



Sydney Metro City & Southwest – Chatswood to Sydenham Modification 8

To extend use of the Blues Point acoustic shed to provide access to complete tunnel fit out
State Significant Infrastructure Modification Assessment
(CSSI 7400 MOD 8)



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Glossary

Abbreviation	Definition
Council	North Sydney Council
Department	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPL	Environment Protection Licence
Minister	Minister for Planning and Public Spaces
Secretary	Planning Secretary of the Department of Planning, Industry and Environment
SSI	State Significant Infrastructure
TfNSW	Transport for NSW

Executive Summary

The then Minister for Planning approved the Sydney Metro City and Southwest – Chatswood to Sydenham project on 9 January 2017. The Chatswood to Sydenham project is primarily an underground metro rail line approximately 16.5 kilometres from west of Chatswood station and under Sydney Harbour to north of Sydenham Station. It includes five new stations and new underground platforms at Martin Place and Central. The approved project also includes a 2,100 square metre temporary construction site at Henry Lawson Reserve, Blues Point, originally established to retrieve the cutter heads and shield of the tunnel boring machines (TBMs) arriving from the Chatswood dive site and Barangaroo.

Transport for NSW (the Proponent) has submitted a request to modify the project approval to extend use of the site and acoustic shed at the Blues Point temporary site. Modification 8 “Blues Point Acoustic Shed” requests:

- use of the site for a further 12 months as the primary access point to fit out the under-harbour section of the rail tunnels between Victoria Cross and Barangaroo; and
- continued use of the existing acoustic shed at Blues Point for up to an additional 12 months, with the shed to be removed prior to the Christmas/New Year period in 2021/2022.

The Department publicly exhibited the proposed modification from 22 July 2020 to 5 August 2020 (15 days). Sixteen submissions were received during the exhibition period, consisting of 14 individual submissions, one from North Sydney Council and one from the Environment Protection Authority. Of the sixteen submissions, 14 were objections including from North Sydney Council.

Department’s Consideration

The proposed modification seeks to retain the existing acoustic shed at Blues Point for an additional year. This is to mitigate noise impacts from use of the site for primary access for materials delivery for tunnel fit out between Victoria Cross and Barangaroo. Access to the tunnel for fitout was previously planned to occur from Barangaroo but is no longer practicable.

The discovery of the heritage boat at Barangaroo during archaeological investigations has delayed earthworks that would enable vehicular access to, and materials delivery through, the tunnel. Access for materials and plant delivery is not expected to be available until Q3 2021. This would delay the overall construction program by approximately 12 months.

Access via the Blues Point shaft would provide direct and physically unimpeded access to the tunnel for fit out activities between Victoria Cross and Barangaroo that would avoid significant delay with manageable impacts. The anticipated impacts associated with extended use of the Blues Point site is considered consistent with the impacts previously assessed for shaft excavation and TBM retrieval (EIS, 2016 & MOD 5). Noise and traffic impacts associated with materials delivery between 7 am and 10 pm would be managed by continued implementation of existing conditions of approval.

Out of hour deliveries would be required to ensure materials and equipment required for fit out work are available. The Department recommends that out of hours deliveries cease at 10:00 pm except

where oversized deliveries between 10:00 pm and 7:00 am as directed by relevant authorities and a condition is included to this effect.

Issues of construction traffic on Blues Point Road, public access to the harbour foreshore and visual impacts of the acoustic shed are considered manageable and do not require further amendment to the approval. The Department acknowledges the broader objective of the Sydney Metro City and Southwest – Chatswood to Sydenham project to facilitate and respond to Sydney’s forecast population, economic growth and the present and emerging constraints on the existing rail network; the modification would support the delivery of the project.

It is determined that the benefits of the modification outweigh the associated impacts and therefore should be approved subject to the recommended conditions.

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1 Introduction

This report provides an assessment of an application to modify the State significant infrastructure (SSI) approval for the Sydney Metro City and Southwest – Chatswood to Sydenham project (SSI 7400). The modification application seeks approval for:

- use of the Blues Point site as the primary access point to fit out the under-harbour section of the rail tunnels between Victoria Cross and Barangaroo; and
- continued use of the existing acoustic shed for up to an additional 12 months, with the shed to be removed before the Christmas/New Year period in 2021/2022.

The application was lodged on 8 July 2020 by Sydney Metro (the Proponent) pursuant to section 5.25 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1 Background

Sydney Metro City and Southwest – Chatswood to Sydenham forms part of the future high capacity rail network which includes Sydney Metro Northwest (currently operating) and the Sydenham to Bankstown upgrade project (under construction). The Chatswood to Sydenham project is primarily an underground metro rail line, approximately 16.5 kilometres long (approximately 15.5 kilometres of which is located in underground rail tunnels), commencing west of Chatswood Station and under Sydney Harbour to Sydenham Station, with new stations at Crows Nest, Victoria Cross, Barangaroo, Pitt Street and Waterloo; and new underground platforms at Martin Place and Central. Construction commenced in late 2017 with services expected to commence in 2024.

