4.1 Concurrence environmentally relevant activities state code

Response column key:
þ Achieved
P/S Performance solution

Table 4.1.2: All environmentally relevant activities

Performance outcomes	Acceptable outcomes	Response	Comment
Site suitability			
PO1 The choice of the site at which the activity is to be carried out minimises serious environmental harm on areas of high conservation value and special significance, and sensitive land uses at adjacent places.	**AO1.1** Both of the following apply: (1) areas of high conservation value and special significance likely to be affected by the activity are identified and evaluated, and any adverse effects on these areas are minimised, including any edge effects on the areas (2) the activity does not have an adverse effect beyond the site. Or	N/A	
	AO1.2 Both of the following apply: (1) areas of high conservation value and special significance likely to be affected by the proposal are identified and evaluated and any adverse effects on the areas are minimised, including any edge effects on the areas (2) critical design requirements will prevent emissions having an irreversible or widespread impact on adjacent areas.	þ	The proposed extension to the extractive industry operation is well separated from the nearest sensitive receptors, being the residential uses located towards the east and approximately 1.2 kilometres from the edge of the site. The area between is used for pine plantation and includes the existing remnant vegetation corridors along the drainage features. The areas to the north, west and south of the proposed operation also comprise extensive areas of State forest. As such, any potential for noise or dust impacts from the proposed operation on sensitive receivers is expected to be within the accepted levels as nominated within the Environmental Authority (EA) conditions anticipated for the development. The Environmental Management Plan (EMP) prepared for the operation includes a range of management measures for potential impacts, including dust and noise, to ensure that on-site management practices are in place and that any potential for adverse impacts beyond the site meets the required levels (refer **Attachment 5 – Environmental Management Plan**). A Water Quality Management Plan has been prepared as part of the Environmental Management Plan, to ensure that any potential water quality impacts are appropriately managed (refer **Attachment 5 – Environmental**

Performance outcomes	Acceptable outcomes	Response	Comment
			Management Plan). Areas of high conservation value have been considered as part of the Ecological Assessment prepared by Biodiversity Assessment and Management (BAAM) (refer **Attachment 8 – Ecological Assessment**). The assessment concludes that there will be no Significant Residual Impact (SRI) on any regulated protected plant or animal species. Due to the particular circumstances of this site, the clearing of regulated vegetation (including essential habitat and waterway vegetation) has been confirmed as exempt works under the *Vegetation Management Act 1999* (VM Act), due to it being located within a State forest (pine plantation). This aspect is further detailed in section 6.1.3 of the Planning Assessment Report
Location of activity on the site			
PO2 The location for the activity on the site protects all environmental values relevant to adjacent sensitive land uses.	**AO2.1** The location of the activity means there will be no adverse effect on any environmental values. Or	N/A	
	AO2.2 Both of the following apply: (1) the activity and components of the activity are located on the site in a way that prevents or minimises adverse effects on the use of adjacent land and allows for effective management of the environmental impacts of the activity (2) areas used for storing environmentally hazardous materials in bulk are located to take into consideration the likelihood of flooding.	þ	The proposed operation is well separated from the nearest residential uses to the east of the site, by approximately 1.2 kilometres of pine plantation and the existing remnant vegetation corridors along the drainage features. The areas to the north, west and south of the proposed operation also comprise extensive areas of State forest. As such, any potential for noise or dust impacts from the proposed operation is expected to be to be within the accepted levels as nominated within the EA conditions anticipated for the development. The EMP prepared for the site includes management measures for a range potential impacts (eg. water quality, vibration, dust and noise) to ensure any potential for adverse impacts beyond the site are managed to the required levels (refer **Attachment 5 – Environmental Management Plan**). There will be no environmentally hazardous materials stored in bulk on the site. The diesel transtank has been shown to be sufficiently separated (minimum 50 metres) from the

