

8 October 2021

Emily Hillebrand
Director
Victorian Planning Authority
Level 25, 35 Collins Street
MELBOURNE VIC 3000



Dear Emily,

ARDEN STRUCTURE PLAN AND AMENDMENT C407 TO MELBOURNE PLANNING SCHEME

Thank you for the opportunity to provide a submission on the Arden Structure Plan and associated draft Planning Scheme Amendment C407 to the Melbourne Planning Scheme.

EPA recognises that the release of these documents represents a significant milestone in this important project. EPA also recognises the extensive consultation that has already taken place between VPA and EPA, and therefore intends to structure this submission in a way that focuses on the key environmental, amenity and human health risks associated with dust and odour, noise and vibration, and potentially contaminated land.

Our Understanding of the Proposal

Arden is a state significant urban renewal precinct located in North Melbourne. The 46-hectare Arden precinct lies west of North Melbourne's established residential area and south of the Macaulay urban renewal precinct.

The Arden Precinct will be transformed into *"an international innovation and technology precinct."*

Arden will accommodate a range of sensitive uses including new housing, a network of open spaces, community facilities and schools alongside a range of commercial operations and workplaces.

Documents Reviewed

EPA has targeted its review of the Amendment documentation and have reviewed the following documents:

- Arden Structure Plan (1 of 2, and 2 of 2);
- Arden Adverse Amenity Impact Assessment (GHD, 6 Sept 2021);
- Arden Transport Precinct – Arden Structure Plan – Amenity Risk Assessment (GHD, 23 Aug 2021)
- Arden Explanatory Report;
- Land Contamination Assessment (Prensa, Nov 2018);
- Draft Special Use Zone – Schedule 7 (SUZ7) ;
- Schedule 1 to Clause 44.08 Buffer Area Overlay, Asphalt Plant – Inner Buffer Area (BAO1);
- Schedule 2 to Clause 44.08 Buffer Area Overlay, Asphalt Plant – Outer Buffer Area (BAO2);
- Schedule to Clause 66.04 of the Melbourne Planning Scheme, and
- Draft EAO Mapping (EAOMap04).

Our Position

Strategic Intent

EPA notes and supports Objective 29 of the Structure Plan which seeks to:

"Make Arden adaptable to change while managing the impacts of existing uses that need to transition from the precinct."

EPA notes and supports Objective 28 of the Structure Plan which seeks to ensure that:

"...new development responds to surrounding conditions including the transmission pressure gas pipelines and is not unduly impacted by noise, vibration and electromagnetic interference from the adjacent railway corridor, elevated roadway and Metro Tunnel."

EPA supports the view that, as stated in the Explanatory Report, *"...Facilitating precinct scale infrastructure leverages on urban renewal as an agent of change to 'do better'"* The proposition that land use planning provides an opportunity for improved built form and environmental outcomes aligns with the principles of the new *Environment Protection Act 2017* .

Proposed Planning Controls

In relation to the proposed BAO Schedules 1 and 2 we consider that overall, the planning controls strike the appropriate balance between the facilitation of development for the precinct and the need to mitigate against known risks to amenity and human health. These risks are associated with existing industry as set out in the 'Arden Transport Precinct – Arden Structure Plan - Amenity Risk Assessment' (GHD, 23 Aug 2021).

We support the controls as currently drafted and would resist any future changes that allow for the establishment of sensitive uses within the areas covered by BAO1 and BAO2 under different circumstances than those currently proposed.

In relation to potentially contaminated land, we consider that further work is needed to ensure that Amendment aligns with the updated framework; including:

- Updating the Contamination Assessment to accord with the updates planning framework for potentially contaminated land;
- Relying on the updated Contamination Assessment as a technical basis of informing the application of the Environmental Audit Overlay (EAO); and
- Including planning controls to address potentially contaminated land where the proposed land use is not a sensitive use, secondary school(s) or children's playground.

We will provide comment on the proposal as it relates to noise and vibration as part of a late submission – see further detail below.