The approved project includes a temporary construction site at Blues Point to retrieve the cutter heads and shield of the tunnel boring machine (TBMs) arriving from launch sites at Chatswood and Barangaroo. The Blues Point temporary sites covers an area of about 2,100 square metres in Henry Lawson Reserve, at the southern end of Blues Point Road (Figure 1).

Since the project was approved, detailed construction planning for the Blues Point temporary site has identified the need for all components of the TBMs arriving at Blues Point from the Chatswood dive site and from Barangaroo to be retrieved from the site for construction programming and construction work safety reasons.

A modification was previously approved on 2 November 2018 for

- installation of a temporary acoustic shed at Blues Point to retrieve the TBMs arriving at Blues Point; and
- transfer of TBMs to barges for return to Barangaroo or to onward transportation sites.

The acoustic shed was due to be removed by December 2020.

The Proponent is seeking approval for the continued use of the existing acoustic shed for up to an additional 12 months, extending across a second Christmas/New Year period, with the shed to be removed before the Christmas/New Year period in 2021/2022. The site would be used as the primary access point to fit out the section of rail tunnels between Victoria Cross and Barangaroo.



Figure 1 | Blues Point temporary access site (Source: Blues Point acoustic shed modification report, Sydney Metro, August 2018)

1.2 Approval history

Project approval was granted on 9 January 2017 by the then Minister under then section 115ZB of the EP&A Act for the Sydney Metro City and Southwest – Chatswood to Sydenham project (SSI 7400).

The project approval permits the following work at the Blues Point temporary site:

- excavation of a shaft to the tunnels below and removal of about 8,000 cubic metres of spoil during daytime hours;
- retrieval of cutter heads and shields of tunnel boring machines launched from the Chatswood dive site and from Barangaroo through the shaft;
- transporting the cutter heads and shields by either road or by barge;
- access to the site from Blues Point Road (left-in) and Henry Lawson Drive (left-out); and
- works undertaken outside standard daytime construction hours provided appropriate noise mitigation is in place.

Following the original approval, a modification (MOD 5) was granted over the site, for work to allow the installation of a temporary acoustic shed (**Figure 2**) and retrieval of all components of the TBMs from the Chatswood dive site and from Barangaroo through the shaft. The modification was approved on 2 November 2018.



Figure 2 | View of site and acoustic shed from east to west (DPIE Site Visit 6 August 2020)

The project approval includes the following conditions relevant to the application:

- Condition E33 – Construction Noise and Vibration Impact Statements (CNVISs) must be prepared for each construction site before construction noise and vibration impacts commence and must include specific mitigation measures identified through consultation with affected sensitive receivers;
- Condition E49 – acoustic sheds must be erected as soon as site establishment works at the facilities are completed and before undertaking any works or activities which are required to be conducted within the shed;
- Condition E57 – work at the Blues Point temporary site must be avoided during key harbour viewing events (determined in consultation with Events NSW, North Sydney and City of Sydney councils);
- Condition E82 – Construction Traffic Management Plans (CTMPs) must be prepared for each construction site before construction commences at the relevant construction site;
- Condition E85 – heavy vehicle haulage must not use local roads unless no feasible alternatives are available;
- Condition 86 – measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties;

- Condition E99 – the project must be constructed in a manner that minimises visual impacts of construction sites, including incorporation of architectural treatment and finishes within key elements of temporary structures that reflect the context within which the construction sites are located.

The project approval has been modified on seven previous occasions as summarised in **Table 1**.

Table 1 | Summary of Modifications

Mod No.	Summary of Modifications	Approval Authority	Type	Approval Date
MOD 1	Service Relocations	Department	115ZI	18 October 2017
MOD 2	Central Walk	Department	115ZI	21 December 2017
MOD 3	Martin Place Metro Station	Minister	115ZI (2)	22 March 2018
MOD 4	Sydenham Station and Metro Trains Facility	Department	115ZI	13 December 2017
MOD 5	Blues Point Acoustic Shed	Department	5.25	2 November 2018
MOD 6	Administrative changes	Department	5.25	21 February 2019
MOD 7	Administrative changes	Department	5.25	29 June 2020

2 Proposed modification

In May 2016, the Environmental Impact Statement assessed the main tunnel fit out occurring from the Chatswood and Marrickville Dive sites. During initial construction planning, Barangaroo was proposed as the main access point for under-harbour tunnel fit out works between Victoria Cross and Barangaroo. However, a significant heritage find (a timber boat) at Barangaroo has delayed earthworks. Earthwork completion to enable vehicular access to the tunnel from Barangaroo is now expected to be completed in Q3 2021. Delaying tunnel fit out between Barangaroo and Victoria Cross until then would cause an overall delay to construction and testing of approximately 12 months.

The Blues Point temporary site was reviewed as the only remaining access point to complete the tunnel fit out works between Victoria Cross and Barangaroo without causing delays to the scheduled completion. As the Blues Point temporary site includes an access shaft to the tunnels below, it would allow for efficient delivery of plant and materials to complete track slab pouring, rail installation and fixing works, and remaining tunnel fit out works from the Blues Point temporary site within the required construction time frame. The impacts of using the site are considered consistent with those previously assessed in the EIS and MOD 5. Existing conditions of approval are generally considered appropriate to manage the likely impacts.