Performance outcomes	Acceptable outcomes	Response	Comment
			existing vegetation and pine plantation and will be stored in a double skinned container, in compliance with the required Australian Standards.
PO3 The activity avoids adverse impacts on matters of state environmental significance or, where this is not reasonably possible, impacts are minimised and, where this is not reasonably possible, an environmental offset is provided for any significant residual impact to matters of state environmental matters that are prescribed environmental matters.	**AO3.1** Matters of state environmental significance likely to be affected by the activity are identified and evaluated, and any adverse effects on the matters of state environmental significance are avoided or, where this cannot be reasonably achieved, impacts are minimised, and where this cannot be reasonably achieved, an environmental offset is provided for any significant residual impact to matters of state environmental significance that are prescribed environmental matters. Editor's note: Applications for development should identify anticipated losses, and outline what actions are proposed to be undertaken to offset the loss in accordance with the Significant Residual Impact Guideline and the relevant Queensland Environmental Offset Policy.	þ	Matters of State Environmental Significant (MSES) are addressed in detail in the Ecological Assessment prepared by BAAM and section 6.1.5 of the Planning Assessment Report. In summary, the Ecological Assessment concludes that whilst the proposed extension will result in a SRI on MSES values, the clearing of regulated vegetation has been confirmed as exempt works under the VM Act, due to the site being located within a State forest (pine plantation).
PO4 Development avoids or minimises and offsets any adverse impacts on riparian areas and ecological corridors located in a strategic environmental area.	**AO4.1** Development is set back from a waterway by at least 200 metres. And	N/A	The site is not located within a strategic environmental area.
	AO4.2 Development minimises adverse impacts on fish passage during works and the carrying out of the activity. And	N/A	
	AO4.3 Clearing of riparian vegetation is minimised or, where this cannot be reasonably achieved, an environmental offset is provided for any significant residual impact. And	N/A	
	AO4.4 Natural regeneration of native plant species is facilitated in cleared riparian areas.	N/A	
Critical design requirements			
PO5 The design of the facility at which the activity is to be carried out permits the activity to be carried out in accordance with best practice environmental management.	**AO5.1** The activity does not involve the storage, production, treatment or release of hazardous contaminants, or involve a regulated structure. Or	N/A	
	AO5.2 Development ensures that— (1) all storage provided for hazardous contaminants includes secondary containment to prevent or minimise releases to the environment from spillage or	þ	It is proposed to include a diesel transtank, as shown within **Attachment 1 – Proposal Plans**.

Performance outcomes	Acceptable outcomes	Response	Comment
	leaks (2) regulated structures must comply with the manual for assessing consequence categories and hydraulic performance of structures, Department of Environment and Heritage Protection, 2013 (3) containers are provided for the storage of hazardous contaminants and are secured to prevent the removal of the containers from the site by a flood event (4) the design of the facility— (a) prevents or minimises the production of hazardous contaminants and waste, or (b) contains and treats hazardous contaminants, rather than releasing them.		The diesel transtank has been shown to be sufficiently separated (minimum 50 metres) from the existing vegetation and pine plantation and will be stored in a double skinned container, in compliance with the required Australian Standards.
PO6 Development avoids or minimises any adverse impacts from pollutants on environmental values and water quality objectives for receiving waters (surface and groundwater) on site or leaving a site located in a strategic environmental area.	**AO6.1** Development demonstrates current best practice environmental management to meet relevant environmental values and water quality objectives of the Environmental Protection (Water) Policy or relevant to the ERA to be carried out on the site. Or	N/A	The site is not located within a strategic environmental area.
	AO6.2 All stormwater, wastewater, discharges and overflows leaving the site are: (1) treated to the quality of the receiving waters prior to discharge, or (2) reclaimed or re-used such that there is no export of pollutants to receiving waters.	N/A	

Table 4.1.3: Environmentally relevant activities in a strategic environmental area

Performance outcomes	Acceptable outcomes	Response	Comment
Concurrence ERA 16 (extractive and screening activities)—other than riverine quarry extraction **Geomorphic processes**			
PO1 Bed and bank stability is preserved.	**AO1.1** Excavation in the bed of a stream is limited to scour depth. And	N/A	The site is not located within a strategic environmental area.

