submitted as part of the required Roads Act, Section 138 approval process;
- Any changes to the traffic and transport arrangements that are proposed during the installation of cables should ensure that operations of the road network are prioritised;
- It is noted that the proposed construction work may impact on WestConnex (inclusive of an area for the WestConnex new M5 Project) and the future F6/M6 Extension. Roads and Maritime Services is currently consulting with the relevant project teams to ensure there is no conflicts with their construction works. Further details and/or requirements will be provided by Roads and Maritime Services in due course;
- It is noted that cones are proposed to protect the site at some places, Consideration should be taken in accordance with the Traffic Control at Works Sites (TCAWS) and other safety measures for when the workers are on site. Certain circumstances may not be suitable for this arrangement and may require heavier barriers;
- As part of the package of information to be submitted with future Section 138 Application's detailed Construction and Pedestrian Traffic Management Plans (CPTMP) and Traffic Control Plans will be required. It is important to note that all roadworks and traffic control facilities must be undertaken by a pre-qualified contractor. A copy of pre-qualified contractors can be found on the Roads and Maritime Services website at: http://www.rta.nsw.gov.au/doingbusinesswithus/tenderscontracts/prequalifiedcontractors.htm; and
- Further traffic management details should be provided in the CPTMP. For roads where diversions are required, details on the duration of diversion, likely diversion routes and impacts of the diversion on all road users should be provided in the CPTMP. For roads where traffic flow is maintained, details of any changes to the existing road layout (such as changes to the number of lanes, turning lanes, parking, etc), duration of changes and impacts on all road users should be provided in the CPTMP.

Suggested Conditions of Consent Relating to Classified Roads

The suggested Conditions of Consents are provided below:

General Conditions

- *Joint bays are not permitted within the classified road reserve;*
- *Cable installation on classified roads should be maintenance free;*
- *Any road crossings should be underbore and maintenance free;*
- *The Applicant shall undertake works in accordance with Roads and Maritime Services Technical Direction - Trenchless Excavation within the Easement of Roads and Maritime Infrastructure (GTD 2018 002 | RMS 18.906 – 25 July 2018) (a copy of this document will be provided upon TransGrid's request);*
- *If underboring is not practicable (details must be forwarded to Roads and Maritime Services for approval) then trenching may be approved but the utility shall be installed a minimum of 1.2 metres below the lowest point of the road formation;*

- *The pavement restoration shall be carried out in accordance with Roads and Maritime Services Specification No. M209 (a copy of this document will be provided upon TransGrid's request); and*
- *All proposed cabling should ensure minimum required cover is maintained for all existing assets/infrastructure within the classified road reserve (e.g. drainage infrastructure, etc). All existing infrastructure located within the classified road reserve that will be impacted must be accurately shown on the documentation submitted as part of the required Section 138 approval process.*

Prior to the Commencement of Works on Site

Prior to the commencement of works on site,

- *The Applicant shall obtain concurrence/approval from Roads and Maritime Services in accordance with Section 138 of the Roads Act 1993 prior to the commencement of the works. This shall include, but not be limited to details on how the work will be staged inclusive of an estimated time frame for each stage so as to ensure safety and efficiency impacts on the classified road network are minimised. The Section 138 application with required supporting information can be submitted* to *Roads and Maritime Services via development.sydney@rms.nsw.gov.au;*
- *The Applicant shall submit a Road Occupancy Licence (ROL) application to the Transport Management Centre (TMC) for its approval for any works on classified roads, a local road within 100m of traffic signals and when TransGrid is planning on occupying space on an existing road that affects traffic flow along the classified road network. An ROL will need to be applied for all proposed works at least 10 working days prior to proposed implementation. . A ROL can be obtained through https://myrta.com/oplinc2/pages/security/oplincLogin.jsf;*
- *The Applicant shall undertake detailed assessment of traffic, parking, pedestrian and cycle accessibility impacts. The Applicant must undertake traffic analysis for peak periods, including providing the raw data, to identify the impact on the road network to demonstrate that construction traffic can be managed to minimise disruption to traffic network operations, pedestrian, bicycle and public transport networks, to the satisfaction of Roads and Maritime Services and the Sydney Coordination Office within TfNSW. Note that truck movements must be minimised during peak periods within commercial centres. Peak periods are 7am to 10am and 4pm to 7pm Monday to Friday;*
- *The Applicant shall:*
    - *Prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Transport Management Centre (TMC), Sydney Coordination Office within TfNSW and Roads and Maritime Services. The CPTMP needs to specify, but not limited to, the following:*
        - *A description of the project;*
        - *Construction program;*
        - *Proposed construction hours.*
        - *Construction vehicle access arrangements;*
        - *Location of any proposed work zone(s), work site(s) and work compound(s);*

