



# Environment Effects Statement

## ATTACHMENT I

- Legislation and policy report



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# Attachment I Legislation and Policy

## 1 Introduction

Section 4.5 of the Scoping Requirements for the West Gate Tunnel Project dated April 2016 requires the EES to identify relevant legislation, policies, guidelines and standards, and assess their specific requirements or implications for the project, particularly in relation to required approvals that may involve legislation referred to in section 3.3 of the Scoping Requirements.

The approvals likely to be required for the project include the following:

- An amendment to the Melbourne, Port of Melbourne, Maribyrnong, Hobsons Bay, Brimbank and Wyndham Planning Schemes under the *Planning and Environment Act 1987*
- An approved cultural heritage management plan under the *Aboriginal Heritage Act 2006*
- A works approval under the *Environment Protection Act 1970* in relation to the installation of a tunnel ventilation system, and a waste discharge licence following the construction and commissioning of the system
- Consents to undertake works on or across a waterway under the *Water Act 1989*
- Permit to remove listed flora and / or fauna from public land under the *Flora and Fauna Guarantee Act 1988*
- Possibly, a permit to take wildlife under the *Wildlife Act 1975*
- Consent to undertake works on a road and to connect to a freeway under the *Road Management Act 2004*
- Consent to disturb an archaeological site under the *Heritage Act 1995*
- Consent to use and develop coastal Crown land under the *Coastal Management Act 1995*
- Consent under the *Conservation, Forests and Lands Act 1987*.

This Table describes the key legislation, policies, guidelines and standards relevant to the project and the grant of the above approvals. Additional legislation, policies, guidelines and standards may apply to discrete components or specific environmental impacts or effects of the project, particularly in respect of highly technical matters. Where applicable, these are discussed in the relevant technical report or study appearing as an Appendix to the EES, which should be read in conjunction with this Table.

Where relevant, each section of this Table is separated into international standards, Commonwealth legislation, policies, guidelines and standards, State legislation, policies, guidelines and standards and local policies. Subordinate instruments are addressed under policies, guidelines and standards with the relevant State or Commonwealth sections of the table.

## 2 Environmental Impact Assessment

Document	Description	Requirements / Implications
<b>National / Commonwealth</b> Legislation		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	<p>This Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation.</p> <p>It provides for the conservation of biodiversity and the protection of the environment, particularly those aspects that are considered to be among the nine Matters of National Environmental Significance (MNES), including World Heritage Properties, National Heritage Places, Ramsar wetlands, nationally listed threatened species and ecological communities and listed migratory species.</p> <p>The Act states that 'controlled' actions, i.e. actions that are determined as likely to have a significant impact on a MNES are subject to assessment and approval under the Act.</p>	<p>In December 2015, the Department of Economic, Development, Jobs, Transport and Resources (DEDJTR) referred the West Gate Tunnel Project ("the project") to the Commonwealth Environment Minister (Referral 2015/7620) for a determination as to whether the project is a controlled action requiring assessment and approval under the EPBC Act.</p> <p>On 14th January 2016, the Minister determined that the project is not a controlled action. Accordingly, it does not require assessment and approval under the EPBC Act.</p>
<b>Victorian / State</b> Legislation		
<i>Major Transport Projects Facilitation Act 2009</i> (MTPF Act)	<p>The purpose of this Act is to facilitate the development of major transport projects declared under the Act. It contains a range of facilitating provisions including in relation to:</p> <ul style="list-style-type: none"> <li>• Land acquisition and assembly including in respect of public, private, Council and Crown land</li> <li>• Road construction, deviation, closure and management</li> <li>• Dealing with utilities.</li> </ul>	<p>The project was declared a major transport project to which the project delivery provisions of the Act will apply, by notice published in the Government Gazette dated 5 September 2016. The Minister for Roads and Road Safety was also declared the Project Minister for the project on the same day.</p>

Document	Description	Requirements / Implications
<i>Environment Effects Act 1978</i> (EE Act)	<p>This Act contains a framework by which projects with the potential to have significant effects on the environment may require the preparation of an Environment Effects Statement (EES) for assessment by the Minister for Planning. An EES may be required for declared "public works" or works determined by the Minister to require an EES following referral.</p> <p>Where an EES is required, scoping requirements are issued by the Minister for Planning to guide the preparation of the EES. Once prepared it is placed on exhibition for public review and submission (typically for a period of 30 days). Public submissions can be considered in a number of ways including by an inquiry panel appointed by the Minister who may also be required to conduct a formal hearing. After considering all relevant submissions and conducting any necessary hearing, the inquiry panel's report is provided to the Minister for Planning to assess the environmental effects of the project and issue an Assessment Report. The Minister's Assessment Report is provided to relevant statutory decision makers to inform their decision whether or not to approve the project and, if so, on what conditions.</p>	<p>On 18 December 2015, the Minister for Planning declared the project to be "public works" under section 3 of the EE Act. Accordingly, an EES is required to be prepared for the project.</p> <p>In April 2016, the Minister issued finalised Scoping Requirements for the project. The Western Distributor Authority within the DEDJTR is preparing the EES for the project in accordance with the Scoping Requirements which requires the assessment of a range of specific environmental effects including in respect of the following subject matters in this table. In May 2017, there was a re-declaration under section 3 of the EE Act to amend the project name.</p> <p>The EES will be placed on public exhibition for a period of 30 business days, and an inquiry will be appointed to consider the environmental effects of the project.</p> <p>At the conclusion of the EES assessment process the Minister for Planning's Assessment Report will be provided to statutory decision makers to inform their decision whether to grant relevant approvals for the project.</p>
<i>Planning and Environment Act 1987</i> (P&E Act)	<p>This Act establishes a framework for planning the use, development and protection of land in Victoria. It provides for the preparation of planning schemes in each municipality consistent with the Victoria Planning Provisions, and procedures by which planning schemes may be amended and planning permits obtained to govern land use and development.</p> <p>For large linear projects traversing numerous planning schemes requiring multiple permissions, planning approval is frequently obtained by way of a project specific planning control contained an Incorporated Document included in the relevant planning schemes by a planning scheme amendment. Some projects may also require additional development controls to be placed on land in close proximity to the project to protect the ongoing operation of the project and future development from potential adverse impacts arising from the project. Such additional control may be imposed by a design and development overlay or other control over land introduced by a planning scheme amendment.</p> <p>Where a draft planning scheme amendment for a project is exhibited with an EES it is not uncommon for the Minister for Planning to make the relevant planning scheme amendment at the conclusion of the EES assessment process under section 20(4) of the Act without further notice or exhibition of the amendment. See section 3 of this Table for further discussion on the P&amp;E Act, its role in land use planning and specific requirements and implications for the grant of a planning scheme amendment for the project.</p>	<p>The area within which the project would be constructed and operated, traverses a number of municipalities and is affected by a range of planning controls that require approval under the P&amp;E Act.</p> <p>The development and use of the project is expected to be approved via a planning scheme amendment to the Wynndham, Hobsons Bay, Maribyrnong, Port of Melbourne and Melbourne Planning Schemes, facilitated by the Minister for Planning.</p> <p>The planning scheme amendment would seek to insert an Incorporated Document into the relevant planning schemes and apply a Design and Development Overlay and associated Incorporated Document over the tunnels component of the project in the Maribyrnong and Hobsons Bay Planning Schemes.</p>

Document	Description	Requirements / Implications
<p><i>Transport Integration Act 2010 (TI Act)</i></p>	<p>This Act establishes a framework for an integrated and sustainable transport system in Victoria consistent with the vision statement "for an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible State". It contains transport system objectives and decision making principles which must be considered by transport bodies and interface bodies being authorities who may make decisions under interface legislation capable of affecting the transport system and the achievement of an integrated and sustainable transport system.</p> <p>The transport system objectives address matters relevant to:</p> <ul style="list-style-type: none"> <li>• Social and economic inclusion</li> <li>• Economic prosperity</li> <li>• Environmental sustainability</li> <li>• Integration of transport and land use</li> <li>• Efficiency, coordination and reliability</li> <li>• Safety and health and wellbeing.</li> </ul> <p>The decision making principles address:</p> <ul style="list-style-type: none"> <li>• Integrated decision-making</li> <li>• Triple bottom line assessment</li> <li>• Equity between persons and generations</li> <li>• Transport system from the user's perspective</li> <li>• The precautionary principle</li> <li>• Stakeholder engagement and community participation</li> <li>• Transparency in decision making.</li> </ul>	<p>The project should contribute to the efficient and effective movement of people and goods and minimise disruption.</p> <p>The project should also align with the transport system objectives. Transport bodies and interface bodies including the Minister for Planning (responsible for the administration of the P&amp;E Act and the EE Act) will need to have regard to the transport system objectives and the decision making principles when making decisions in respect of the project. However the weight to be given to each objective and decision making principle is a matter for the relevant decision maker.</p> <p>See Chapter 2 for discussion on how the project aligns with the transport system objectives.</p>
<p>Policy / Guidelines / Standards</p>		
<p><i>Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978</i></p>	<p>These Ministerial Guidelines are made under section 10 of the EE Act, and supplement the requirements of the EE Act by providing further detail about the EES assessment process.</p>	<p>The EES Scoping Requirements for the project were issued in April 2016 consistent with the Ministerial Guidelines pursuant to which the EES is being prepared.</p>

### 3 Land Use Planning

Document	Description	Requirements/Implications
<b>National / Commonwealth</b>		
Legislation		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	This Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation, and is further discussed in section 2 of this Table.	See section 2.
<i>Native Title Act 1993</i> (Native Title Act)	This Act recognises and protects the native title rights and interests of Aboriginal and Torres Strait Islanders across Australia, and is further discussed in section 14 of this Table.	See section 14
<b>Victorian/State</b>		
Legislation		
<i>Planning and Environment Act 1987</i> (P&E Act)	<p>As discussed in section 2, the P&amp;E Act establishes a framework for planning the use, development and protection of land in Victoria, and it is proposed to seek a planning scheme amendment to permit development of the project. The Act imposes obligations on a planning authority responsible for the preparation of an amendment including the following:</p> <ul style="list-style-type: none"> <li>The requirement to comply with relevant directions or guidelines issued by the Minister for Planning including as to the form and content of any planning scheme. For relevant directions or guidelines see discussion under the Policy, Guidelines and Standards below.</li> <li>The requirement to implement the objectives of planning in Victoria, provide sound, strategic and co-ordinated planning of the use and development of land and prepare an explanatory report in respect of any proposed amendment to a planning scheme.</li> </ul>	<p>A draft planning scheme amendment has been prepared for the project in accordance with the requirements of the Act and will be placed on exhibition with the EES.</p> <p>The draft planning scheme amendment is supported by a Strategic Assessment Report appearing at Attachment IV to the EES.</p>

Document	Description	Requirements/Implications
	<p>The objectives of planning in Victoria are contained in section 4(1) of the Act and are set out in full below:</p> <ul style="list-style-type: none"> <li>a To provide for the fair, orderly, economic and sustainable use, and development of land</li> <li>b To provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity</li> <li>c To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria</li> <li>d To conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value</li> <li>e To protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community</li> <li>f To facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e)</li> <li>g To balance the present and future interests of all Victorians.</li> </ul> <p>In preparing a planning scheme amendment a planning authority:</p> <ul style="list-style-type: none"> <li>• Must have regard to the Minister's directions</li> <li>• Must have regard to the Victoria Planning Provisions</li> <li>• In the case of an amendment, must have regard to any municipal strategic statement, strategic plan, policy statement, code or guideline which forms part of the scheme</li> <li>• Must take into account any significant effects which it considers the scheme or amendment might have on the environment or which it considers the environment might have on any use or development envisaged in the scheme or amendment</li> <li>• Must take into account its social effects and economic effects.</li> </ul> <p>In respect of an amendment that the Minister for Planning prepares, the Minister may exempt himself from the requirements of sections 17, 18 and 19 of the Act and the regulations (in relation to notice and exhibition) "if the Minister considers that compliance with any of those requirements is not warranted or that the interests of Victoria or any part of Victoria make such an exemption appropriate".</p>	

