

Minor works REF addendum memo

To [REDACTED], Director CSE Sydney West

From [REDACTED], Senior Manager Environment and Sustainability
[REDACTED], Senior Project Manager

Priority ROUTINE

Date 21 October 2025

Subject Minor works review of environmental factors addendum memo for fire and life safety upgrades – Brookvale Bus Depot Conversion

Proposed modification

Modification to the Brookvale Bus Depot Conversion Minor Works Review of Environmental Factors.

Background

The Brookvale Bus Depot Conversion Minor Works Review of Environmental Factors (minor works REF) was determined on 6 June 2024 for the conversion of the existing bus depot at 630-636 Pittwater Road Brookvale to zero emissions technology (see Figure 1). The Brookvale Bus Depot Conversion will support the transition of around 229 existing diesel buses to an entire new fleet of battery electric buses.

Key features of the bus depot conversion include:

- 13 fast charging bus bays
- a new gantry and pantograph (fast charging) system installed across the north-end of the bus depot
- repurposing an existing bus parking row to install new technology including:
 - a battery energy storage system
 - a back-up generator
 - electric vehicle charging stations
- upgrading power supply and electrical infrastructure
- provision for a new solar photovoltaic (PV) system on the existing depot offices and/or maintenance workshop.

Construction commenced around mid-2024 and is complete, with bus commissioning works ongoing.

Temporary offsite bus parking area for use during construction was assessed via the Addendum Minor Works REF (July 2024) (addendum MWREF (2024)).

Purpose

The purpose of this memo is to:

- Describe the proposed modification.
- Document and assess the likely impacts of the proposed modification on the environment.
- Detail protective measures to be implemented.
- Document the recommendation of the Transport for NSW (Transport) Senior Manager Environment and Sustainability (SMES) and the decision by the Transport delegated manager whether or not to determine the modification to the project.

This memo is an addendum to and is to be read in conjunction with the Brookvale Bus Depot Conversion Minor Works REF determined on 6 June 2024 and the Addendum Minor Works REF (July 2024).

Description of proposed modification

During detailed design, a Fire Life Safety Risk Assessment (WSP, 2024) (FLSRA) was commissioned which recommended measures to address potential risks.

The main features of the proposed fire and life safety upgrades include:

- installation of an isolation bay protected by fire walls
- installation of fire suppression systems in the workshop and on the gantry structure
- upgrades to fire hydrant system within the depot

installation of smoke detection and building occupant warning systems.

Refer to Figure 1 for indicative location of proposed modifications.

Construction of the modification is expected to start in October 2025 and take approximately four months to complete. Other construction activities associated with the depot conversion work have been completed.



Figure 1. Location of the Brookvale bus depot and indicative location of proposed modifications.

Need for the proposed modification

Since the determination of the Brookvale Bus Depot Conversion minor works REF, the FLSRA identified risks that should be addressed to mitigate new fire risks arising from the depot conversion works.

Options considered

A fire and life safety workshop was undertaken with Transport, the operator and construction contractor to consider modification options. A do nothing approach would not address potential risks associated with the electrification of the bus depot.

The preferred option is to proceed with the proposed fire and life safety modifications.

Consultation

Consultation under State Environmental Planning Policy (Transport and Infrastructure, 2021), was undertaken with Northern Beaches Council, the State Emergency Service and occupiers of adjoining land as part of the Brookvale Bus Depot Conversion Addendum Minor Works REF (July 2024) and the Minor Works REF determined on 6 June 2024. Due to previous high-level consultation and given that the proposed modification does not comprise an entirely new project and does not extend the current proposal boundary, additional consultation under State Environmental Planning Policy (Transport and Infrastructure) 2021 was not deemed necessary.

The community will continue to be informed as part of regular project notifications.