- *Short and long term lane and road closures and proposed diversion routes;*
- *Bus stop and associated facilities relocation and any changes to service rerouting;*
- *Parking management;*
- *Haulage routes;*
- *Traffic management measures to manage the road network performance;*
- *Estimated number of construction vehicle movements, including measures to reduce the number of movements during the AM and PM peak periods;*
- *Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from the construction of the development;*
- *Cumulative construction impacts of the development. 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 road network;*
- *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; and*
- *Consultation strategy for liaison with surrounding stakeholders, including other developments.*

o *Submit a copy of the final plan to the Coordinator General, Transport Coordination for endorsement.*

2. Heavy Rail Corridors

Comment

The TransGrid Potts Hill to Alexandria transmission cable project has the potential to impact on a number of heavy rail corridors. The cable route proposed will cross over Sydney Trains' assets and project sites and the details are provided below:

- It is proposed to cross the rail infrastructure at the following locations by utilising 'cable bridges':
    - o Over the Chullora Branch Corridor near Muir Road; and
    - o Over the Main Suburban Line at Bedwin Road, St Peters.

  The final design of the cable bridges is unknown. These cable bridges may also be designed to allow pedestrian and or cycle access over the rail corridor;
- The More Trains More Services (MTMS) Program is currently investigating infrastructure upgrades to the Sydney Trains network. The route of the feeder will be in the vicinity of project sites under consideration. The MTMS Stage 3 Program is investigating a potential project site adjacent to Unwins Bridge Road which is in the vicinity of the proposed cable bridge near Camdenville Park;

- The proposed route of the feeder is in the vicinity of a number of electrical assets operated and maintained by Sydney Trains. The construction of this feeder may have subsequent impacts on fault levels and earthing and bonding issues within the area;
- At its western end, the proposed alignment of the power transmission cable will pass over an existing rail track on Muir Road Chullora as part of the Digital System Program. This track is part of the broader Chullora Railway Workshops and is not currently electrified. TfNSW is currently developing a project as part of its Digital Systems Program, which will use this track as part of a new digital systems technology and testing centre. This will involve upgrades to this track and associated infrastructure, including electrification of the line (i.e. construction and operation of overhead wiring to supply power to the trains) over the next 1-2 years; and
- The proposed cable also crosses the existing rail track between Sydenham and St Peters Stations at the 'proposed special crossing', before turning and running parallel to the rail corridor within Camdenville Park. This is in proximity to the site of the proposed upgrade of St Peters Station as part of the Transport Access Program, which is currently scheduled to commence in 2022. Initial design development identifies the installation of a new padmount transformer and associated cabling infrastructure supplying the station.

It is advised that:

- Given the proximity of several Sydney Trains / TfNSW projects to the proposed power transmission cable, it is essential that the design and construction of the Transgrid cable be undertaken in consultation with TfNSW, and in accordance with the requirements of applicable standards issued by the TfNSW Asset Standards Authority;
- The heavy rail corridors need to be protected during all stages of the transmission cable project;
- The numerous rail crossings have the potential to impact electrolysis;
- There are inconsistencies in the placement of the conduit for optical fibre identified in the SSI application;
- TransGrid must engage with Sydney Trains Engineering Maintenance Interface (EMI) team to obtain acceptance of the final design, related reports and construction methodology;
- Maintenance of all its assets will be the responsibility of TransGrid;
- The cable bridge works may require the removal of vegetation. Sydney Trains' environmental database identifies that the endangered ecological vegetation community 'Cooks River Castlereigh Ironbark Forest' is located in the vicinity of the proposed crossing location at the Chullora branch rail corridor. It is also noted that there are a number of large trees within this section of the Chullora branch rail corridor. There are a small number of trees (approximately 4-5) located within the rail corridor in the vicinity of the proposed crossing at Bedwin Road, St Peters;
- Future use of the cable crossings for pedestrian/cycle ways are appropriate and safe adjacent to rail infrastructure and coordinated to ensure future pedestrian/cycle movements and to provide convenient connections to station infrastructure and/or other public transport links;
- It is noted that a cable bridge is proposed at Chullora. Underboring to cross the rail could be considered at Chullora;

