Managing noise and vibration impacts from transport corridors state code 1.1

Response column key:

Achieved
 P/S Performance solution
 N/A Not applicable

Performance outcomes	Acceptable outcomes	Response Comment		
Residential buildings near a state-control	Residential buildings near a state-controlled road or type 1 multi modal corridor			
PO1 Development involving an accommodation activity that is a residential building achieves acceptable noise levels for residents and visitors by mitigating adverse impacts on the development from noise generated by a state-controlled road or a type 1 multimodal corridor.	 AO1.1 All facades of a residential building exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following external noise criteria#: (1) ≤60 dB(A) L₁₀ (18 hour) facade corrected (measured L₉₀ (8 hour) free field between 10 pm and 6 am ≤40 dB(A)) (2) ≤63 dB(A) L₁₀ (18 hour) facade corrected (measured L₉₀ (8 hour) free field between 10 pm and 6 am >40 dB(A)). AND 	AO1 – Proposal Complies The caretaker's residence is located a considerable distance from the state- controlled road, approximately 550 metres, and situated toward the rear of an administration building. The impact from road noise would be minimal and acceptable.		
		The open space for the caretaker's residence is located further south away from the road and located at the rear of the residence. Again road noise would be minimal and acceptable.		
	 AO1.2 Every private open space in an accommodation activity exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following external noise criteria#: (1) ≤57 dB(A) L₁₀ (18 hour) free field (measured L₉₀ (18 hour) free field between 6 am and 12 midnight ≤45 dB(A)) (2) ≤60 dB(A) L₁₀ (18 hour) free field (measured L₉₀ (18 hour) free field between 6 am and 12 midnight >45 dB(A)). AND 	A01.2 – Proposal Complies The open space for the caretaker's residence is located further south away from the road and located at the rear of the residence. Again road noise would be minimal and acceptable.		
	 AO1.3 Every passive recreation area in an accommodation activity exposed to noise from a state-controlled road or type 1 multi-modal corridor meets the following external noise criteria#: (1) 63 dB(A) L₁₀ (12 hour) free field (between 6 am and 6 	AO1.3 – Proposal Complies The open space for the caretaker's residence is located further south away		

Performance outcomes	Acceptable outcomes	Response Comment	
	pm). AND	from the road and located at the rear of the residence. Again road noise would be minimal and acceptable.	
	 AO1.4 Every habitable room in an accommodation activity (other than a residential building), exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following internal noise criteria#: (1) ≤35 dB(A) L_{eq} (1 hour) (maximum hour over 24 hours). Note: Noise levels from a state-controlled road or type 1 multi-modal corridor are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. Editor's note: Habitable rooms of residential buildings located within a transport noise corridor must comply with the Queensland Development Code MP4.4 Buildings in a transport noise corridors are mapped on the Department of Infrastructure, Local Government and Planning's State Planning Policy Interactive Mapping System. 	AO1.4 – Not Applicable No accommodation activity proposed.	
Accommodation buildings near a railwa	y with more than 15 passing trains per day or a type 2 mι	Ilti modal corridor	
PO2 Development involving an accommodation activity that is a residential building achieves acceptable noise levels for residents and visitors by mitigating adverse impacts on the development from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	 AO2.1 All facades of a residential building exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: (1) ≤65 dB(A) L_{eq} (24 hour) facade corrected (2) ≤87 dB(A) (single event maximum sound pressure level) facade corrected. AND 	AO2 – Not Applicable The proposal is not within a railway with more than 15 passing trains per day or a type 2 multi modal corridor.	
	 AO2.2 Every private open space and passive recreation area exposed to noise from a railway with more than 15 passing trains per day or type 2 multi-modal corridor meet the following external noise criteria#: (1) ≤62 dB(A) L_{eq} (24 hour) free field (2) ≤84 dB(A) (single event maximum sound pressure level) free field. AND 	AO2.2 – Not Applicable The proposal is not within a railway with more than 15 passing trains per day or a type 2 multi modal corrido	