Impact assessment

An assessment of potential environmental impacts is included in this section. Attachment A addresses the environmental factors specified in section 171 of the Environmental Planning and Assessment Regulation 2021 and matters of national environmental significance under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Soil

Excavation would be required for civil works associated with the fire suppression systems and upgrading the hydrant system, including upgrading the Sydney Water connection and trenching for the installation of pipes from the Sydney Water connection point to the fire hydrant systems.

The NSW Planning and Environment acid sulfate soils (ASS) database reports the proposal area as being Soil Class 4 under the Warringah Local Environmental Plan (LEP) 2011. The mapping shows the affected area as being the southern portion of the depot. The Atlas of Australia Acid Sulfate Soils classify part of the depot as having a low probability of ASS occurrence (6-70% chance) greater than 3m below ground surface. See Figure 2 below.

The proposal would involve excavations to a maximum approximate depth of 3 metres, however, the proposed modification would not involve excavation in the southern portion of the site that is mapped as Class 4 Acid Sulfate Soils.

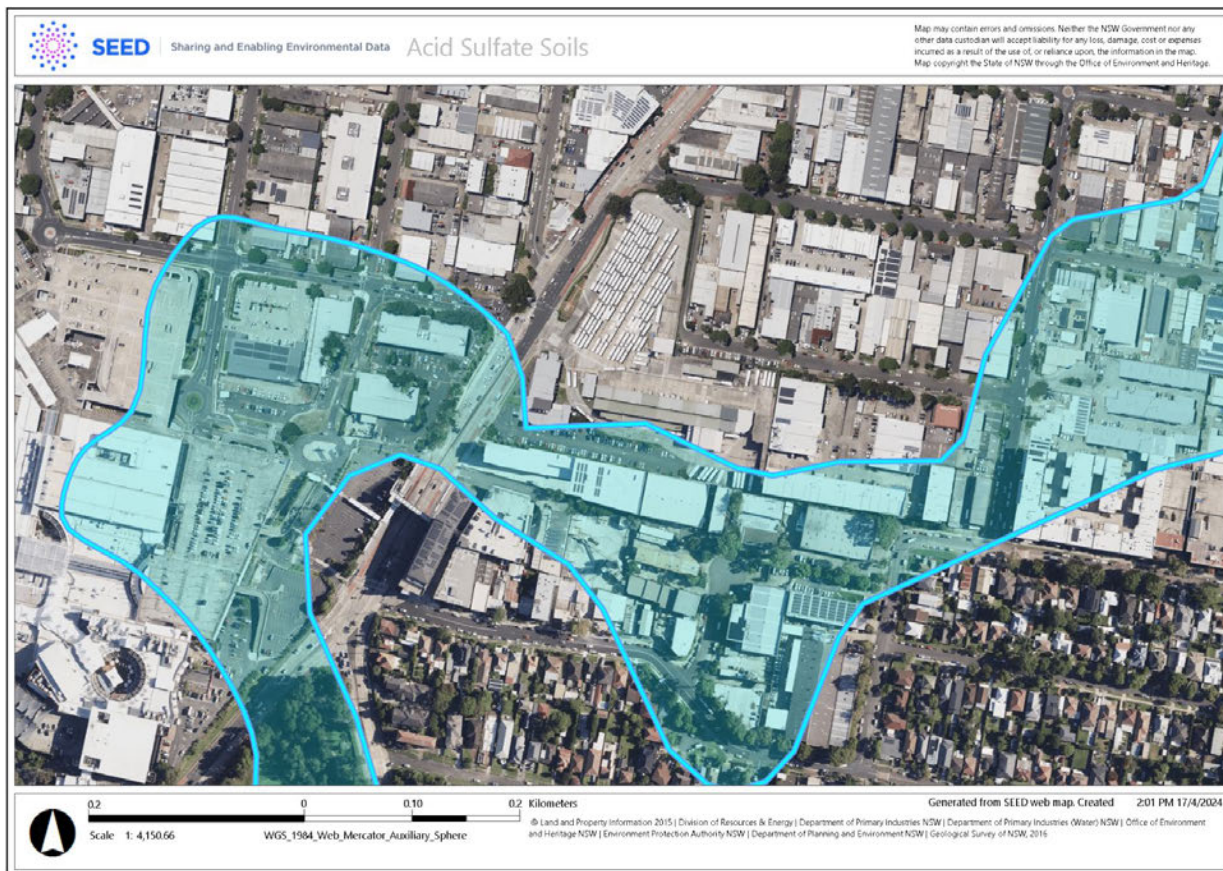


Figure 2. Acid Sulfate Soil Probability Risk map. Low probability of ASS occurrence (6-70% chance) shown in blue.

Waterways and water quality

Potential minor impacts may be experienced during the construction of the modification as a result of exposed soils and trenching.

Noise and vibration

During construction of the proposed modification, the noise and vibration impacts are expected to be consistent with the noise and vibration scenarios assessed in the ZEB Brookvale Depot Noise and Vibration Impact Assessment (Pulse White Noise Acoustics, 2024), as part of the determined minor works REF. The modification would result in an increase in the duration of the noise and vibration impacts.

