



Integrated
Management
System

Planning Approval Consistency Assessment Form

SM ES-FT-414

Sydney Metro Integrated Management System (IMS)

| | |
|---------------------------|---|
| Assessment Name: | LineWide - Bulk Supply Feeder Route - Canterbury to Campsie |
| Prepared by: | Sydney Metro |
| Prepared for: | LineWide contract |
| Assessment number: | TfNSW 34 |
| Status: | Final |
| Version: | 0 |
| Planning approval: | SSI 8256 (SWM) |
| Date required: | September 2019 |
| iCentral number | SM-19-00127992 |

Form information – do not alter

| | |
|------------------------|---|
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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 |
|---|
| <p>Planning approval reference details (Application/Document No. (including modifications)): Sydney Metro City & Southwest - Sydenham to Bankstown (SSI 8256)</p> |
| <p>Date of determination: Instrument of Approval Date – 12/12/2018</p> |
| <p>Type of planning approval: Division 5.2 – Critical State Significant Infrastructure (CSSI)</p> |
| <p>Description of existing approved project you are assessing for consistency: The Submissions and Preferred Infrastructure Report (SPIR) included the following description of the approved project works:</p> <p>The proposed works include upgrade works to convert stations and the rail line to Sydney Metro operations and other works. Upgrading the track and rail systems would include:</p> <ul style="list-style-type: none"> • Track works where required along the rail corridor • New or replacement turn back facilities and track crossovers • Installing Sydney Metro rail systems and adjusting existing Sydney Trains rail systems • Overhead wiring adjustments. <p>Other works proposed to support Sydney Metro operations would include:</p> <ul style="list-style-type: none"> • Upgrading existing bridges and underpasses across the rail corridor • Installation of security measures, including fencing, where required • Installation of noise barriers where required • Augmenting the existing power supply, including new traction substations and provision of new feeder cables consisting of a 33-kilovolt high-voltage electricity feeder cable will be installed between the new traction substation in Campsie and the existing Ausgrid electrical substation about one kilometre south of Canterbury Station in Earlwood. • Utility and rail system protection and relocation works. <p>It should also be noted that the SPIR provides more details on the alignment of the 33-kilovolt high-voltage electricity feeder cable (traction power supply cable), stating:</p> |

(Uncontrolled when printed)

Construction of the proposed traction power supply feeder from Campsie Station to Ausgrid's Canterbury Substation in Earlwood would be undertaken generally via trenching along the alignment. The use of horizontal directional drilling to install the cable would potentially be used in the following locations to minimise impacts:

- along Canterbury Road due to high traffic volumes
- between River Street and Karool Avenue due to a substantial change in elevation between the two streets - at this location, there is also a local heritage item which would need to be considered
- along Westfield Street (including the substation access road) between Mooney Avenue and the Canterbury Substation.
- The alignment also crosses Cup and Saucer Creek on Fore Street, Canterbury, via an existing bridge. This crossing would involve integrating the cable into the bridge structure, and works within the creek would not be required. The final design of this crossing would be confirmed during detailed design.

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

Sydney Metro City and Southwest Sydenham to Bankstown upgrade Environmental Impact Statement (September 2017)

Sydney Metro City and Southwest Sydenham to Bankstown Submissions and Preferred Infrastructure Report (June 2018)

Sydney Metro City and Southwest Sydenham to Bankstown Submissions Report (September 2018)

Conditions of Approval SSI 8256 (signed 12 December 2018)

All proposed works identified in this assessment would be undertaken in accordance with the mitigation measures identified in the EIS/SPIR/submissions report and the Conditions of Approval

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.

SPR approved route (page 36, Appendix B).



