



Integrated Management System

Planning Approval Consistency Assessment Form

SM ES-FT-414

Sydney Metro Integrated Management System (IMS)

Prepared by:	Leah Henderson
Prepared for:	Laing O'Rourke
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The Planning Approval Consistency Assessment Form should be completed in accordance with the Sydney Metro Planning Approval Consistency Assessment Procedure (SM ES-PW-314) and Sydney Metro Environmental Planning and Approval Manual (SM ES-ST-216)

1.0 Existing Approved Project

Planning approval reference details (Application/Document No. (including modifications)):

Sydney Metro City and Southwest Chatswood to Sydenham Conditions of Approval (SSI 15_7400) as modified.

Modification 1 – Relocation of Victoria Cross northern services building. Additional station entry and relocation of Artarmon Substation (SSI Mod 1).

Modification 2 – Central Walk – Sydney Metro City and Southwest – Chatswood to Sydenham (SSI Mod 2).

Modification 3 – Martin Place Metro Station – Sydney Metro City and Southwest – Chatswood to Sydenham (SSI Mod 3).

Modification 4 – Sydenham Station and Metro Facility South – Chatswood to Sydenham (SSI Mod 4).

Date of determination:

SSI 15_7400 – 9 January 2017.

SSI Mod 1 – 18 October 2017.

SSI Mod 2 – 21 December 2017.

SSI Mod 3 – 22 March 2017.

SSI Mod 4 – 13 December 2017.

Type of planning approval:

Part 5.1 - Critical State Significant Infrastructure

Description of existing approved project you are assessing for consistency:

SSI 15_7400: The Chatswood to Sydenham component of Sydney Metro City and Southwest comprises a new metro rail line, approximately 16 kilometres long, between Chatswood and Sydenham. New metro stations would be provided at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo, as well as new underground metro platforms provided at Central Station.

Section 7.10.9 of the Environmental Impact Statement (EIS) identified and assessed a combined services ring at Central Station.

SSI Mod 2: Given the modifications that have been approved, the Chatswood to Sydenham component of Sydney Metro City and Southwest SSI is now approved to operate to Sydenham Station and includes the upgrade of Sydenham Station and the delivery of Central Walk. The Central Station Main (CSM) works are a major element of the Sydney Metro City and Southwest project, which includes the construction of a new metro station underneath Central Station's existing heavy-rail platforms 12, 13, 14 and 15. Work to the existing Central Station and Central Walk, which includes a new eastern entrance and concourse running below the suburban rail platforms (existing platforms 16 to 23).

Section 6.6 and 7.6 of the SSI Mod 2 modified the route of the combined services ring and included new underfloor tunnels, a gantry, a vertical bore and the use of existing tunnels, where possible, to lay services for the Project throughout the Central Station precinct. The installation of a new 33/11kV transformer and associated switching equipment within the Lee Street Substation was also identified and assessed.

A new padmount substation and temporary power supply from Chalmers Street Substation was not identified and assessed in the EIS or the SSI Mod 2. Permanent 11 kilovolt (11kV) feeders from the Lee Street Substation (once it is operational) and the Sydney Yard West (SYW) Substation to the padmount substation were also not identified and assessed.

Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):

- The Sydney Metro City and Southwest – Development Consent – Determination, dated 9th January 2017
- The Sydney Metro City and Southwest - Environmental Impact Statement, dated 3rd May 2016
- The Sydney Metro City and Southwest Chatswood to Sydenham Submissions and Preferred Infrastructure Report (PIR), dated October 2016
- Modification 2 – Central Walk – Sydney Metro City and Southwest – Chatswood to Sydenham (SSI Mod) – 21 December 2017
- Chatswood to Sydenham – Central Walk Modification – Submissions Report – 4 April 2017
- Chatswood to Sydenham – Central Walk Modification – Determination, dated 21 December 2017

All proposed works identified in this assessment would be undertaken in accordance with the mitigation measures identified in the EIS, PIR and the Infrastructure Approval, as modified.

2.0 Description of proposed development/activity/works

Describe ancillary activities, duration of work, working hours, machinery, staffing levels, impacts on utilities/authorities, wastes generated or hazardous substances/dangerous goods used.

This Environmental Consistency Assessment has been prepared to address the proposed construction of a padmount substation (referred to as the SYAB Padmount throughout) and the associated temporary and permanent 11kV feeder connections. The new substation would be installed near the Sydney Yard Access Bridge.