Document	Description	Requirements/Implications
<i>Crown Land (Reserves) Act 1978</i>	This Act provides for the reservation of land for a range of public purposes, stipulates how reserved land must be dealt with and prescribes key governance arrangements for committees of management appointed to manage reserved land.	The provisions of Part 6 of the MTPF Act enable Crown land reserved under the <i>Crown Land (Reserves) Act 1978</i> to be used for the purposes of a declared project. These provisions are likely to be utilised to facilitate development of the project, to the extent that any reserved Crown land will be impacted by the project.
<i>Land Act 1958</i>	This Act deals with sale, grants and occupation of unreserved Crown land in Victoria.	The provisions of Part 6 of the MTPF Act enable unreserved Crown land to be used for the purposes of a declared project. These provisions are likely to be utilised to facilitate development of the project, to the extent that any unreserved Crown land will be impacted by the project.
<i>Land Acquisition and Compensation Act 1986 (LAC Act)</i>	This Act sets out the process for the compulsory acquisition of interests in land and the payment of compensation. An acquiring authority must comply with the processes set out under the Act where these powers are relied upon, except to the extent modified by the MTPF Act for any declared project under that Act.	The project authority for the project will be obliged to comply with the provisions of the Act as modified by the MTPF Act, to the extent that any interest in land needs to be compulsorily acquired for the project. The provisions of the Act (as modified) may also apply to the extent that any access or temporary occupation of land is required for development of the project.
<i>Environment Effects Act 1978 (EE Act)</i>	As discussed in section 2 of this Table, the EE Act contains a framework by which projects with the potential to have significant effects on the environment may require the preparation of an EES for assessment by the Minister for Planning. At the conclusion of the assessment process, the Minister's assessment report is provided to statutory decision-makers to inform their decision on whether or not to grant an approval for the project and if so on what conditions. The Minister's assessment determines whether the likely environmental effects of a project are acceptable, and whether any modifications or specific mitigation measures are required to achieve acceptable outcomes. Decision-makers are required to consider the Minister's assessment and are encouraged to consult with the Minister where it is not proposed to adopt the assessment.	As discussed in section 2 of this Table an EES is required for the project, and the Minister's assessment will be provided to relevant decision-makers to inform their decision on whether or not to approve the project and if so on what conditions. This includes the decision to prepare, adopt and approve a planning scheme amendment for the project under the P&E Act.
<i>Aboriginal Heritage Act 2006 (AH Act)</i>	This Act provides a framework for the protection of Aboriginal cultural heritage in Victoria, and requires an approved aboriginal cultural heritage management plan to be prepared for projects requiring an EES. See section 14 of this Table for further discussion.	A cultural heritage management plan is required to be prepared under the AH Act for the project.
<i>Heritage Act 1995 (Heritage Act)</i>	This Act creates a system to protect and conserve places and objects of cultural heritage significance in Victoria, and may require heritage permits to be obtained in respect of works impacting on a place listed on the Victoria Heritage Register (VHR) and heritage consents to be obtained for works impacting on archaeological relics recorded on the Heritage Inventory. See section 13 for further discussion.	There are no places listed on the VHR that will be impacted by the project and to the extent that any place, object, area or relic listed on the VHR will be affected, a heritage consent will be obtained. See section 13 for further detail.

Document	Description	Requirements/Implications
<i>Transport Integration Act 2010</i> (TI Act)	As discussed in section 2, this Act establishes a framework for an integrated and sustainable transport system in Victoria and requires transport and interface bodies to consider the transport system objectives and decision making principles under the Act when making decisions relevant to the transport system or which may affect the transport system.	As discussed in section 2, the project ought to be consistent with the transport system objectives contained in the Act. The Explanatory Report for the draft planning scheme amendment is also required to address how the amendment addresses the requirements of the TI Act
<i>Flora and Fauna Guarantee Act 1988</i> (FFG Act)	This Act is the primary legislation dealing with biodiversity conservation and sustainable use of native ecology in Victoria, and is discussed in section 4 of this Table.	See section 4.
<i>Coastal Management Act 1995</i>	This Act governs the use and development of coastal Crown land in Victoria. The Act establishes the Victorian Coastal Council and provides for the establishment of Regional Coastal Boards. The Act provides for long-term strategic planning and management through the Victorian Coastal Strategy. The Act also provides for the preparation and implementation of management plans for coastal Crown land.	See section 6.
<i>Conservation, Forests and Lands Act 1987</i>	This Act provides a framework for a land management system that requires a public authority prior to commencing certain works to submit a plan of works to the Secretary for comment on any necessary measures to be taken for the protection of land, waters and wildlife. The type of works that require the preparation of a plan for comment include works for 'structures, in or across waterways which potentially interfere with the passage of fish, or the quality of aquatic habitat'.	See section 6.
Policy / Guidelines / Standards		
Victoria, the Freight State: The Victorian Freight and Logistics Plan (Department of Transport, Planning and Local Infrastructure, 2013)	This provides the state's vision for maintaining and increasing Victoria's competitive edge as Australia's freight and logistics capital, and is discussed further in section 5. One of the principles upon which the plan is built is to ensure the integration of freight and logistics activities with other land uses. The plan provides that freight and logistics activity should be strategically located and operated so as to enhance the productive potential and liveability of Melbourne and Victoria as a whole, whilst promoting efficiency of movement.	See section 5 of this Table and the Strategic Assessment Report, for further detail.
VicRoads Smart Roads Framework	This framework manages competing interest for limited road space by giving priority use of the road to different transport modes at particular locations and times of the day and is discussed further in section 5. This framework provides the operational direction that supports broader strategies around land use and transport. It plays an important role in the development of future road projects and integrating transport and land use planning in a growing state.	See section 5.

Document	Description	Requirements/Implications
State Planning Policy Framework	<p>The State Planning Policy Framework (SPPF) is contained in all Victorian Planning Schemes and applies to all land in Victoria. It seeks to ensure that the objectives of planning in Victoria as set out in the P&amp;E Act are fostered through appropriate land use and development policies and practices integrating relevant environmental, social and economic factors in the interests of net community benefit and sustainable use and development. The SPPF contains policies in relation to the following themes, with many policies referring to additional policies, guidelines or reference material which are to be considered as relevant:</p> <ul style="list-style-type: none"> <li>• Settlement</li> <li>• Environmental and landscape values</li> <li>• Environmental risks</li> <li>• Natural resource management</li> <li>• Built environment and heritage</li> <li>• Housing</li> <li>• Economic development</li> <li>• Transport</li> <li>• Infrastructure.</li> </ul> <p>A planning authority is required to consider these policies when preparing a planning scheme amendment, and balance competing objectives in favour of net community benefit and sustainable development for the benefit of present and future generations.</p>	<p>Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.</p>
Local Planning Policy Framework	<p>Each of the Melbourne, Port Melbourne, Hobsons Bay, Brimbank, Maribyrnong and Wyndham Planning Schemes contain a Local Planning Policy Framework setting out the municipal strategic statement and local planning policies that apply to the planning schemes, in addition to the SPPF.</p> <p>When preparing amendments to the scheme, a planning authority is required to take the LPPF into account.</p>	<p>The LPPF within each of the relevant planning schemes will need to be considered in the evaluation of the project and the planning scheme amendment required for the project.</p>
Planning Scheme Provisions and Controls of the Melbourne, Port Melbourne, Hobsons Bay, Maribyrnong and Wyndham Planning Schemes	<p>Each of the relevant planning schemes contain planning controls, provisions and requirements for planning approval under various zones, overlays and particular provisions which (without the planning scheme amendment) would apply to the project.</p>	<p>These provisions will need to be considered in the evaluation of the project and in the preparation of the planning scheme amendment for the project.</p>

Document	Description	Requirements/Implications
Plan Melbourne, Department of Transport, Planning and Local Infrastructure (2014)	<p>Plan Melbourne is the Victorian Government's long range strategic plan for metropolitan Melbourne, setting out directions, initiatives and actions for land use, transport and infrastructure. It is referenced in the SPPF. Plan Melbourne focusses on the following areas:</p> <ul style="list-style-type: none"> <li>• Providing employment in an expanded central city, and state significant employment clusters and industrial precincts</li> <li>• Transforming the transport system to support a more efficient, productive city with improved travel options to increase social and economic participation</li> <li>• Directing growth and increased development intensity to strategic locations</li> <li>• Achieving a city of '20-minute neighbourhoods'</li> <li>• Delivering a compact urban form with a fixed urban growth boundary</li> <li>• Protecting environment and the peri-urban area</li> <li>• Supporting growth in regional Victoria</li> <li>• Recognition of the evolution of an Integrated Economic Triangle between the Hastings-Dandenong Corridor, the Hume Corridor and the Wyndham-Geelong Corridor</li> <li>• Secure adequate gateway capacity for moving passengers and freight into and out of Victoria by designating ports, airports and interstate terminals.</li> </ul>	<p>Plan Melbourne will be relevant to the evaluation of the project and the planning scheme amendment required for the project. Relevant strategies will include:</p> <ul style="list-style-type: none"> <li>• The concept of an integrated economic triangle by 2050, connecting the Hastings-Dandenong, Hume and Wyndham-Geelong corridors</li> <li>• Strengthening the competitiveness of employment land</li> <li>• Improving the efficiency of freight networks whilst protecting urban amenity</li> <li>• Improving landside transport access to transport gateways including ports and interstate rail terminals.</li> </ul>
Plan Melbourne Refresh Discussion Paper (2015)	<p>The Plan Melbourne Refresh Discussion Paper was released in October 2015. This Paper references the project as a specific road based initiative to be included in Plan Melbourne Refresh.</p>	<p>This discussion paper will inform preparation of the planning scheme amendment until Plan Melbourne is formally revised.</p>
Ministerial Directions under s7(5) and s12(2)(a) of the P&E Act	<p>Relevant Ministerial directions and guidelines include:</p> <ul style="list-style-type: none"> <li>• Direction No. 11 Strategic Assessment of Amendments</li> <li>• Direction No. 9 Metropolitan Planning Strategy</li> <li>• Direction No. 14 Port Environs</li> <li>• Direction in relation to the form and content of planning schemes and planning scheme amendments</li> </ul>	<p>These directions must be considered in the preparation of the planning scheme amendment for the project.</p>

## 4 Ecology

Document	Description	Requirements / Implications
National / Commonwealth		
Legislation		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	As discussed in section 2, this Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation. Among the matters of national environmental significance protected by the legislation are nationally listed threatened species and communities and listed migratory species.	The project is not an action requiring assessment and approval under the Act. See section 2 for further details.
Victorian / State		
Legislation		
<i>Planning and Environment Act 1987</i> (P&E Act)	As discussed in sections 2 and 3 of this Table, this Act establishes a framework for planning the use, development and protection of land in Victoria and provides for the preparation of planning schemes based on the Victoria Planning Provisions. Planning provisions apply to the removal of native vegetation, which may require planning approval from the responsible authority.	Some native vegetation will need to be removed as part of the project. This will need to be identified assessed and offset (as required) in accordance with the <i>Permitted clearing of native vegetation - Biodiversity Assessment Guidelines</i> (except as otherwise permitted by the Secretary under the planning scheme amendment for the project).
<i>Flora and Fauna Guarantee Act 1988</i> (FFG Act)	This Act is the primary legislation dealing with biodiversity conservation and sustainable use of native ecology in Victoria. It provides a legal framework to enable and promote conservation of Victoria's native flora and fauna, and to enable management of potentially threatening processes. Threatened species and communities of flora and fauna, as well as threatening processes, are listed under this Act. Section 47 provides that a permit is required for the removal of any listed protected flora from public land.	The project must consider impacts to flora and fauna and a formal ecological assessment is occurring as part of the EES process which will identify any ecological assets affected. A permit will be required to remove listed flora from public land.