Activities proposed to occur from the Blues Point temporary site include:

- concrete pours to form the track slab and rail fastening;
- rail installation and fixing;
- cable and equipment installation;
- overhead traction power installation; and
- other equipment installation including lighting (including emergency lighting), drainage, and fire and life safety systems (including walkways connecting to emergency egress and fire hydrant systems).

Construction activities on the surface would include:

- installation of a smaller gantry crane in the shed and subsequent reinstatement of the front wall and roof of the acoustic shed;
- concrete deliveries including agitator truck unloading into the pump; and
- delivery unloading.

The gantry crane would be used to lower the materials from the shaft into the tunnels below. Fit-out works would occur at the bottom of the shaft within the tunnels. The use of the temporary acoustic shed would be extended for 12 months to minimise noise impacts associated with tunnel fit out.

3 Statutory context

3.1 Scope of modifications

In accordance with section 5.25 of the EP&A Act, a proponent may request the Minister to modify the approval for State significant infrastructure. The Minister's approval for a modification is not required if the infrastructure as modified will be consistent with the existing approval.

The modification for the continued use of the existing acoustic shed for up to an additional 12 months as the primary access point to fit out the section of the rail tunnels between Victoria Cross and Barangaroo is not considered consistent with the existing approval. Consequently, modification of the Minister's approval is required.

3.2 Minister's delegate as determining authority

Under the Instrument of Delegation dated 11 October 2017, the functions and powers of the Minister for Planning and Public Spaces under section 5.25 of the EP&A Act to determine a modification of the Minister's approval may be delegated to officers of the Department, if:

- the relevant local council has not made an objection;
- a political disclosure statement has not been made; and
- there are less than 25 public submissions objections.

North Sydney Council objected to the proposal. Therefore, the Minister's delegation cannot be used, and the Minister is the approval authority.

4 Engagement

4.1 Department's engagement

Under section 5.28(1)(g) of the EP&A Act, the Planning Secretary is required to make requests for modification of approvals determined by the Minister publicly available. Accordingly, the Department exhibited the modification on its website from 22 July 2020 to 5 August 2020, a period of 14 days. The modification was not made physically available due to COVID-19 and concerns for public health.

On 25 March 2020, the NSW Government introduced the *COVID-19 Legislation Amendment (Emergency Measures) Act 2020* which amended the EP&A Act, including changes to exhibition requirements to protect public health and safety. Section 10.18 EP&A Act states:

During the prescribed period ... a requirement in this Act or the regulations that any document be made available for inspection (however described) at a physical location is satisfied if the document is instead made available on the NSW planning portal or any other website approved by the Planning Secretary.

The modification was made available on the Department's planning portal, ensuring the required documents were made publicly available in accordance with section 10.18 of the EP&A Act.

The modification request was also referred to North Sydney Council and the Environment Protection Authority (EPA), as the relevant authorities regarding the proposed modification. Department officers visited the site on 6 August 2020.

4.2 Summary of submissions

During the exhibition period, the Department received 15 submissions. Of the submissions received, one was from a NSW Government agency and 14 were from the community. Thirteen submissions objected to the proposal and two submissions provided comments only. All community members that made a submission live within five kilometres of the construction site.

North Sydney Council made a late submission objecting to the modification after the close of the exhibition period.

Table 2| Summary of Agency submissions

Submitter	Number	Position
Government Agencies		
EPA	1	Advice
Total Agency submissions	1	

Table 3 | Summary of Council, special interest group and community submissions

Submitter	Number	Position
Local council		
North Sydney Council	1	Object
Community members		
< 5 km	12	Object
	2	Comment
Total Council and Community submissions	15	

4.3 Key issues raised in submissions

Government Agencies

NSW Environment Protection Authority (EPA) noted:

- whether the subject works fall within the meaning and intent of 24/7 allowances in condition E48 and whether 24/7 works are justified;
- opportunities to limit hours of operation and community impacts should be explored;
- off-site traffic impacts need to be considered and not rely on the assessment in the EIS; and
- the assessment of potential noise impacts does not appear to be consistent with the Interim Construction Noise Guideline (EPA 2017) for out of standard hours work periods.

The EPA recommended further detailed assessment be undertaken.

Local Council

North Sydney Council raised concerns about the continued use of the Blues Point site and its changed use from a retrieval site to active construction site. It objected to increased use of local roads for construction vehicles due to associated noise and amenity impacts, traffic and parking impacts and public safety issues, with concern for 24/7 use.

Council recommended revisiting the use of barging and raised concerns with the ongoing alienation of public open space, particularly for community events including New Year's Eve. Council suggested completion of the acquisition of 1 Henry Lawson Drive as a requirement of consent to offset the ongoing inconvenience caused.

Community submissions

Several key issues were raised by the community, and further details of the issues raised are provided in **Section 6**.