Since the approval of the S2B EIS the design of the feeder route between the Canterbury substation and the Campsie traction substation has been further developed, and the proposed cable route would be along the following alignment as indicated on Figure 1 on the left:

- Canterbury substation, north entry point
- Crossing Cup and Saucer Creek
- Through Pat O'Connor Reserve to Anzac Street
- Along the roadway of Anzac Street, High Street, Cooks Avenue
- Crossing Canterbury Road
- Along the roadway of Gould Street, South Parade
- Crossing Beamish Street
- Lilian Lane
- Campsie traction substation, 33kV switch room

The proposed works would include the installation of underground conduits to accommodate two (2) new 33kV connections using two 3-core underground cables per bulk supply feeder (four cables in total).

The associated civil works would require pavement cutting, excavation of the trench, laying the conduit, backfilling and making good of disturbed areas.

Figure 1: Proposed feeder route between Canterbury and Campsie

3.0 Timeframe

There is no change to the proposed duration of works for the BSP routes. Works are anticipated to commence early 2020 and would be completed by end 2022, followed by testing and commissioning.

4.0 Site description

The proposed feeder route extends approximately 2.3km from south-west Canterbury to western Campsie, predominantly through suburban residential areas, following the local road alignment. There are also two mixed commercial areas that would need to be crossed, at Canterbury Road (between Cooks Avenue and Gould Street), and along Beamish Street at Campsie. Canterbury Road and Beamish Street are two major arterial roads that need to be traversed.

Canterbury is a Sydney suburb located 10.5 kilometres south-west of the Sydney central business district in the Canterbury-Bankstown Council. The former City of Canterbury takes its name from the suburb, however its administrative centre is located in the adjacent suburb of Campsie, which is also a large commercial and administrative centre of the Canterbury-Bankstown Council. Campsie is 13 kilometres south-west of the Sydney central business district, on the southern bank of the Cooks River.



The proposed alignment of the BPS route would traverse the Cup and Saucer Creek and the Pat O’Conner Reserve near the Ausgrid’s Canterbury Substation (see photo on the left). The Cup and Saucer Creek rises in Canterbury local government area, near Wiley Park railway station and flows in an east north-easterly direction through the suburbs of Roselands, Kingsgrove, and Clemton Park, where it makes its confluence with the Cooks River, within the suburb of Earlwood. The upper reaches of the creek are a piped drainage system, which becomes part drain and part creek in the lower reaches. The Cup and Saucer Creek Catchment Management Study by the Water Board in 1992 showed extensive toxic organics in the form of polycyclic aromatic hydrocarbons and organochlorines. The creek is so named because of sandstone formations in the former bed of the creek.

The Pat O’Conner Reserve is managed by the Canterbury-Bankstown Council providing recreational opportunities for the local community. It contains a cycleway, an informal cricket pitch and play equipment.

Photo 1: Cup and Saucer Creek adjacent to the Ausgrid Canterbury Substation at Pat O’Conner Reserve

5.0 Site Environmental Characteristics

The site environmental features of the Canterbury to Campsie BPS route are characterised by a range of aspects, including public recreational open space, mixed commercial zones, but mostly medium and high density residential areas.

As described above, the proposed alignment of the BPS route would traverse the Cup and Saucer Creek and the Pat O’Conner Reserve near the Ausgrid’s Canterbury Substation. The Cup and Saucer Creek has been highly modified and is a concreted open drain at the proposed crossing location. Pat O’Conner Reserve, again, is a highly modified recreational area that is mostly grassed and contains a high-voltage transmission line, cycle paths and recreational equipment.

The proposed BPS route would mostly follow the alignment of formed residential carriageways or footpath with minimal need to permanently remove or modify existing vegetation.

6.0 Justification for the proposed works

A bulk power supply is required to operate the Sydney Metro train service between Sydenham and Bankstown, which involves the reticulation of electricity from the nearest substation to a traction substation within the Sydney Metro rail corridor. Ausgrid’s Canterbury Substation has been identified as the most appropriate source of bulk power based on a range of criteria including proximity to the project, available capacity, community and environmental considerations.

A number of reticulation routes have been investigated, however the preferred option has been identified to provide the best overall system resilience, has the least environmental impact and is also the most cost effective solution.

