STATEWIDE
RIVER & STREAM MANAGEMENT PTY. LTD

MORDIALLOC FREEWAY PROJECT

Independent Reviewer and Environmental Auditor

Quarterly Construction Audit

Report 7, September 2021

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CONTENTS

1 Background

1.1 What are the Environmental Performance Requirements?

This Environmental Management Framework (EMF) was developed by Major Road Projects Victoria (MRPV) to provide the Mordialloc Bypass Project with a transparent and integrated framework for managing environmental risk. In order to achieve acceptable environmental outcomes, the EMF requires the implementation of a number of Environmental Performance Requirements (EPRs).

The EPRs address the following identified risks:

a) Acid sulfate soil / contaminated land

b) Air quality

c) Biodiversity and habitat/ wetlands and waterways

d) Cultural heritage (Aboriginal heritage and historic heritage)

e) Economic

f) Environmental Management

g) Greenhouse gas / sustainability

h) Landscape, urban design and visual

i) Noise and vibration

j) Social

k) Surface Water and Ground Water

l) Traffic and transport

The EPRs relevant to the construction and operational phase of the project are listed in the following table.

Table 1: EPR plans that require review

EPR No.	EPR Title
EM1	Environmental Management Plans
EM2	Environmental complaints management plan
AQ1	Air quality (operation)
AQ2	Air quality (construction)
B1	Fauna habitat
B2	Lighting design
B3	Native vegetation and habitat
B4	Fauna (construction)
B5	Native vegetation (construction)

B6	Flora and Fauna (operation)
CL1	Soil Management Plan
CL2	Acid Sulphate Soil Management Plan
CL3	Passive landfill gas capture and venting
CL4	Landfill Gas Management Plan (Construction)
CL5	Landfill Gas Management Plan (Operation)
CL6	PFAS Management Plan
CL7	Landfill material
E1	Business Disruption Plan
E2	Utility assets
GG1	Greenhouse gas monitoring and reporting
GG2	Emissions reduction
H1	Cultural Heritage Management Plan
H2	Unidentified non-Aboriginal historical archaeological sites
H3	Non-Aboriginal heritage sites
LV1	Landscape and urban design
LV2	Crime prevention through environmental design
LV3	Reinstatement works
LV4	Lighting (operation)
LV5	Light spillage (construction)
LV6	Tree removal
LV7	Landscape management strategy
LV8	Independent urban design review panel
NV1	Noise and vibration (design)
NV2	Construction Noise and Vibration Management Plan
NV3	Traffic noise verification
S1	Community and Stakeholder Engagement Plan
S2	Recreational facilities
T1	Intersection and freeway design and performance

1.2 Why Do the EPRs Need to be Reviewed?

EPR EM3 requires the D&C contractor to appoint an Independent Reviewer and Environmental Auditor (IREA), as detailed below:

Independent Reviewer and Environmental Auditor

Appoint a suitably qualified Independent Reviewer and Environmental Auditor (IREA) to review and certify the CEMP and other management plans as required by the EPRs, in accordance with the Environmental Management Framework. The IREA must be an accredited Environmental Auditor or an EPA-appointed auditor. During construction audit reports must be provided to MTIA and the Minister for Planning on a regular basis as appropriate. Audit reports are to be made available to the public.

2 Audit Scope and Criteria

This review sighted the plans and documents relevant to specific EPRs listed in section 1.1 of this report. The review confirmed if:

- Plan/s and/or other document/s have been produced by McConnell Dowell Decmil Joint Venture (MCDDJV) for each Environment Performance Requirement (EPR);
- Assessed the design parameters and considerations are indicative of MRPV specification requirements and compliant with the contract specification; and
- Determined if the requirements of the EPRs have been implemented and met by MCDDJV.

A summary of the EPR requirements and the findings are presented in Section 3of this report.

NOTES:

- The existence of plans to meet EPR construction requirements were reviewed and assessed by the IREA at the commencement of the project. This previous review is referenced as evidence in Section 3.
- A number of EPRs include requirements that can only be completed after the freeway is operational for some period. These requirements cannot be assessed at this stage, therefore, this report excludes these future requirements and only assess requirements due as of the date of the audit.

3 Previous Audit Recommendation

Previous Finding Status:
"Y" - Completed
"P" - Partially completed
"O" - Open, not actioned
"On-going" - Actions that have commenced, but will need to continue for some period
"NA" - No longer applicable

Recom. No.	Recommendation	Findings	Status
1.	The majority of the site is now paved, therefore: • water carts should concentrate on those area that are still to be paved or where earthworks, movement of stockpiles or spreading of soil is still occurring; and • street sweepers should concentrate on areas where dirt may be tracked onto paved areas.	Street sweeper and water truck drivers have been advised of the requirement. Observations by the Environment Team have confirmed that it is being implemented.	Y

Summary:

Completed = 1 out of 1 (100 %)