Document	Description	Requirements / Implications
<p><i>Catchment and Land Protection Act 1994</i> (CLP Act)</p>	<p>This Act is the principal legislation relating to the management of pest plants and animals in Victoria and establishes a framework for the management and protection of catchments through the management of land and water resources.</p> <p>Under the Act, landowners have a responsibility to avoid causing or contributing to land degradation, including taking all reasonable steps to conserve soil, protect water resources, eradicate regionally prohibited weeds, prevent the growth and spread of regionally controlled weeds and, where possible, eradicate established pest animals declared under the Act.</p> <p>The Act categorises weeds and their respective management requirements into:</p> <ul style="list-style-type: none"> <li>• State prohibited weeds</li> <li>• Regionally prohibited weeds</li> <li>• Regionally controlled weeds</li> <li>• Restricted weeds.</li> </ul>	<p>The project has the potential to promote the spread of noxious weeds. Management measures during construction would need to be implemented to minimise the likelihood of this occurring. CLP Act-listed weed species present within the project alignment requires that the proponent take all reasonable steps to prevent the growth and spread of regionally controlled weeds.</p>
<p><i>Wildlife Act 1975</i> (Wildlife Act)</p>	<p>This Act includes procedures to protect and conserve wildlife and to protect species from extinction. It prohibits and regulates the conduct of persons engaged in activities concerning or relating to wildlife.</p> <p>All fauna species indigenous to Victoria are listed as protected under this Act.</p>	<p>Any potential for impact to these species, including the need to translocate fauna species from the project alignment will require authorization from DELWP.</p>
<p>Policy / Guidelines / Standards</p>		
<p>Permitted Clearing of Native Vegetation – Biodiversity Assessment Guidelines, Department of Environment and Primary Industries 2013</p>	<p>These Guidelines have been designed to manage the risk to Victoria's biodiversity associated with the removal of native vegetation, and are relevant to:</p> <ul style="list-style-type: none"> <li>• Permit application process</li> <li>• Site assessment and methodology</li> <li>• Specific permit conditions such as offsetting.</li> </ul> <p>The guidelines are an Incorporated Document in the Melbourne, Port Melbourne, Hobsons Bay, Maribyrnong and Wyndham Planning Schemes.</p>	<p>Some native vegetation will need to be removed as part of the project. This will need to be identified assessed and offset (as required) in accordance with the <i>Permitted clearing of native vegetation - Biodiversity Assessment Guidelines</i> (except as otherwise permitted by the Secretary under the planning scheme amendment for the project).</p>

Document	Description	Requirements / Implications
State Planning Policy Framework (SPPF)	<p>As discussed in section 3 of this Table, SPPF is common to all Victorian planning schemes, and contains policies in relation to various themes including Clause 12 in relation to Environmental and Landscape Values. This has a series of specific provisions, including those for:</p> <ul style="list-style-type: none"> <li>• Biodiversity – Protection and conservation of Victoria’s biodiversity, including important habitat for Victoria’s flora and fauna and other strategically valuable biodiversity sites</li> <li>• Native vegetation management – prevents loss of biodiversity as a result of clearance of native vegetation.</li> </ul>	<p>Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.</p>
State Planning Policy Framework (SPPF) – Planning Scheme Provisions and Controls	<p>As discussed in section 3, each of the relevant planning schemes contain planning controls, provisions and requirements for planning approval under various zones, overlays and particular provisions which (without the planning scheme amendment) would apply to the project. Such provisions include the following in relation to ecological matters:</p> <ul style="list-style-type: none"> <li>• Vegetation Protection Overlays (VPOs) which are applied to areas where vegetation of significance exists. Most overlays also have schedules which specify specific objectives and requirements</li> <li>• Environmental Significance Overlay (ESO) which identifies areas where the development of land may be affected by environmental constraints and ensures that development is compatible with identified environmental values</li> </ul> <p>Particular provisions including clause 52.17 in relation to the removal of native vegetation.</p>	<p>All of the planning schemes intersected by the project have VPO which will need to be considered in the evaluation of the project together with the application of clause 52.17.</p>
Local Planning Policy Framework (LPPF)	<p>As discussed in section 3, each of the Melbourne, Port Melbourne, Hobsons Bay, Brimbank, Maribyrnong and Wyndham Planning Schemes contain a Local Planning Policy Framework setting out the municipal strategic statement and local planning policies that apply to the planning schemes, in addition to the SPPF.</p> <p>Objectives and strategies for the protection of environment and landscape values are key themes relevant to the project in the MSS of all the affected planning schemes. The local policies that are designed to implement these objectives and strategies vary across the municipalities, however they all address issues of potential impact and protection of biodiversity and environmental values, and provide guidance (from an environment and landscape perspective) in terms of new development.</p>	<p>As discussed in section 3, the LPPF within each of the relevant planning schemes will need to be considered in the evaluation of the project, including those provisions relevant to ecological issues.</p>

Document	Description	Requirements / Implications
State Environment Protection Policy (Waters of Victoria) (SEPP (WoV)).	SEPPs are subordinate instruments made under the <i>Environment Protection Act 1970</i> , and set out policies to establish environmental quality objectives. SEPP (WoV) provides the legal framework for the protection and rehabilitation of Victoria's surface waters to protect beneficial uses. See section 6 for further discussion.	Relevant provisions of this SEPP will need to be considered in the evaluation of the project, including the environmental water quality standards required to protect beneficial uses.
DELWP Victorian Advisory Lists	The DELWP Victorian Advisory Lists are non-statutory lists of species for which conservation management is recommended. The presence, or likely presence, of a species listed on the Advisory List is used to determine whether species-specific habitat is required to be offset.	The project area will need to be assessed for potential habitats of species listed on the Advisory List.
<b>Local Policies</b>		
Greening the West – a regional approach. Strategic Plan 2014	This Strategic Plan aims to deliver positive social and health outcomes to members of the community living in Melbourne's western suburbs (including Wyndham, Hobsons Bay and Maribyrnong intersected by the project) through urban revegetation programs. The plan aims to achieve greens space improvement through the delivery of a series of goals associated with increased and improved green space.	Relevant provisions of this plan will need to be considered in the evaluation of the project, including the level of consistency with key goals and objectives of the plan.
Koroit Creek Regional Strategy 2005 – 2030 (Land Design Partnership, 2006)	This strategy provides a 25 year planning framework for the creek corridor from Toolern Vale to Port Phillip and includes recommendations for the management of the Koroit Creek corridor relating to biodiversity, environmental condition, development of an open space network, waterway management and landscape character.	Relevant provisions of this strategy will need to be considered in the evaluation of the project, including the level of consistency with the strategy.
Tree Retention and Removal Policy (City of Melbourne, 2012)	This policy sets out standards for the priority status and approval of tree removals from land managed by the City of Melbourne in the context of development, as well as tree protection requirements for the successful retention of trees.	Relevant provisions of this policy will need to be considered in the evaluation of the project, including the level of consistency with policy objectives, particularly in terms of recognising the value and importance of public trees, and their retention and protection within the context of the project.

Document	Description	Requirements / Implications
<p>Urban Forest Strategy, Making a Great City Greener 2012-2032 (City of Melbourne, 2011)</p>	<p>This provides a strategy to expand and enhance vegetation within the City of Melbourne and adapt to climate change, population growth, urban heating, urban expansion and the anticipated future loss of old trees.</p> <p>Mechanisms to achieve this is based on six strategies and targets:</p> <ul style="list-style-type: none"> <li>• Increase canopy cover</li> <li>• Increase urban forest diversity</li> <li>• Improve vegetation health</li> <li>• Improve soil moisture and water quality</li> <li>• Improve urban ecology</li> <li>• Inform and consult the community.</li> </ul>	<p>Relevant provisions of this strategy will need to be considered in the evaluation of the project, including the level of consistency with key goals and targets of this Strategy.</p>
<p>Draft Urban Ecology and Biodiversity Strategy (City of Melbourne, 2016)*</p>	<p>This draft strategy provides direction on managing and enhancing ecological values, recognising the importance of healthy ecosystems and biodiversity in the liveability and wellbeing of the City of Melbourne. The strategy promotes the concept that cities have a key role in protecting and maintaining biodiversity, as havens for many species of plant and animals.</p>	<p>Relevant provisions of this strategy will need to be considered in the evaluation of the project, including the level of consistency with key goals and targets of this Strategy.</p>

\* This version of the strategy was the publicly available document at the time of preparing the EES. The City of Melbourne is in the process of updating and endorsing the strategy to the Nature in the City Strategy.

## 5 Traffic and Transport

Document	Description	Requirements / Implications
National / Commonwealth Legislation		
Approval and regulation of transportation is mainly a function of State legislation.		
Victorian / State Legislation		
<i>Transport Integration Act 2010</i> (TI Act)	As discussed in sections 2 and 3 above, this Act establishes a framework for an integrated and sustainable transport system in Victoria consistent with the Act's vision statement, and contains transport system objectives and decision making principles which must be considered by transport bodies and interface bodies.	The transport system objectives will need to be considered in the evaluation of the project, and in the preparation of the planning scheme amendment for the project. See sections 2 and 3 for further detail.
<i>Road Management Act 2004</i> (RM Act)	This Act provides a statutory framework for road management authorities to manage the road network in Victoria that facilitates the coordination of the various uses of road reserves for roadways, pathways, infrastructure and similar purposes. The Act also provides for the role, functions and powers of road authorities, depending on the type of road concerned. Schedule 2, Part 1 of the Act requires the written consent of VicRoads to connect the project road to an existing freeway, and Schedule 7, Part 16 requires the consent of a coordinating road authority to do work on a road. However, some of these requirements will be unnecessary under the project delivery provisions of the MTPF Act which will apply to the project, provided the modified regime under that Act is complied with.	The provisions of Division 8 of Part 6 of the MTPF Act in relation to road management are likely to be utilised for the delivery of the project which streamline the legislative requirements in relation to conducting works on a road and connection works to a freeway.
<i>Planning and Environment Act 1987</i> (P&E Act)	This Act establishes the framework for planning the use, development and protection of land in Victoria. Its role in project assessment, land use planning and planning approval are discussed in sections 2 and 3 above. Specific measures for planning of transport infrastructure enabled by this Act are discussed below.	See sections 2 and 3.