The foundations of the SYAB Padmount would be constructed first and are approximately 2 metres by 4 metres. The foundations would be followed by the construction of the temporary 11kV connection to the Chalmers Street Substation via a ULX (a service crossing beneath the rail line) to Sydney Yard. The feeder would then be in GST (Galvanised Steel Trough) to the SYAB Padmount. This feeder will be redundant and decommissioned once the Lee Street Substation is operational. The transformer would then be installed within the SYAB Padmount and a fence erected around the perimeter. Testing and commissioning of the feeder will follow.

The permanent 11kV power supply to the SYAB Padmount would be from Lee Street Substation and the SYW Substation via two ULX (refer to Appendix A for the proposed location of the permanent feeder routes). The ULX that is required for the permanent 11kV supply will be approximately 1.5 metres deep.

Approximately 10 staff are required on site to complete the works, requiring the following plant and equipment:

- 3 heavy vehicles
- 3 site utes
- An excavator
- A high-rail excavator
- Sucker truck
- Compactor

Sydney Trains signalling and communication cables are known to be in the area and these would be located using non-destructive digging. All located utilities would be managed in accordance with the requirements of the EIS.

Trenches would be backfilled with excavated spoil where possible and any excess would be removed from site and disposed of at a suitably licenced facility. Small quantities of steel, timber and concrete waste would also be generated on site and recycled appropriately.

There is the potential to uncover contaminated materials given the land use is an existing railway with associated activities. These include, metals, hydrocarbons, pesticides, nutrients, phenols, carbamates, herbicides and asbestos in soils. The amount of excess excavated spoil generated is expected to be minimal and would be disposed of at a suitably licenced facility.

Associated activities including notifications, environmental controls, site establishment and fencing/hoarding would be undertaken in accordance with the Revised Environmental Management Measures (REMM) in the Preferred Infrastructure Report, the Conditions of Approval (CoA) and an Environmental Control Map (ECM) that will be developed for this project.

3.0 Timeframe

When will the proposed change take place? For how long?

The construction of the SYAB Padmount and associated 11kV feeders would take place between June and December 2018. Works to be undertaken prior to the approval of the CEMP will be the subject of a pre-construction minor works approval.

Approved, standard working hours for the Project are as follows:

- 07.00 – 18.00 Monday to Friday
- 08.00 – 13.00 Saturdays
- No works Sundays or Public holidays

Testing and commissioning activities would be undertaken during rail possession weekends, outside of standard construction hours. These works would be undertaken in accordance with the REMM and the CoA for the Project and Sydney Metro out of hours works protocol.

4.0 Site description

Provide a description of the site on which the proposed works are to be carried out, including, Lot and Deposited Plan details, where available. Map to be included here or as an appendix. Detail of land owner.

The SYAB Padmount would be located within Sydney Yard at Central Station, Sydney. The associated feeders would connect to Chalmers Street Substation, Chalmers Street Sydney, the Sydney Yard West Substation and the Lee Street Substation, both located adjacent to the disused Goods Line, accessed from Lee Street, Sydney.

The construction site is zoned SP2 – Special Purpose (Infrastructure) and is owned by Sydney Trains.

The site is located on Lot/Section/Plan no: 118//DP1078271, which is where the majority of works for the Sydney Metro - Chatswood to Sydenham - City & Southwest Project will take place.

Refer to Appendix B for the proposed works location.

5.0 Site Environmental Characteristics

Describe the environment (i.e., vegetation, nearby waterways, land use, surrounding land use), identify likely presence of protected flora/fauna and sensitive area.

The ground cover at the site is disturbed, is part of the rail corridor and covered in a mix of gravel, bare dirt, ballast and concrete hardstand.

The surrounding land uses are roads including Lee and Chalmers Streets, the rail corridor and associated infrastructure, office buildings, a hotel and Prince Alfred Park.

The site is located within the state heritage listed Sydney Terminal and Central Railway Stations Group (01255), on Eddy Avenue, Sydney and is listed on the Sydney Trains s170 register.

There were no Aboriginal heritage items located within 100 metres of the Central Station works, with the nearest site 330 metres away (*Sydney Metro Chatswood to Sydenham Technical paper 5: Aboriginal Heritage – Archaeological Assessment, Artefact 2016*). The site appears highly disturbed, overlaid with gravel, does not show signs of any landscape features that are likely to indicate the presence of Aboriginal heritage and as such it is unlikely that Aboriginal heritage will be impacted by the proposal.