4 EPR Assessment and Findings

Table 2: EPR requirements, findings and level of completion

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
EM1	Environmental management plans	Prepare and implement a Construction Environmental Management Plan (CEMP) and other management plans as required by the EPRs in accordance with the Environmental Management Strategy and prepare and implement an Operations Environmental Management Plan (OEMP) as required by the EPRs in accordance with the Environmental Management Framework. All plans must be prepared to the satisfaction of MTIA or the authority specified in the EPRs. Plans that apply to the operation phase of the project, including the OEMP, must be prepared in conjunction with VicRoads. All plans specified in the EPRs must be implemented. The CEMP must be prepared in accordance with Environment Protection Authority (EPA) Publication 480 Environmental Guidelines for Major Construction Sites (EPA Victoria 1996), EPA Publication 275 Construction Techniques for Sediment Pollution Control (EPA Victoria 275) and relevant best practice construction guidelines. The process for development and implementation of the CEMP and other management plan(s) must include consultation with the Kingston City Council, Greater Dandenong City Council, VicRoads, Melbourne Water and EPA Victoria as relevant. These consultation processes must be described in the relevant environmental plans. The CEMP and other management plan(s) must be integrated and must be approved by MTIA prior to the commencement of works (except for preparatory works referred to in the Incorporated Document). The OEMP must be approved by the MTIA prior to opening the project to the public.	The CEMP was prepared and audited at the commencement of the project and found to comply with all EPR requirements. The implementation of the CEMP and related sub-plans and procedures was confirmed during the quarterly audits. An Operation Environmental Management Plan for swales and basins has been developed. A 7 year flora and fauna monitoring plan has also been developed. Consultation with external bodies has occurred and the OEMP provided to MRPV. These two plans will need to be implemented by DOT.	Y
EM2	Environmental complaints management	Prior to the commencement of works a process for recording, managing, and resolving complaints received from affected stakeholders must be developed and implemented. The complaints management arrangements must be consistent with Australian Standard AS/NZS 100002: 2014 Guidelines for Complaint	A process for recording, managing and resolving all forms of complaints	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		Management in Organisations.	including environmental related topics are addressed in the Communications and Stakeholder Management Plan [ref 1202-01-CSE-MPL-1000-00010]. The process of responding to complaints was reviewed by the IREA during the quarterly audits.	
EM3	Independent Reviewer and Environmental Auditor	Appoint a suitably qualified Independent Reviewer and Environmental Auditor (IREA) to review and certify the CEMP and other management plans as required by the EPRs, in accordance with the Environmental Management Framework. The IREA must be an accredited Environmental Auditor or an EPA-appointed auditor. During construction audit reports must be provided to MTIA and the Minister for Planning on a regular basis as appropriate. Audit reports are to be made available to the public.	An IREA was appointed by MCDDJV to audit the EPRs.	Y
AQ1	Air quality (operation)	The project must be designed and constructed to minimise air quality impacts during operation and to ensure the requirements of relevant legislation, policies and guidelines are met, including appropriate operational monitoring to obtain data in order to confirm model predictions and inform potential mitigation responses particularly for NO2, but not limited to: • State Environment Protection Policy (Air Quality Management) • State Environment Protection Policy (Ambient Air Quality).	A freeway was designed instead of a bypass to exclude traffic lights and prevent stop-start traffic, which would have increased vehicle emissions. NOTE: Air quality monitoring is excluded from this audit, as it will need to be confirmed during operational phase by DOT.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
AQ2	Air quality (construction)	The air quality management plan must be prepared in consultation with EPA Victoria, including real-time monitoring to inform the dust control in response to adverse weather events in time to minimise impacts to sensitive receptors. The plan must be approved prior to the works. Measures to minimise dust, odour and other air emissions must be implemented in accordance with relevant legislation, policies and guidelines including an air quality management plan, but not limited to: • EPA Victoria Publication 480: Environmental Guidelines for Major Construction Sites • VicRoads Contract Specification Standard Section 177, with PM10 monitoring undertaken for both residential and commercial receptors.	An air quality management and monitoring plan (1202-01-ENV-PLN-1000-00102) was developed and audited prior to project commencement. The implementation was reviewed during each quality audit.	Y
B1	Fauna habitat	Direct and indirect impacts on fauna must be minimised by preserving and enhancing habitat and facilitating habitat connectivity where practicable. This will be achieved through implementation of (as a minimum): • fauna crossings, including culverts modified for fauna movement between the Braeside Park Wetlands and Woodlands Industrial Estate Wetlands (minimum of 3 culverts), and between the Waterways wetland waterbodies south of Governor Road (minimum of 2 culverts) • multi-function fauna barriers, to limit fauna mortality and limit disturbance to surrounding habitat, at the following areas, subject to detailed design: – Braeside Park: on the east side of the new roadway, provision of a 3 metre high barrier extending from Lower Dandenong Road to Governor Road – Woodlands Wetlands: on the west side of the new roadway, provision of a 4 metre high barrier extending from Park Way to the south approximately 750 metres, transitioning to a 3 metre high barrier to be provided from that location to Governor Road – Waterways Wetlands (north-west): on the west side of the new roadway, provision of a 2 metre high barrier extending from Governor Road to the south approximately 600 metres, transitioning to a 1 metre high barrier to be provided from that location to Bowen Park Way – Waterways Wetlands (north-east): on the east side of the new roadway, provision of a 2 metre high barrier extending from Governor Road to the south approximately 200 metres, transitioning to a 2.5 metre high barrier to be provided from that location to the south approximately 175 metres, transitioning to a 3 metre high barrier to be provided from that location to the south approximately 200 metres, transitioning to a 2.5 metre barrier to be provided from that location to Bowen Park Way – Waterways Wetlands (bridge structure): provision of a 3 metre high barrier on both sides of the new	Fauna crossings have been installed along with the multi-function fauna barriers. Fencing is in place. Landscaping was completed. The hardstand in the Waterway area was in the process of being removed. Total removal of the hardstand and replanting in the wetlands will be completed in approximately 1 - 1.5 months following this review. The waterways bridge is a dual bridge design. NOTE: Even though replanting had not been completed in all areas at the time of this audit, it	Y (once replanting completed)