Document	Description	Requirements / Implications
<b>Policy / Guidelines / Standards</b>		
Towards Zero 2016-2020 - Victoria's Road Safety Strategy & Action Plan	This strategy is to reduce fatalities and serious injuries by 15 per cent, with the ultimate aim of bringing the annual road toll under 200 per year by 2020. The strategy takes a collaborative approach in improvements to road and roadside infrastructure and encourages community engagement on speed limits and uptake of safer vehicles.	Of specific relevance to the project, the strategy includes reference to reducing heavy vehicle conflict and crashes, redirecting heavy traffic away from local streets, and creating local street environments with speeds that are more appropriate for pedestrians and cyclists.
Plan Melbourne, Department of Transport, Planning and Local Infrastructure (2014) Plan Melbourne Refresh Discussion Paper (2015)	Plan Melbourne is a State government document outlining a vision for Melbourne's growth to the year 2050. See section 3 for further discussion.	See section 3.
Victoria, the Freight State: The Victorian Freight and Logistics Plan (Department of Transport, Planning and Local Infrastructure, 2013)	<p>This is the Victorian Government's Plan to retain Victoria's status as Australia's freight and logistics capital by addressing the anticipated growth in freight movements across Melbourne and Victoria to 2050. Its objectives are:</p> <ul style="list-style-type: none"> <li>• Plan for and deliver capacity at key freight gateways in a timely manner</li> <li>• Improve the efficiency and productivity of key freight network links</li> <li>• Ensure future options are secured for key freight network developments</li> <li>• Progressively decentralise freight activities from central Melbourne to selected industrial areas</li> <li>• Protect and enhance access to markets for regional Victoria and adjoining catchments.</li> </ul> <p>The principles on which the Plan is based include to:</p> <ul style="list-style-type: none"> <li>• Maximise efficiency of freight movements on the transport network</li> <li>• Maximise the contribution of freight and logistics to overall economic performance</li> <li>• Ensure continuity of international and interstate gateway capacity</li> <li>• Ensure integration of freight and logistics activities with other land uses</li> <li>• Minimise impacts of freight and logistics activity on safety, amenity and the environment</li> <li>• Maximise affordability and private sector investment.</li> </ul>	<p>This plan does not reference the project, however the projections that the document makes regarding the future growth and demand of freight in Victoria continues to be relevant.</p> <p>Of specific relevance to the project, the Plan references:</p> <ul style="list-style-type: none"> <li>• Utilising managed motorways technology to extract more capacity from existing infrastructure</li> <li>• Extending access to the freight network for High Productivity</li> <li>• Freight Vehicles (HPFVs) to promote freight efficiency</li> <li>• Accessing off-peak (night time) capacity (which is currently constrained in the west by truck curfews)</li> <li>• Investing in new and enhanced networks links for freight.</li> </ul>

Document	Description	Requirements / Implications
VicRoads Smart Roads Framework	This framework manages competing interests for limited road space by giving priority use of the road to different transport modes at particular locations and times of the day. It is aligned with the TI Act and recognises the increasing importance of public transport, walking and cycling as transport modes.	This framework can assist in informing new road proposals, from major infrastructure projects to minor works, as well as land use development with implications on the road network, and will be relevant to consider in the assessment of the project.
Cycling into the Future 2013-23 (State of Victoria, 2012)	<p>This strategy supports and encourages cycling as a means of travel and/or to stay fit and healthy by:</p> <ul style="list-style-type: none"> <li>• Building evidence on which the Government can make more informed decisions about cycle policy</li> <li>• Streamlining the process for clarifying accountability, improving coordination, planning and delivery</li> <li>• Reducing conflicts and risks to make cycling safer</li> <li>• Encouraging cycling; growing the cycling economy</li> <li>• Planning urban cycling networks to improve connectivity and better target investment in urban networks, regional trails and specialist cycle sport infrastructure.</li> </ul> <p>This strategy brings together the planning of Melbourne’s Principal Bicycle Network and Metropolitan Trail Network.</p>	This strategy identifies the benefits of integrating cycle infrastructure with other infrastructure projects, and will be relevant to consider in the assessment of the project.
Network Development Plan – Metropolitan Rail (Public Transport Victoria, 2012).	<p>This Plan sets out in detail how Melbourne’s railway system is expected to evolve and grow over the short, medium and long-term. The Plan sets out four objectives including to:</p> <ul style="list-style-type: none"> <li>• Overcome existing network constraints and provide a strong foundation for further expansion of capacity in the future</li> <li>• Introduce a metro style train system for Melbourne: <ul style="list-style-type: none"> <li>• Extend the network into growth areas and existing areas without good access to rail services</li> <li>• Prepare for further growth and protect future options.</li> </ul> </li> </ul>	A number of projects proposed under this Plan serve the west of Melbourne and potentially interface with, and will need to be considered by the project.

Document	Description	Requirements / Implications
State Planning Policy Framework (SPPF)	<p>As discussed in section 3 of this Table, SPPF is common to all Victorian planning schemes, and contains policies in relation to various themes including Clause 18 in relation to Transport. This clause contains strategic goals for different sectors of transportation in including management of the road system and establishes the role of planning in:</p> <ul style="list-style-type: none"> <li>• Ensuring integrated and sustainable transport</li> <li>• Providing access to social and economic opportunities</li> <li>• Facilitating economic prosperity</li> <li>• Contributing to environmental sustainability</li> <li>• Coordinating movement of people and goods</li> <li>• Providing safe transport.</li> </ul>	<p>Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.</p>
State Planning Policy Framework (SPPF) - Planning Scheme Provisions and Controls	<p>As discussed in section 3, each of the relevant planning schemes contain planning controls, provisions and requirements for planning approval under various zones, overlays and particular provisions which (without the planning scheme amendment) would apply to the project. Such provisions include the following in relation to transport matters:</p> <ul style="list-style-type: none"> <li>• Road Zones (RDZ1 and RDZ2) define the zones of planning schemes allocated to road reserves and place controls on any development within them</li> </ul> <p>Public Use Zones (PUZ) recognise public land use for public utility and community services and facilities and are typically allocated, among other things, for public transport corridors and infrastructure.</p>	<p>All of the planning schemes intersected by the project have transport related zones. These provisions will need to be considered in the evaluation of the project and in the preparation of the planning scheme amendment for the project</p>
Local Planning Policy Framework (LPPF)	<p>As discussed in section 3, each of the Melbourne, Port Melbourne, Hobsons Bay, Brimbank, Maribyrnong and Wyndham Planning Schemes contain a Local Planning Policy Framework setting out the municipal strategic statement and local planning policies that apply to the planning schemes, in addition to the SPPF.</p> <p>Objectives and strategies for an integrated transport system are key themes relevant to the project in the MSS of all the affected planning schemes. The local policies that are designed to implement these objectives and strategies vary across the municipalities, however they all address issues of providing high quality integrated public transport, cycle and pedestrian paths to enhance walkability and safety, and adequate parking in tourist precincts and activity centres. They provide guidance in terms of new development to balance good road access for industrial and residential land uses, whilst carefully managing the impacts associated with a growth in freight to protect residential amenity.</p>	<p>The LPPF within each of the relevant planning schemes will need to be considered in the evaluation of the project and the planning scheme amendment required for the project.</p>

Document	Description	Requirements / Implications
<p>Local Policies</p> <p>Hobsons Bay Integrated Transport Strategy (Hobsons Bay City Council, 2006)</p>	<p>This strategy provides a framework for safe, equitable and efficient future transport development in the City of Hobsons Bay. It promotes:</p> <p>a carefully planned, integrated transport network for all vehicles, cyclists and pedestrians to maximise amenity while meeting the needs of business;</p> <ul style="list-style-type: none"> <li>• A high class public transport network for the local community</li> <li>• A network of roads to service industrial areas without affecting the amenity of sensitive land uses</li> <li>• Adequate parking facilities</li> <li>• A network of well-connected segregated cycle and pedestrian paths</li> <li>• Altona and Williamstown as important water transport terminals and tourism nodes.</li> </ul>	<p>The project interfaces with a number of issues and action plans identified in this strategy, including the following which will need to be considered in the evaluation of the project:</p> <ul style="list-style-type: none"> <li>• Addressing discontinuities in pedestrian and cycle network and design for needs of pedestrians and cyclists in all new facilities</li> <li>• Understanding the changing demands on the arterial and local road network</li> <li>• Addressing congestion issues associated with the M1 Corridor and the West Gate Bridge</li> <li>• Addressing intersection and ramp upgrades particularly at Melbourne Road and Millers Road interchanges</li> <li>• Understanding the drivers associated with changes in the freight and logistics industries and how these can be addressed on the network.</li> </ul>
<p>Western Transport Strategy (Leadwest, 2012)</p>	<p>This strategy was developed by Leadwest, the Western Transport Alliance and the local governments of Melbourne's West to prioritise projects that improve transport services and associated infrastructure across Melbourne's West. The City of Hobsons Bay endorsed this Strategy as one of a group of stakeholders in the Western Region.</p> <p>A new east west crossing of the Maribyrnong River was identified as urgently needed to meet the needs of freight and network resilience.</p> <p>The consensus of parties to the study was that investment should prioritise freight access to the port and should not encourage further car access to the CBD.</p>	<p>This Strategy will need to be considered in the evaluation of the project and in the preparation of the planning scheme amendment for the project.</p>
<p>Hobsons Bay Strategic Bicycle Plan 2013–2017 (Hobsons Bay City Council, 2013)</p>	<p>This implementation plan is for bicycle projects over the period 2013–2017. It uses count data, user surveys and consultation with cycling stakeholders to describe existing issues and provide a technical basis for future network improvements. This Plan identifies more than 120 projects, many of which are now complete.</p>	<p>This Plan identifies existing and proposed cycle routes along and across the West Gate Freeway, against which the proposed cycle infrastructure associated with the project can be evaluated.</p>

Document	Description	Requirements / Implications
<p>Maribyrnong Integrated Transport Strategy (Maribyrnong City Council, 2012) (MITS)</p>	<p>This strategy is for the development of Maribyrnong's transport network for the next decade, taking into account the projected growth within and outside of Maribyrnong. The strategy sets out a vision for a transport system which is safe, equitable and sustainable, achieved by:</p> <ul style="list-style-type: none"> <li>• Integrating transport and land use planning</li> <li>• Improving the pedestrian environment and linkages</li> <li>• Improving connections to and investment in public transport</li> <li>• Improving opportunities for cycling</li> <li>• Directing commercial traffic onto efficient arterial routes away from residential areas</li> <li>• Addressing road congestion by prioritising space-efficient transport modes</li> <li>• Reducing greenhouse gas emissions and air pollution through efficiency improvements</li> <li>• Informing people about their travel choices.</li> </ul>	<p>This strategy expresses support for an alternative to the West Gate Freeway (as offered by the project) and the desire to maximise the benefits of transferring traffic (particularly freight) off local routes.</p>

Document	Description	Requirements / Implications
<p>Transport Strategy 2012: Planning for Future Growth (City of Melbourne, 2012) (including the Bicycle, Motorcycle, Road Safety and Walking Action Plans)</p>	<p>This strategy aims to:</p> <ul style="list-style-type: none"> <li>Coordinate the City of Melbourne’s transport initiatives and strategic land use development policy;</li> <li>Advocate the City of Melbourne’s position on transport and related land use policy to State Government</li> <li>Align City of Melbourne and State Government investment in transport</li> <li>Align the City of Melbourne and its many stakeholders.</li> </ul> <p>The key directions of the strategy include:</p> <ul style="list-style-type: none"> <li>Integrate transport and land use planning</li> <li>Create ‘go anywhere, anytime’ public transport for inner Melbourne</li> <li>Support public transport, walking and cycling as the dominant modes of transport in inner Melbourne</li> <li>Develop high-mobility pedestrian and public transport streets in the central city</li> <li>Make Melbourne a cycling city</li> <li>Foster innovative, low impact freight and delivery in central Melbourne.</li> </ul>	<p>Of relevance to the project, this strategy recognises the following which will need to be considered in the evaluation of the project:</p> <ul style="list-style-type: none"> <li>The economic importance of the flow of people and goods to and from the city, and the need for capacity around the Port of Melbourne and the central city to absorb freight growth</li> <li>The relative underdevelopment of the links on the western side of the city</li> <li>Congestion on the West Gate corridor from use by low-occupancy passenger cars</li> <li>Over-reliance of freight on the Inner West’s local roads</li> <li>The need to prioritise freight and service vehicles on freeways, and encourage transfer of other trips to other modes, promoting walking, cycling and public transport.</li> </ul> <p>Four Action Plans sit under the strategy which are relevant to the project:</p> <ul style="list-style-type: none"> <li>Bicycle Plan (2016–2020) includes a priority corridor along Footscray Road and other enhancements of cycle infrastructure near the project</li> <li>Motorcycle Plan (2015–2018) promotes safe motorcycling as a sustainable and space efficient mode of travel</li> <li>Road Safety Plan (2013–2017) accident reduction plan to create a more supportive environment for vulnerable road users (pedestrians, cyclists and motorcyclists)</li> <li>Walking Plan (2014–2017) aims to expand the pedestrian network, reduce delays, improve safety and accommodate growth in walking using a mix of planning, operational and capital works interventions.</li> </ul>