During operations, additional minor and intermittent noise impacts may be experienced in the event of the smoke detection and building warning systems being activated during testing or an emergency.

Air quality

During construction, it is expected that there would be continued minor impacts associated with exhaust emissions.

Aboriginal cultural heritage

No additional impacts expected.

Non-Aboriginal heritage

No additional impacts expected. The proposed modification will not impact the Tramway Staff War Memorial, Warringah LEP (I1).

Biodiversity

No additional impacts expected.

Traffic and transport

No additional traffic and transport impacts expected. There would be no interruptions or changes to bus services operating from Brookvale Bus Depot during construction or during operations.

Social

No additional impacts expected.

Landscape character and visual impacts

During construction, minor temporary visual impacts associated with the construction work.

The proposed modification would install a bus isolation bay with fire walls, which would be visible from nearby receivers on Powells Road. There would be two fire walls, approximately 4.7 metres high and 19 metres long (as shown in figure 3), which would be visible from surrounding businesses and the road network. The general height of the proposed fire walls would be similar to the height of the depot workshop building and surrounding commercial/industrial buildings.

During operation, the addition of the fire walls would result in a visual change for road users and surrounding businesses. The fire wall structures would be broadly consistent with the scale and urban form of the existing surrounding commercial and industrial premises, resulting in a minor landscape character impact.