Key Environmental, Human Health and Amenity Risks

Dust and Odour

Located within the Arden Precinct are a range of existing land uses including industrial activities which have the potential to generate offsite odour and dust impacts in a manner which may compromise the amenity and human health of future sensitive uses.

During earlier phases of this project, EPA highlighted these risks to VPA and encouraged the preparation of a site specific risk assessment to more clearly understand the potential risk, together with the development of planning controls designed to mitigate these risks.

Of particular concern to EPA is the presence of the existing asphalt manufacturing plant (Citywide) located 208-292 Arden Street, North Melbourne. While it remains in operation, EPA consider it to be incompatible with the development of sensitive uses as proposed by the Structure Plan, with a potential hospital campus expected to anchor what is to be known as 'Arden Central – Innovation'. Also proposed are residential uses occurring throughout the precinct (at upper levels), in addition to a proposed government primary school.

EPA notes that, in response to the early advice provided, GHD on behalf of VPA have undertaken the 'Arden Transport Precinct- Arden Structure Plan - Amenity Risk Assessment' dated 23 August 2021 which in turn forms the technical basis for the proposed Buffer Area Overlay (BAO 1 and BAO 2).

The Assessment considers risks of dust and odour from existing, nominated industry across the Precinct and seeks to determine whether firstly, default separation distances (as set out in EPA Publication 1518, *Recommended Separation Distances for Industrial Residual Air Emissions*) and secondly, assess the risk of amenity impacts on future sensitive uses.

The proposed Buffer Area Overlay (BAO) translates the potential impacts and the spatial extent to which they are likely to apply into a planning control designed to mitigate risk according to severity, with the BAO1 applying to an inner buffer area (BAO1) and an outer buffer risk area (BAO2).

Key features of *Asphalt Plant – Inner Buffer Area (BAO1)* include –

- Permit required for nominated sensitive uses including hospital, place of assembly, accommodation and education centre;
- Permit required for buildings and works associated with hospital, place of assembly, accommodation and education centre;
- Requirement for an Amenity Assessment for buildings associated with sensitive use that includes assessment of the potential odour impacts from the asphalt plant (Citywide);
- A Further requirement for buildings associated with accommodation or education centre to be accompanied by formal indication that that *"...will result in asphalt plant ceasing operation on land at 208- 292 Arden Street, North Melbourne prior to the proposed use commencing; or Suitable evidence to demonstrate that the risk of odour associated with the asphalt plant at 208-292 Arden Street, North Melbourne has been eliminated."*

Key features of *Asphalt Plant – Outer Buffer Area (BAO2)* include –

- Permit required for nominated sensitive uses including hospital, place of assembly, accommodation and education centre;
- Permit required for buildings and works associated with hospital, place of assembly, accommodation and education centre;
- Requirement for an Amenity Assessment for buildings associated with sensitive use that includes assessment of the potential odour impacts from the asphalt plant (Citywide).

The key difference between BAO1 and BAO2 is that the establishment of accommodation and education centre in BAO2 are not dependent on the cessation of activities at the asphalt plant (Citywide), but rather could be established subject to a suitable design response.

We would like to take this opportunity to make some observations:

Arden Transport Precinct- Arden Structure Plan - Amenity Risk Assessment (GHD, 23 August 2021)

Firstly, in regard to the GHD report, we consider that the methodology used by GHD to assess risk of dust and odour in relation to nominated industry across the Arden Precinct is acceptable. It is our understanding that the methodology draws on the previous, similar work that GHD has already

Citywide Asphalt Plant, Hot concrete batching plant (temporary), Iron Stockfeeds gran and stockfeed mill and handling facility, Weston Mill four mill.

undertaken in this area and applies best practice to the assessment of odour in particular, which in itself is consistent with EPA's recommended approach.

Secondly, EPA is satisfied with the outcomes of the risk assessment insofar as a variation to the recommended separation distances is justified and the findings of the assessment can be used to delineate areas of moderate, medium and low risk which in turn can be used to inform the preparation of a Buffer Area Overlay – see below.