Performance outcomes	Acceptable outcomes	Response Comment	
	 AO2.3 Every habitable room in an accommodation activity (other than a residential building) exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#: (1) ≤45 dB(A) single event maximum sound pressure level (railway). Note: Noise levels from railways or type 2 multi-modal corridors are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. Editor's note: Habitable rooms of residential buildings located within a transport noise corridor must comply with the Queensland Development Code MP4.4 Buildings in a transport noise corridors are mapped on the Department of Infrastructure, Local Government and Planning's State Planning Policy Interactive Mapping System. 		
Accommodation activities near a buswa	y or light rail		
PO3 Development involving an accommodation activity achieves acceptable noise levels for residents and visitors by mitigating adverse impacts on the development from noise generated by a busway or light rail.	 AO3.1 All facades of an accommodation activity exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤55 dB(A) L_{eq} (1 hour) facade corrected (maximum hour between 6 am and 10 pm) (2) ≤50 dB(A) L_{eq} (1 hour) facade corrected (maximum hour between 10 pm and 6 am) (3) ≤64 dB(A) L_{max} facade corrected (between 10 pm and 6 am). AND 	AO3 – Proposal Complies The caretaker's residence is located a considerable distance from the state- controlled road, approximately 550 metres, and situated toward the rear of an administration building. The impact from any bus road noise would be minimal and acceptable.	
	 AO3.2 Every private open space and passive recreation area in an accommodation activity exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤52 dB(A) L_{eq} (1 hour) free field (maximum hour between 6 am and 10 pm) (2) ≤66 dB(A) L_{max} free field. 	AO3.2 – Not Applicable No accommodation activity proposed.	

Performance outcomes	Acceptable outcomes	Response Comment	
	AND		
	 AO3.3 Every habitable room of an accommodation activity exposed to noise from a busway or light rail meets the following internal noise criteria#: (1) ≤35 dB(A) L_{eq} (1 hour) (maximum hour over 24 hours). Note: Noise levels from a busway or light rail are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. 	AO3.3 - Not Applicable No accommodation activity proposed.	
Particular development near a state-con	Introlled road or type 1 multi modal corridor		
 PO4 Development involving a: (1) child care centre, or (2) educational establishment achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from poise development of the development 	 AO4.1 All facades of buildings for a child care centre or educational establishment exposed to noise from state-controlled roads or type 1 multi-modal corridors meet the following external noise criteria#: (1) ≤58 dB(A) L₁₀ (1 hour) facade corrected (maximum hour during normal opening hours). AND 	AO4.1 - Not Applicable No child care centre or educational establishment proposed.	
from noise generated by a state- controlled road or a type 1 multi-modal corridor.	 AO4.2 Outdoor education area and outdoor play area exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following external noise criteria#: (1) ≤63 dB(A) L₁₀ (12 hours) free field (between 6 am and 6 pm). AND 	AO4.2 - Not Applicable No child care centre or educational establishment proposed.	
	 AO4.3 Indoor education areas and indoor play areas in a childcare centre or educational establishment exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following internal noise criteria#: (1) ≤35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Noise levels from state-controlled roads or type 1 multi-modal corridors are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. 	AO4.3 - Not Applicable No child care centre or educational establishment proposed.	
PO5 Development involving a hospital achieves acceptable noise levels for workers and patrons by mitigating	AO5.1 All facades of buildings for a hospital exposed to noise from state-controlled roads or type 1 multi-modal corridors meet the following external noise criteria#:	AO5.1 – Not Applicable No hospital proposed.	

Performance outcomes	Acceptable outcomes	Response Comment	
adverse impacts on the development from noise generated by a state- controlled road or a type 1 multi-modal corridor.	 (1) ≤58 dB(A) L₁₀ (1 hour) facade corrected (maximum hour during normal opening hours). AND 		
	 AO5.2 Patient care areas exposed to noise from a state-controlled road or type 1 multi-modal corridor meet the following internal noise criteria#: (1) ≤35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). 	AO5.2 – Not Applicable No hospital proposed	
	Note: Noise levels from state-controlled roads or type 1 multi- modal corridors are to be measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.		
Particular development near a railway (with more than 15 passing trains per day) or a type 2 mult	i modal corridor	
 PO6 Development involving a: (1) child care centre, or (2) educational establishment achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor. 	 AO6.1 All facades of buildings in a child care centre or educational establishment exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: (1) ≤65 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours) (2) ≤87 dB(A) (single event maximum sound pressure level) facade corrected. 	AO6.1 – Not Applicable No child care centre or educational establishment proposed.	
	 AO6.2 Outdoor education area and outdoor play area exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#: (1) ≤62 dB(A) L_{eq} (12 hour) free field (between 6 am and 6 pm) (2) ≤84 dB(A) (single event maximum sound pressure level) free field. 	AO6.2 – Not Applicable No child care centre or educational establishment proposed.	
	AO6.3 Sleeping rooms in a child care centre exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#:	AO6.3 – Not Applicable No child care centre or educational establishment	