Performance outcomes	Acceptable outcomes	Response	Comment
	AO1.2 Excavation in the bed of a stream is less than one-third of the bed width. And	N/A	
	AO1.3 Clearing of in-stream vegetation is limited to the minimum area required for the activity to be carried out. And	N/A	
	AO1.4 The final stream profile does not direct flow into a bank.	N/A	
Concurrence ERA 16 (extractive and screening activities)—riverine quarry material extraction **Geomorphic and hydrological processes**			
PO2 Extraction must occur from areas of active deposition including: (1) aggrading bars, or (2) sand slugs, or (3) benches and islands, or (4) sediment pockets in bedrock channels.	No acceptable outcome is prescribed.	N/A	
PO3 Excavation must not occur below the current bed level of a watercourse or waters.	No acceptable outcome is prescribed.	N/A	
PO4 Bed and bank stability is preserved during the operation or the carrying out of the activity.	**AO4.1** Vehicle access tracks and crossings associated with the activity have scour protection on the bed immediately downstream of the crossing. And	N/A	
	AO4.2 Access ramps and tracks are kept to a minimum and constructed to minimise erosion and turbulence problems at times of high flow. And	N/A	
	AO4.3 Ramps cut into the bank for vehicle access are orientated downstream. And	N/A	
	AO9.4 Vehicle crossings are orientated perpendicular to the stream channel ±10°. And	N/A	
	AO4.5 Where vehicle crossings are required, these will be	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	at stream-bed level; **Or** if it can be demonstrated that stream-bed level crossings are inappropriate, any culverts for vehicle crossing are aligned with the direction of natural stream flow, when that flow is of a depth equal to the culvert height. And		
	AO4.6 The activity includes measures to prevent stormwater erosion in drains and cuttings on the bank. And	N/A	
	AO4.7 Stream-bed controls are located upstream and downstream of the site. And	N/A	
	AO4.8 Excavation in the stream-bed is less than one-third of the bed width. And	N/A	
	AO4.9 Clearing of in-stream vegetation is limited to the minimum area required for the activity to occur.	N/A	
PO5 Bed and bank stability is preserved.	**AO5.1** The stream is rehabilitated as near as possible to its natural state after the activity has been conducted. And	N/A	
	AO5.2 Exposed bank areas are prepared to facilitate natural regeneration of native plant species. And	N/A	
	AO5.3 Stream-bed and bank controls are retained upstream and downstream of the site of the activity.	N/A	

Table 4.1.4: Intensive animal industries

Performance outcomes	Acceptable outcomes	Response	Comment
Surface water			
PO1 The structures containing and controlling run-off from the activity and waste re-use areas minimise adverse effects on surface waters external to the activity. Editor's note: To meet the requirements of this	No acceptable outcome is prescribed.	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
performance outcome, it is recommended that the applicant develop a management system for the activity, detailing: (1) environmental hazards (2) risk assessment processes (3) an auditable, risk-based management system for the operation of the activity (4) procedures for annual review (5) proposed maintenance operations (6) stock numbers (7) monitoring of pens, sheds, ponds, drainage and any obvious dust, noise and odour impacts. Note: Development should have regard to the following industry guideline for surface water for the applicable ERA. (1) **Cattle:** National guidelines for beef cattle feedlots in Australia, 3rd Edition, Meat & Livestock Australia, 2012. (2) **Cattle and sheep**: National beef cattle feedlot environmental code of practice, 2nd Edition, Meat & Livestock Australia, 2012. (3) **Pig keeping:** National environmental guidelines for piggeries, 2nd Edition (Revised), Tucker, RW, McGahan, EJ, Galloway, JL and O'Keefe for Australian Pork Limited, 2010. (4) **Poultry farming**: Queensland guidelines for meat chicken farms, Department of Agriculture, Fisheries and Forestry, 2012.			
Groundwater			
PO2 The activity is designed and managed to prevent or minimise adverse effects on groundwater or any associated surface ecological systems. Editor's note: Development should have regard to the following industry guideline for groundwater for the applicable ERA. (1) **Cattle:** National guidelines for beef	No acceptable outcome is prescribed.	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
cattle feedlots in Australia, 3rd Edition, Meat & Livestock Australia, 2012. (2) **Cattle and sheep**: National beef cattle feedlot environmental code of practice, 2nd Edition, Meat & Livestock Australia, 2012. (3) **Pig keeping:** National environmental guidelines for piggeries, 2nd Edition (Revised), Tucker, RW, McGahan, EJ, Galloway, JL and O'Keefe for Australian Pork Limited, 2010. (4) **Poultry farming**: Queensland guidelines for meat chicken farms, Department of Agriculture, Fisheries and Forestry, 2012.			
Amenity			
PO3 The activity is designed and managed to minimise adverse effects on the amenity of the surrounding community.	No acceptable outcome is prescribed.	N/A	
Native flora and fauna			
PO4 The activity is designed and managed to minimise adverse effects on ecological communities. Editor's note: Development should have regard to the following industry guideline for native flora and fauna for the applicable ERA. (1) **Cattle:** National guidelines for beef cattle feedlots in Australia, 3rd Edition, Meat & Livestock Australia, 2012. (2) **Cattle and sheep**: National beef cattle feedlot environmental code of practice, 2nd Edition, Meat & Livestock Australia, 2012. (3) **Pig keeping:** National environmental guidelines for piggeries, 2nd Edition (Revised), Tucker, RW, McGahan, EJ, Galloway, JL and O'Keefe for Australian Pork Limited, 2010. (4) **Poultry farming**: Queensland guidelines for meat chicken farms, Department of Agriculture, Fisheries and Forestry, 2012.	No acceptable outcome is prescribed.	N/A	

17.1 Public passenger transport state code

This Code does not apply to extractive industry. As the proposed caretaker's accommodation is directly associated and ancillary to the proposed extension, it is also considered not to apply.