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		roadway bridge structure, extending from Bowen Park Way south to the Melbourne Water Levy • wildlife friendly fencing that does not use barbed wire, including to control human and dog access to Braeside Wetlands and Braeside Park from the shared user path or roadway • landscaping including: – the use of site-specific indigenous species – creating or revegetating habitat that maximises connectivity and minimises predation risk at fauna crossing points and under the constructed bridge over Waterways Wetlands – open wetland and grassy habitat where appropriate, including swales adjacent to fauna barriers – reinstatement of habitat in areas of the Waterways Wetlands disturbed by the project, including planting of wetlands species in accordance with the landscape plans (EPR LV1) • a dual bridge structure at Mordialloc Creek/Waterways Wetland to allow light penetration and facilitate fauna movement. The multi-function fauna barriers must be solid and free from gaps or cracks and must be constructed from a material with an acoustic performance of at least Rw + Ctr 25. During detailed design and in consultation with a suitably qualified specialist ecologist, refine proposed height, form and materiality of the multi-function fauna barriers to optimise the achievement of bird flight diversion objectives without compromising the achievement of other objectives.	was substantially completed. Additionally, the revegetation contractor carrying out the replanting will not be paid unless the replanting is completed. Therefore, the auditor is confident the works will be finalised as required.	
B2	Lighting design	Fauna sensitive operational lighting design principles must be incorporated into lighting design in sensitive areas around wetlands and Braeside Park. The design principles are: • Siting of lights: – Use lights only where necessary and use the minimum brightness (lumens) possible – Site lighting columns away sites of ecological value to the extent possible – Minimise the height of lighting where possible. • Fixtures: – Use shielding to shield bulbs and lenses and to minimise light spill onto sites of ecological value – Avoid reflective surfaces under lights. • Wavelengths: – Use narrow-spectrum light sources to lower the range of species affected by lighting, and avoid blue and white wavelengths (4200 kelvin, ideally <3000 kelvin) – Use long wavelength bulbs to minimise the emission of UV light. Best practicable measures must be adopted to avoid and minimise adverse impacts from construction on	Lighting designs were reviewed and verified by the IREA at project commencement.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		wildlife using habitat adjacent to the project.		
B3	Native vegetation and habitat	Native vegetation removal must be avoided, minimised and managed in accordance with the Guidelines for the removal, destruction or lopping of native vegetation 2017 (Guidelines 2017). Native vegetation offsets will be required for the removal of native vegetation, with the area (in hectares) to be calculated and approved in accordance with these guidelines. Offsets where possible will be integrated with any offset requirements under the EPBC Act. No-go zones will be established to protect sensitive vegetation, trees and habitat areas that are not removed in accordance with the Guidelines 2017. No-go zones will be detailed, protected and managed in accordance with the requirements set out in AS4970-2009 Protection of Trees on Development Sites and mapped in the CEMP.	Offsets and vegetation plans were reviewed and verified by the IREA at project commencement. Compliance with the plans and retention of vegetation was confirmed at each quarterly audit.	Y
B4	Fauna (construction)	Minimise, monitor and document impacts on fauna during construction works, including: • obtaining all relevant permits under the Wildlife Act 1975 • pre-clearing fauna surveys and relocation of fauna by qualified fauna handlers to nearby suitable habitat • directional temporary construction lighting to minimise lighting impact on sensitive fauna habitat • noise and vibration impact on sensitive fauna • if construction works near wetlands occur between September and March, monitoring of birds before and at regular intervals during construction to assess disturbance impacts, with minimisation of noisy and high disturbance works where practicable • regular inspections of excavations/trenches • excluding heavy construction vehicles along Edithvale Road near sensitive habitats • adding identified high value habitat trees (including hollow-bearing and large trees) into no-go zones where suitable • closure of excavations/trenches at the end of each day, where practicable, inspection of excavation/trenches for fauna at the start of each day and immediately before backfilling • minimise barriers to fauna movement at the end of each day and installation of fauna movement devices where effective to create safe crossing opportunities • enforced speed limits of 40km per hour within construction areas, outside of existing arterial roads.	The fauna management plan and permits were review and verified by the IREA at project commencement. Implementation was confirmed during the quarterly audits, which included regular bird surveys throughout the project duration.	Y
B5	Native vegetation (construction)	Monitor, minimise and document impacts on retained/adjacent native vegetation, including: • pre-clearing surveys for threatened flora in the Mordialloc Creek/Waterways wetland impact area are to be conducted by a suitably qualified ecologist, and plants are to be relocated to a suitable recipient	The vegetation management plan was confirmed and verified by	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		site where considered practicable by the ecologist • mapping and fencing of no-go zones and tree protection zones in accordance with AS4970-2009 Protection of Trees on Development Sites • no site compound, temporary offices, hardstand, plant storage facility or stockpiles will be established within no-go zones, nor will any works be conducted in such areas • environmental induction/training for construction personnel • development and implementation of weed hygiene measures to avoid the spread or introduction of weeds during construction, including vehicle and equipment hygiene measures • as far as practicable, re-establishing the landform and substrate under the Mordialloc Creek bridge following bridge construction. Any revegetation or replanting within listed threatened ecological communities should use species consistent with the communities' composition as far as practicable. Where consistent species cannot be used, minimising further loss of ecological community should be prioritised over plantings that may outcompete the extant community.	the IREA at project commencement. Implementation was confirmed during the quarterly audits.	
B6	Flora and Fauna (operation)	Prior to opening the project to the public, a Flora and Fauna Monitoring and Management Plan must be prepared in consultation with Department of Environment and Energy (DoEE), Department of Environment, Land, Water and Planning (DELWP), Melbourne Water, Parks Victoria, VicRoads and any other relevant land manager. The plan must include flora and fauna monitoring by ecologists after opening, including: • An outline of the monitoring arrangements, including frequency and duration, in consultation with DELWP. Monitoring must occur annually for at least 7 years, including one monitoring event immediately prior to opening • available database information should be taken into account for benchmarking • monitoring of bird use of nearby wetlands (Woodlands Wetlands, Braeside Park Wetlands, and Waterways Wetlands) and threatened flora and weeds at the Waterways Wetlands • Design, implement and maintain an Aquatic Flora and Fauna Ecosystem Reinstatement and Maintenance Plan for the Waterways Wetlands ecological habitat • monitoring of measures to allow habitat connectivity for threatened fauna including Waterways bridge, fauna culverts, and revegetation • evaluation of measures (fencing and multi-function fauna barriers) to reduce wildlife and vehicle collisions.	A 7 year flora and fauna management and monitoring plan has been developed. Relevant authorities were provided with the plan for comment.	Y
CL1	Soil Management	Prior to the commencement of works (other than preparatory works referred to in the Incorporated Document), a Soil Management Plan {SMP) must be prepared and implemented in accordance with	The soil management plan (1202-01-ENV-PLN-	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
	Plan	relevant regulations, standards and best practice guidelines including the National Environment Protection (Assessment of Site Contamination) Measure 1999 as amended in 2013. The plan must be developed in consultation with EPA Victoria and address the management requirements associated with the handling, storage, reuse and/or disposal of soils (clean fill and contaminated spoil) and comply with EPA Victoria's contaminated soil management and reuse on major infrastructure projects approvals process. The SMP must make provision for additional assessments to be conducted, where required, to more accurately locate sources of contamination and to refine management measures. Investigations must be undertaken in accordance with EPA Publication 702 (Soil Sampling). The SMP must follow published EPA guidance on contaminated soil management and reuse on major infrastructure projects. The SMP must include an Acid Sulphate Soil Management Plan (EPR CL2) and management requirements for PFAS contaminated soils (see EPR CL6).	1000-0010), that incorporates acid sulphate soil management, was reviewed by the IREA at commencement of the project.	
CL2	Acid Sulphate Soil Management Plan	Prior to the commencement of works (other than preparatory works referred to in the Incorporated Document), prepare an Acid Sulphate Soil Management Plan in consultation with EPA Victoria in accordance with the Industrial Waste Management Policy (Waste Acid Sulphate Soils) 1999, EPA Publication 655.1 Acid Sulphate Soil and Rock, and relevant EPA regulations, standards and best practice guidance. This plan must include: • locations and extent of potential acid sulphate soils that could be disturbed or otherwise affected by the project, including site-specific information for areas at risk • assessment of potential impact on human health, odour and the environment • measures to prevent oxidation of acid sulphate soils wherever possible, and • suitable sites for management, reuse or disposal of acid sulphate soils with regard to sensitive receptors (wetlands, waterways and residential areas).	As above	Y
CL3	Passive landfill gas capture and venting	A passive landfill gas capture and ventilation system must be developed where the roadway traverses the landfill area to facilitate the emission of landfill gas to the atmosphere so as to minimise accumulation of landfill gas below the roadway. The passive landfill gas capture and ventilation system must: • be designed in conjunction with VicRoads and in consultation with EPA Victoria • meet the landfill gas management requirements of the EPA's guideline Best Practice Environmental Management: Siting, design, operation and rehabilitation of landfills (EPA Victoria 2015) and Workplace Exposure Standards for Airborne Contaminants (Safe Work 2013) • be reviewed and approved by the IREA established under EPR EM4. During design, provision must be made for gas protection measures to be provided at all underground	The landfill management plan, which incorporates landfill gas management and monitoring, was reviewed by the IREA at commencement of the project. Implementation was confirmed during the quarterly audits.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		services, pits and other voids within the road reserve in locations where landfill gas is emitted, or to which it has the potential to migrate. The passive landfill gas capture and ventilation system(s) must be maintained for the operational life of the project except where otherwise agreed to by EPA Victoria.		