- project development and alternatives
 - lack of adequate consideration of impacts
 - inadequate consideration of alternative sites, particularly Barangaroo
 - longevity of impacts for the community and uncertainty regarding ongoing delays
- social and economic
 - amenity impacts on local community
 - access impacts to businesses during construction
 - loss of community open space
 - loss of rental income for property owners
- visual
 - acoustic shed dominates the environment and compromises residential views
 - loss of views for New Year's Eve fireworks
- health, safety and hazards
 - human health impacts arising from increased pollution related to construction and traffic
 - safety impacts to pedestrians and road users as a result of increased traffic
- traffic, access and parking
 - construction traffic and transport impacts on local community
 - local road and parking impacts during construction
 - narrow and steep road unsuitable for large trucks
- air quality
 - adverse construction (dust) air quality impacts
- noise and vibration
 - construction and traffic noise impacting on quality of life
 - impacts on residents' sleep quality
- consultation
 - inadequate consultation prior to and during the public exhibition of the modification report particularly with businesses.

4.4 Response to submissions

Following the completion of the formal exhibition period, the Department provided the Proponent with the submissions received and requested it prepare a response to those submissions. The Proponent responded to submissions in September 2020. This report is available on the Department's website and was forwarded to the EPA and North Sydney Council on 30 September 2020.

The Proponent's response to submissions committed to only oversized materials and equipment delivery between 12:00 am and 7:00 am (when required), with all other deliveries stopping at 12 am. The EPA remained concerned with the potential for sleep disturbance due to deliveries at night and recommended that deliveries be restricted to 7:00 am to 10:00 pm. This is consistent with the daytime and evening measurement periods in the *Interim Construction Noise Guideline* (ICNG). The Department has considered this in **Section 5.1**.

North Sydney Council responded that Council's concerns related to extended use, impacts on the local road network and to the surrounding community were not satisfactorily addressed. These matters were considered as part of the Department's assessment. Council also sought ongoing consultation with the community and that the revised conditions of approval be made available. The existing conditions of approval require ongoing consultation with the community which the Department considers appropriately address this matter. If approved, a consolidated approval would be made available on the Department's website.

5 Assessment

The Department has reviewed the modification report, considered the issues raised in submissions received and the Proponent's response to submissions as part of its assessment. The key issues identified were noise and vibration (**Section 5.1**), traffic and transport (**Section 5.2**), and public domain and visual impact (**Section 5.3**).

5.1 Noise and vibration

Issue

The modification seeks to use the temporary site at Blues Point as the main access point for tunnel fit out works between Victoria Cross and Barangaroo, extending the period residents would be exposed to construction noise. The Proponent proposes to retain the acoustic shed over the site and beyond the Christmas/New Year period 2020/2021 when it would otherwise be required to be removed, to manage construction noise from the extended use of the site. The key noise issues associated with the proposed modification are related to:

- surface activities including crane installation and materials delivery, including concrete; and
- construction traffic.

Surface work

While most tunnel fit out activities would occur in the tunnel, some construction activities would occur on the surface that generate noise including:

- unloading of trucks with heavy items (e.g. concrete rail sleepers);
- work to install the smaller gantry crane and subsequent reinstatement of the front wall and the first bay of the roof of the acoustic shed; and
- concrete deliveries including agitator truck unloading into the pump.

Anticipated noise levels at the surface are consistent with the noise levels assessed in MOD 5 for shaft excavation, TBM disassembly and TBM retrieval.

Construction traffic

Traffic noise impacts are largely consistent with those considered for the Blues Point site in the Environmental Impact Statement and previous modification, with a minor 1 dB exceedance on Blues Point Road during standard construction hours.

The proposed modification would require regular heavy vehicle movement, including delivery of equipment, materials and concrete to the site. Concrete deliveries would occur between standard construction hours of 7:00 am to 6:00 pm. Concrete deliveries would cease at 6 pm except where required to complete a pour. Other materials and plant delivery would occur after 6 pm.

The initial proposal in the modification was to allow for materials delivery 24 hours a day, seven days a week. In response to concerns raised in submissions, the Proponent revised this schedule to commit to materials delivery between 7:00 am and 12:00 am and no more than one to two heavy

vehicle movements per hour to reduce the impacts of out of hour deliveries and the potential for sleep disturbance at nearby residences. The only deliveries between 12:00 am and 7:00 am would be for oversized equipment where this is required by the NSW Police or roads authority. This includes the gantry crane and acoustic shed panels to reinstate the front wall at site establishment and other plant and equipment which may be required from time to time such as alternative plant pieces for the gantry crane and other equipment required to assist in the tunnel fit out works.

Submissions

Submissions from the public raised concerns regarding noise impacts of the proposed modification including:

- concern for sleep disturbance and poor amenity due to late night noise;
- noise impacts exacerbated due to the significant grade of Blues Point Road; and
- noise impacts associated with construction workers.

North Sydney Council noted that potential noise and amenity impact would affect residents during construction. Council is concerned about continuation of noise impacts to surrounding residents over the extended period, particularly with out of hour deliveries, and requested that consideration be given to barging material to the site.