The Eastern Bentwing-bat and the Eastern Freetail-bat could inhabit buildings and bridges at Central Station (*Sydney Metro Chatswood to Sydenham Technical Paper 9: Biodiversity Assessment, Arcadis 2016*). Given that no buildings or bridges are being removed or impacted as part of the proposal then impacts to the bats is unlikely.

There is one tree beside the Sydney Yard West Substation and several trees beside the ORS building. No trees would be impacted by these works.

There are no waterways within 500 metres of the site.

6.0 Justification for the proposed works

Address the need for the proposed works, whether there are alternatives to the proposed works (and why these are not appropriate), and the consequences with not proceeding with the proposed work.

The SYAB Padmount and associated temporary and permanent 11kV feeders are required to enable the CSM works and to permanently power the Sydney Yard Access Bridge (SYAB). If this power supply is not provided, then the SYAB will not operate and the CSM works will not go ahead.

The construction area for the metro station box at Central Station will directly impact on the existing transformer in the ORS building. A new transformer is therefore required. An area near the Sydney Yard Access Bridge was chosen as an appropriate location for its permanent placement. The SYAB Padmount requires power supply in the form of two 11kV feeders from the SYW Substation and the Lee Street Substation. The Lee Street Substation is currently under construction and until it is operational, power will be temporarily supplied via an 11kV feeder from the Chalmers Street Substation.

7.0 Environmental Benefit

Identify whether there are environmental benefits associated with the proposed works. If so, provide details:

The benefit of the SYAB Padmount and the associated feeders is to enable Laing O'Rourke to complete the proposed works efficiently, within the project timeframes and to ensure the SYAB is operational for the long term.

8.0 Control Measures

Will a project and site specific EMP be prepared? Are appropriate control measures already identified in an existing EMP?

A site-specific ECM would be prepared incorporating control measures from the REMM and CoA.

9.0 Climate Change Impacts

Is the site likely ~~to be~~ adversely affected by the impacts of climate change? If yes, what adaptation/mitigation measures will be incorporated into the design?

No. The proposed works are unlikely to be adversely affected by the impacts of climate change due to the location and proposed management measures.

10.0 Impact Assessment – Construction

Attach supporting evidence in the Appendices if required. Make reference to the relevant Appendix if used.

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Water	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Air quality	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Noise vibration	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Indigenous heritage	The Central Station site is within Method Area 2 as outlined in the Aboriginal Cultural Heritage Assessment Report (CHAR) (Artefact Heritage 2016b). The impacts of these works will be similar to those described in the EIS.	<ul style="list-style-type: none"> Excavation of the SYAB Padmount foundations are to be undertaken in accordance with the Sydney Metro AMS – Central Station Metro Early Works (Artefact 2018). Aboriginal objects cannot be impacted during early works. 	Y	Y	—
Non-indigenous heritage	The site is located within the curtilage of the State Heritage listed Sydney Terminal and Central Railway Stations Group (01255), on Eddy Avenue, Sydney.	<ul style="list-style-type: none"> Significant archaeological remains cannot be impacted by early works. Construction of the 	Y	Y	—

(Uncontrolled when printed)

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>Construction of the SYAB Padmount foundations has the potential to impact on Non-Aboriginal archaeology including the first and second railway expansion and the east carriage shed (Artefact, April 2018). These impacts are similar in location, nature and scope to those identified and assessed in the Approved Project as modified.</p> <p>The impacts of the excavation for the ULX and the GST are similar in nature and scope to those identified and assessed in the Approved Project as modified.</p> <p>There would be no impacts to built heritage as result of these works beyond what was assessed in the EIS.</p>	<p>foundations for the SYAB Padmount are to be undertaken in accordance with the Sydney Metro AMS – Central Station Metro Early Works (Artefact 2018).</p>			
Community and stakeholder	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Traffic	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Waste	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Social	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Economic	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—

(Uncontrolled when printed)

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed/activity, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Visual	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Urban design	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Geotechnical	No geotechnical investigations are proposed.	NA	Y	Y	—
Land use	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Climate Change	There would be no climate change related impacts.	No additional mitigation is required	Y	Y	—
Risk	There are no additional risks associated with these changes.	No additional mitigation is required	Y	Y	—
Other	The impacts of these works will be similar to those described in the EIS.	No additional mitigation is required	Y	Y	—
Management and mitigation measures	No additional management and mitigation required for construction of this change.	No additional mitigation is required	Y	Y	—

11.0 Impact Assessment – Operation

Attach supporting evidence in the Appendix if required. Make reference to the relevant Appendix if used.