Buffer Area Overlay – Schedules 1 and 2

In relation to the BAO itself, we consider that overall, the planning controls strike the appropriate balance between the facilitation of development for the precinct and the need to mitigate against known risks to amenity and human health associated with existing industry.

Furthermore, we support the controls as drafted and would resist changes that allow for the establishment of sensitive uses within the areas covered by BAO1 and BAO2 under different circumstances than those currently proposed. This includes the extent to which the BAO1 and BAO2 applies, and whether uses can establish prior to the ceasing of activities at the asphalt plant.

Recognising the expertise held within EPA to support decision making under the BAO, EPA supports the proposal to be included as a 'Determining' referral authority on planning applications pursuant to Clause 3.0 to Schedule 1 and 2 of the BAO, as set out in the draft Schedule to Clause 66.04 of the Melbourne Planning Scheme.

Noise and Vibration

The Amendment documents recognise that there are a number of existing sources of noise and vibration which pose a risk to the amenity and human health of future sensitive uses.

It is also important to allow for the construction of the Metro Tunnel and new Arden Station, which is expected to be completed, and open for use in 2025.

Recognising that the Arden precinct will be zoned Special Use Zone – Schedule 7 (SUZ7) with new obligations imposed on development across the Precinct, it is important for EPA to give consideration to the requirements of that Schedule in the context of the new framework for environmental protection that comes with the commencement of the new *Environment Protection Act 2017* which applies from 1 July 2021.

EPA's technical noise experts are currently reviewing both the Arden Adverse Amenity Impact Assessment (GHD, 6 Sept 2021) as well as the provisions of the SUZ7 with a view to determining whether these controls require any further strengthening to ensure that the mitigation of noise and vibration impacts aligns with new Act and its requirements.

We expect to be able to provide further comment by 18 October 2021 and thank you in advance for your patience in this regard.

Potentially Contaminated Land

The Arden Precinct, like many parts of Melbourne, has a long history of industrial land use. Land contamination is most often the result of past uses of the land and its associated effects from pollution and waste. Contaminated land can cause risks to human health when people are directly exposed to contaminants in the soil and dust, to vapours from contaminated soil and groundwater or direct contact with contaminated groundwater. Immediate and prolonged exposure to these contaminants can pose a potential for acute and chronic human health impacts for the users of the land.

The Structure Plan acknowledges that Arden's industrial past has left a legacy of land contamination, and that land may require further investigation, clean up or management prior to development.

The Land Contamination Assessment (the Contamination Assessment) prepared by Prensa (November 2018) seeks to provide an indication of the potential for contamination for each land parcel. The Contamination Assessment identified 1,032 property parcels or 238 property allotments and assigned a potential for contamination based on the historical use of the land.

Based on this potential for contamination, and the possible uses of the land, the Contamination Assessment then assigns a relative risk ranking to inform the further assessment required, consistent with *Planning Practice Note 30 – Potentially Contaminated Land* (DSE, 2005). The Contamination Assessment illustrates these on:

- Figure 6A – Potential for Contamination
- Figure 6B – Relative Risk Ranking where the proposed use is a 'sensitive use'
- Figure 6C – Relative Risk Ranking where the proposed use is 'other use'

Turning to the Amendment documentation, the draft Explanatory Report states the Amendment:

... introduces the Environmental Audit Overlay over areas recognised as having high or medium likelihood to be contaminated to ensure audits are undertaken prior to the commencement of sensitive uses.

The draft mapping indicates the Environmental Audit Overlay (EAO) is proposed to be applied across the entire precinct, with the exception of roadways and some properties fronting Macauley Road. This appears to be consistent with Figure 6A and 6B of the Contamination Assessment, aside from properties fronting Macauley Road which is discussed below.