## 6 Surface Water Resources

Document	Description	Requirements / Implications
National / Commonwealth		
Legislation		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	As discussed in section 2, this Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation. Among the matters of national environmental significance protected by the legislation are Ramsar wetlands.	The project is not an action requiring assessment and approval under the Act. See section 2 for further details
Policy / Guidelines / Standards		
National Water Quality Management Strategy 1994 (NWQMS)	This Strategy is a joint national approach to improving water quality in Australian and New Zealand waterways developed by the Australian and New Zealand Governments in cooperation with state and territory governments. It aims to 'achieve sustainable use of the nation's water resources by protecting and enhancing their quality while maintaining economic and social development'. The NWQMS includes 21 subsidiary guideline documents covering ambient and drinking water quality, monitoring, groundwater, rural land uses and water quality, stormwater, sewerage systems and effluent management for specific industries.	These principles have guided the project's scientific investigations, surface water impact assessment and strategies to eliminate/minimise impacts on surface water.
Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 1992)	These Guidelines have been prepared as part of Australia's NWQMS (see above). These Guidelines (and subsequent revisions) set the water quality objectives required to sustain current or future environmental values for natural and semi-natural water resources in Australia and New Zealand and provide recommended limits to acceptable change in water quality that will continue to protect the associated environmental values.	Meeting the guidelines for the project will provide a level of certainty that there will be no significant impact on water resource values.
Australian Guidelines for Water Quality Monitoring and Reporting 2000	These Guidelines provide a comprehensive framework and guidance for the monitoring and reporting of fresh and marine waters and groundwater.	These guidelines will be reflected in the water quality monitoring programs within the project's environmental performance requirements.

Document	Description	Requirements / Implications
<p>The Framework for Marine and Estuarine Water Quality Protection 2002</p>	<p>This framework is issued under the NWQMS. The Framework aims to protect the nation's marine environment from the adverse effects from sediment, nutrients, pathogens, heavy metals and other pollutants due to land-based activities such as urban, industrial and agricultural development.</p> <p>This Framework provides a nationally consistent approach to coastal water quality protection including development of Water Quality Improvement Plans (WQIP) for key coastal waterways threatened by pollution.</p>	<p>WQIP for in coastal waterways will be considered in the assessment of the impact of the project's water quality impacts.</p>
<p>Australian Rainfall and Runoff Guideline Document (Engineers Australia, 1987 and revisions) (ARR)</p>	<p>This ARR is a national guideline for estimating design flood characteristics in Australia, providing guidance on appropriate techniques and methods for determining design flood flows and levels.</p>	<p>Any hydrologic or hydraulic investigation required to assess the project's impacts, is required to adopt the standards identified in this guideline.</p>
<p>Australian Runoff Quality: A Guide to Water Sensitive Urban Design (Engineers Australia, 2006)</p>	<p>This guideline is an overview of current best practice in the management of stormwater in Australia. It provides information on structural Water Sensitive Urban Design (WSUD) features, as well as stormwater contaminant processes and pollutant characteristics, harvesting and re-use, and targets to protect receiving waters.</p>	<p>This guideline influences the methods adopted for water quality impact assessment of the project.</p>
<p>Guide to Road Tunnels (Austroads, 2010)</p>	<p>This provides a comprehensive guide for the planning of road tunnels and describes important issues and considerations relating to implementation, general planning, regulation, structural and geometric design, drainage, geology, the environment as well as operation, construction and maintenance.</p>	<p>The risk management approach identified in this guide should be applied to the assessment of tunnel flood immunity standards.</p>

Document	Description	Requirements / Implications
Victorian / State Legislation		
<i>Water Act 1989</i> (Water Act)	<p>This Act is the primary legislation for the integrated management of Victoria's water resources. The Act promotes efficient use and allocation of water resources, and provides a formal means for protecting and enhancing waterway flow, water quality and catchment conditions.</p> <p>The Act also governs the entitlement of water authorities. Melbourne Water is the authority responsible for managing Melbourne's waterways and major drainage systems. The powers given to Melbourne Water under this Act are primarily implemented through By-Law No. 2: Waterways, Land and Works Protection and Management (see below).</p> <p>Section 67 of the Act requires a licence to construct, alter, operate or decommission works on a waterway. The Act also requires a permit to undertake any works within or in proximity of a designated waterway. A permit is required to build over, or near, any of Melbourne Water's underground assets such as pipes, drains, water mains and easements.</p>	<p>Consent will be required to undertake works on or across a waterway by way of a licence and appropriate permits.</p> <p>See By-Law No. 2: Waterways, Land and Works Protection and Management below.</p>
<i>Environment Protection Act 1970</i> (EP Act)	<p>This Act is the primary legislation regulating the protection of Victoria's environment including protecting water environments from pollution. The Act establishes the Environment Protection Authority (EPA) to administer the Act and regulations and Orders made under the EP Act including Orders declaring State Environment Protection Policies (SEPPs).</p>	<p>See State Environment Protection Policy (Waters of Victoria) below.</p>
<i>Planning and Environment Act 1987</i> (P&E Act)	<p>This Act establishes the framework for planning the use, development and protection of land in Victoria. Its role in project approval and land use planning are discussed in sections 2 and 3 respectively.</p> <p>This Act contributes to the protection of water resources through strategies, planning schemes and policies developed at a state and local level (see below).</p>	<p>See sections 2 and 3.</p>
<i>Catchment and Land Protection Act 1994</i> (CLP Act)	<p>This Act is the principal legislation relating to the management of pest plants and animals in Victoria. This is discussed further in section 4.</p>	<p>The project has the potential to promote the spread of noxious weeds.</p>

Document	Description	Requirements / Implications
<i>Coastal Management Act 1995</i>	This Act enables co-ordinated strategic planning and management for the Victorian coast, management plans for coastal Crown land, and a co-ordinated approach to approvals for the use and development of coastal Crown land. The Act provides for long-term strategic planning and management through the Victorian Coastal Strategy (see below). One of the objectives of the Act is to 'maintain and improve coastal water quality'. Section 37 of this Act requires written consent of the Minister to use or develop coastal Crown land.	Consent will be required to use and develop coastal Crown land under this Act. In particular, consent to undertake works adjacent to or in the Maribyrnong River.
<i>Conservation, Forests and Lands Act 1987</i>	Section 66 of this Act requires a public authority proposing to carry out works specified in Schedule 3 of the Act to submit a plan of works to the Secretary for comment on any necessary measures to be taken for the protection of land, waters and wildlife. Schedule 3 includes structures, in or across waterways which potentially interfere with the passage of fish, or the quality of aquatic habitat.	Consent under this Act will be required to carry out the proposed works.
<b>Policy / Guidelines / Standards</b>		
State Environment Protection Policy (Waters of Victoria) (SEPP (WoV))	SEPPs are subordinate instruments to the EP Act 1970, and set out policies to establish environmental quality objectives. SEPP (WoV) provides the legal framework for the protection and rehabilitation of Victoria's surface waters. It provides for: <ul style="list-style-type: none"> <li>• Beneficial uses and values of Victoria's fresh and marine water environments</li> <li>• Objectives and indicators for the environmental quality required to protect them</li> <li>• Guidance to authorities for protection and rehabilitation of waterways in order to meet objectives</li> <li>• Measures to be implemented to control the environmental impact of discharges and protect the beneficial uses of water.</li> </ul> SEPP (WoV) includes schedules with beneficial uses, environmental quality indicators and objectives for specific watercourses within the different catchments.	The project should not prevent achievement of the objectives and targets of the SEPP. Specific targets for watercourses potentially affected by the project can be found in Schedules F6 (Port Phillip Bay) and F7 (Waters of the Yarra Catchment) of the SEPP WoV.
Victorian Waterway Management Strategy (Department of Environment and Primary Industries, 2013)	This provides an 8-year strategy for managing Victoria's waterways. It involves the development and implementation of regional waterway strategies for ten catchment management regions across Victoria.	These strategies require the project to maintain or improve the environmental, social, cultural and economic values of rivers, estuaries and wetlands.

Document	Description	Requirements / Implications
Healthy Waterways Strategy (Melbourne Water, 2013) (HWS)	This is a five-year strategy for managing waterways in the Port Phillip and Westernport region. It sets priorities and actions to improve waterway health and implementation targets to measure the effectiveness of the actions identified.	The project should not prevent Melbourne Water from achieving the longer term waterway implementation targets identified in the HWS.
By-Law No. 2: Waterways, Land and Works Protection and Management	<p>This By-Law No. 2 empowers Melbourne Water to enact the Water Act through:</p> <ul style="list-style-type: none"> <li>• The management, protection and use of lands, waterways and works under the management and control of Melbourne Water</li> <li>• Preventing or minimising interference with or obstruction of the flow of water</li> <li>• Preventing or minimising the pollution or silting up of designated waterways, land or works or any injury to or pollution of it or them, including prohibiting the deposit of material in or near it or them</li> <li>• Prohibiting or regulating the removal of any material from land forming part of a designated waterway or designated land or works</li> <li>• The general management and control of any designated waterways or designated land or works.</li> </ul>	The project will require works to be undertaken within waterways and Melbourne Water have a set of criteria that must be met for each individual waterway.
The Port Phillip and Westernport Regional River Health Strategy (RRHS) 2007	<p>The RRHS is part of the HWS (see above) and provides an overview of the condition of each of the key rivers within the region in terms of water quality, aquatic life, habitat and stability, vegetation and flow. It also provides specific strategies (extended under the HWS) providing a five-year plan for improving their health.</p> <p>The RRHS is implemented by Melbourne Water with the assistance of the Port Phillip and Westernport Catchment Management Authority, Councils, and State Government Agencies.</p>	The RRHS includes Yarra, Maribymong and Werribee River catchments which are the major waterways intersected by the project.
Urban Stormwater Best Practice Environmental Management Guidelines (BPEMG) (CSIRO, 1999)	These guidelines were developed to establish best practice performance objectives for developments affecting urban stormwater and help determine specific pollutant reduction targets and stormwater management measures necessary to meet the SEPP.	The project must comply with the BPEMG in operation (not construction).
EPA Information Bulletins on State Environment Protection Policy (Waters of Victoria)	<p>Two of the Information Bulletins relevant to this study include:</p> <ul style="list-style-type: none"> <li>• Water Quality Objectives for Rivers and Streams – Ecosystem Protection (June 2002)</li> <li>• Nutrient Objectives for Rivers and Streams – Ecosystem Protection (December 2001).</li> </ul>	These sets of objectives for waterways are potentially affected by the project.