18.1 Filling, excavation and structures state code

Response column key:
þ Achieved
P/S Performance solution

Table 18.1.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
All development			
PO1 Buildings, services, structures and utilities do not adversely impact on the safety or operation of: (1) state transport corridors (2) future state transport corridors (3) state transport infrastructure Editor's note: For a railway, Section 2.3 – Structures, setbacks, utilities and maintenance of the Guide for Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	**AO1.1** Buildings, structures, services and utilities are not located in a railway, future railway land or public passenger transport corridor. And	þ	No buildings, structures, services and utilities are located in a railway, future railway land or public passenger transport corridor.
	AO1.2 Buildings and structures are set back horizontally a minimum of three metres from overhead line equipment. And	N/A	
	AO1.3 Construction activities do not encroach into a railway or public passenger transport corridor. And	N/A	
	AO1.4 The lowest part of development in or over a railway or future railway land is to be a minimum of: (1) 7.9 metres above the railway track where the proposed development extends along the railway for a distance of less than 40 metres, or (2) 9.0 metres above the railway track where the development extends along the railway for a distance of between 40 and 80 metres. And	N/A	
	AO1.5 Existing authorised access points and access routes to state transport corridors for maintenance and emergency works are maintained, allowing for uninterrupted access at all times. And	N/A	
	AO1.6 Pipe work, services and utilities can be maintained without requiring access to the state transport corridor. And	N/A	
	AO1.7 Pipe work, services and utilities are not attached to rail transport infrastructure: (1) are not attached to rail transport infrastructure or other rail infrastructure, and	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	(2) do not penetrate through the side of any proposed building element or structure where built to boundary in, over or abutting a railway. And		
	AO1.8 Buildings and structures are set back a minimum of three metres from a railway bridge. And	N/A	
	AO1.9 Development below or abutting a railway bridge is to be clear of permanent structures or any other activity that may impede emergency access or works and maintenance of rail transport infrastructure. Editor's note: Temporary activities below or abutting a railway bridge could include, for example, car parking or outdoor storage.	N/A	
	AO1.10 Development above a railway is designed to facilitate ventilation as follows: (1) for development extending above a railway for a distance of less than 80 metres, gaps are provided to ensure natural ventilation, or (2) for development extending above a railway for a distance of more than 80 metres, ventilation shafts are provided. Editor's note: For development extending above a railway for a distance of more than 80 metres, it is recommended that modelling of smoke dispersion should be undertaken by a RPEQ to predict the spread of combustion products and inform the ventilation design. Section 5.1 – Development over a railway of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome.	N/A	
PO2 Development prevents unauthorised access to: (1) state transport corridors, (2) future state transport corridors, (3) state transport infrastructure, by people, vehicles and projectiles. Editor's note: For a railway, Section 2.4 –	**AO2.1** Fencing is provided along the property boundary with the railway. Editor's note: Where fencing is provided it is to be in accordance with the railway manager's standards. And	N/A	
	AO2.2 Accommodation activities with a publicly accessible area located within 10 metres from the boundary of a railway or 20 metres from the centreline of	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
Preventing unauthorised access of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	the nearest railway track (whichever is the shorter distance), include throw protection screens for the publicly accessible area as follows: (1) openings of no greater than 25 mm x 25 mm (2) height of 2.4 metres vertically above the highest toe hold if see-through, or 2 metres if non see-through. Editor's note: Expanded metal is considered see-through. And		