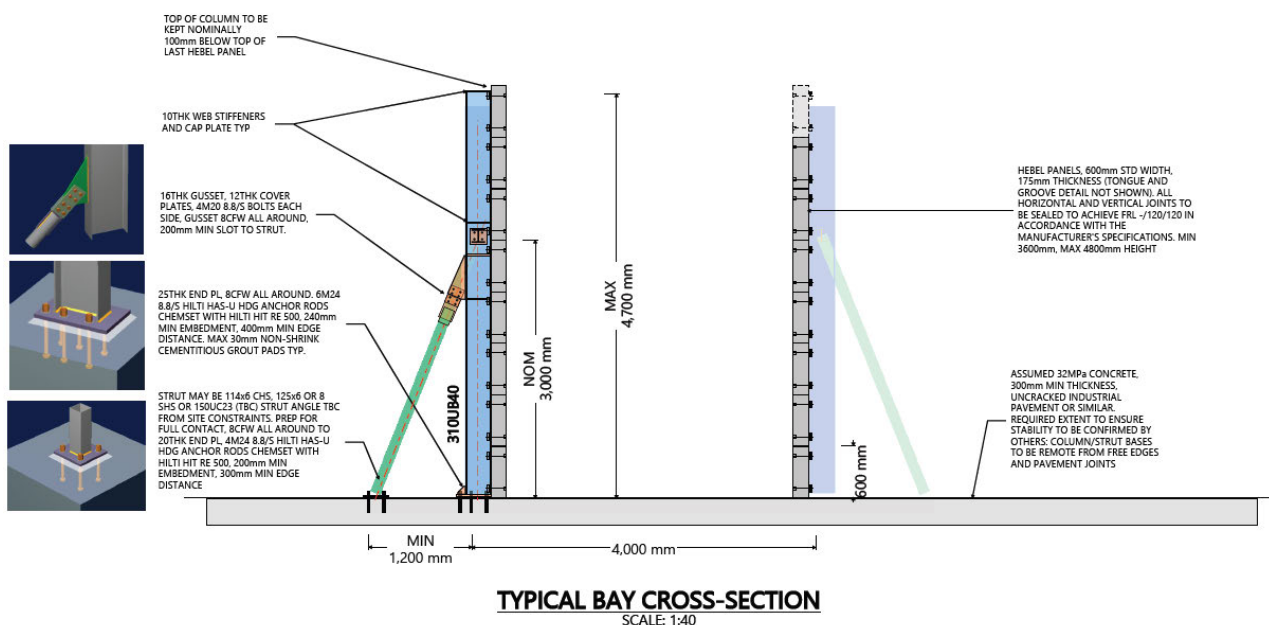


Figure 3. Indicative typical cross-section of the isolation bay

Waste

During construction, there is expected to be a minor increase in wastes generated including from concrete breakout and spoil not suitable for reuse.

Climate change and greenhouse gas emissions

No additional impacts expected.

Cumulative impacts

No additional impacts expected.

Summary of additional or revised safeguards

No additional safeguards are proposed as a result of the proposed modification.

Licences, permits or approvals

Prior to any work on Sydney Water or Northern Beaches Council assets in relation to the proposed modification, the respective approvals, including landowners consent (where applicable) would be obtained.

Conclusion

All relevant safeguards identified in the Brookvale Bus Depot Conversion Minor Works REF would be applied to this work. No additional or revised safeguards are required.

Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) applies to the proposed modification. The proposed modification has been reviewed in the context of the Brookvale Bus Depot Conversion Minor Works REF and the addendum MWREF (2024) and considered against the requirements of sections 5.5 and 5.7 of the EP&A Act.

In considering the proposed modification this assessment has examined and taken into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of that activity as addressed in this memo, and associated information. This assessment is considered to be in accordance with the factors specified in section 171 of the Environmental Planning and Assessment Regulation 2021.

The Brookvale Bus Depot Conversion including the proposed modification described in this memo will have some environmental impacts which can be ameliorated satisfactorily. Having regard to the safeguards and management measures in the determined Minor Works REF, it is considered that the expected environmental impacts are unlikely to be significant and an environmental impact statement is not required under Division 5.2 of the EP&A Act.

The Brookvale Bus Depot Conversion including the proposed modification described in this memo will not significantly affect biodiversity values listed under the *Biodiversity Conservation Act 2016*. Therefore, the concurrence of the Coordinator General of the Environment and Heritage Group of Department of Planning and Environment and a species impact statement or a Biodiversity Development Assessment Report (BDAR) is not required.

In addition to the above, the assessment considered the effect of the activity on:

- Conservation agreements under the *National Parks and Wildlife Act 1974*.
- Plans of management under the *National Parks and Wildlife Act 1974*.
- Biodiversity stewardship sites under the *Biodiversity Conservation Act 2016*.

- Wilderness areas under the *Wilderness Act 1987*.

The assessment has also addressed the potential impacts of the activity on matters of national environmental significance and any impacts on the environment of Commonwealth land and concluded that there will be no significant impacts. Therefore, there is no need for a referral to be made to the Australian Government Department of Climate Change, Energy, the Environment and Water for a decision by the Australian Minister for the Environment on whether assessment and approval is required under the EPBC Act or for application of the EPBC Act strategic assessment for Transport activities assessed under Part 5 of the EPBC Act.

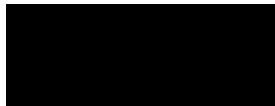
This memo is considered to be of adequate quality and meets all relevant requirements.