Environment Protection Authority noted concerns that the Proponent had not explored options to reduce hours of operations and associated impacts to the community. It questioned the consistency of noise management levels with the *Interim Construction Noise Guideline* for out of standard hours work periods.

A number of public submissions also commented on the ongoing impacts from the extended period of works at the Blues Point temporary site and the noise impacts to residents which included lack of respite.

Consideration

Surface work noise levels are consistent with the approved project

It was demonstrated in the Modification Report that surface work construction noise associated with tunnel fit out works are in keeping with the approved noise levels for daytime activities at Blues Point assessed under the EIS and MOD 5. The Proponent is seeking to retain the acoustic shed over the site which, as considered in MOD 5, would reduce noise-affected residents by up to 15 dB(A) compared to the no shed scenario.

Whilst tunnel fit out works are approved for 24 hours per day seven days per week, the Proponent has committed to minimise noise impacts by

- restricting work to standard daytime hours of 7:00 am to 6:00 pm;
- reinstating the front bay of the acoustic shed; and
- ensuring that work is carried out with the acoustic shed closed wherever possible, noting that it would need to be opened to allow for deliveries and these would continue after 6:00 pm.

Surface activities between 6:00 pm and 12:00 am would be restricted to delivery of materials to ensure the following morning's shift is resourced with the required materials. The Proponent committed to no standard deliveries after 12:00 am, to spread these across six hours and to no more

than two deliveries per hour based on previous work and communication with the community, however no specific consultation was undertaken in this regard.

The Proponent has undertaken a qualitative assessment that compared the construction activities undertaken to date (with the acoustic shed in place) and the proposed noise generating activities included under the proposed modification, and concluded that the noise generated by these activities would be less than the approved and completed activities of site establishment, shaft excavation and TBM retrieval. The Department is satisfied that the assessment is appropriate for the purposes of this modification request.

Overall, the Department is satisfied that the assessment is appropriate and noise impacts would be similar to those assessed and approved under the EIS and MOD 5.

Construction traffic noise

The Proponent's assessment of traffic noise concludes that it is consistent with the NSW Road Noise Policy (RNP) which considers exceedances of up to 2dB(A) to be within acceptable limits for construction traffic noise.

The Department understands that site establishment, including reinstating the acoustic shed and bringing in the gantry crane, would take approximately two months. It is expected that within the two month establishment phase there would be approximately 14 larger (oversized) deliveries required outside standard hours (after midnight), at the direction of NSW Police and/or Transport for NSW. It is accepted that these deliveries are unavoidable and are required in order to establish the site, maintain traffic flows on Blues Point Road and for community safety. The Proponent has committed to providing the community with suitable warning of out of hours delivery.

Following establishment, work associated with tunnel fit out between Victoria Cross and Barangaroo would be ongoing for approximately six months, including the delivery of concrete, concrete rail sleepers, steel walkway components, steel pipe works and steelworks. Concrete deliveries would occur during standard hours of 7:00 am to 6:00 pm, reducing impacts to residents.

In response to concerns with noise impacts associated with out of hour deliveries, the Proponent has committed to including mitigation measure NV13 which states that 'out of hours heavy vehicle movements to the Blues Point temporary site would not be undertaken between 12 am to 7 am, except where circumstances require larger (oversized) vehicle movements to be undertaken outside standards hours (after midnight), at the direction of NSW Police and/or Transport for NSW.' Deliveries would be restricted to no more than two per hour between 6 pm and 12 am.

Eight out of hours deliveries (from 6:00 pm to 12:00 am) are proposed each night for six months and would be undertaken 7 days a week, though fewer deliveries are likely to occur on a Sunday. Given the residential setting and steep grade of Blues Point Road, the Department recognises that the nature of out of hour deliveries has potential to cause sleep disturbance.

While the use of this construction site is less intensive than others across the project, there are potential impacts to residents with nightly deliveries proposed until midnight. The Department accepts that the Proponent has attempted to address this by restricting nightly deliveries to before 12:00 am (amended in the Response to Submissions) but agrees with concerns raised by the EPA in regards to sleep disturbance. In the absence of clear desire by the community for deliveries over a longer period, the Department considers that all regular nightly deliveries should cease by 10:00 pm consistent with the night-time period expressed by the EPA.

Following advice from the EPA, the Department has recommended a condition that restricts deliveries to between 7:00 am to 10:00 pm, in accordance with the *Interim Construction Noise Guideline*. The Proponent has advised up to three deliveries per hour in the evening (6:00 pm to 10:00 pm) would be required to make up for the reduction in allowable delivery hours without extending the duration of the construction program.

The Department considers that the requirement of 3-4 deliveries per hour between 6:00 pm to 10:00 pm would cause less nuisance and potential for sleep disturbance compared to two deliveries per hour between 6:00 pm to 12:00 am, despite the increase in truck movements per hour. Therefore, it is recommended that standard out of hours deliveries cease at 10 pm and that the Proponent adhere to the commitment of up to eight standard deliveries between 6 pm and 10 pm. If a case can be established to enable out of hours deliveries between 10:00 pm to 12:00 am which demonstrates clear community support for this outcome, the recommended condition allows the Proponent to negotiate an alternative timeframe through an Environment Protection Licence (EPL).