Performance outcomes	Acceptable outcomes	Response Comment
	 (1) ≤45 dB(A) single event maximum sound pressure level. AND 	proposed.
	AO6.4 Indoor education areas and indoor play areas exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#:	AO6.4 – Not Applicable No child care centre or educational establishment proposed.
	 (1) ≤50 dB(A) single event maximum sound pressure level. Note: Noise levels from railways or type 2 multi-modal corridors are measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. 	
PO7 Development involving a hospital achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development	A07.1 All facades of buildings for a hospital exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following external noise criteria#:	AO7 1– Not Applicable No hospital proposed.
from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	 ≤65 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours) 	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	 (2) ≤87 dB(A) (single event maximum sound pressure level) facade corrected. 	
	AND	
	A07.2 Ward areas exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#:	AO7 2– Not Applicable No hospital proposed.
	 (1) ≤45 dB(A) single event maximum sound pressure level. AND 	
	A07.3 Patient care areas (other than ward areas) exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meet the following internal noise criteria#:	AO7 3– Not Applicable No hospital proposed.
	 (1) ≤50 dB(A) single event maximum sound pressure level. Note: Noise levels from railways or type 2 multi-modal corridors 	
4	Troto. Troise levels norn railways of type 2 multi-modal comuois	

Performance outcomes	Acceptable outcomes	Response Comment
	are measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise.	
Particular development near a busway	or light rail	
 PO8 Development involving a: (1) child care centre, or (2) educational establishment achieves acceptable noise levels for workers and patrons by mitigating adverse impacts on the development from noise generated by a busway or light rail. 	 AO8.1 All facades of buildings for a child care centre or educational establishment exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤55 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours). AND 	AO8.1 – Not Applicable No child care centre or educational establishment proposed.
	 AO8.2 Outdoor education area and outdoor play areas exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤52 dB(A) L_{eq} (1 hour) free field (maximum hour during normal opening hours) (2) ≤66 dB(A) L_{max} free field (during normal opening hours). AND 	AO8.2 – Not Applicable No child care centre or educational establishment proposed.
	 AO8.3 Indoor education areas and indoor play areas exposed to noise from a busway or light rail meet the following internal noise criteria#: (1) ≤35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Areas exposed to noise from a busway or light rail are measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. 	AO8.3 – Not Applicable No child care centre or educational establishment proposed.
PO9 Development involving a hospital achieves acceptable noise levels for workers and patients by mitigating adverse impacts on the development from noise generated by a busway or light rail.	 AO9.1 All facades of buildings for a hospital exposed to noise from a busway or light rail meet the following external noise criteria#: (1) ≤55 dB(A) L_{eq} (1 hour) facade corrected (maximum hour during normal opening hours). AND 	AO9.1 – Not Applicable No hospital proposed.
	AO9.2 Patient care areas exposed to noise from a busway or light rail meet the following internal noise criteria#:	AO9.2 – Not Applicable No hospital proposed.

Performance outcomes	Acceptable outcomes	Response Comment	
	 (1) ≤35 dB(A) L_{eq} (1 hour) (maximum hour during opening hours). Note: Areas exposed to noise from a busway or light rail are measured in accordance with AS1055.1–1997 Acoustics – Description and measurement of environmental noise. 		
Noise barriers or earth mounds			
 PO10 Noise barriers or earth mounds erected to mitigate noise from transport operations and infrastructure are designed, sited and constructed to: (1) maintain safe operation and maintenance of state transport infrastructure (2) minimise impacts on surrounding properties 	AO10.1 Where adjacent to a state-controlled road or type 1 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with Chapter 7 Integrated Noise Barrier Design of the <i>Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise</i> , Department of Transport and Main Roads, 2013. OR	AO10.1 – Not Applicable No noise barriers or earth mounds are proposed due to nature of proposal.	
 (3) complement the surrounding local environment (4) maintain fauna movement corridors where appropriate 	AO10.2 Where adjacent to a railway or type 2 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with the <i>Civil Engineering Technical Requirement</i> — <i>CIVIL-SR-014 Design of noise barriers adjacent to railways</i> , Queensland Rail, 2011. OR	AO10.2 – Not Applicable Not adjacent to railway	
	AO10.3 No acceptable outcome is prescribed for noise barriers and earth mounds adjacent to a busway or light rail.		
Vibration			
P011 Development mitigates adverse impacts on the development from vibration generated by transport operations and infrastructure.	No acceptable outcome is prescribed.	AO11 – Proposal Complies Proposed development mitigates adverse impacts on the development from vibration generated by transport operations and infrastructure.	