The proposed modification has been characterised in the context of the Brookvale Bus Depot Conversion and is considered to be consistent with that project's objectives and key features. While the proposed modification would increase the overall environmental impacts of the determined project, it is substantially the same as the activity described and assessed in the determined REF and does not constitute an entirely new activity.

Certification

This memo provides a true and fair description of the scope and potential impacts of the proposal to modify the Brookvale Bus Depot Conversion project to provide fire and life safety upgrades.

Prepared by:

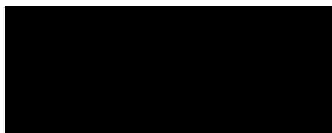
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14/10/2025

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Senior Environment and Sustainability Officer

Reviewed by:

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14/10/2025

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Senior Project Manager

Recommendation

It is recommended that the proposal to modify the Minor works review of environmental factors to include fire and life safety upgrades as described in this memo proceed subject to the implementation of all safeguards and management measures identified in this memo and in the Brookvale Bus Depot Conversion Minor Works REF and compliance with all other relevant statutory approvals, licences, permits and authorisations. Consideration of this proposed modification has examined and taken into account, to the fullest extent possible, all matters likely to affect the environment by reason of the activity in accordance with the EP&A Act, EP&A Regulation and the Guidelines approved under clause 170 of the EP&A Regulation. It is established that the activity is not likely to

significantly affect the environment. The memo has concluded that there will be no significant impacts on matters of national environmental significance or the environment of Commonwealth land.

Recommended by:

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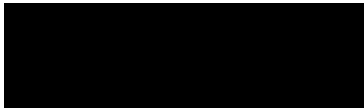
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Transport Senior Manager Environment and Sustainability – Zero Emission Buses

Decision statement

In accordance with the above recommendation, I certify that I have reviewed and endorsed the contents of this addendum memo, and to the best of my knowledge, it is in accordance with the EP&A Act, the EP&A Regulation and the Guidelines approved under Section 170 of the EP&A Regulation, and the information is neither false nor misleading.

Determined by:

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Director CSE Sydney West

Date: 21/10/2025

Attachments

Attachment A – Section 171 EP&A Regulation checklists and Matters of National Environmental Significance

Attachment B – Brookvale Bus Depot Conversion Minor Works REF and addendum MWREF (2024)

Attachment A: Consideration of State and Commonwealth environmental factors

Environmental Planning and Assessment Regulation 2021 section 171(2) checklist

The following factors, listed in section 171(2) of the Environmental Planning and Assessment Regulation 2021, have been considered to assess the likely impacts of the proposal on the natural and built environment. This consideration is required to comply with sections 5.5 and 5.7 of the EP&A Act.

Factor	Description of impact	Duration and extent
(a) Environmental impact on a community.	During construction, there would be some temporary minor impacts to the community, particularly in relation to noise and visual amenity.	Negative, short-term, minor
(b) The transformation of a locality.	- During construction there would be some minor visual impacts associated with the presence of construction equipment and activities. - During operation, there would be a negative impact in relation to the visual impact of the bus isolation bay.	Negative, short-term, minor Negative, long-term, minor
(c) Environmental impact on the ecosystems of a locality.	Construction of the proposal has the potential to result in temporary environmental impacts on the ecosystem of the locality such as temporary noise, air quality and contamination however, this would be managed in accordance with the implementation of the safeguards. The proposal is not expected to result in any long-term environmental impacts on the ecosystem of the locality.	Negative, short-term, minor
(d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality.	- The proposal is located within an existing bus depot. The proposal has the potential to result in short-term negative impacts due to construction related activities. The impacts would be minimised with the implementation of the safeguards as detailed in the Minor Works REF. - The proposal would not result in any substantial reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality.	Negative, short-term, minor
(e) Any effect on a locality, place or building having aesthetic,	The proposal would not affect a known Aboriginal or non-Aboriginal heritage item, place or object.	Nil

anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations.		
(f) Any impact on habitat of any protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i>).	The proposed modification is located within an existing bus depot, a highly disturbed area and is unlikely to have any impact on the habitat of protected fauna.	Nil
(g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air.	The proposed modification is located within an existing bus depot, a highly disturbed area. The proposed modification would not require any vegetation removal or trimming and is unlikely to endanger any species of animal, plant or other form of life, whether living on land, in water or in the air.	Nil
(h) Any long-term effects on the environment.	The proposed modification is unlikely to have any long-term effects on the environment given the nature and extend of the works and safeguards to be implemented.	Nil
(i) Any degradation of the quality of the environment	The proposed modification is unlikely to result in degradation of the quality of the environment. During construction there would be minor and temporary impacts to the environment, primarily from noise, and during operations a reduction in visual amenity. These potential impacts would be managed in accordance with the safeguards within the Minor Works REF.	Negative, short-term, minor
(j) Any risk to the safety of the environment.	The proposed modification is unlikely to cause any pollution or safety risks to the environment provided the safeguards are implemented.	Nil
(k) Any reduction in the range of beneficial uses of the environment.	The proposed modification is unlikely to result in the reduction in the range of beneficial uses of the environment.	Nil
(l) Any pollution of the environment.	- During construction, minor, short-term risks to water quality would be present in the event of spill or release of material from the work site. Safeguards were included in the Minor Works REF to address the risk of water pollution. - In the event of the fire suppression	Negative, short-term, minor Negative, long-term, minor

	system activating, there is a risk of water runoff causing pollution where it may exceed the capacity of the onsite stormwater system after the isolation valve is engaged.	
(m) Any environmental problems associated with the disposal of waste.	- Given the historical use of the bus depot, there is potential for contaminants to be present within the soils. Hazardous waste (including asbestos and acid sulfate soils) may be generated by the proposal. All spoil to be removed from site would be tested to confirm the presence of any contamination. Any contaminated spoil would be disposed of at an appropriately licensed facility, and in accordance with SafeWork NSW requirements. - In the event of the fire suppression system activating, there is a risk of water runoff causing pollution where it may exceed the capacity of the onsite stormwater system after the isolation valve is engaged.	Negative, short-term, minor Negative, long-term, minor
(n) Any increased demands on resources, natural or otherwise which are, or are likely to become, in short supply.	The proposed modification will increase the water demand of the bus depot. However, this would only be during fire events.	Negative, long-term, minor
(o) The cumulative environmental effect with other existing or likely future activities.	No additional cumulative impacts as a result of the proposed modification.	Nil
(p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions.	The proposed modification would not affect or be affected by any coastal processes or coastal hazards.	Nil
(q) Applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1.	The applicable local strategic plan is the Northern Beaches Council's Towards 2040, Local Strategic Planning Statement, which guides land use planning for the Northern Beaches over the next 20 years. The proposal supports priority 20 in this plan, regarding sustainable local transport networks. This priority area includes improving the local bus network and innovative and emerging technology.	Positive, long-term
(r) Other relevant environmental factors.	In considering the potential impacts of this proposal all relevant environmental factors have been considered in this addendum MWREF.	

Matters of National Environmental Significance

Environmental factor	Impact
Any impact on a World Heritage property?	Nil
Any impact on a National Heritage place?	Nil
Any impact on a wetland of international importance (often called 'Ramsar' wetlands)?	Nil
Any impact on nationally threatened species, ecological communities or migratory species?	Nil
Any impact on a Commonwealth marine area?	Nil
Does the proposal involve a nuclear action (including uranium mining)?	Nil
Additionally, any impact (direct or indirect) on the environment of Commonwealth land?	Nil

Attachment B: Determined minor works REFs

- Brookvale Bus Depot Conversion Minor Works Review of Environmental Factors (June 2024)
- Addendum Minor Works REF (July 2024)