Document	Description	Requirements / Implications
Victorian Coastal Strategy 2014 (VCS)	The VCS is a State Government Policy which provides a long-term vision for the planning, management and sustainable use of the Victorian coast. It sets a framework for developing and implementing locally and regionally specific strategies and plans such as coastal management plans, regional coastal plans, and planning schemes.	The VCS requires that new developments (including the project) consider climate change and sea level rise in all aspects of planning and management on the coast.
Maribyrnong River Valley Design Guidelines (Department of Planning and Community Development, April 2010)	These guidelines were prepared by the Department of Planning and Community Development (now Department of Environment, Land, Water and Planning) with the contribution of other agencies including the Cities of Brimbank, Hume, Maribyrnong, Melbourne and Moonee Valley Councils. The Guidelines set out a broad vision for a healthy, vibrant river with quality open space, good walking and cycling trails and sensitive development that protects the Maribyrnong's natural and urban features.	This document is a reference document in planning schemes. Sections 6 and 7 of the guidelines are applicable to future design outcomes associated with the project.
Moonee Ponds Creek Master Plan Draft	<p>The City of Melbourne's Annual Plan 2016/17 states in relation to Moonee Ponds Creek that the following actions will be taken:</p> <ul style="list-style-type: none"> <li>• In partnership with the Victorian Government, finalise the Moonee Ponds Creek Masterplan and seek agreement on a funding and implementation strategy</li> <li>• Develop a flood mitigation strategy including open space requirements, around the Moonee Ponds Creek corridor.</li> </ul>	The increase in elevated structures above the creek would decrease the amenity value of this open space and impact on its overall value as a recreation space in this location. The functionality as a shared use pathway and connector would not be impacted.
Port Phillip Bay Environmental Management Plan 2001 (PPBEMP)	This is a plan to maintain the health and amenity of Port Phillip Bay by reducing pollution entering the Bay and preventing the spread and impact of marine pests. A new draft of the plan 2017-2027 has been released for community and stakeholder consultation.	Consideration will need to be given to this plan in the evaluation of the project.

Document	Description	Requirements / Implications
<p>State Planning Policy Framework (SPPF)</p>	<p>As discussed in section 3 of this Table, SPPF is common to all Victorian planning schemes, and contains policies in relation to various themes including Clause 12 in relation to Environmental and Landscape Value and Clause 13 in relation to Environmental Risks.</p> <p>Clause 12 has a series of specific provisions for:</p> <ul style="list-style-type: none"> <li>• Coastal areas to recognise and enhance the value of the coastal areas to the community and ensure sustainable use of natural coastal resources</li> <li>• Rivers to protect and enhance the significant river corridors of metropolitan Melbourne' with specific policies for the Yarra River.</li> </ul> <p>Clause 13 has a series of specific provisions for:</p> <ul style="list-style-type: none"> <li>• Coastal inundation and erosion to plan for and manage the potential coastal impacts of climate change.</li> <li>• Floodplain management to assist the protection of:                             <ul style="list-style-type: none"> <li>• Life, property and community infrastructure from flood hazard</li> <li>• The natural flood carrying capacity of rivers, streams and floodways</li> <li>• The flood storage function of floodplains and waterways</li> <li>• Floodplain areas of environmental significance or of importance to river health.</li> </ul> </li> </ul>	<p>Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.</p>
<p>State Planning Policy Framework (SPPF) - Planning Scheme Provisions and Controls</p>	<p>As discussed in section 3, each of the relevant planning schemes contain planning controls, provisions and requirements for planning approval under various zones, overlays and particular provisions which (without the planning scheme amendment) would apply to the project. Such provisions include the following in relation to surface water:</p> <ul style="list-style-type: none"> <li>• Special Building Overlays (SBO) – identifies areas prone to overland flooding to set appropriate conditions and floor levels to address any flood risk to developments. These overlays require a planning permit for buildings and works</li> <li>• Land Subject to Inundation Overlays (LSIO) – applies to land affected by flooding from waterways and open drainage systems (commonly known as floodplains). These overlays require a planning permit for buildings and works</li> <li>• Floodway Overlays (FO) – identifies land carrying active flood flows associated with waterways and open drainage systems. This overlay is categorised by depths in excess of one metre Urban Floodway Zone (UFZ) – controls development and land restricting anything other than low intensity uses such as recreation and agriculture. Development is generally not encouraged in the UFZ.</li> </ul>	<p>All of the planning schemes intersected by the project have water related zones and overlays which will need to be considered in the evaluation of the project.</p>

Document	Description	Requirements / Implications
Local Planning Policy Framework (LPPF)	<p>As discussed in section 3, each of the Melbourne, Port Melbourne, Hobsons Bay, Brimbank Maribyrnong and Wyndham Planning Schemes contain a Local Planning Policy Framework setting out the municipal strategic statement and local planning policies that apply to the planning schemes, in addition to the SPPF.</p> <p>While Melbourne Water is responsible for regional drainage, flood plain and waterway management and for contributing to the protection and improvement of waterway health across greater Melbourne, Councils are the responsible authorities for planning decisions made with reference to planning schemes that control land use and development. Planning schemes identify the presence of surface water and control development through the application of overlays (applied to protect areas from adverse impacts or to allow easy identification of constraints in developments on that area) defined through the VPPs.</p>	<p>As discussed in section 3, the LPPF within each of the relevant planning schemes will need to be considered in the evaluation of the project, including those provisions relevant to surface water.</p>
<p>Local Policies</p> <p>Wyndham City Council</p>	<p>In addition to the zones and overlays above, the Wyndham City Council has the following relevant policies and guidelines:</p> <ul style="list-style-type: none"> <li>Site Environmental Management Plan (SEMP): Guidelines and Standards Manual 2013 – Standards for SEMP’s that detail the potential environmental impacts of developments and management strategies and site practices to reduce them with particular focus on protecting stormwater drainage and managing runoff</li> <li>Wyndham Stormwater Management Plan 2015 - a strategic plan reviewing all existing systems, processes and design practices relating to stormwater management and water sensitive urban and a plan for their future improvement.</li> </ul>	<p>Laverton North is in the vicinity of the project.</p> <p>The SEMP guideline requirements for surface water management apply to the project.</p> <p>The Stormwater Management Plan provides guidance for any changes to hydrology or stormwater infrastructure proposed by the project.</p>
City of Brimbank Council	<p>In addition to the zones and overlays above, the City of Brimbank Council has the following relevant policies and guidelines:</p> <p>Brimbank Sustainable Water Strategy 2013–2023 – a strategic 10-year plan for securing the Council’s water resources by improving water quality, flood management, ‘fit-for-purpose’ water sources and health benefits across the water cycle.</p> <p>Urban Forest Strategy 2016–2046 – The Urban Forest Strategy is a 30-year strategic approach to increasing Brimbank City Council’s canopy setting a framework for tree planting in the LGA.</p>	<p>The suburbs of Brooklyn and Sunshine West are in the vicinity of the project.</p> <p>Council’s sustainable water strategy requires the project to meet appropriate water sensitive urban design (WSUD) requirements (minimum standards to be established) and adopt sediment control and erosion protection during construction.</p> <p>The project will have to comply with the Urban Forest strategy, where applicable.</p>

Document	Description	Requirements / Implications
Hobsons Bay City Council	<p>In addition to the zones and overlays above, the Hobsons Bay City Council has the following relevant policies and guidelines:</p> <ul style="list-style-type: none"> <li>Living Hobsons Bay: an Integrated Water Management Plan 2014-2019 – strategic guidance for the LGA's water management activities and describes the water management goals for the five year period of 2014 to 2019 through measures which include avoiding wastage, protecting waterways by encouraging good stormwater management and preventing pollution of stormwater.</li> </ul>	<p>The following suburbs are located within the project area: Altona North, Brooklyn, South Kingsville and Spotswood.</p> <p>Actions for promoting integrated water management in developments including the promotion of water efficiency measures and meeting best practice stormwater management which are relevant to the project.</p>
City of Maribyrnong	<p>In addition to the zones and overlays above, the Maribyrnong City Council has the following relevant policies and guidelines:</p> <ul style="list-style-type: none"> <li>Maribyrnong City Council Stormwater Management Plan - Volume 1 2001 – Plan to improve stormwater environmental management through improving stormwater quality for defined beneficial uses: <ul style="list-style-type: none"> <li>Maribyrnong Stormwater Drainage Asset Management Plan (D-AMP) 2011 sets out how the Council manages urban stormwater drainage assets including pipes, pits and other drainage infrastructure</li> <li>Maribyrnong River Valley – Design Guidelines 2010 - a planning framework designed by the major agencies responsible for the river to achieve greater planning consistency along the river valley</li> <li>City of Maribyrnong Open Space Strategy 2014 - Provides strategic direction for the future planning, provision, design and management of open space in the City of Maribyrnong from 2013 to 2031 and describes the existing open space network and analyses potential future changes.</li> </ul> </li> </ul>	<p>The suburbs of Footscray and Yarraville are in the vicinity of the project.</p> <p>Design guidelines will influence project elements along the river including the proposed crossing of the Maribyrnong River and associate riverbank works.</p> <p>This strategy identifies lack of connectivity in open space corridors along waterways which the project will have to take into account.</p>
City of Melbourne	<p>In addition to the zones and overlays above, the City of Melbourne has the following relevant policies and guidelines:</p> <ul style="list-style-type: none"> <li>Total Watermark – City as a Catchment Strategy 2014 - The city's sustainability strategy with respect to water resources focussing on climate change adaptation and flood prevention, water for sustainable beneficial uses and efficient water use.</li> </ul>	<p>The suburbs of Docklands, North Melbourne and West Melbourne are in the vicinity of the project.</p> <p>Meeting the objectives of this strategy will require the project to adopt an integrated water management approach to planning and design including:</p> <ul style="list-style-type: none"> <li>Climate change adaptation and flood (amended flood levels)</li> <li>Access to waterways and public open space</li> <li>Optimised stormwater quality, decreased runoff, health of waterways</li> <li>Water use (optimise fit for purpose water use).</li> </ul>

## 7 Groundwater

Document	Description	Requirements / Implications
<b>National / Commonwealth</b>		
<b>Legislation</b>		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	As discussed in section 2, this Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation.	The project is not a controlled action requiring assessment and approval under the Act. See section 2 for further details.
<i>National Environment Protection Council Act 1994</i>	This Act allows the National Environmental Protection Council (NEPC) to issue National Environment Protection Measures (NEMs). These measures are framework documents containing national environmental protection objectives. They assist in protecting or managing particular aspects of the environment.	See ASC NEPM below.
<b>Policy / Guidelines / Standards</b>		
National Water Quality Management Strategy 1994 (NWQMS)	This strategy described in section 6 also applies to groundwater. The NWQMS includes 21 subsidiary guideline documents covering ambient and drinking water quality, monitoring, groundwater, rural land uses and water quality, stormwater, sewerage systems and effluent management for specific industries.	These principles have guided the project's scientific investigations, groundwater impact assessment and strategies to eliminate/minimise impacts on ground water.
National Environment Protection (Assessment of Site Contamination) Measure (NEPC 2013) (ASC NEPM).	This provides a national approach to the assessment of potentially contaminated sites to ensure effective management by the community and to provide adequate protection of human health and the environment where known contamination has occurred. The ASC NEPM is divided into two schedules: <ul style="list-style-type: none"> <li>Schedule A identifies the recommended process for the assessment of site contamination</li> <li>Schedule B identifies 10 general guidelines for the assessment of site contamination.</li> </ul>	The assessment of groundwater affected by the project includes evaluation of potential contaminated groundwater using the ASC NEPM.