CL4	Landfill Gas Management Plan (Construction)	Prior to the commencement of works (other than preparatory works defined in the Incorporated Document), a Landfill Gas Management Plan (Construction) must be prepared (EPR EM2). The plan must be developed in consultation with EPA Victoria and in accordance with relevant regulations, standards and best practice guidelines including, but not limited to, Best Practice Environmental Management: Siting, design, operation and rehabilitation of landfills (EPA Victoria 2015) and Workplace Exposure Standards for Airborne Contaminants (Safe Work 2013). The plan must detail specific monitoring and risk mitigation requirements that are to be implemented during the construction phase to reduce landfill gas-related risks to neighbouring land users, site workers, plant and equipment. The Landfill Gas Management Plan must: • reference applicable regulatory requirements • detail the nature and extent of contamination • include details of design and construction requirements for passive landfill gas and venting systems • define roles and responsibilities • detail landfill gas monitoring and reporting requirements • include monitoring requirements for explosive atmospheres and fire risks during construction • include guidelines for work areas which constitute confined spaces, and • include requirements for use of spark and flame emitting equipment, tools or plant during construction works.	As above	Y
CL5	Landfill Gas Management Plan (Operation)	Prior to the completion of construction of the passive landfill gas capture and venting system (EPR CL3) a monitoring and management program for surface, sub-surface and internal/underground voids, pits and service trenches will be specified within a Landfill Gas Management Plan (Operation). The plan must be developed in consultation with EPA Victoria and assess ongoing risk associated with landfill gas generated by the former landfill(s) in the northern portion of the project area. The plan must outline procedures for any future works within the project area, means of protection of in-ground gas protection/mitigation	The landfill gas management plan (operations) was reviewed and implementation confirmed by the IREA during quarterly audit 6.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
CL6	PFAS Management Plan	Prior to the commencement of works (other than preparatory works referred to in the Incorporated Document), a site-specific PFAS management plan must be prepared in consultation with EPA Victoria in accordance with EPA Publication 1669.2. Interim position statement on PFAS (EPA Victoria 2018) and the Heads of EPAs Australia and New Zealand PFAS National Environmental Management Plan (PFAS NEMP) (HEPA2018).	PFAS management was incorporated in the soil management plan which was reviewed and verified by the IREA at commencement of the project.	Y
CL7	Landfill material	Structures that penetrate the landfill must be designed and constructed to avoid the creation of additional pathways for contaminants to move from leachate to surrounding groundwater and minimise the need for landfill material to be removed in consultation with the EPA. The structures must be designed to avoid impacts on groundwater flows and groundwater quality, including consideration of vertical hydraulic gradients and lateral spread of contamination taking into account the direction of groundwater flow.	The plan for construction over the landfill was reviewed and verified by the IREA at commencement of the project.	Y
E1	Business Disruption Plan	During design and construction, impacts on local businesses must be minimised through the preparation and implementation of a Business Disruption Plan. The Business Disruption Plan will be consistent with an approved Community and Stakeholder Engagement Management Plan (EPR S1) and include: • transport planning prior to road closures to minimise impacts on business access and parking (EPR T2) • a process for communication with traders and businesses • management of potential amenity impacts during construction and operation (EPR AQ1, AQ2, NV2, and NV3).	The plan was reviewed and verified by the IREA at commencement of the project.	Y
E2	Utility assets	Through detailed design and construction, the impacts on utility assets must be minimised to the extent practicable including, but not limited to: • stormwater and sewer assets • electricity transmission assets (overhead and underground lines) • gas and fuel pipelines • communications lines (e.g. fibre optic cables). If relocations are required to facilitate the project, utility assets must be protected and, where required, modified to the satisfaction of the asset owners.	The asset management plan was reviewed and verified by the IREA at commencement of the project.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
GG1	Greenhouse gas monitoring and reporting	Minimise and manage greenhouse gas emissions (GHG) arising from construction, operation and maintenance through the integration of sustainable design practices. Prior to commencement of works, a Sustainability Management Plan (SMP) which includes mandatory actions to monitor and report construction phase greenhouse gas emissions and to benchmark predicted operational phase greenhouse emissions in accordance with Mat-1 and Ene-1 credits of the Infrastructure Sustainability (IS) rating tool (v1.2).	The sustainability management plan has been reviewed and verified by the IREA at commencement of the project. The Infrastructure Sustainability Council (ISC) carried out independent audits of the project to confirm implementation.	Y
GG2	Emissions reduction	The materials and equipment for the project must be selected with the intent to reduce the project associated GHG emissions during the construction and operational phases. A verifiable improvement in project GHG emissions must be achieved by achieving a minimum of Mat-1 (Level 1) and Ene-1 (Level 2) credits of the Infrastructure Sustainability (IS) rating tool (v1.2). A minimum of 20% of construction phase energy must be purchased from an accredited GreenPower product.	Achievement of all requirements for this EPR was independently confirmed by ISCA.	Y
H1	Cultural Heritage Management Plan	Comply with and implement the Cultural Heritage Management Plan (CHMP) approved under the Aboriginal Heritage Act 2006.	CHMP checklist inspections occurred weekly from the start of the project and records	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
			retained for review	
H2	Unidentified non-Aboriginal historical archaeological sites	An archaeological discovery protocol must be prepared that specifies measures to avoid and minimise impacts on any previously unidentified historical archaeological sites and values discovered during construction. The management protocol must be consistent with the requirements of the Heritage Act 2017 and must be developed in consultation with Heritage Victoria. The protocol must include procedures for ceasing work if human remains or archaeological artefacts are discovered, notifying Heritage Victoria of the find, obtaining consent to deal with the remains or artefact, and dealing with the remains or artefact in accordance with the consent.	Actions to be taken in case of an archaeological discovery were part of project Cultural Heritage Management Plan reviewed and verified by the IREA at project commencement and confirmed during the quarterly audits. It also formed part of the induction training also reviewed by the IREA.	Y
H3	Non-Aboriginal heritage sites	The project must be designed to avoid damage to the Braeside Park Precinct brick buildings. Prior to the commencement of works that have the potential to impact on heritage structures or places, appropriate heritage protection plans must be developed for inclusion in the CEMP and physical protection measures must be implemented to avoid or mitigate potential impacts to the heritage assets.	Protection of the Braeside Park Precinct brick buildings was incorporated in the design, reviewed by the IREA at the start of the project and inspected during the quarterly audits.	Y
LV1	Landscape and urban design	Landscape and urban design plans must be developed prior to the commencement of works (other than preparatory works referred to in the Incorporated Document) and must respond to or be based on relevant standards and the best practice principles of the: • Landscape Concept Plan (VicRoads, August 2018) and Landscape and Urban Design Strategy (Aspect Studios, September 2018) for the project • Good Design Principles - Transport (OVGA 2015) • Urban Design Charter for Victoria, and • Urban Design Guidelines for Victoria (DELWP 2017). The landscape and urban design plans must be prepared by suitably qualified professionals in consultation	The landscape management plan was reviewed and verified by the IREA at the start of the project and implementation reviewed during the quarterly audits.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		with relevant stakeholders, including Kingston City Council, and must incorporate, where practicable, high quality integrated mitigation measures to minimise the landscape and visual impact associated with the project, including in respect of: • open spaces and recreational spaces • bridges and structures • significant views from the public domain • community facilities • residential interfaces • industrial interfaces, and • heritage assets. The landscape and urban design plans must: • include vegetation screening appropriate for visually impacted community spaces, including residential areas and public open spaces • in high traffic areas and at sensitive interfaces make use of mature tree stock (15 litre) where appropriate in combination with tube stock and advanced tree plantings to reduce the initial visual impacts • denser planting of a 15-metre-wide band of trees (small and medium size) at areas where residences are within 35 metres of the roadway with exception of the roadside south of Springvale Road between chainage (CH) CH30,900 to CH31,200 [refer to Attachment 1A of the Special Conditions]. • ensure that visually apparent elements (including acoustic and other barriers, bridges and abutments) are the subject of an integrated landscape and urban design process • minimise overshadowing by acoustic barriers of residential properties • utilise colours and materials derived from the existing landscape and ecological environment • make use of appropriate ecologically sensitive indigenous planting • consider existing landscape character and sensitivities • enhance key gateway streetscapes• maintain and enhance existing pedestrian connections, where practicable, and ensure that the underpass at Braeside Park achieves best practice urban design principles • be developed in consultation with appropriate Traditional Owner groups to provide direction on appropriate landscape typologies, land management practices and principles, and • incorporate requirements of EPR LV2 and EPR LV3. Landscaping and urban design for the project in accordance with the landscape and urban design plans must be implemented and maintained (EPR LV7).		