- TfNSW would like to use the works opportunity to extend the current operational technology optic fibre network, and run its fibre and ducts along the proposed route for the agency use whilst trenches are open; and
- Access into the rail corridor will be granted through Access Authority Instrument (AAI) – This request can be organised through our EMI team via email at: Central_Interface@transport.nsw.gov.au.

Suggested Conditions of Consent Related to Heavy Rail

The suggested Conditions of Consents are provided below:

General Conditions

- *Preliminary and detailed design and installation shall be undertaken by an Authorised Engineering Organisation (AEO) and in accordance with Australian & ASA standards Sydney Trains shall be consulted in regards to safety, design and maintenance requirements in relation to infrastructure installed in the rail corridor;*
- *Sydney Train's safety and asset management standards shall be adopted to ensure rail infrastructure is appropriately protected and can be safely operated during and after construction of the cable bridges;*
- *Details of the property management/easements over rail infrastructure shall be provided to allow TransGrid to access and maintain the cables into the future;*
- *Any vegetation or tree removal shall be minimised and if unavoidable, appropriate offsets are identified in consultation with the Sydney Trains Environment Specialist– Biodiversity;*
- *Cable bridges shall be constructed with appropriate non reflective materials and promote passive surveillance to deter antisocial behaviour and/or unauthorised access to rail infrastructure;*
- *Jointing and pulling pits shall be located outside of the corridor to minimise maintenance related access requirements;*
- *A position paper should be presented to the NSW Electrolysis Committee. Baseline readings should be taken prior to construction for comparison after installation;*
- *Where being used for Pilot Wire Protection, placement of the fibre conduit shall be reviewed to ensure highest likelihood of availability during a cable strike;*
- *Fast acting protection with a backup scheme should be used; and*
- *As far as is practical, works in the vicinity of the rail corridor are to be undertaken generally consistent with Sydney Trains EPL 12208 requirements, particularly in relation to noise impacts and notification requirements where out of hours works are required.*

Prior to the issue of the relevant Construction Certificate

Prior to the issue of the relevant Construction Certificate,

- *The Final Approved For Construction (AFC) Drawings & related documentation shall be reviewed and accepted by Sydney Trains Reviewer (ESI);*
- *The Applicant shall enter into a Safety Interface agreement (SIA) acceptable to Sydney Trains; and*

- *A Maintenance plan for all TransGrid assets located within the railway corridor shall be provided to Sydney Trains for acceptance.*

3. Sydney Metro Corridor

Comment

The TransGrid Potts Hill to Alexandria transmission cable project has the potential to impact Sydney Metro City and Southwest at the proposed rail corridor cable bridge at Bedwin Road, St Peters.

It is advised that:

- Sydney Metro is currently undertaking works below Bedwin Road to construct a new track (shunt neck), these works will be ongoing until 2024. Subject to TransGrid's proposed cable bridge construction program, detailed construction interface will be necessary to avoid conflicting activities;
- Design of TransGrid infrastructure across the rail corridor must comply with Asset Standards Authority Standards;
- The concept design indicates that a new build infrastructure (cable bridge, footings, column abutments) is located within the rail corridor, specifically within the future Sydney Metro train operational area; and
- Sydney Metro has completed extensive flood modelling of the Marrickville valley catchment to demonstrate that the Sydney Metro Critical State Significant Infrastructure has no negative impact on flooding. The proposed TransGrid infrastructure at Bedwin Road has the potential to negatively impact on flooding in the area.