Document	Description	Requirements / Implications
<p>Victorian / State Legislation</p>		
<p><i>Environment Protection Act 1970</i> (EP Act)</p>	<p>This Act described in section 6 also applies to the protection of groundwater quality.</p>	<p>See State Environment Protection Policy (Groundwaters of Victoria) discussed below.</p>
<p><i>Water Act 1989</i> (Water Act)</p>	<p>This Act discussed in section 6 also applies to the management of groundwater, and imposes licensing requirements in relation to the dewatering of groundwater. The Act establishes DELWP as the authority responsible for the sustainable, efficient, equitable management and allocation of groundwater. For groundwater in southern Victoria, the DELWP has delegated this responsibility to Southern Rural Water, whose responsibilities include licensing any extraction from and injection to the groundwater system. Groundwater dewatering and recharge through bores requires a licence from Southern Rural Water (for construction of bores and for pumping from/to bores).</p>	<p>Licensing will be required for any dewatering activities required by the project.</p>
<p>Policy / Guidelines / Standards</p>		
<p>State Environment Protection Policy (Groundwaters of Victoria) (SEPP Groundwater)</p>	<p>SEPPs are subordinate instruments to the <i>Environment Protection Act 1970</i>, and set out policies to establish environmental quality objectives.</p> <p>SEPP Groundwater sets a statutory framework for groundwater protection and the clean-up and management of polluted groundwater. The policy defines the beneficial uses to be protected according to discrete segments of the groundwater environment (bands of total dissolved solids (TDS) concentrations).</p> <p>SEPP Groundwater refers to the SEPP WoV when assessing impacts of groundwater that might discharge to surface water environments. The SEPP WoV includes objectives for the protection of surface water beneficial uses and the maintenance of ecosystems, which includes the point of discharge/interaction of groundwater and surface water.</p>	<p>The project will need to minimise the potential for adverse impacts on groundwater quality to ensure that existing beneficial uses are protected.</p>

Document	Description	Requirements / Implications
<p>EPA Guidelines:</p> <ul style="list-style-type: none"> <li>• Groundwater Sampling Guidelines (Publication 669) 2000</li> <li>• Hydrogeological Assessment (Groundwater Quality) (Publication 668) 2006</li> <li>• Sampling and Analysis of Waters, Wastewaters, Soils and Wastes (Publication IWRG701) 2009</li> <li>• The cleanup and management of polluted groundwater (Publication 840.2) 2016</li> <li>• Environmental Guidelines for Major Construction Sites (Publication 480) 1996.</li> </ul>	<p>Groundwater Sampling Guidelines (Publication 669) assists those involved in groundwater sampling to reduce the potential for error, allowing subsequent groundwater management decisions to be based on 'representative' groundwater quality data.</p> <p>Hydrogeological Assessment (Groundwater Quality) (Publication 668) provides guidance on the SEPP Groundwater. It contains a process to determine any existing groundwater contamination and resulting risk to beneficial uses of groundwater, and any potential risk to groundwater quality and beneficial uses.</p> <p>Sampling and Analysis of Waters, Wastewaters, Soils and Wastes (Publication IWRG701) provides guidance on environmental sampling.</p> <p>The clean-up and management of polluted groundwater (Publication 840.2) provide details on EPA's requirements and expectations for developing and implementing the clean up and management of polluted groundwater to ensure the protection of human health and the environment.</p> <p>Environmental Guidelines for Major Construction Sites (Publication 480) is designed to provide developers and contractors with guidelines on how to implement sound practices that minimise environmental impacts and eliminate health risks and nuisance to residents near a construction site.</p>	<p>Management and assessment of groundwater for the project is to be undertaken in accordance with these guidelines.</p>

## 8 Ground Movement

Document Legislation	Description	Requirements / Implications
<p>There is no specific legislation or policy applicable to ground movement assessment. Ground movement impacts are dependent on the structure type and its tolerance to movement (e.g. span and flexibility), the assessment of which is based on engineering principles, using relevant guidelines. Legislation and guidance relating to assessment of impacts on the environment which, amongst other things, result from issues surrounding ground movement are included in sections 4, 6, 7 and 9 to 14.</p>		
<p><b>Policy / Guidelines / Standards</b></p>		
Code of Practice for the Risk Management of Tunnel Works (ITIG 2012)	International guidelines to 'promote and secure best practice for the minimisation and management of risks associated with the design and construction' of underground structures.	Risk assessment for tunnel design and construction on the project will adhere to this Code of Practice.
The Model Specification for Tunnelling (ICE 2010)	A common standard for tunnelling produced in the UK but used internationally and forms the basis of tunnelling specifications. The document includes sections on 'General requirements', 'Materials', 'Methods', 'Ground stabilisation processes' and 'Working environment'.	Tunnel design and construction methods will adhere to recognised Australian and international standards.
Construction Industry Research and Information Association (CIRIA) documents	A series of guidance documents on prediction of ground movements from tunnelling and measures to manage them: <ul style="list-style-type: none"> <li>Guidance on the prediction and effects of ground movements by tunnelling in soft ground beneath urban areas (CIRIA Report 30)</li> <li>CIRIA SP200 (2001) – Vol 1: Projects and Methods, Building Response to Tunnelling</li> <li>CIRIA SP201 (2003) – Response of buildings to excavation induced ground movements.</li> </ul>	These documents will inform the design and assessment of the tunnels on the project.
Australian Standard AS2870-2011 Residential slabs and footings	These documents contain design guidance relating to ground movement.	
Austroroads – Guide to Road Tunnels (Part 1 and 2)		
CIRIA C750 (2016) – Groundwater Control: Design and Practice (2 <sup>nd</sup> Edition)		

## 9 Contaminated Land and Waste Disposal

Document	Description	Requirements / Implications
National / Commonwealth Legislation		
<i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)	As discussed in section 2, this Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation.	The project is not an action requiring assessment and approval under the Act. See section 2 for further details.
<i>National Environment Protection Council Act 1994</i>	This Act allows the National Environmental Protection Council (NEPC) to issue National Environment Protection Measures (NEMPs). These measures are framework documents containing national environmental protection objectives. They assist in protecting or managing particular aspects of the environment.	See ASC NEPM below.
Policy / Guidelines / Standards		
National Environment Protection (Assessment of Site Contamination) Measure (NEPC 2013) (ASC NEPM).	This provides a national approach to the assessment of potentially contaminated sites to ensure effective management by the community and to provide adequate protection of human health and the environment where known contamination has occurred. See section 7 for further discussion. The NEPM is referenced under the State Environment Protection Policy (Prevention and Management of Contamination of Land) (see below).	In Victoria, the ASC NEPM is mainly implemented through the State policies and guidelines described below. The NEPM and associated State policies and guidelines are used as the basis for the assessment of contaminated land potentially disturbed by the project.
Australian Standard AS4482.1-2005 Guide to the investigation and sampling of sites with potentially contaminated soil - non-volatile and semi-volatile compounds Australian Standard AS4482.2-1999 Guide to the sampling and investigation of potentially contaminated soil - volatile substances	AS4482.1-2005 provides guidance for the collection of sufficient and reliable information for the assessment of a site potentially contaminated by non-volatile and semi-volatile compounds. It includes the formulation of data quality objectives and design of a sampling plan to meet the objectives of the investigation. AS4482.2-1999 sets out guidance for collecting sufficient and reliable information for the assessment of a potentially contaminated site.	These standards provide guidance when sampling and investigating potentially contaminated soils (for non-volatile, semi-volatile and volatile compounds).

Document	Description	Requirements / Implications
Victorian / State Legislation		
<i>Environment Protection Act 1970</i> (EP Act)	<p>This Act is the primary legislation regulating the protection of the environment including protecting land from pollution, and regulating the management of waste including its classification, transport, storage, containment, treatment and disposal.</p> <p>These Regulations include the following:</p> <ul style="list-style-type: none"> <li>• Definition of prescribed waste and prescribed industrial waste</li> <li>• Sets rules for transporting prescribed industrial waste</li> <li>• Provision for exemptions based on beneficial re-use.</li> </ul>	<p>The SEPP (Prevention and Management of Contaminated Land) (see below) will apply to the assessment of contaminated land impacts and waste for the project.</p>
Environment Protection (Industrial Waste Resource) Regulations 2009	<ul style="list-style-type: none"> <li>• Definition of prescribed waste and prescribed industrial waste</li> <li>• Sets rules for transporting prescribed industrial waste</li> <li>• Provision for exemptions based on beneficial re-use.</li> </ul>	<p>Any prescribed waste generated by the project will be subject to these Regulations.</p>
Policy / Guidelines / Standards		
State Environment Protection Policy (Prevention and Management of Contaminated Land) (SEPP Land)	<p>SEPPs are subordinate instruments made under the EP Act 1970, and set out policies to establish environmental quality objectives.</p> <p>SEPP Land establishes beneficial uses of land in Victoria and provides a mechanism for determining whether these uses are being protected, such as indicators and objectives for use in assessing impacts. Contamination concentrations are set for protection of beneficial uses (maintenance of ecosystems, human health buildings and structures, aesthetics, production of food, flora and fibre).</p> <p>The SEPP Land applies to both historically contaminated land and current activities.</p>	<p>The SEPP Land provides specific reference to beneficial use criteria for potential contaminants which, if exceeded, may indicate that beneficial uses are precluded as well as methodologies for assessing impacts, which will be used for the assessment of the project's impacts in relation to contaminated land.</p>
<p>The Industrial Waste Resource Guidelines (IWRGs):</p> <ul style="list-style-type: none"> <li>• IWRG621, Soil Hazard Categorisation and Management (EPA, 2009a)</li> <li>• IWRG702, Soil Sampling (EPA, 2009b)</li> <li>• IWRG600.2, Waste Categorisation (EPA, 2010)</li> </ul>	<p>IWRGs are published by the Victorian EPA to provide guidance for management of waste, including waste soil, in Victoria.</p> <p>The guidelines explain how to determine the waste category of excavated material based on site history and testing for contaminants to determine a hazard category and reasonably expected to be present and defining the categories of 'fill material' and 'prescribed industrial waste'.</p>	<p>These guidance documents will be used in the categorisation of waste generated by the project. In particular, IWRGs will provide guidance on the sampling and categorisation of excavated waste soils to be moved off site for reuse or disposal.</p>
EPA Victoria Classification of Wastes (Publication 448, May 2007)	<p>This publication provides guidance on EPA requirements for the classification of waste and the suitable re-use, management or off-site disposal of each category of waste.</p>	

Document	Description	Requirements / Implications
<p>The Industrial Waste Management Policy (Waste Acid Sulphate Soils) (IWMP WASS)</p>	<p>The IWMP WASS establishes the statutory framework for identifying, assessing and managing Waste Acid Sulphate Soils (WASS) defined by reference to EPA Publication 655 'Acid Sulphate Soil and Rock'.</p> <p>The policy's objective is to protect human health and the environment from risks that may be posed by WASS, and requires that a person must not cause or permit the disposal or reuse of WASS at any premises not licensed or covered by an appropriate environment management plan.</p> <p>The on-site management of WASS does not require the preparation of an EMP but must apply current best practice in accordance with the Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulphate Soil (see below).</p>	<p>Any excavation of coastal soils required by the project will be assessed and managed for acid sulphates according to the relevant policies and guidelines.</p>
<p>Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulphate Soil 2009 (BPMG)</p>	<p>The BPMG presents a risk identification approach to assist with decisions about assessing and managing coastal acid sulphate soils (CASS) to help protect the environment, humans and infrastructure from the adverse impacts associated with CASS disturbance.</p>	<p>Best practice guidelines will be used to assess and manage acid sulphate soils associated with the tunnels and port/CityLink/city connections components, and their disposal.</p>