7.0 Environmental Benefit

The preferred route option for the Canterbury to Campsie bulk power supply route is approximately 1.5km shorter than the initial route (approximately 2.3km instead of 3.8km), and it avoids crossing the Cup And Saucer Creek via the existing bridge at Fore Street, which has the potential to be a high risk in design and construction.

8.0 Control Measures

Will a project and site specific EMP be prepared? Yes

Are appropriate control measures already identified in an existing EMP? No. The Line-wide Works contractor would be responsible for the proposed works and would ensure appropriate control measures are included in their environmental management documents.

9.0 Climate Change Impacts

Is the site likely to be adversely affected by the impacts of climate change? No

If yes, what adaptation/mitigation measures will be incorporated into the design? Not applicable

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 proposed route would require trenching through Pat O'Conner Reserve for approximately 250m resulting in some temporary ground disturbance and removal of vegetation, including some trees (and shrubs within garden beds). However, the overall route length would be approximately 1.5km shorter compared to the BPS route in the tender design package. | Any tree removal would require offsets to be managed in accordance with CoA E4 of CSSI 8256, and the preparation of a comprehensive Tree Report in accordance with CoA E5 of CSSI 8256. | Y | Y | — |
| Water | The Cup and Saucer Creek is proposed to be crossed near the Canterbury substation, instead reticulating the power cables via the existing bridge at Fore Street, which would have the potential to be a high risk in design and construction. Consequently, there is a positive impact through the reduction of risk. | No additional measures required. | Y | Y | — |
| Air quality | No change from the approved project. Potentially lower impact since the overall route length would be approximately 1.5km shorter compared to the BPS route in the tender design package, which is likely to have a positive impact overall. | No additional measures required. | Y | Y | — |
| Noise vibration | No change from the approved project. Potentially lower impact since the overall route length would be approximately 1.5km shorter compared to the BPS route in the tender design package, which is likely to have a positive impact | No additional measures required. | Y | Y | — |

| 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 |
| | overall. | | | | |
| Indigenous heritage | The proposed works would be undertaken in previously disturbed areas. Further, an AHIMS search has been undertaken which did not identify any recorded Aboriginal sites. As such, the potential of encountering areas of Aboriginal significance is low. | No additional measures required. | Y | Y | — |
| Non-indigenous heritage | The proposed works would be undertaken in previously disturbed areas. As such, the potential of encountering areas of archaeological significance is low. However, there are a number of locally significant buildings listed on the LEP Heritage Register (Schedule 5 – Environmental Heritage) which are located in proximity of the proposed BPS route. Even though it is unlikely that these listed heritage items would be directly affected by the proposed works precautions would be undertaken to prevent any accidental damage. | Identify all listed heritage buildings along the proposed BSP route and ensure that they are identified in Environmental Control Maps and adequately protected to avoid accidental damage. | Y | Y | — |
| Community and stakeholder | Residents and businesses along the proposed BPS route may be temporarily disrupted as a result of the proposed works through noise/vibration and/or the use of pedestrian diversion routes and/or temporary lane closures. However, access to residences, businesses and the Pat O’Conner Reserve would be managed and maintained during the proposed works in consultation with residences, businesses and CBC. | No additional measures required. | Y | Y | — |
| Traffic | There may be minor temporary impacts to the traffic network as a result of the proposed works as temporary lane closure may be required. Access to residences, businesses and the Pat | No additional measures required. | Y | Y | — |