Conclusion

The Proponent's commitments to avoid, minimise and manage impacts, including in accordance with Sydney Metro's approved Construction Noise and Vibration Strategy are appropriate. The Department is satisfied that the likely noise impacts are consistent with those assessed in the EIS and MOD 5. Impacts are largely consistent with the approved project hours of construction and construction activities. In the absence of clear community desire for fewer trucks per hour over the evening and night-time period ending at 12:00 am, the Department agrees with the EPA that deliveries should cease at 10:00 pm to reduce potential sleep disturbance impacts on neighbouring residents.

5.2 Traffic and access

Issue

The Blues Point temporary site is located at the end of Blues Point Road near the intersection with Henry Lawson Avenue. The proposed modification seeks to continue construction traffic movement over the next 12 months to support the delivery of materials for tunnel fit out works.

In the modification report, the proponent assessed:

- four heavy vehicle movements per hour in the AM peak period (7:00 am to 10:00 am) and PM peak period (4:00 pm to 6:00 pm)
- six heavy vehicle movements per hour out of peak period (10:00 am to 4:00 pm)
- up to eight heavy vehicle movements between 6:00 pm to 7:00 am, not including oversized vehicle deliveries between 10 pm and 7 am where required by NSW Police or Transport for NSW.

In response to issues raised in submissions, the Proponent revised the modification request in the Response to Submissions to restrict standard out of hours deliveries to 6 pm to 12 am.

The Proponent has assessed that traffic movements associated with tunnel fit out works at Blues Point are consistent with that approved as part of the EIS for the tunnel boring machine retrieval (**Figure 3**).



Figure 3 | Blues Point temporary site haulage routes (Source: Blues Point acoustic shed modification report, Sydney Metro, August 2020)

Submissions

Submissions from the community raised concerns in relation to traffic and transport, including:

- construction vehicles considered too large to travel along Blues Point Road;
- previous damage from construction vehicles to parked vehicles, road surface and other road infrastructure (including pedestrian refuges);
- clarification on, or consideration of, delivery of materials by barge; and
- concern construction vehicles would restrict access to local businesses.

North Sydney Council considered that the proposal significantly increases the use of Blues Point Road by heavy vehicles needing to deliver steel rails, concrete and other materials to the site, seeking that consideration be given to barging the materials to the site.

Consideration

Barging is not suitable for materials delivery

A number of public submissions sought clarification as to why concrete and equipment deliveries could not be barged in.

The Department is satisfied that the Proponent considered the option of barging materials and equipment, but this was not pursued as transport times cannot be guaranteed owing to tides, and safety and environmental risks posed by transporting fully loaded concrete trucks on barges. Guaranteed times are particularly critical for concrete delivery. Concrete curing times mean that barging is not an appropriate delivery option. As concrete delivery is a significant proportion of construction traffic, the Department accepts that materials need to be transported by road.

Access to the tunnel from Barangaroo is not possible

Access to the tunnel for construction equipment and materials was originally proposed from Marrickville and then Barangaroo. The discovery of the heritage wooden timber boat at Barangaroo has delayed access to the tunnel from that site by 12 months. This has had flow-on effects to the construction program at that site. Access to the tunnel for the purpose of fit out between Barangaroo and Victoria Cross will also be delayed by approximately 12 months unless an alternate access point is used. The Department accepts that tunnel access from Blues Point is the most appropriate alternative to avoid delays to the overall construction program and completion timeframes.

The proposed modification would permit the acoustic shed to be retained and used for a further 12 months. The impacts of materials delivery to the site are considered consistent with those previously assessed as part of the EIS and MOD 5. The Department is satisfied that the Minister's approval includes conditions appropriate to manage the expected traffic and general noise impacts but recommends that standard deliveries (i.e. not oversized deliveries) should be restricted to 7:00 am and 10:00 pm to minimise sleep disturbance to surrounding residents.

Blues Point Road is suitable for construction traffic

Residents were concerned that construction vehicles are too large to traverse along Blues Point Road and have previously damaged parked vehicles, road surface and other road infrastructure. These matters were considered for the original project and are addressed in a number of conditions which would continue to apply to the modified project. These include:

- Condition E82 which requires the preparation of a Construction Traffic Management Plan (CTMP) to identify the efficient and safe egress and ingress of construction vehicles, parking management and heavy vehicle management and pedestrian safety. This is to be implemented before the commencement of construction
- Conditions E90 and E91 address Council's concerns regarding damage to local roads. Condition E90 requires a road dilapidation report to be prepared before use by heavy vehicles associated with the project and provided to Council. Under Condition E91, if damage has occurred the Proponent must either compensate the landowner or rectify the damage. This matter would be resolved between the relevant parties when construction is completed.

The matter of damage to vehicles should be addressed directly with the Proponent, however the Department has not been advised of any such incidents having occurred to date.