	AO2.3 Development in or over a railway or future railway land includes throw protection screens. Editor's note: Throw protection screens in a railway or future railway land designed in accordance with the relevant provisions of the Civil Engineering Technical Requirement CIVIL-SR-005 Design of buildings over or near railways, Queensland Rail, 2011, and the Civil Engineering Technical Requirement CIVIL-SR-008 Protection screens, Queensland Rail, 2011, comply with this acceptable outcome. And	N/A	
	AO2.4 Road barriers are installed along any proposed roads abutting a railway. Editor's note: Road barriers designed in accordance with Queensland Rail Civil Engineering Technical Requirement CIVIL-SR-007 Design and selection criteria for road/rail interface barriers comply with this acceptable outcome. And	N/A	
	AO2.5 Proposed vehicle manoeuvring areas, driveways, loading areas or carparks abutting a railway include rail interface barriers. Editor's note: A Registered Professional Engineer of Queensland (RPEQ) certified barrier design complies with this acceptable outcome.	N/A	
PO3 Buildings and structures in, over or below a railway or future railway land are able to sustain impacts to their structural integrity in the event of an impact from a derailed train.	**AO3.1** Buildings and structures, including piers or supporting elements, located in, over or below a railway or future railway land are designed and constructed in accordance with AS5100 Bridge design, AS 1170 Structural design actions and Civil Engineering Technical Requirement CIVIL-SR-012 Collision protection of	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	supporting elements adjacent to railways, Queensland Rail, 2011.		
PO4 Buildings and structures in, over, below or within 50 metres of a state-controlled transport tunnel or a future state-controlled transport tunnel have no adverse impact on the structural integrity of the state-controlled transport tunnel. Editor's note: For a railway, Section 2.5 – Tunnels of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	**AO4.1** Development in, over, below or within 50 metres of a state-controlled transport tunnel or future state-controlled transport tunnel ensures that the tunnel is: (1) not vertically overloaded or affected by the addition or removal of lateral loading (2) not adversely affected as a result of directly or indirectly disturbing groundwater or soil. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a Registered Professional Engineer of Queensland (RPEQ) certified geotechnical investigation, earthworks drawings and supporting technical details, and structural engineering drawings and supporting technical details be prepared and submitted with the application.	N/A	
PO5 Development involving dangerous goods adjacent to a railway or future railway land does not adversely impact on the safety of a railway. Editor's note: Section 2.6 – Dangerous goods and fire safety of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	**AO5.1** Development involving dangerous goods, other than hazardous chemicals below the threshold quantities listed in table 5.2 of the State Planning Policy guideline: State interest – emissions and hazardous activities, Guidance on development involving hazardous chemicals, Department of State Development, Infrastructure and Planning, 2013, ensures that impacts on a railway from a fire, explosion, spill, gas emission or dangerous goods incident can be appropriately mitigated. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a risk assessment be undertaken in accordance with Attachment 1: Risk assessment guide of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015.	N/A	
PO6 Any part of the development located within 25 metres of a state-controlled road or future state-controlled road minimises the potential to distract drivers and cause a safety hazard.	**AO6.1** Advertising devices proposed to be located within 25 metres of a state-controlled road or future state-controlled road are designed to meet the relevant standards for advertising outside the boundaries of, but visible from, a state-controlled road, outlined within the Roadside advertising guide, Department of Transport and Main Roads, 2013.	N/A	
PO7 Filling, excavation and construction does not adversely impact on or	**AO7.1** Filling and excavation does not undermine, cause subsidence of, or groundwater seepage onto a state	N/A	The proposed extension to the existing operation is located in excess of 1.5 kilometres from the nearest State controlled