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	—
Water	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	—
Air quality	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	—
Noise vibration	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	—
Indigenous heritage	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	—
Non-indigenous heritage	An padmount substation would be permanently located within the State Heritage listed Sydney Terminal and Central Railway Stations Group (01255) at the completion of the project. The padmount substation would add to the visual clutter of the railway environment however given the substantial changes occurring at Central Station, including the provision of power supply and associated infrastructure, this impact is considered negligible and similar in nature and scope to power supply upgrades that were identified and assessed in Approved Project as modified.	Not applicable	Y	Y	—

(Uncontrolled when printed)

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	There would be no change to the operational impacts described in the Approved Project as modified.				
Community and stakeholder	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Traffic	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Waste	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Social	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Economic	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Visual	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Urban design	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Geotechnical	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Land use	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Climate Change	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Risk	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-
Other	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	-



(Uncontrolled when printed)

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed activity/works, relative to the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Management and mitigation measures	The impacts of these works will be similar to those described in the EIS.	Not applicable	Y	Y	—

12.0 Consistency with the Approved Project

<p>Based on a review and understanding of the existing Approved Project and the proposed modifications, is there is a transformation of the Project?</p>	<p>No. The proposed works would not transform the project. The Approved Project would continue to provide a new metro line between Chatswood and Sydenham. The works are in a similar location to the Approved Project as modified.</p>
<p>Is the project as modified consistent with the objectives and functions of the Approved Project as a whole?</p>	<p>Yes. The proposed works will assist the Approved Project to achieve its objectives and functions. Power supply will allow construction of the Central Station Main Works and operation of the Sydney Yard Access Bridge. This will enable the Central Station component of the Sydney Metro Project to operate efficiently and deliver on the objectives to provide a reliable, quality and resilient transport offering to the customer.</p>
<p>Is the project as modified consistent with the objectives and functions of elements of the Approved Project?</p>	<p>Yes. The proposed works are consistent with the objectives and functions of the power supply element of the Approved Project. The proposed works would be constructed to minimise impacts on the surrounding environment and provide a reliable source of power during construction and operation.</p>
<p>Are there any new environmental impacts as a result of the proposed works/modifications?</p>	<p>No. There are no new environmental impacts as a result of the proposed works. The impacts are similar in scope and nature to those identified and assessed in the EIS for the Approved Project and would take place in similar locations and during work hours already assessed.</p>
<p>Is the project as modified consistent with the conditions of approval?</p>	<p>Yes. The proposed works are consistent with the conditions of approval for the Approved Project and no changes are required to accommodate the proposed works.</p>
<p>Are the impacts of the proposed activity/works known and understood?</p>	<p>Yes. The impacts of the proposed works are known and understood. Detailed site plans and construction methodologies were used to assess the impacts. Information from the EIS was used to understand the existing environment and the potential for impacts to sensitive receivers and surrounding land uses as the proposed works are in similar locations to the Approved Project as modified.</p>
<p>Are the impacts of the proposed activity/works able to be managed so as not to have an adverse impact?</p>	<p>Yes. The impacts would be managed to avoid adverse impacts. The relevant conditions of approval and the revised environmental management measures would be implemented before and during the proposed works to ensure that they do not have an adverse impact on the surrounding the environment.</p>

13.0 Other Environmental Approvals

Identify all other approvals required for the project:

- Pre-construction minor works approval.
- Out of hours work approval.



Author certification

To be completed by person preparing checklist.

I certify that to the best of my knowledge this Consistency Checklist:

- Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the Proposed Revision; and
- Examines the consistency of the Proposed Revision with the Approved Project; is accurate in all material respects and does not omit any material information.

Name:	Leah Henderson	Signature:	
Title:	Environment Manager	Date:	9.4.18
Company:	Laing O'Rourke		

Environmental Representative Review

(Additional step for City & Southwest projects only – if this is a CA against a Northwest Project or REF delete this table)

As an approved ER for the Sydney Metro City & Southwest project, I have reviewed the information provided in this assessment. I am satisfied that mitigation measures are adequate to minimise the impact of the proposed work.

Name:	Erran Woodward	Signature:	
Title:	Environmental Representative	Date:	9/04/18

This section is for Sydney Metro only.