EPA supports the application of the EAO as the primary mechanism for ensuring potentially contaminated land is assessed, and where needed, cleaned up or appropriately managed. The application of the EAO appears to accord with *Ministerial Direction Number 1 – Potentially Contaminated Land* (MD1), which establishes two tests:

- the zoning of the land allows sensitive uses, secondary school, or children's playground to establish, whether or not subject to a permit; and,
- the land meets the definition of potentially contaminated land.

Changes to the Planning Framework for Potentially Contaminated Land

Given the Contamination Assessment was prepared in late 2018, EPA are cognisant of the recent changes to the planning framework for potentially contaminated land stemming from the introduction of the *Environment Protection Act 2017*. This includes, but is not limited to:

- Updated Planning Practice Note 30: Potentially Contaminated Land (DELWP, 2021)(PPN30);
- Updated *Ministerial Direction Number 1: Potentially Contaminated Land*; and
- Updated Environmental Audit Overlay (EAO).

Given the Contamination Assessment relies heavily on the earlier version of *Planning Practice Note 30: Potentially Contaminated Land* (DSE, 2005) to assign a potential for contamination and relative risk ranking, EPA considers further work is needed to ensure this Assessment now accords with the updated planning framework for potentially contaminated land. This is of particular importance given the Contamination Assessment is the technical document being used to support and inform the appropriate application of the EAO across the Precinct.

Updates should account for, but are not limited to;

1. The updated list of potentially contaminating land uses in Table 2 of *Planning Practice Note 30: Potentially Contaminated Land* (DELWP, 2021), and how the nesting of potentially contaminated fill material has been amended.
2. The updated table for the recommended approach to assessing potentially contaminated land in Table 3 of *Planning Practice Note 30: Potentially Contaminated Land* (DELWP, 2021).

3. The updated *Ministerial Direction Number 1: Potentially Contaminated Land*, to inform the application of the EAO.

Assessment of 'Other' Land Uses

EPA notes there does not appear to be a planning control to trigger an investigation of potentially contaminated land for those future land uses that are not sensitive uses, secondary schools or children's playground.

Table 3 of *Planning Practice Note 30: Potentially Contaminated Land* (DELWP, 2021) recommends a Preliminary Site Investigation where land has a high potential for contamination and the proposed land use is open space, retail, office, industry or warehouse. This is supported by Clause 13.04-1S - 'Contaminated and Potentially Contaminated Land' of the Melbourne Planning Scheme which states:

Policy guideline

Consider as relevant the potential for contamination to impact the proposed use or development through an assessment that is proportionate to the risk, including:

- *An assessment in accordance with the National Environment Protection (Assessment of Site Contamination) Measure (National Environment Protection Council, 1999)*

It is noted that a Preliminary Site Investigation is an assessment under the *National Environment Protection (Assessment of Site Contamination) Measure* (National Environment Protection Council, 1999).

Further, the Contamination Assessment makes recommendations for sites which have a high potential for contamination where the land uses are not sensitive uses, secondary schools or children's playground, under:

- *Section - 7.2 Triggers for Further Assessment Works*

"For sites which represent a medium risk, (i.e., have a medium potential when developed for sensitive uses or high potential for contamination when developed for other uses), a site assessment by a suitably qualified environmental professional is recommended to determine if an audit is necessary".

(Emphasis added)

- *Figure 6C - 'Relative Risk Ranking - Other Use'*

"Medium Risk" - Illustrated in yellow shading

As such, EPA recommends that provisions are made for a planning control to trigger an investigation of potentially contaminated land for those land uses that are not sensitive uses, secondary schools, or children's playground (i.e., those land uses not addressed by the Environmental Audit Overlay).

Outcomes of Environmental Audit

Environmental audits, triggered by the EAO, often make recommendations in relation to ongoing risks, uses, controls, management, and monitoring actions that should be implemented or undertaken in relation to the attributes of the audited site. These recommendations must be implemented for the site to be suitable for its proposed use, and typically relate to the development or ongoing management of a site. Planning Practice Note 30 – Potentially Contaminated Land (DELWP, 2021) states:

- *Where a planning scheme amendment applies, provision needs to be made for applicable recommendations to be given effect, or where possible used to inform the drafting of planning provisions.*

Accordingly, EPA recommends provisions are made for the recommendations of an environmental audit to be given effect.