The public concerns about restricted access to local business during construction are acknowledged. However, construction vehicles are considered unlikely to impede access to businesses on Mitchell Road and Blues Point Road. Construction vehicles would not be stopping in these locations, only passing businesses on Blues Point Road to access the construction site at the end of Blues Point Road. Construction vehicles would not affect parking or pedestrian access, being part of the passing traffic flow on Blues Point Road.

Condition E86 addressed potential impacts of the project to businesses and requires preparation of a Business Management Plan in consultation with affected businesses. This condition continues to apply to the modified project and any existing plans would need to be revised for any necessary changes. The Department is satisfied that the proposed modification would not restrict business and that existing conditions and mitigation measures would manage potential concerns.

Conclusion

On balance, the proposed modification may result in temporary impacts associated with traffic and transport environment and are considered consistent with the impacts assessed for TBM removal as part of MOD 5 and construction vehicle movements considered in the EIS. The Department considers the existing conditions of approval are adequate to manage potential and prolonged impacts to surrounding residents and businesses.

5.3 Access to public space and visual impact

Public space and amenity impacts

The proposed modification requires the use of Henry Lawson Reserve for an additional 12 months beyond that originally approved. This extends the period that the community is restricted from access to part of the Reserve.

Temporary construction-related social impacts include reduced amenity from increased noise and traffic, parking restrictions and traffic, pedestrian and cyclist access changes, and impacts on businesses. An increase in construction traffic on Blues Point Road has the potential to disrupt the village atmosphere and character of local centres within the study area, particularly the cafes and pedestrian precinct at McMahon's Point village. Amenity impacts associated with noise and vibration and traffic and access are addressed in **Sections 5.1** and **5.2** of this report.

Visual impact

The site sits on the harbour foreshore with direct views towards the Sydney Opera House framed by the Sydney Harbour Bridge and across to Walsh Bay. The proposed modification would require the acoustic shed to remain for an additional 12 months, continuing to disrupt these views of the Sydney Harbour Bridge and Walsh Bay to immediate residential properties within proximity.

Submissions

Submissions from the public raised concerns regarding visual and public space impacts of the proposed modification including:

- dominance of the acoustic shed in the environment, compromising residential views and the loss of broader community views, especially for the New Year's Eve fireworks and use of the public space on which the site is located; and
- the loss of green public open space, amenity impacts to the local community and access impacts to businesses during construction.

North Sydney Council raised concerns with ongoing alienation of public open space at Henry Lawson Reserve, considered to be of national importance owing to its prominent viewpoint to the Sydney Harbour which would impact community events including New Year's Eve. Council sought confirmation of a date that the site would be completely restored and returned to Council, including heritage interpretation elements of the old Cottage that was unearthed as part of the works on the site. Council also recommended the acquisition of 1 Henry Lawson Avenue would be a considerable offset to the ongoing inconvenience caused by the repurposing of the site.

Consideration

Use of shed and site for additional 12 months

The continued use of the existing acoustic shed for up to an additional 12 months extends the visual impacts, particularly for residential properties with direct views of it, and the use of public land. The scale of the impact would remain unchanged but would remain for the Christmas/New Year period in 2020/2021, when access to and enjoyment of the views from the area are of greater value to the community. However, the visual impacts remain temporary and reversible when the acoustic shed is removed once the worksite is decommissioned and the park is rehabilitated.

The Proponent has advised that the construction program seeks to minimise the time the shed would remain and to minimise impacts during key viewing of harbour events where possible. Activities at night requiring lighting would be undertaken in accordance with existing mitigation measures to avoid light spill or would be undertaken within the acoustic shed. The Department accepts that the benefits of the shed remaining in place to manage construction noise from the site outweigh the temporary impacts of restricted access to Henry Lawson Reserve and proposes amending Condition E57 to ensure that it does not remain in place for more than two Christmas/New Year periods.

Public access to park

The Department accepts that the shed in such a prominent location restricts access to and enjoyment of parts of the reserve and the views it affords across the harbour. However, the Proponent has put in place measures that:

- minimise the area of reserve alienated from public access; and
- allow safe access to the foreshore beach.

Public access to the eastern section of Henry Lawson Reserve around to McMahons Point, as well as Blues Point Reserve/Warungareeyuh (peninsula in front of Blues Point Tower) remain accessible to the public with unrestricted views of the harbour.

The Proponent has advised that the proposed works would use the existing site set up, which is slightly set back to allow the community to access the beach on Sydney Harbour in front of the site and that the shed would be dismantled ahead of the Christmas/New Year period 2021/2022 with the park reinstated for community use in early 2022.

The Department is in the process of compulsorily acquiring 1 Henry Lawson Avenue to complete public ownership of Blues Point Reserve with the statutory compulsory acquisition process expected to be completed in 2021. The Proponent has committed to work closely with the Department and North Sydney Council to include 1 Henry Lawson Avenue in the reinstated park design.

The continued use of the site, while disruptive to the community, is temporary and access to the remaining public space for key harbour viewing events is not affected. The restriction of access to public space has been minimised and measures put in place to ensure safe access to the harbour foreshore and beach remain.