Application supported and submitted by

Name:	Yvette Buchli	Date:	9/4/18
Title:	Environmental Planning Manager	Comments:	—
Signature:			

Based on the above assessment, are the impacts and scope of the proposed activity/modification consistent with the existing Approved Project?

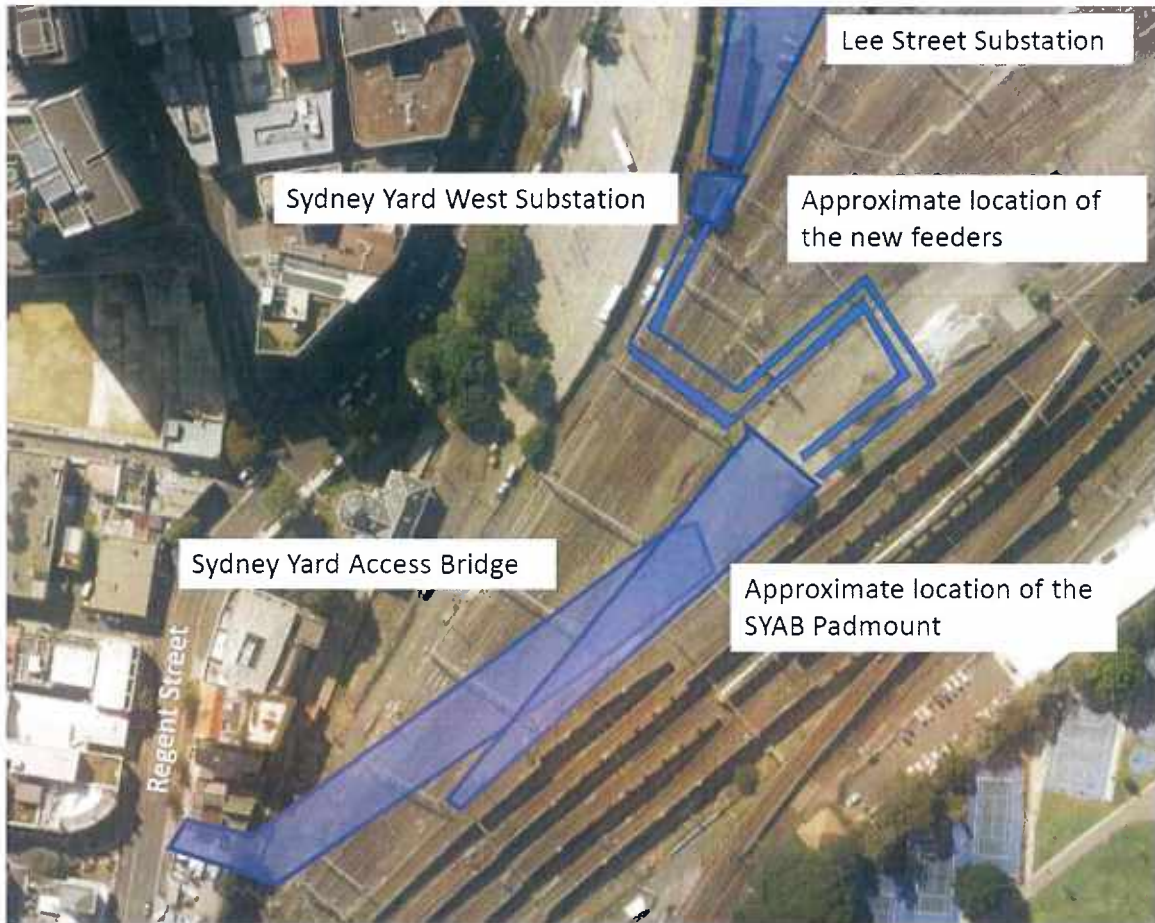
- Yes The proposed activity/works are consistent and no further assessment is required.
- No The proposed works/activity is not consistent with the Approved Project. A modification or a new activity approval/ consent is required. Advise Project Manager of appropriate alternative planning approvals pathway to be undertaken.



Endorsed by			
Name:	FIL CERONE	Date:	11/4/18
Title:	Principal Manager Director Northwest/City & Southwest Sustainability, Environment & Planning	Comments:	
Signature:			

Appendix A

Approximate location of the proposed permanent feeders from Lee Street Substation and Sydney Yard West Substation to the SYAB Padmount.



Appendix B

Location of the proposed works