Performance outcomes	Acceptable outcomes	Response	Comment
compromise the safety or operation of: (1) state transport corridors, (2) future state transport corridors, (3) state transport infrastructure. Editor's note: For a railway, Section 2.7 – Filling, excavation and ground disturbance of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	transport corridor or future state transport corridor. Editor's note: To demonstrate compliance with this acceptable outcome for a state-controlled road, it is recommended that a filling and excavation report assessing the proposed filling and excavation be prepared in accordance with the requirements of the Road planning and design manual, Department of Transport and Main Roads, 2013. Editor's note: To demonstrate compliance with this acceptable outcome for a state transport corridor, excluding a state-controlled road, it is recommended that the following be submitted with the application: (1) a RPEQ certified geotechnical investigation (2) RPEQ certified earthworks drawings and supporting technical details (3) RPEQ certified structural engineering drawings and supporting technical details. Editor's note: If a development involves filling and excavation within a state-controlled road, an approval issued by the Department of Transport and Main Roads under section 33 of the *Transport Infrastructure Act 1994* may be required. And		road, being Beerburrum Road (to the east of the site).
	AO7.2 Development involving excavation, boring, piling or blasting does not result in vibration impacts during construction or blasting which would compromise the safety and operational integrity of a state transport corridor. Editor's note: To demonstrate compliance with this acceptable outcome it is recommended that an RPEQ certified geotechnical report be prepared and submitted with the application. And	N/A	The proposed operation is located in excess of 1.5 kilometres from the nearest State controlled road and no such associated impacts are expected.
	AO7.3 Development does not store fill, spoil or any other material in a railway.	N/A	
PO8 Filling and excavation does not interfere with or impact on existing or future planned services or public utilities on a state-controlled road.	**AO8.1** Any alternative service and public utility alignment must satisfy the standards and design specifications of the service or public utility provider, and any costs of relocation are borne by the developer.	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	Editor's note: An approval issued by the Department of Transport and Main Roads under section 33 of the *Transport Infrastructure Act 1994* may be required.		
PO9 Retaining or reinforced soil structures required to contain fill and excavation: (1) do not encroach on a state transport corridor, (2) are capable of being constructed and maintained without adversely impacting a state transport corridor, (3) do not adversely impact on a state transport corridor through the addition or removal of lateral loads or surcharge loads, (4) are constructed of durable materials which maximise the life of the structure. Editor's note: For a railway, Section 2.7 – Filling, excavation and ground disturbance of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this performance outcome.	**AO9.1** Retaining or reinforced soil structures (including footings, rock anchors and soil nails) are not located in a state transport corridor or future state transport corridor. And	N/A	
	AO9.2 Retaining or reinforced soil structures in excess of an overall height of one metre abutting a state transport corridor are to be designed and certified by a structural RPEQ. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that the following be submitted with the application: (1) a RPEQ certified geotechnical investigation (2) RPEQ certified earthworks drawings and supporting technical details (3) RPEQ certified structural engineering drawings and supporting technical details. And	N/A	
	AO9.3 Retaining or reinforced soil structures that are set back less than 750 millimetres from a common boundary with a state-controlled road are certified by a structural RPEQ and designed to achieve a low maintenance external finish. And	N/A	The site does not have a common boundary with a State controlled road.
	AO9.4 Retaining or reinforced soil structures adjacent to a state-controlled road, and in excess of an overall height of two metres, incorporate design treatments (such as terracing or planting) to reduce the overall height impact. And	N/A	
	AO9.5 Construction materials of all retaining or reinforced soil structures have a design life exceeding 40 years, and comply with the specifications approved by a RPEQ. And	N/A	
	AO9.6 Temporary structures and batters do not encroach into a railway.	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	And		
	AO9.7 Surcharge loading from vehicles or the stockpiling of materials or soil on retaining or reinforced soil structures adjacent to a state transport corridor or future state transport corridor meet the requirements of AS5100.2 Bridge design—Design loads or a minimum of 10 kPa (whichever is greater). And	N/A	
	AO9.8 Excavation or any other works do not remove the lateral load of retaining structures associated with, or adjacent to, a state transport corridor. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a RPEQ certified geotechnical and structural assessment be prepared and submitted with the application.	N/A	
PO10 Filling and excavation does not cause siltation and erosion run-off from the property, or wind blown dust nuisance onto a state-controlled road.	**AO10.1** Compaction of fill is carried out in accordance with the requirements of AS 1289.0 2000 – Methods of testing soils for engineering purposes.	N/A	
PO11 Where the quantity of fill or excavated spoil material being imported or exported for a development exceeds 10 000 tonnes, and haulage will be on a state-controlled road, any impact on the infrastructure is identified and mitigation measures implemented.	**AO11.1** The impacts on the state-controlled road network are identified, and measures are implemented to avoid, reduce or compensate the effects on the asset life of the state-controlled road. Editor's note: It is recommended that a pavement impact assessment report be prepared to address this acceptable outcome. Guidance for preparing a pavement impact assessment is set out in Guidelines for assessment of road impacts of development (GARID), Department of Main Roads, 2006.	þ	A Traffic and Pavement Impact Assessment has been prepared for the proposal by MRCagney Traffic Engineers which deals with pavement impacts and potential intersection impacts (refer **Attachment 6 – Traffic and Pavement Impact Assessment**).
PO12 Filling and excavation associated with providing a driveway crossover to a state-controlled road does not compromise the operation or capacity of existing drainage infrastructure.	**AO12.1** Filling and excavation associated with the design of driveway crossovers complies with the relevant Institute of Public Works Engineering Australia Queensland (IPWEAQ) standards. Editor's note: The construction of any crossover requires the applicant to obtain a permit to work in the state-controlled road corridor under section 33 of the *Transport Infrastructure Act 1994* and a section 62 approval under the *Transport Infrastructure Act 1994* for the siting of the access and associated works.	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
PO13 Fill material does not cause contamination from the development site onto a state-controlled road.	**AO13.1** Fill material is free of contaminants including acid sulphate content, and achieves compliance with AS 1289.0 – Methods of testing soils for engineering purposes and AS 4133.0-2005 – Methods of testing rocks for engineering purposes.	N/A	
PO14 Vibration generated through fill compaction does not result in damage or nuisance to a state-controlled road.	**AO14.1** Fill compaction does not result in any vibrations beyond the site boundary, and is in accordance with AS 2436–2010 – Guide to noise and vibration control on construction, demolition and maintenance sites.	N/A	