Conclusion

Based upon the Department's recommended conditions, in conjunction with the Proponent's committed mitigation measures, the Department is satisfied that the social and visual impacts of the proposal are temporary and can be appropriately managed.

6 Evaluation

The Department has reviewed the Modification Report, submissions and the Response to Submissions and has assessed the key issues arising from the proposed changes to the approved project, including taking advice from the EPA and North Sydney Council.

The key issues are noise and traffic impacts related to out of hour deliveries, traffic and transport and visual impacts and loss of public space from the continued use of the site for an additional 12 months.

Through its assessment, including consideration of concerns raised by the EPA, Council and the community, the Department recommends that the approval be amended to include a new condition limiting deliveries from 7:00 am to 10:00 pm, with the exception of oversized deliveries that would require direction of NSW Police or Transport for NSW. Limiting delivery hours would reduce night-time noise impacts to surrounding residents, reducing risk of sleep impacts.

The Department recognises that the impacts would be a continuation to the existing use of the site for a further 12 months. Therefore, the Department recommends that the existing condition limiting the period that the acoustic shed is in place be amended to ensure that it is not in place for more than two Christmas/New Year periods.

The Department is satisfied that its recommendation provides a balanced outcome and considers the proposed modification should be approved, subject to conditions.

7 Recommendation

It is recommended that the Minister for Planning and Public Spaces:


- **considers** the findings and recommendations of this report; and
- **determines** that the request CSSI 7400 MOD 8 falls within the scope of section 5.25 of the EP&A Act;
- **accepts and adopts** the findings and recommendations in this report as the reasons for making the decision to grant approval to the request;
- **agrees** with the key reasons for approval listed in the draft notice of decision;
- **modifies** the approval CSSI 7400; and
- **signs** the attached Recommended Instrument of Modification (Appendix D).

Recommended by:



Lisa Mitchell
Team Leader
Transport Assessments

Recommended by:



Erica van den Honert
Acting Executive Director
Infrastructure Assessments

8 Determination

The recommendation is **Adopted / Not adopted** by:

The Hon. Rob Stokes, MP
Minister for Planning and Public Spaces

Appendices

Appendix A – Modification Report and Response to Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/38021>

Appendix B – Submissions

<https://www.planningportal.nsw.gov.au/major-projects/project/38021>

Appendix C – Community Views

Issue	Consideration
<p><i>Noise impacts</i></p> <ul style="list-style-type: none"> Concern for sleep disturbance and poor amenity due to late-night noise. Noise impacts associated with construction workers Noise impacts exacerbated due to the significant grade of Blues Point Road 	<p><i>Assessment</i></p> <ul style="list-style-type: none"> construction noise, including traffic noise, is consistent with the approved project (as modified by MOD 5) out of standard construction hours deliveries restricted to 6.00 pm to 10.00 pm the proponent has committed to eight vehicle movements between 6.00 pm and 10.00 pm only oversized vehicle deliveries directed/authorised by the NSW Police or road authority between 10:00 pm and 7:00 am construction and site management plans in accordance with existing condition of approval to address construction worker behaviour generally only materials delivery outside of standard construction hours
<p><i>Traffic and transport impacts</i></p> <ul style="list-style-type: none"> Construction vehicles are too large to traverse along Blues Point Road Concerns of damage from construction vehicles to parked vehicles, road infrastructure and road surface Clarification on, or consideration of, delivery of material by barge Concern construction vehicles will restrict access to local business 	<p><i>Assessment</i></p> <ul style="list-style-type: none"> oversized construction deliveries are restricted to 10:00 pm to 7:00 am on requirement of NSW police and Transport for NSW existing conditions include road dilapidation surveys and requirements to rectify damage attributable to the project any concerns regarding damage to vehicles and private assets (not including buildings/property) should be addressed directly with the proponent concrete delivery is time dependent. Barging is dependent on other harbour activities and tides and does not provide the certainty required that concrete can be delivered when required and will not cure during transport. Concrete is a significant proportion of the traffic movements and therefore barging is not a feasible consideration construction vehicles would be passing traffic and not likely to have a significant effect on physical access to local businesses. Workers may access local businesses for lunch; however this is consistent with current activities and benefits the local economy and business
<p><i>Community and amenity impacts</i></p> <ul style="list-style-type: none"> Dominance of the acoustic shed in the environment, compromising residential views and the loss of broader community views (particularly for Sydney New Year fireworks) Loss of green public open space 	<p><i>Assessment</i></p> <ul style="list-style-type: none"> visual impacts of the acoustic shed would not change but would be present for a longer period of time, including a second Christmas/New Year period visual impacts and loss of public open space are temporary and would be restored once tunnel fit out is complete the proponent has provided safe public access to the harbour foreshore and beach adjacent to the construction site other unaffected public areas remain available to the public with unrestricted views to the east of the construction site around to McMahons Point as well as Blues Point Reserve/Warungeerah

Appendix D – Recommended Instrument of Modification