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
LV2	Crime prevention through environmental design	Landscape and urban design plans must protect and, where practicable, improve access to, and amenity for, potentially affected residents, open spaces, pedestrian and cyclist networks, social and community infrastructure and commercial facilities, whilst meeting the requirements of EPR B2. This includes implementing the principles and guidelines of Crime Prevention Through Environmental Design (CPTED) and Urban Design Guidelines for Victoria (DELWP 2017) and maximising passive surveillance levels as far as practicable.	The landscaping plan (which included public access areas) was reviewed by the IREA at the start of the project and inspected during the quarterly audits.	Y
LV3	Reinstatement works	Within 12 months of the commencement of operation, the public open spaces, vegetation cover and facilities disturbed by temporary works must be reinstated to the reasonable satisfaction of the relevant land manager.	This EPR is not due until 12 months after the project opens. However, areas have been reinstated progressively as construction was completed (confirmed by IREA during quarterly audits). All reinstatement works should be completed within 1-1.5 months of this audit. NOTE: Even though reinstatement had not been completed in all areas at the time of this audit, it was substantially completed. Additionally, the revegetation contractor carrying out the replanting will not be paid unless the replanting is completed. Therefore, the auditor is confident the works will be finalised as required.	Y (once all works are completed ahead of scheduled requirement)