| 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 |
| | O'Conner Reserve would be maintained. A TMP will be developed for the works in accordance with CoA E46-E51. Works would also be managed in consultation with all stakeholders in accordance with the approved CCS (Part B) and CoA E37. | | | | |
| Waste | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Social | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Economic | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Visual | The proposed works would result in the temporary visual impact to the streetscape along the proposed BPS route as cable trenches would need to be excavated. This impact would be short-term in nature. All disturbed areas would be reinstated and made good. | No additional measures required. | Y | Y | ✓ |
| Urban design | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Geotechnical | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Land use | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Climate Change | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Risk | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Other | No change from the approved project. | No additional measures required. | Y | Y | ✓ |
| Management and mitigation measures | No change from the approved project. | No additional measures 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 | No change from the approved project. | No additional measures required. | Y | Y | / |
| Water | No change from the approved project. | No additional measures required. | Y | Y | / |
| Air quality | No change from the approved project. | No additional measures required. | Y | Y | / |
| Noise vibration | No change from the approved project. | No additional measures required. | Y | Y | / |
| Indigenous heritage | No change from the approved project. | No additional measures required. | Y | Y | / |
| Non-indigenous heritage | No change from the approved project. | No additional measures required. | Y | Y | / |
| Community and stakeholder | No change from the approved project. | No additional measures required. | Y | Y | / |
| Traffic | No change from the approved project. | No additional measures required. | Y | Y | / |
| Waste | No change from the approved project. | No additional measures required. | Y | Y | / |
| Social | No change from the approved project. | No additional measures required. | Y | Y | / |
| Economic | No change from the approved project. | No additional measures required. | Y | Y | / |

| 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 |
| Visual | No change from the approved project. | No additional measures required. | Y | Y | — |
| Urban design | No change from the approved project. | No additional measures required. | Y | Y | — |
| Geotechnical | No change from the approved project. | No additional measures required. | Y | Y | — |
| Land use | No change from the approved project. | No additional measures required. | Y | Y | — |
| Climate Change | No change from the approved project. | No additional measures required. | Y | Y | — |
| Risk | No change from the approved project. | No additional measures required. | Y | Y | — |
| Other | No change from the approved project. | No additional measures required. | Y | Y | — |
| Management and mitigation measures | No change from the approved project. | No additional measures required. | 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 project would continue to provide a new metro rail line from Sydenham to Bankstown.</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 would be consistent with the objectives and functions of the approved project.</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 would be consistent with the objectives and functions of the construction elements of the approved project.</p> |
| <p>Are there any new environmental impacts as a result of the proposed works/modifications?</p> | <p>No new environmental impacts are expected as a result of the proposed works.</p> |
| <p>Is the project as modified consistent with the conditions of approval?</p> | <p>Yes. The proposed works would be consistent with the conditions of approval.</p> |
| <p>Are the impacts of the proposed activity/works known and understood?</p> | <p>Yes. The impacts of the proposed works are understood.</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 of the proposed works can be managed so as to avoid an adverse impact.</p> |


13.0 Other Environmental Approvals

Identify all other approvals required for the project:

Not applicable


Author certification

To be completed by person preparing checklist.

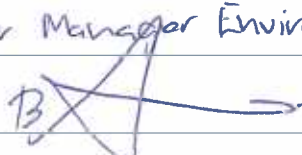
| | | | |
|---|---------------------|------------|---|
| <p>I certify that to the best of my knowledge this Consistency Checklist:</p> <ul style="list-style-type: none"> Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of 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: | Chris Berg | Signature: |  |
| Title: | Environment Manager | | |
| Company: | Sydney Metro | Date: | 23/8/2019 |

Environmental Representative Review

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

| | | | |
|--|------------------------------|------------|--|
| <p>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.</p> | | | |
| Name: | Peter Hatton | Signature: |  |
| Title: | Environmental Representative | | |
| | | Date: | 29/08/19 |

This section is for Sydney Metro only.

| | | | |
|---|---|-----------|--------|
| <p>Application supported and submitted by</p> | | | |
| Name: | Ben Armstrong | Date: | 3/9/19 |
| Title: | Shr Manager Environment | 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.



| Enforced by | | | |
|-------------|--|-----------|---------|
| Name: | FIL CERONE | Date: | 11/9/19 |
| Title: | Director, City & Southwest, Sustainability, Environment & Planning | Comments: | — |
| Signature: | | | |