Environmental Audit Overlay Mapping

EPA notes that seven properties fronting Macauley Road are not subject to the proposed Environmental Audit Overlay. These properties are number one to seven in figure 6A of the Contamination Assessment, which all have either a high or medium potential for contamination. It is assumed these properties are not included in the EAO mapping due to the land already subject to the Environmental Audit Overlay. Conversely, the land bound by Arden Street, Laurens Street, Queensberry Street and Munster Terrace are already subject to the Environmental Audit Overlay, however these sites are included in the EAO Mapping (EAOMap04), suggesting that this amendment proposes to apply Environmental Audit Overlay to that land.

The Explanatory Report indicates all the above-mentioned land is included within the Amendment area. As such, EPA recommends consistency in the consideration of land that is already subject to the Environmental Audit Overlay within EAO Mapping (EAOMap04).

Recommendations

In summary, EPA provides the following recommendations:

- Update the Contamination Assessment to accord with the updates planning framework for potentially contaminated land.
- Use the updated Contamination Assessment as a technical basis of informing the application of the Environmental Audit Overlay.
- Provisions are made for a planning control to trigger an investigation of potentially contaminated land for those land uses that are not sensitive uses, secondary schools, or a children's playground.
- Provisions are made for recommendations of environmental audit to be given effect.
- Consistency in the consideration of land that is already subject to the Environmental Audit Overlay within EAO Mapping.

EPA may have further comment on potentially contaminated land if the Contamination Assessment is amended.

Closing

Value of Ministerial Direction 19

EPA would like to take this opportunity to commend VPA in its proactive approach to the assessment of risk as it relates to potential dust and odour impacts from existing industry across the Arden precinct, and the need to account for these risks in the planning framework.

EPA considers that the work done by GHD on behalf of VPA to translate potential amenity impacts into a new Buffer Area Overlay (BAO) sets a new benchmark for land use planning as it relates to urban renewal precincts in Melbourne.

It also reflects the value of Ministerial Direction 19 and the opportunity given to all parties to understand risk early in the project timeline and account for this in the overall delivery of the project.

Potentially Contaminated Land

Recognising the existing work that has been done to ensure that the Structure Plan responds appropriately to potentially contaminated land, EPA has set out some pragmatic steps that will allow the Planning Scheme Amendment to align with the updated framework for potentially contaminated land. This includes consideration of changes to Ministerial Direction 1, PPN30 and the revised EAO. EPA expects that with these updates, the technical assessment being used to inform the relevant controls is robust and able to withstand scrutiny.

Next Steps

EPA is committed to providing comment the proposal as it relates to noise and vibration as part of a late submission. Subsequent to this, we would be pleased to meet with VPA to discuss any aspect of our advice should any clarification be required.

If you have any questions in the meantime, please do not hesitate to contact [REDACTED]

Yours sincerely,



Elita Briggs

[REDACTED]
Environment Protection Authority Victoria

19 October 2021

Emily Hillebrand
Director
Victorian Planning Authority
Level 25, 35 Collins Street
MELBOURNE VIC 3000



Our Ref: REQ001256

Dear Emily,

ARDEN STRUCTURE PLAN AND AMENDMENT C407 TO MELBOURNE PLANNING SCHEME

Thank you for the opportunity to provide a further submission on the Arden Structure Plan and associated draft Planning Scheme Amendment C407 to the Melbourne Planning Scheme. As indicated in our letter dated 8 October 2021, we intend to comment on risks associated with noise and vibration across the Precinct.

Our Understanding of the Proposal

Arden is a state significant urban renewal precinct located in North Melbourne. The 46-hectare Arden precinct lies west of North Melbourne's established residential area and south of the Macaulay urban renewal precinct.