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
LV4	Lighting (operation)	All lighting of permanent structures must be designed to minimise light spillage and protect the amenity of adjacent land uses to the extent practicable. Lighting in sensitive areas around wetlands and Braeside Park must also comply with EPR B2.	The lighting design was reviewed and verified by the IREA at the start of the project.	Y
LV5	Light spillage (construction)	All lighting during construction must be managed in such a way as to minimise light spill to surrounding residential land uses, sensitive areas including wetlands and Braeside Park, and neighbourhoods. The strategies and techniques to do so must be included in the CEMP.	Lighting during construction was included in the CEMP, which was reviewed and verified by the IREA at the start of the project	Y
LV6	Tree removal	Minimise the removal of mature trees, particularly large amenity trees and those within or connected to public open spaces, that are not currently protected by no-go zones as described in EPR B3.	Several large trees and sections of native vegetation were retained that were not included in the design no-go-zones. The retention of trees was assessed and confirmed during the quarterly audits. The avoidance of tree removal will also be quantified and verified when the assessment report produced by the contractor Habitat Management Services is submitted to DELWP in order to reconcile the actual amount of tree removal with native vegetation offsets	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
			originally sought.	
LV7	Landscape management strategy	A landscape management strategy must be developed and implemented to ensure healthy growth of planted vegetation prior to road opening. The strategy will include watering and weed management that ensures establishment to include a monitoring program. • The landscape plan must ensure the reinstatement of soils is of sufficient quality and volumes to support the long-term viability of replacement plantings. Ensure adequate soil moisture in tree root zones especially during their establishment stage • Employ water sensitive urban design principles (WSUD) where possible • The landscape plan must specify the locations where installations of advanced trees are indicated to minimise impact of tree removal. The landscape plan must identify locations for planting prior to construction works where feasible to do so.	The landscape management plan was reviewed and verified by the IREA at the start of the project and implementation confirmed during the quarterly audits.	Y
LV8	Independent urban design review panel	A suitably qualified Independent Urban Design Review Panel must be appointed for the project by MTIA. The landscape and urban design plans and Landscape Management Strategy must be referred to the Independent Urban Design Review Panel for review against the relevant EPRs and project objectives.	An urban design panel was established and chaired by an independent expert (Manager of SMEC's landscape practice). Minutes were maintained during the 9 meetings over the project life and reviewed by the IREA.	Y
NV1	Noise and vibration (design)	Noise and vibration impacts on residents during operation must be minimised by the inclusion of appropriate noise attenuation measures and road surface specifications in the design. Road traffic noise emissions must comply with the Project Objective Noise Levels: • 63dBA LlO, 18Hr for the new bypass, ·and • 68dBA LlO, 18Hr for the Mornington Peninsula Freeway works • For noise-sensitive receivers as defined in the VicRoads Traffic Noise Reduction Policy. Design year 2031 must be used for the purpose of traffic noise modelling as part of the detailed design development.	The noise attenuation design and modelling was reviewed and verified by the IREA at project commencement. Note: The achievement of the design noise criteria cannot be assessed (by DOT) until after the	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
			freeway is operational and has therefore been exclude from this audit.	
NV2	Construction Noise and Vibration Management Plan	A Construction Noise and Vibration Management Plan (CNVMP) prepared in consultation with EPA Victoria must be implemented during construction to: • manage noise in accordance with EPA Publication 1254 Noise Control Guidelines, EPA Publication 480 Environmental guidelines for major construction sites and VicRoads Noise Guidelines, unless otherwise specified in the CNVMP • include measures to manage vibration in accordance with human response to vibration guideline targets (BS 6472 Evaluation of human exposure to vibration in buildings (1-80Hz)) and structural damage targets (DIN 4150 Structural vibration - Effects of vibration on structures). The CNVMP must include requirements for substituting high noise or vibration construction plant or processes with a lower noise or vibration option. The CNVMP must make provision for ad hoc, targeted and routine noise and vibration monitoring to inform management and mitigation. The CNVMP should highlight potential unavoidable night works and consult with relevant stakeholders, including EPA, prior to construction. The CNVMP must include construction noise guideline targets for residential and non-residential receivers to enable a quantitative assessment of construction noise impacts to be undertaken. The guideline targets should be developed in consultation with the EPA. Construction noise guideline targets for day, evening and night-time activities should be specified. If construction noise is predicted to or does exceed the guideline targets then management actions as specified in the CNVMP must be implemented.	The noise management plan was reviewed and verified by the IREA at project commencement. The noise impacts and controls were assessed at each quarterly audit.	Y
NV3	Traffic noise verification	Traffic noise must be measured between 6 to 12 months after opening of the project, in accordance with the VicRoads Traffic Noise Measurement Requirements for Acoustic Consultants – September 2011, to verify conformance with the external traffic noise performance requirements set out in EPR NV1. Remedial action must be completed by Final Completion (at the completion of the Defects Liability Period) if the performance requirements set out in EPR NV1 are not met.	The IREA has viewed a proposal by a suitably experienced consultant to carry out the monitoring 6-12 months after the project opens. NOTE Traffic noise monitoring is excluded from this audit as it will	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
			need to be carried out by DOT 6-12 months after the freeway opens.	
S1	Community and Stakeholder Engagement Plan	A Community and Stakeholder Engagement Plan must be prepared in consultation with Kingston City Council and Greater Dandenong City Council prior to the commencement of works (other than preparatory works referred to in the Incorporated Document). The preparation of the plan must give consideration to relevant guidelines and the Victorian Auditor General Office: Better Practice Guide: Public Participation in Government Decision Making. The Community and Stakeholder Engagement Plan must: • identify all project activities that potentially impact on community, land owners and business operations, and provide for well-coordinated communication and engagement processes in relation to each activity • outline key messages • ensure that project communications and engagement activities reflect the needs and profiles of local communities • ensure that consultation addresses the needs of vulnerable groups that will be impacted by the project, such as the elderly, socio-economically disadvantaged groups and children • address the needs of users of community facilities impacted by the project • set out processes and measures to provide sufficient prior notice to key stakeholders and other potentially affected stakeholders of construction activities (including any staged works, early works, or out of hours works), significant milestones, changed traffic conditions, interruptions to utility services, changed access and parking conditions, and periods of predicted high noise and vibration activities, including contact details for complaints and enquiries • provide for any interested stakeholder to register their contact details to ensure that they are automatically advised of planned construction activities, project progress, mitigation measures and intended reinstatement measures, where applicable include a complaints management process, as specified in EPR EM2.	The community engagement plan was reviewed and verified by the IREA at project commencement and implementation conformed at each quarterly audit.	Y
S2	Recreational facilities	Where construction works have a direct impact on the use and enjoyment of recreational facilities, appropriate management measures must be implemented in cooperation with the relevant land manager(s) and affected stakeholder organisations. These measures would include arrangements for the provision of alternative facilities, where required, for the period of disruption.	Alternate pathways and safe access were provided to cyclists and pedestrians during the construction	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
			phase. These were inspected by the IREA during the quarterly audit. There were no recreational facilities impacted on during the construction phase.	
T1	Intersection and freeway design and performance	Intersections and freeway facilities that are affected and/or proposed by the project will be designed and constructed to provide safe vehicle movements to the satisfaction of the responsible road management authority. The design of intersections and the freeway must meet VicRoads' design standards with analysis undertaken to ensure the proposed configuration will achieve acceptable operational performance. Road Safety Audits and/or Safe System Assessment in accordance with Austroads guidelines will be undertaken to maximise the safety potential of the project.	The designs were reviewed and verified by the IREA at project commencement.	Y
T2	Transport Management Plan	Prior to the commencement of works, TMP(s) must be developed and implemented to minimise disruption (to the extent practicable) to affected local land uses, traffic, on-road public transport, pedestrian and bicycle movements and existing public facilities during all stages of construction. The plan(s) will comply with relevant standards and must be developed in consultation with Kingston City Council, Greater Dandenong City Council, VicRoads and public transport providers and be informed and supported by an appropriate level of transport analysis. The plan(s) must include: • a program to monitor impacts of construction activities to all modes of active and passive transport. Where monitoring identifies adverse impacts, practicable mitigation measures must be developed and implemented • consideration of cumulative impacts of other major projects operating concurrently in the local area • identify the route options for construction vehicles (including haulage of spoil and other heavy materials to and from the construction site) travelling to and from the project construction site, recognising sensitive receptors, and prioritising the use of arterial roads • development of suitable measures to ensure emergency service access is not inhibited as a result of project construction activities (in consultation with emergency services) • provision for the minimisation of impacts on existing connectivity for pedestrians, cyclists, public transport and road vehicles as a result of construction, including the identification of alternative routes for pedestrians and cyclists and other measures to maintain connectivity and safety for pedestrians and	The plans were reviewed and verified by the IREA at project commencement. Implementation of the controls was assessed and confirmed during the quarterly audits. This included field inspection of site access point for vehicles, traffic management, pedestrian and cycle access, review of community communications and complaints, responses to community complaints, site compound inspections, confirming	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		cyclists • management of any temporary or partial closure of roads and traffic lanes, including provision for suitable routes for vehicles, cyclists and pedestrians, to maintain connectivity for road and footpath users • restrictions to the number of local roads to be used for construction-related transportation to minimise impacts on amenity, in consultation with the relevant road authorities, including at Edithvale Road (EPR B4) • reinstatement of access to open space, community facilities, commercial premises and dwellings if disrupted, as soon as practicable, and to an equivalent standard • provision for safe access points to laydown areas and site compounds • normal working hours 7am to 7pm except where work outside those hours is necessary • a communications strategy to advise affected users, potentially affected users, relevant stakeholders and the relevant road authorities of any changes to transport conditions in accordance with the Community and Stakeholder Engagement Management Plan (EPR S1). The plan must include specific measures for discrete components or stages of the works having the potential to impact on roads, shared use paths, bicycle paths, footpaths or public transport infrastructure.	working hours and reinstatement works.	
T3	Vehicle and pedestrian access	Where formal vehicle and pedestrian access are altered during construction, such access must be replaced in accordance with relevant road design standards, as soon as practicable.	Temporary pathways and traffic diversions provided during the construction phase have been replaced with permanent public access pathways. Roadways have been reinstated.	Y
T4	Traffic validation	Undertake a monitoring program to measure actual traffic volumes and road performance relative to model predictions presented in the EES. The results must be published on a publicly accessible website.	This EPR is not included in this audit, as it can only be assessed by DOT after the project opens.	NA
W1	Water body health	During design, construction and operation, impacts on surface water quality and flow must be minimised through adoption of measures to: • minimise changes in water flows and adverse changes in water quality to and within wetland areas; and • avoid an increase in discharge of pollutant loading (to higher than existing conditions levels) on	The water monitoring plan was reviewed by the IREA at project commencement. The	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		beneficial uses due to the construction and operation of the project in accordance with CSIRO Best Practice Environmental Management Guidelines for Urban Stormwater (1999) and Water Sensitive Road Design (WSRD). In addition, the project must incorporate spill containment at the outfalls which pose a high risk to sensitive receptors, including Waterways Wetlands, Woodlands Wetlands and Edithvale Wetlands and the waterway system including Mordialloc Creek. The spill containment must be designed, implemented and maintained in accordance with relevant guidelines and standards. Design specific maintenance requirements relating to water body health, (that do not form part of standard VicRoads maintenance requirements), must be included in the Water Asset Management Plan (EPR W7). The design of surface water control measures for the project as a whole must comply with the VicRoads Integrated Water Management Guidelines {2013} and CSIRO Best Practice Environmental Management Guidelines for Urban Stormwater (1999). This design and mitigation measures should ensure the hydrological characteristics of the Edithvale Wetlands are maintained to within acceptable limits, to minimise risk to its ecological values. Mitigation measures should include the provision of adequate on reservation retention capacity for stormwater from the impervious surfaces associated with the freeway, so that resultant increases in water entering the Edithvale Wetlands are appropriately reduced and attenuated. The design of surface water control measures for the project should be in consultation with Melbourne Water as the manager of the Edithvale Wetlands Ramsar site.	implementation was assessed during each quarterly audit.	
W2	Flood protection (operation)	Changes to flood behaviour resulting from the project must meet the requirements of Melbourne Water's guideline "Melbourne Water standards for infrastructure in flood prone areas" to the satisfaction of Melbourne Water". Consult with Melbourne Water through the project design process to consider the risk of flooding in the event of a flood larger than the 1% per cent AEP design flood or blockage. Design-specific maintenance requirements relating to floodwater, and that do not form part of standard VicRoads maintenance requirements, must be included in the Water Asset Management Plan (EPR W7).	The hydrologist's assessments and declaration were reviewed and verified by the IREA at project commencement.	Y
W3	Surface water management (construction)	Protect local waterways and wetlands by applying best practice sedimentation and pollution control measures in accordance with EPA Victoria publication 480 Environmental Guidelines for Major Construction Sites and EPA publication 275 Construction techniques for sediment pollution control through the Construction Environmental Management Plan(s) and other plans. Implement a water collection and	The water monitoring plan was reviewed and verified by the IREA at project commencement.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		treatment system to ensure that stormwater discharges comply with the State Environment Protection Policy (Waters) 2018 and Melbourne Water performance criteria. Such plans and systems should be prepared in consultation with relevant authorities before the commencement of works.	The implementation was assessed during each quarterly audit.	
W4	Flood protection (construction)	During construction, the requirements of the "Melbourne Water standards for infrastructure in flood prone areas" must be complied with. Measures must be implemented to the satisfaction of Melbourne Water and in consultation with any other relevant drainage authority, to ensure that temporary construction activities do not increase flood risks (including flood levels, flows and velocities) to the surrounding areas. A flood management plan must be developed in consultation with and not objected by Melbourne Water for any temporary works.	The flood protection plan was reviewed by the IREA at the project commencement.	Y
W5	Water Management and Monitoring Plan	A Water Management and Monitoring Plan (WMMP) must be prepared in consultation with EPA Victoria and relevant water authorities, and be implemented prior to construction, during construction and for five years following opening the project to the public. The WMMP must incorporate both surface and groundwater monitoring. Monitoring should commence prior to the commencement of works (other than preparatory works referred to in the Incorporated Document) to establish baseline conditions. The WMMP must incorporate baseline data collected to date and additional baseline data as required to address key issues including impacts of embankments and piling on groundwater. Incorporating the baseline data, the WMMP must include: • detail of the monitoring parameters, including the frequency and location of surface water monitoring points and groundwater monitoring bores • monitoring parameters should include, but not be limited to, sediment, nutrients and toxicants • specific trigger levels (water quality in surface water bodies and groundwater bores) and details of contingency plans in the case trigger levels are exceeded • detailed reporting requirements • roles and responsibilities, not limited to: – the owner of monitoring network assets – the manager of monitoring network assets and results – the party (or parties) undertaking monitoring (prior to construction, during construction and for five years following opening). The groundwater component of the WMMP must include assessment and, if necessary, mitigation of the following impacts: • the impact of the embankments on groundwater levels, flow and quality	The water management plan was reviewed and verified by the IREA at project commencement. The implementation was confirmed during quarterly audits.	Y