18.2 Stormwater and drainage impacts on state transport infrastructure state code

Response column key:
þ Achieved
P/S Performance solution

Table 18.2.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
Stormwater and drainage management			
PO1 Stormwater management for the development must ensure there is no worsening of, and no actionable nuisance in relation to peak discharges, flood levels, frequency or duration of flooding, flow velocities, water quality, ponding, sedimentation and scour effects on an existing or future state transport corridor for all flood and stormwater events that exist prior to development, and up to a 1 per cent annual exceedance probability.	**AO1.1** The development does not result in stormwater or drainage impacts or actionable nuisance within an existing or future state transport corridor. Editor's note: It is recommended that basic stormwater information is to be prepared to demonstrate compliance with AO1.1. Or	þ	The proposed operation is located in excess of 1.5 kilometres from the nearest State controlled road and no such associated impacts are expected.
	AO1.2 A stormwater management statement certified by an RPEQ demonstrates that the development will achieve a no worsening impact or actionable nuisance on an existing or future state transport corridor. Or	N/A	
	AO1.3 A stormwater management plan certified by an RPEQ demonstrates that the development will achieve a no worsening impact or actionable nuisance on an existing future state transport corridor. Or	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	AO1.4 For development on premises within 25 metres of a railway, a stormwater management plan certified by an RPEQ demonstrates that: (1) the development will achieve a no worsening impact or actionable nuisance on the railway (1) the development does not cause stormwater, roofwater, ponding, floodwater or any other drainage to be directed to, increased or concentrated on the railway (2) the development does not impede any drainage, stormwater or floodwater flows from the railway (3) stormwater or floodwater flows have been designed to: (a) maintain the structural integrity of the light rail transport infrastructure (b) avoid scour or deposition (4) additional railway formation drainage necessitated by the development is located within the premises where the development is carried out (5) retaining structures for excavations abutting the railway corridor provide for drainage.	N/A	
Lawful point of discharge			
PO2 Stormwater run-off and drainage are directed to a lawful point of discharge to avoid adverse impacts on a future or existing state transport corridor.	**AO2.1** Where stormwater run-off is discharged to a state transport corridor, the discharge is to a lawful point of discharge in accordance with section 3.4 of Queensland urban drainage manual, Department of Energy and Water Supply, 2013. Or	N/A	
	AO2.2 For development on premises within 25 metres of a railway, approval from the relevant railway manager for the railway, as defined in the *Transport Infrastructure Act 1994*, schedule 6 has been gained to verify the lawful point of discharge for stormwater onto the railway. And	N/A	
	AO2.3 Development does not cause a net increase in or concentration of stormwater or floodwater flows discharging onto the state transport corridor	N/A	

Performance outcomes	Acceptable outcomes	Response	Comment
	during construction or thereafter. And		
	AO2.4 Development does not create any additional points of discharge or changes to the condition of an existing lawful point of discharge to the state transport corridor.	N/A	
Sediment and erosion management			
PO3 Run-off from upstream development is managed to ensure that sedimentation and erosion do not cause siltation of stormwater infrastructure in the state transport corridor.	**AO3.1** Development with a high risk of erosion incorporates erosion and sediment control measures. Editor's note: For a state-controlled road where a development has a high risk of erosion, an erosion and sedimentation control plan should be provided to support a stormwater management statement or stormwater management plan. Section 1 of the *Stormwater guideline for environmentally relevant activities*, Department of Environment and Heritage Protection, 2014, defines development considered to have a high risk of erosion.	N/A	The proposed operation is located in excess of 1.5 kilometres from the nearest State controlled road and no such associated impacts are expected.