Table 1.1.2: Reconfiguring a lot

Performance outcomes	Acceptable outcomes	Response	Comment
Future anticipated accommo	dation activity near a state controlled road or type ?	multi-modal corridor	

Performance outcomes	Acceptable outcomes	Response Comment	
PO1 Development involving land where a future anticipated accommodation activity is made exempt or self-assessable development under a local planning instrument is to achieve acceptable noise levels for residents and visitors by mitigating adverse impacts on the development site from noise generated by a state-controlled road or a type 1 multi-modal corridor.	 AO1.1 Land for a future anticipated accommodation activity exposed to noise from a state-controlled road or type 1 multi-modal corridor meets the following external noise criteria at the building envelope or if the building envelope is unknown, the deemed-to-comply setback distance for buildings stipulated by the local planning instrument or relevant building regulations#: (1) ≤57 dB(A) L₁₀ (18 hour) free field (measured L₉₀ (18 hour) free field between 6 am and 12 midnight ≤45 dB(A)) (2) ≤60 dB(A) L₁₀ (18 hour) free field (measured L₉₀ (18 hour) free field between 6 am and 12 midnight >45 dB(A)). 	PO1 – Proposal Complies The proposed caretaker's residence is located a considerable distance from the state-controlled road, approximately 550 metres, and situated toward the rear of an administration building. The impact form road noise would be minimal and acceptable.	
Future anticipated accommodation activ	ity near a railway with more than 15 passing trains per da	ay or a type 2 multi-modal corri	dor
PO2 Development involving land where a future anticipated accommodation activity is made exempt or self-assessable development under a local planning instrument is to achieve acceptable noise levels for residents and visitors by mitigating adverse impacts on the development site from noise generated by a railway with more than 15 passing trains per day or a type 2 multi-modal corridor.	 AO2.1 Land for a future anticipated accommodation activity exposed to noise from a railway with more than 15 passing trains per day or a type 2 multi-modal corridor meets the following external noise criteria at the building envelope or if the building envelope is unknown, the deemed-to-comply setback distance for buildings stipulated by the local planning instrument or relevant building regulations#: (1) ≤62 dB(A) L_{eq} (24 hour) free field (2) ≤84 dB(A) (single event maximum sound pressure level) free field. 	PO2 – Not Applicable The proposal is not within a railway with more than 15 passing trains per day or a type 2 multi modal corridor	
Future anticipated accommodation activ	rity near a busway or light rail		
PO3 Development involving land where a future anticipated accommodation activity is made exempt or self-assessable development under a local planning instrument is to achieve acceptable noise levels by mitigating adverse impacts on the development site from noise generated by a busway or light rail.	 AO3.1 Land for a future anticipated accommodation activity exposed to noise from a busway or light rail meets the following external noise criteria at the building envelope or if the building envelope is unknown, the deemed-to-comply setback distance for buildings stipulated by the local government planning instrument or building regulations#: (1) ≤52 dB(A) L_{eq} (1 hour) free field (maximum hour between 6 am and 10 pm) (2) ≤47 dB(A) L_{eq} (1 hour) free field (maximum hour between 10 pm and 6 am) (3) ≤66 dB(A) L_{max} free field. 	PO3 – Proposal Complies The proposed caretaker's residence is located a considerable distance from the state-controlled road, approximately 550 metres, and situated toward the rear of an administration building. The impact from any bus road noise would be minimal and acceptable.	
Noise barriers or earth mounds			

Performance outcomes	Acceptable outcomes	Response Comment
 PO4 Noise barriers or earth mounds erected to mitigate noise from transport operations and infrastructure are designed, sited and constructed to: (1) maintain safe operation and maintenance of state transport infrastructure (2) minimise impacts on surrounding properties 	AO4.1 Where adjacent to a state-controlled road or a type 1 multi-modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with Chapter 7 Integrated Noise Barrier Design of the <i>Transport Noise Management Code of Practice – Volume 1 Road Traffic Noise</i> , Department of Transport and Main Roads, 2013. OR	AO4.1 – Not Applicable No noise barriers or earth mounds are proposed due to nature of proposal.
 (3) complement the surrounding local environment (4) maintain fauna movement corridors where appropriate. 	A04.2 Where adjacent to a railway or a type 2 multi- modal corridor, noise barriers and earth mounds are designed, sited and constructed in accordance with the <i>Civil Engineering Technical Requirement — CIVIL-SR-</i> 014 Design of noise barriers adjacent to railways, Queensland Rail, 2011. OR	AO4.2 – Not Applicable Not adjacent to railway.
	A04.3 No acceptable outcome is prescribed for noise barriers and earth mounds adjacent to a busway or light rail.	AO4.3 – Not Applicable Not adjacent to busway or light rail.