EPR or Spec Ref	EPR or Scope item Name	Detailed Scope Reference	Findings	Completed (Y/N)
		• the impact of piling on groundwater levels, flows and quality.		
W6	Surface water management (design and operation)	The volume, peak flow and quality of surface water discharges during operation must have no adverse impact to the drainage network capacities in consultation with Melbourne Water, Kingston City Council and Greater Dandenong City Council, as appropriate.	The design of the swales and retention basins were reviewed by the IREA at project commencement.	Y
W7	Water Asset Management Plan (Operation)	Prior to completion of construction, an Asset Management Plan must be established to ensure the ongoing effectiveness of works to mitigate impacts on surface water, including drainage culverts and bioretention systems. The plan must specify requirements in relation to management, monitoring and reporting.	The Operation Management Plan, which includes swale and retention pond maintenance and monitoring (to be implemented by DOT), is described in EM1 and addresses the requirements of this EPR.	Y

5 Conclusions

The review of the EPRs found that MCDDJV has met the requirements of the EPRs as applicable at the time of the audit.

Based on the seven quarterly audits that have occurred since the project commenced, the following additional conclusions and comments are made:

- Given the proximity of the works to local residents, along with the work that was carried out in a sensitive wetland, it is the IREA's opinion that the project succeeded in minimising the environmental and community impacts that could have occurred. Major road projects sometimes result in negative impacts on the local community's amenities. In contrast, the current project has increased community access and use that can be made of the project site via community paths, extensive landscaping and establishment of stormwater basins/wetlands. The project also addressed a number of legacy issues on the project site, such as dumped industrial wastes, capping of a former landfill and the remediation of areas containing contaminated soil.

- The project highlighted and resolved a number of administrative issues that have been present on road projects for many years. These included:
  - The need to separately assess background noise levels in residential areas that adjoin both the proposed works areas and major roadways, rather than only measuring background levels in quiet residential street away from major roadways;
  - Not setting the noise limits based on the L_{90} background level, as this often results in noise limits which are below the measured L_{eq} noise level when assessing compliance before construction even commences;
  - Only set water quality limits on parameters which the construction project may impact on and exclude parameters such as temperature;
  - Discontinue the deposition bottle dust gauges and directional gauges, which only provide a coarse indication of dust levels well after the event, and instead utilise additional real time calibrated dust monitors; and
  - Only require groundwater monitoring when there is a potential for the project to adversely impact on the underlying aquifer.