19.2 Transport infrastructure and network design state code

Response column key:
- þ Achieved
- **P/S** Performance solution
- **N/A** Not applicable

Table 19.2.1: All development

Performance outcomes	Acceptable outcomes	Response	Comment
All state transport infrastructure – except state-controlled roads			
PO1 Development does not compromise the safe and efficient management or operation of state transport infrastructure or `transport networks.` Editor's note: To demonstrate compliance with this performance outcome, it is recommended that a traffic impact assessment be prepared. A traffic impact assessment should identify any upgrade works required to mitigate impacts on the safety and operational integrity of the state transport corridor.	No acceptable outcome is prescribed.	**P/S**	A Traffic and Pavement Impact Assessment has been prepared for the proposal by MRCagney Traffic Engineers which deals with pavement impacts and potential intersection impacts (refer **Attachment 6 – Traffic and Pavement Impact Assessment**).
PO2 Development does not compromise planned upgrades to state transport infrastructure or the development of future state transport infrastructure in `future state transport corridors`. Editor's note: Written advice from DTMR advising that there are no planned upgrades of state transport infrastructure or future state transport corridors that will be compromised by the development will assist in addressing this performance outcome.	**AO2.1** The layout and design of the proposed development accommodates planned upgrades to state transport infrastructure. And	**N/A**	
	AO2.2 The layout and design of the development accommodates the delivery of state transport infrastructure in future state transport corridors. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a traffic impact assessment be prepared.	**N/A**	
PO3 Development does not adversely impact on the safety of a railway crossing.	**AO3.1** Development does not require a new railway crossing. Or	**N/A**	
	AO3.2 A new railway crossing is grade separated. Or	**N/A**	
	AO3.3 Impacts to level crossing safety are mitigated. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a traffic impact assessment be prepared. An impact on a level	**N/A**	

Performance outcomes	Acceptable outcomes	Response	Comment
	crossing may require an Australian Level Crossing Assessment Model (ALCAM) assessment to be undertaken. Section 2.2 – Railway crossing safety of the Guide to Development in a Transport Environment: Rail, Department of Transport and Main Roads, 2015, provides guidance on how to comply with this acceptable outcome. And		
	AO3.4 Upgrades to a level crossing are designed and constructed in accordance with AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings and applicable rail manager standard drawings. And	**N/A**	
	AO3.5 Access points achieve sufficient clearance from a level crossing in accordance with AS1742.7 – Manual of uniform traffic control devices, Part 7: Railway crossings by providing a minimum clearance of 5 metres from the edge running rail (outer rail) plus the length of the largest vehicle anticipated on-site. And	**N/A**	
	AO3.6 On-site vehicle circulation is designed to give priority to entering vehicles at all times.	**N/A**	
State-controlled roads			
PO4 Development does not compromise the safe and efficient management or operation of state-controlled roads. Editor's note: A `traffic impact assessment` will assist in addressing this performance outcome.	No acceptable outcome is prescribed.	**P/S**	A Traffic and Pavement Impact Assessment has been prepared for the proposal by MRCagney Traffic Engineers which deals with pavement impacts and potential intersection impacts (refer **Attachment 6 – Traffic and Pavement Impact Assessment**).
PO5 Development does not compromise planned upgrades of the state-controlled road network or delivery of `future state-controlled roads`. Editor's note: Written advice from DTMR that there are no planned upgrades of state-controlled roads or future state-controlled roads which will be compromised by the development will assist in addressing this performance	**AO5.1** The layout and design of the development accommodates planned upgrades of the state-controlled road. And	**N/A**	
	AO5.2 The layout and design of the development accommodates the delivery of future state-controlled roads. Editor's note: To demonstrate compliance with this acceptable outcome, it is recommended that a traffic impact assessment be prepared.	**N/A**	

Performance outcomes	Acceptable outcomes	Response	Comment
outcome.			
PO6 Upgrade works on, or associated with, the state-controlled road network are undertaken in accordance with applicable standards.	**AO6.1** Upgrade works for the development are consistent with the requirements of the Road planning and design manual, 2nd edition, Department of Transport and Main Roads, 2013. And	**N/A**	
	AO6.2 The design and staging of upgrade works on or associated with the state-controlled road network are consistent with planned upgrades.	**N/A**	
PO7 Development does not impose traffic loadings on the state-controlled road network which could be accommodated on the local road network.	**AO7.1** New lower order roads do not connect directly to a state-controlled road. And	**N/A**	
	AO7.2 The layout and design of the development directs traffic generated by the development to use lower order roads.	**N/A**	