The Arden Precinct will be transformed into *"an international innovation and technology precinct."*

Arden will accommodate a range of sensitive uses including new housing, a network of open spaces, community facilities and schools alongside a range of commercial operations and workplaces.

Documents Reviewed

EPAs noise expert has reviewed an extensive range of documents to inform EPA's position on this matter. This includes consideration of documents relating to the project itself as well as provisions of the Melbourne Planning Scheme, the Environment Protection Act 2017, Environment Protection Regulations 2021 and Environment Reference Standard in addition to the documents listed below:

- Arden Structure Plan (1 of 2, and 2 of 2);
- Arden Adverse Amenity Impact Assessment (GHD, 6 Sept 2021);
- Draft Special Use Zone – Schedule 7 (SUZ7); and
- Metro Tunnel Environment Management Framework (December 2019), downloaded from <https://metrotunnel.vic.gov.au/planning/planning-approvals>.

Our Position

Noise and Vibration

There are wide range of existing and future sources of noise and vibration that have the potential to impact on the amenity of future sensitive uses within the Arden Precinct. While these have generally been assessed and translated into planning controls, there are some gaps both in the Arden Adverse Amenity Impact Assessment (GHD, 6 Sept 2021) and the proposed Draft Special Use Zone – Schedule 7 (SUZ7).

When the proposed controls are considered alongside the already existing provisions within the Melbourne Planning Scheme and taking into account the complexity associated with the assessment of

and attenuation of noise, there is a risk of confusion that could lead to proposals for new noise sensitive uses not including the appropriate level of scrutiny.

We therefore encourage VPA to give consideration to how the assessment of noise and its translation into planning permit application requirements (and potentially conditions attached to permits) can be streamlined in its presentation via the planning scheme amendment.

Key Environmental, Human Health and Amenity Risks

Noise and Vibration

We expect to be able to provide further comment by 18 October 2021 and thank you in advance for your patience in this regard.

The Victorian Planning Authority has released the Arden Structure Plan and draft Amendment to the Melbourne Planning Scheme (C4707melb). There are many existing sources of noise and vibration within and around the Precinct, including:

- existing industry;
- transportation infrastructure (Citylink, Dynon Rd, Wurundjeri Way, passenger trains and freight trains);
- heavy vehicles, associated with the existing industry; and
- helicopter flight paths.

Other expected noise and vibration sources include:

- Metro Rail Tunnel
- Arden station and associated plants (ventilation, substation)
- noise sources associated with the project:
 - commercial, industrial and trade premises
 - entertainment venues and likely outdoor entertainment events
 - centralised infrastructure
 - construction sites.

The project will introduce noise sensitive uses (including residential and educational uses) and new noise sources. The management of noise and vibration requires early and holistic consideration of the cumulative impacts.

Assessment

EPA's technical noise experts have now reviewed both the Arden Adverse Amenity Impact Assessment (GHD, 6 Sept 2021) ('the GHD report') as well as the provisions of the SUZ7 with a view to determining whether these controls require any further strengthening to ensure that the mitigation of noise and vibration impacts aligns with new Act and its requirements. They have also reviewed a range of documents accessible to EPA that allow for the consideration of noise and vibration more broadly in relation to Metro Tunnel etc.

We wish to make the following comments:

Arden Adverse Amenity Impact Assessment (GHD, 6 Sept 2021)

The GHD report mainly focusses on existing sources of noise. They provide a review of existing industry, surrounding major roads (Citylink, Wurundjeri Way, Dynon Road), the Upfield rail corridor, and infrastructure facilities (Drainage pumps and West Melbourne Terminal Substation, Essendon Tram Depot). GHD also considers the ANEF contours relating to aircraft noise, and a live entertainment venue in the vicinity of the development.

However, some existing sources of noise and vibration appear to have been overlooked:

- This includes freight trains that would travel along the southwestern corner of the precinct (generating noise, vibration and ground borne noise).
- noise associated with helicopters flying to and from the nearby Parkville hospital precinct .