Appendix A – Audit Agenda

Audit Agenda

Site:	Mordialloc Freeway Project
For:	McConnell Dowell Decmil Joint Venture
Project Environmental Auditor:	Vic Natoli
VicRoads Auditor/Reviewer:	Ken Fraser
Company Representative:	Chris DiDomenico
Audit Date/s:	27th August and 20th September 2021

Day 1

9:00 Opening meeting with company representatives to review audit process, availability of data and personnel and confirm audit agenda

9:30 Initial review of EPRs and current status. Identification of areas where additional evidence was required to confirm compliance with EPR requirements.

5:00 End of Day 1

Day 2

9:00 Final review of EPRs and confirmation of evidence. Assessment of compliance with EPRs

5:00 End of Day 2

Appendix B – Quarterly Audit Schedule

EPR	EPR Title	Quarterly Site Audit and Inspection					
Audit/Review Date		6/2020	9/2020	12/2020	3/2021	6/2021	9/2021
EM1	Construction Environmental Management Plans	*	*	*	*	*	*
EM2	Environmental complaints management	*	*	*	*	*	*
EM3	Independent Reviewer and Environmental Auditor (IREA)						*
AQ1	Air quality (operation)						
AQ2	Air quality (construction)	*	*	*	*	*	*
B1	Fauna habitat						*
B2	Lighting design (operation)						*
B3	Native vegetation and habitat	*	*	*	*	*	*
B4	Fauna (construction)	*	*	*	*	*	*
B5	Native vegetation (construction)	*	*	*	*	*	*
B6	Flora and Fauna Monitoring Management Plan (operation)						*

CL1	Soil Management Plan	*	*	*	*	*	*
CL2	Acid Sulphate Soil Management Plan	*	*	*	*	*	*
CL3	Passive landfill gas capture and venting design						*
CL4	Landfill Gas Management Plan (Construction)		*				*
CL5	Landfill Gas Management Plan (Operation)						*
CL6	PFAS Management Plan	*	*	*	*	*	*
CL7	Landfill material						*
E1	Business Disruption Plan						*
E2	Utility assets						*
GG1	Greenhouse gas monitoring and reporting						*
GG2	Emissions reduction						*
H1	Cultural Heritage Management Plan	*	*	*	*	*	*
H2	Unidentified non-Aboriginal historical archaeological sites	*	*	*	*	*	*
H3	Non-Aboriginal heritage sites	*	*	*	*	*	*

LV1	Landscape and urban design						*
LV2	Crime prevention through environmental design						*
LV3	Reinstatement works						
LV4	Lighting (operation)						*
LV5	Light spillage (construction)	*	*	*	*	*	*
LV6	Minimise large (amenity - non native) tree removal outside no-go zones	*	*	*	*	*	*
LV7	Landscape management strategy						*
LV8	Independent urban design review panel						*
NV1	Noise and vibration (design)						*
NV2	Construction Noise and Vibration Management Plan	*	*	*	*	*	*
NV3	Traffic noise verification						
S1	Community and Stakeholder Engagement Plan	*	*	*	*	*	*
S2	Recreational facilities						
T1	Intersection and freeway design and performance						*

T2	Transport Management Plan						*
T3	Vehicle and pedestrian access						*
T4	Traffic validation						
W1	Water body health (water quality operation)						*
W2	Flood protection (operation)						*
W3	Surface water management (construction)	*	*	*	*	*	*
W4	Flood protection (Flood Management Plan for temporary works) (construction)	*			*		*
W5	Water Management and Monitoring Plan	*	*	*	*	*	*
W6	Surface water management (design and operation)						*
W7	Water Asset Management Plan (Operation)						*

Note:

- Greyed out cells are not applicable during construction, but a number may be audited at project completion.
- An asterisk in the "Quarterly Site Audit and Inspection" columns does not mean every item in the referenced EPR will be reviewed. Refer to the Quarterly Site Audit and Inspection Topic Agenda below for additional details.
- Separate "Quarterly Site Audit and Inspection" and "IREA EPR Review" reports will be produced for each quarter.
- The IREA's review of EPR NV3 (Traffic Noise Verification) will occur post construction.

Quarterly Site Audit and Inspection Topic Agenda

Audit Date	Quarterly Site Audit and Inspection Topics
June 2020	• Review actions taken to close previous audit findings. • Water monitoring results and compliance. (W3, W5) • Air Monitoring results and compliance (AQ2) • Noise monitoring results and compliance (NV2) • Soil Monitoring Results (where monitoring has occurred) (CL1, CL2, CL6) • Incident reporting and response since previous audit • Community complaints and response since previous audit (EM2, LV5, S1) • Flora Fauna EMP (B3, B4, B5) • Flood Management EMP (W4) • Site Inspection (AQ2, B3, B4, B5, H1, H2, H3, LV6, W3)
September 2020	• Review actions taken to close previous audit findings. • Water monitoring results and compliance. (W3, W5) • Air Monitoring results and compliance (AQ2) • Noise monitoring results and compliance (NV2) • Soil Monitoring Results (where monitoring has occurred) (CL1, CL2, CL6) • Incident reporting and response since previous audit • Community complaints and response since previous audit (EM2, LV5, S1) • Soil Management Sub-plan (CL1, CL2, CL6) • Landfill Gas EMP (CL4) • Site Inspection (AQ2, B3, B4, B5, H1, H2, H3, LV6, W3)
December 2020	• Review actions taken to close previous audit findings. • Water monitoring results and compliance. (W3, W5) • Air Monitoring results and compliance (AQ2) • Noise monitoring results and compliance (NV2) • Soil Monitoring Results (where monitoring has occurred) (CL1, CL2, CL6) • Incident reporting and response since previous audit

	• Community complaints and response since previous audit (EM2, LV5, S1) • Noise EMP (NV2) • Site Inspection (AQ2, B3, B4, B5, H1, H2, H3, LV6, W3)
March 2021	• Review actions taken to close previous audit findings. • Water monitoring results and compliance. (W3, W5) • Air Monitoring results and compliance (AQ2) • Noise monitoring results and compliance (NV2) • Soil Monitoring Results (where monitoring has occurred) (CL1, CL2, CL6) • Incident reporting and response since previous audit • Community complaints and response since previous audit (EM2, LV5, S1) • Water EMP (W5) • Flood Management EMP (W4) • Site Inspection (AQ2, B3, B4, B5, H1, H2, H3, LV6, W3)
June 2021	• Review actions taken to close previous audit findings. • Water monitoring results and compliance. (W3, W5) • Air Monitoring results and compliance (AQ2) • Noise monitoring results and compliance (NV2) • Soil Monitoring Results (where monitoring has occurred) (CL1, CL2, CL6) • Incident reporting and response since previous audit • Community complaints and response since previous audit (EM2, LV5, S1) • Landfill Gas (Operations) Sub-Plan (CL5) • Site Inspection (AQ2, B3, B4, B5, H1, H2, H3, LV6, W3)
September 2021	• Review actions taken to close previous audit findings. • Review compliance with EPRs relevant to construction. • Review compliance with any actions listed in EPRs (Operational) that require those actions to be completed prior to commencement of the operational phase.

NOTE:

- References in brackets are the respective EPR numbers.