Suggested Conditions of Consent Relating to Sydney Metro

The suggested Conditions of Consent is provided below:

Prior to the issue of the relevant Construction Certificate,

Prior to the issue of the relevant Construction Certificate, the Applicant shall

- *Enter into a property and operational agreement with Sydney Metro, RailCorp and Sydney Trains;*
- *Undertake flood modelling to demonstrate that new infrastructure at Bedwin Road does not negatively impact on flooding; and*
- *Demonstrate compliance with Sydney Metro's Technical Services at Grade and Elevated Sections Corridor Protection Guidelines and/or Sydney Metro Underground Corridor Protection Services for the proposed works.*

4. Inner West Light Rail Corridor

Comment

The TransGrid Potts Hill to Alexandria transmission cable project has the potential to impact the Inner West Light Rail corridor with the proposed underbore of the light rail in the area of Arlington.

It is advised that:

- Design of TransGrid infrastructure across the light rail corridor must comply with the Asset Standards Authority Standards; and
- Sydney Light Rail assets and the operation of the light rail during construction and operational phases of the cable project needs to be protected.

Suggested Conditions of Consent Relating to Inner West Light Rail

The suggested Conditions of Consent are provided below:

General Conditions

- *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;*
- *All TfNSW, Altrac and Sydney Light Rail Operator's costs associated with review of plans, designs and legal must be borne by the Applicant;*

- *Preliminary and detailed design and installation shall be undertaken by an Authorised Engineering Organisation (AEO) and in accordance with Australian & ASA standards TfNSW shall be consulted in regards to safety, design and maintenance requirements in relation to infrastructure installed in the rail corridor;*
- *TfNSW and the Sydney Light Rail Operator shall be consulted in regards to safety, design and maintenance requirements in relation to infrastructure installed in the rail corridor;*
- *Jointing and pulling pits shall be located outside of the corridor to minimise maintenance related access requirements;*
- *Any vegetation or tree removal shall be minimised and if unavoidable, appropriate offsets are identified in consultation with the TfNSW Environment manager; and*
- *TfNSW's safety and asset management standards shall be adopted to ensure light rail infrastructure is appropriately protected and can be safely operated during and after underboring.*

<u>Prior to the issue of the relevant Construction Certificate</u>

- *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 any Construction Certificates, the Applicant shall provide a summary report that would include the information how each condition has been or would be addressed;*
- *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 TfNSWs' written endorsement; and*
- *Prior to the issue of any Construction Certificate, the following documentation shall be provided for the TfNSW endorsement:*
    - *Final geo-technical 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.*

- *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;*
- *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 Principal Certifying Authority (PCA) with the application for the relevant Construction Certificate;*
- *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;*
- *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;*
- *Prior to the issue of any Construction Certificate, a Safety Interface Agreement between the Applicant, TfNSW and/or 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.*

- *Prior to the issue of any Construction Certificate, a Works Deed between the Applicant, TfNSW and/or 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:*
    - *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;*
    - *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;*
    - *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*

<u>During Construction</u>

- *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; and*
- *Given the site's location next to the rail property, drainage from the underbore 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).*

Prior to the Issue of the Occupation Certificate

- *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; and*
- *Prior to the Issue of the Occupation Certificate, the Applicant is to submit the as-built drawings to TfNSW and the Sydney Light Rail Operator.*

5. Bus Service Corridors

Comment

The Traffic and Transport Assessment prepared to support the SSI application states that consultation with TfNSW and the bus operators would be required in advance to ensure the successful diversion of routes and relocation of bus stops as and when required in accordance with the construction program**.**

It is advised that:

- The bus operators should be consulted for their approval of any proposed diversion of bus routes and bus stop relocations;
- All diverted bus routes should maintain 3.5m lane widths at all times;
- Any changes to the bus stops and bus routes need to be agreed by the Local Traffic Committee; and
- Further details and information on where the bus routes will be diverted and the bus stops will be relocated and how patrons will be affected (i.e. walking distance, signage, control measures, communications with transit authorities) need to be provided to TfNSW and the bus operator(s).

Suggested Conditions of Consent Related to Bus Service Corridors

The suggested Conditions of Consents are provided below:

Prior to the issue of the relevant Construction Certificate

- *Prior to the issue of the relevant Construction Certificate, the Applicant shall identify the relevant bus operators for the bus routes that will be diverted and the bus stops that will be relocated. Contact should be made with these bus operators to obtain agreement on the design and details, and to manage the diversion of bus routes and the relocation bus stop process.*