Interpretation of the new Environment Protection Framework for Noise

When assessing industry, the GHD report focusses essentially on compliance with the Noise limit and assessment protocol for the control of noise from commercial, industrial and trade premises and entertainment venues (the Noise Protocol, EPA Publication 1826). This is considered an oversight; rather, the noise protocol is to be used to determine the noise limits, that is, the obligations are set out in the EP Act and the EP Regulations (which refer to the Noise Protocol).

The GHD report also does not discuss or otherwise mention the ERS and its application. However, the intent of the assessment provided in the report is broadly consistent with maintaining the environmental values for ambient sound defined in the ERS.

Encroachment

The changes in land use set out in the proposed Structure Plan have the potential to impact on existing commercial, industrial and trade premises (referred to as 'industry' hereinafter), since it may result in:

- the development of new noise sensitive areas located closer to industry (or otherwise more exposed to noise from industry)
- a change in noise limits due to rezoning.

While there is some provision for this in the GHD report, we note firstly that the definition of noise sensitive areas includes not only *dwelling, residential buildings, noise sensitive residential uses and other uses comprising dormitories, wards, bedrooms or living rooms*, but also *childcare centres, kindergartens, primary schools and secondary schools*.

Aligning this with the land use terms within the Melbourne Planning Scheme, it is noted that Education Centre includes *childcare centre, employment training centre, primary school, secondary school and tertiary institution*. A more pragmatic approach would see planning controls in relation to noise sensitive areas applied to Accommodation, Hospital and Education Centre (other than Tertiary institution and Employment training centre).

Secondly, while the GHD report does not appear to consider the effect of the rezoning on the noise limits and the existing industry's compliance with the noise limits, this issue can likely be resolved through application of the General Environmental Duty (GED). Additionally, there are opportunities in the detailed acoustic design for new residential and other noise sensitive buildings to further reduce the noise intrusion from existing industry.

With this in mind, we turn our attention to the planning controls proposed and the triggers for a planning permit.

Schedule 7 to the Special Use Zone (SUZ7)

While the proposed draft schedule includes application requirements for Accommodation and Hospital, these uses appear in Section 1 of the Table of uses. Where the relevant conditions of this section are met, a planning permit would not be required, and these application requirements may not be triggered.

This approach does not appear to align with other planning controls that apply across the Precinct including Noise influence areas (as defined in Clauses 55.07-6 and 58.04-3 of the Melbourne Planning Scheme) DDO 26, DDO 66, and DDO 70 of the Melbourne Planning Scheme.

ⁱ The Melbourne Planning Scheme makes provision for this through application of DDO 66 (flight path protection)

This is also inconsistent with the Background report (August 2021) for the Arden Precinct where it reads (p.31):

The draft Arden planning scheme amendment proposes to include noise controls and extend the criteria currently prescribed in the Better Apartment Design Standards (BADs) across all of Arden. This applies a consistent approach for noise management criteria in planning across the municipality.

It is considered that the SUZ7 should be updated to include a trigger for planning permit for all noise sensitive uses (Accommodation, Hospitals and Education Centre, (other than Tertiary institution and Employment training centre)) to ensure that the risks of noise and vibration are duly recognised and accounted for in planning permit applications.

Furthermore, care should be taken to ensure that each planning permit application takes into account the relevant risks that apply at the time of application, noting that noise and vibration across the precinct will vary according to location and also the stage of development.

It is noted that the GHD report recommends that proposals for any noise sensitive development within the Precinct be required to undertake a detailed noise intrusion assessment. It appears that this recommendation was partially adopted but appears to extend only to the assessment of sleeping and living areas only.

Furthermore, the requirement does not account for GHD's recommended 20m rail vibration buffer, nor do the application requirements account for transient and sporadic noise, noise character and low frequency noise (e.g. train, truck or helicopter pass-by) and with sporadic noise (e.g. train horn).

The following may assist in drafting of application requirements:

- Australian Standard AS/NZS 2107 *Acoustics—Recommended design sound levels and reverberation times for building interior* recommends internal design sound level and is the reference standard generally used for the acoustic design of buildings. It is noted that the internal noise levels specified in the *Better Apartment Design Standards* (BADs) are consistent with the provisions of AS/NZS 2107.
- While the recommendations of AS/NZS 2107 are generally expressed as ranges of design sound levels, the median values of the ranges would be relevant to the prescription of criteria for areas other than sleeping and living areas.
- It is noted that the Victorian School Building Authority *Building Quality Standards Handbook* (BQSH) specify that 'spaces must be designed to achieve the design sound level from AS/NZS 2107 for their use type'. Internal ambient noise levels in the nominated area must be no more than 5dB(A) above the lower figure in the range recommended in AS/NZS 2107'.
- The ranges recommended in AS/NZSS 2107 are mostly 5 to 10 dB wide. The median value would equate or be 2 to 3 dB below the '5dB(A) above the lower figure in the range' criterion of the BQSH. The specification of the BQSH would be complied to if the internal noise levels do not exceed the median value of the range of AS/NZS 2107.
- The requirements for the development of new sensitive uses should include a clause providing for 'additional considerations, where relevant, to address transient or variable noise, noise character (tonality, impulsiveness or intermittency) and noise with high energy in the low frequency range.
- Incorporating measures to address noise character and low frequency noise is consistent with the intent of the EP Regulations, under which noise character can result in adjustments to apply to the measured noise levels. Frequency spectrum is a prescribed factor when assessing unreasonable noise.

Other Matters

The review by EPA noise expert is comprehensive and includes a range of other matters such as the Metro Rail Tunnel, *Arden Station and associated infrastructure*, and Entertainment venues and outdoor entertainment events,

EPA is satisfied that the risks relating to noise and vibration arising from these matters will be sufficiently resolved through application of existing or proposed planning controls, and for this reason we have set them aside for the purposes of this submission.

Recommendations

In summary, EPA provides the following recommendations:

- The GHD report should include consideration of existing noise and vibration sources such as freight rail and helicopter noise associated with the nearby Parkville hospital precinct;
 - This should include advice as to whether the recommended rail vibration buffer (20 m) will be sufficient to address the risk of vibration generated from freight train operations; and
 - Reference to EPA's *Noise control guidelines* (Publication 1254.2) which provides noise level criteria for helicopters. It also discusses operational hours for helipads (although these would not apply to emergency flights) and separation between landing site and residential premises.
- SUZ7 should be updated to include a trigger for a planning permit for all noise sensitive uses (Accommodation, Hospitals and Education Centre (other than Tertiary institution and Employment training centre)) across the Arden Precinct and be drafted in such a way to ensure that all relevant risks of noise and vibration are duly recognised and accounted for in planning permit applications.
- The control (application requirement) should provide criteria for areas other than sleeping and living areas (the median value of the range of design sound levels of AS/NZS 2107); and require additional considerations, where relevant, to address:
 - potential noise character (tonality, impulsiveness or intermittency)
 - noise with high energy in the low frequency range
 - transient or variable noise (such as train or helicopter by-passes)
 - the risk of adverse vibration or ground-borne noise from rail operations.
- Also, the controls should emphasise that:
 - internal noise level criteria apply to the combined noise from all noise sources impacting on the development (including contributions from, as relevant, commercial, industrial and trade premises, road traffic noise, train noise and helicopters); and
 - regard should be given to building siting, orientation and lay-out prior to considering acoustic treatment of building envelopes (which may result in occupants not being able to open windows and enjoy outdoor areas of future developments).

Closing

Next Steps

EPA is committed to providing ongoing advice and would be pleased to meet with VPA to discuss any aspect of our submission should any clarification be required. EPA has given consideration to how the controls may be redrafted or amended to give effect to the recommendations of this letter and can provide these on request.

If you have any questions in the meantime, please do not hesitate to contact Planning Team Lead – Strategic, Trish Brice [REDACTED].

Yours sincerely,



Elita Briggs

[REDACTED]