## 10 Air Quality

Document	Description	Requirements / Implications
<p><i>Road Tunnels: Vehicle Emissions and Air Demand for Ventilation</i>, World Road Association (PIARC), 2012</p>	<p>This report presents the data necessary for the design of the ventilation system for road tunnels in normal operation. It aims at defining the minimum quantity of fresh-air that is required to ensure adequate in-tunnel air quality and visibility thresholds. The report is a reference document for the design of tunnels and for monitoring the operation conditions.</p> <p>The report provides the values of admissible concentrations of toxic gases and particulate matter. It then presents the emission factors of the main pollutants and particulate matter as a function of the type of vehicle and of traffic conditions. The report takes into account the change in legislation which enforces more stringent emissions factors and also changes in vehicle technology. In the appendix, emission factors specific to some countries, including Australia, are presented together with the emission factors for the Euro standards.</p>	<p>The PIARC guideline is used to convert traffic data (numbers, types, speed and road gradient) into emission factors. The emission factors are used to estimate mass emission rates from any ventilation structures and assist engineers to design the ventilation system.</p> <p>The same emission factors can be used to estimate pollutant emissions for major surface roads of this project.</p>
<p><i>Guidance on the Assessment of Dust from Demolition and Construction</i>, Version 1.1, Institute of Air Quality Management, United Kingdom, 2014</p>	<p>This document is designed to provide guidance for developers, their consultants and environmental health practitioners on how to undertake a construction impact assessment (including demolition and earthworks as appropriate).</p>	<p>A construction impact assessment may be a standalone document (possibly including other environmental impacts such as noise) or incorporated into an Air Quality Assessment or Environmental Impact Assessment (EIA).</p> <p>Emphasis has been placed on classifying demolition and construction sites according to the risk of impacts and then to identify mitigation measures appropriate to the risk. It is anticipated that with the implementation of effective site-specific mitigation measures, the environmental effect will not be significant in most cases. Nonetheless, a robust assessment of the dust impact risk is necessary in order to determine the level of site-specific mitigation that should be applied.</p>

Document	Description	Requirements / Implications
National / Commonwealth Legislation		
<i>National Environment Protection Council Act 1994</i>	This Act allows the National Environmental Protection Council (NEPC) to issue National Environment Protection Measures (NEMs). These measures are framework documents containing national environmental protection objectives. They assist in protecting or managing particular aspects of the environment.	The NEMs covering air quality include: <ul style="list-style-type: none"> <li>National Environment Protection (Ambient Air Quality) Measure</li> <li>National Environment Protection (Air Toxics) Measure.</li> </ul> These are discussed further below.
Policy / Guidelines / Standards		
National Environment Protection (Ambient Air Quality) Measure (Air NEPM) (February 2016)	The Air NEPM contains standards and goals for key pollutants that are required to be achieved nationwide, with due regard to population exposure. The Air NEPM standards are intended to be applied at performance monitoring locations that represent air quality for a region or sub-region of 25,000 people or more. The Footscray AAQMS is a performance monitoring station in accordance with EPA Victoria's Ambient Air Quality NEPM Monitoring Plan for Victoria (EPA 2001). Importantly, the Air NEPM standards are not relevant to air emissions from individual sources, specific industries or roadside locations. Commonwealth, State and Territory Environment Ministers have flagged an objective to reduce the particulate matter air quality standards for PM <sub>2.5</sub> (to 20 µg/m <sup>3</sup> (1 day average) and 7 µg/m <sup>3</sup> (1 year average) by 2025).	Where relevant, the Air NEPM standards (as adopted by the SEPP(AAQ) – see below) were used for comparison with the air quality predictions for the surface roads assessed through the EES and for consideration of the project's cumulative impacts.
National Environment Protection (Air Toxics) Measure (Air Toxics NEPM) (December 2004)	The aim of the Air Toxics NEPM is to gain a greater understanding of the levels of air toxins at specific locations where elevated concentrations are likely to occur and where the potential for significant human exposure exists. The Air Toxics NEPM establishes monitoring investigation levels (MILs) for benzene, toluene, xylene isomers, formaldehyde and benzo(a)pyrene (BaP) as a marker for polycyclic aromatic hydrocarbons (PAHs). The MILs were established to assess the significance of monitored air toxics levels on human health.	The Air Toxics NEPM MILs apply over longer averaging periods than those specified in Schedules A and B of the SEPP (AQM) and were consequently used, where appropriate, for comparison with air quality predictions for the assessed surface roads and cumulative impacts of the project.

Document	Description	Requirements / Implications
<p>Victorian / State Legislation</p>		
<p><i>Environment Protection Act 1970</i> (EP Act)</p>	<p>As discussed in section 6, this Act is the primary legislative instrument that governs the protection of the environment in Victoria. It regulates certain activities having the potential to impact on the environment and prohibits the occupier of 'scheduled premises' from doing any act or thing (including installing any plant, equipment or process) that is likely to cause the discharge or emission of waste to the environment, unless authorised to do so. Pursuant to regulation made under the Act, 'road tunnel ventilation systems' are scheduled premises. Accordingly, a works approval will be required for the installation of the tunnel ventilation system.</p>	<p>The project will require an EPA works approval in relation to the installation of the tunnel ventilation system, to be applied concurrently with the EES. Following construction and commissioning, a waste discharge licence will also be required in respect of its operation. The EPA works approval application will be assessed against relevant SEPP, including:</p> <ul style="list-style-type: none"> <li>• <i>State Environment Protection Policy (Ambient Air Quality)</i> (SEPP AAQ)</li> <li>• <i>State Environment Protection Policy (Air Quality Management)</i> (SEPP AQM)</li> </ul>
<p>Environment Protection (Scheduled Premises and Exemptions) Regulations 2007</p>	<p>Section 71 of the EP Act allows the Governor in Council to make regulations for, or in respect to, prescribing any premises or class of premises as scheduled premises.</p> <p>Schedule 1 of these Regulations describes the types of premises which are 'scheduled premises' requiring a works approval under section 19A of the EP Act. This includes category L03 for 'road tunnel ventilation systems'.</p>	<p>Under Schedule 1 and Category L03 (road tunnel ventilation systems) of these Regulations, an application to the EPA for a works approval will be required for the tunnel ventilation component of the project.</p>
<p>Policy / Guidelines / Standards</p>		
<p>State Environment Protection Policy (Ambient Air Quality) (SEPP AAQ) as amended in July 2016 to incorporate changes to the Air NEPM particle standards (February 2016)</p>	<p>SEPP (AAQ) applies the standards and objectives of the Air NEPM to Victoria.</p>	<p>The SEPP AQM (see below) provides design criteria concerning particulate matter for stack sources only. In considering wide area sources, such as extractive industries and mining or road transport networks, and in the absence of a protocol for environmental management for large line sources (transport routes), standards from the SEPP(AAQ) can be used as guidance.</p>

Document	Description	Requirements / Implications
<p>State Environment Protection Policy (Air Quality Management) (SEPP AQM) December 2001</p>	<p>The SEPP (AQM) sets out legislative requirements for managing and assessing air emissions in Victoria. The aim of the policy is to:</p> <ul style="list-style-type: none"> <li>• Ensure that prescribed air quality objectives are met</li> <li>• Drive for continual improvement in air quality, whilst having regard to the social and economic development of Victoria</li> <li>• Support the State's other environmental goals.</li> </ul> <p>The SEPP AQM identifies beneficial uses of the air environment and classifies air contaminants as Class 1, 2 or 3 air quality indicators according to their potential to adversely affect the beneficial uses of the air environment:</p> <ul style="list-style-type: none"> <li>• Class 1 air quality indicators are common or widely distributed air pollutants that may threaten the beneficial uses of both local and regional air environments</li> <li>• Class 2 air quality indicators are hazardous substance that may threaten the beneficial uses of the air environment by virtue of their toxicity, bio-accumulation or odorous characteristics</li> <li>• Class 3 air quality indicators are extremely hazardous substances that are carcinogenic, mutagenic, teratogenic, highly toxic or highly persistent, which may threaten the beneficial uses of the air environment.</li> </ul> <p>Unclassified air quality indicators have the potential to affect the beneficial uses of local amenity and aesthetic enjoyment, namely odour and total suspended particulates (nuisance dust).</p>	<p>Whilst SEPP (AQM) does not contain specific criteria for the assessment of impacts from transport corridors, Schedule A does list Class 1, 2 and 3 air quality indicators and their design criteria 'to be used in the assessment of the design of new or expanded sources of emissions'. These criteria are relevant to the modelling assessment of emissions from the proposed project tunnel ventilation structures.</p> <p>Schedule B of the SEPP (AQM) lists intervention levels for specific air quality indicators, which apply to 'all sources of the pollutant within a defined area'. These intervention levels are relevant to the modelling assessment of emissions from surface roads.</p> <p>Air dispersion modelling in accordance with the requirements for new or modified sources of emissions to air in Victoria in Schedule C of the SEPP (AQM) is also relevant to the assessment of the project.</p>
<p>EPA Victoria, Environmental Guidelines for Major Construction Sites (Publication 480, 1996)</p>	<p>This publication is designed to provide developers and contractors with guidelines on how to implement sound practices that minimise environmental impacts and eliminate health risks and nuisance to residents near a construction site. Topics covered include environmental management planning, risk assessment and management, noise and vibration issues.</p>	<p>This publication will be relevant to the management of potential air quality impacts associated with the project. Management measures will include preparation of a Construction Environmental Management Plan (CEMP) and air quality monitoring particularly during construction.</p>

Document	Description	Requirements / Implications
<p>State Planning Policy Framework (SPPF)</p>	<p>As discussed in section 3 of this Table, SPPF is common to all Victorian planning schemes, and contains policies in relation to various themes including Clause 13.04-2 in relation to air quality. This has a series of specific provisions relevant to:</p> <ul style="list-style-type: none"> <li>• Integrating transport and land-use planning to improve transport accessibility and connections</li> <li>• Locating key developments that generate high volumes of trips in the Central Activity District, Principal and Major Activity Centres</li> <li>• Providing infrastructure for public transport, walking and cycling</li> <li>• Ensuring, wherever possible, that there is suitable separation between land uses that reduce amenity and sensitive land uses.</li> </ul>	<p>Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.</p>

# 11 Surface Noise and Vibration

Document International Standards	Description	Requirements / Implications
German Standard DIN4150.2 <i>Structural vibration – Human exposure in buildings</i>	This standard specifies a method for measuring and evaluating the effects of vibration on structures. The standard lists acceptable values for both short-term and long-term vibration with the distinction based on whether there may be any fatigue-related failure of the structure. The standard is directed towards preventing cosmetic damage such as crack formation in plaster, rather than damage to reinforced concrete structures.	This standard has been considered in the project however, more stringent specific asset vibration criteria have been adopted for the project, based on BS55228.2 (see below)
British Standard BS6472-1:2008 <i>Guide to evaluation of human exposure to vibration in buildings. Part 2: Vibration sources other than blasting</i>	This standard provides information to identify vibration values that when complied with (dependent upon frequency) should be expected to have no adverse comments, sensations or complaints for the vast majority of persons. Acceptable vibration values are known to be dependent upon social and cultural factors, psychological attitudes and expected interference with privacy. The British Standard therefore provides a range of values based upon these expected variations.	This standard was referred by AS2436 (see section 12) and has been used in the project as a guide to establish human comfort vibration criteria.
British Standard BS5528-2:2009 <i>Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration</i>	Appropriate vibration performance guidelines for each asset/service affected by the project should be based upon the asset owners' guidelines, or where these do not exist or are irrelevant for the service type, this standard values should be applied. Where the condition of the asset is shown to be sound, the elevated values in other standards such as the DIN4150-3:1999 may be applied.	This standard was referred by AS2436 (see section 12) and has been used in the project to assist in providing a guide to administer the BS7385.2 dosage value through the more easily assessed, measured and managed peak particle velocity criteria.  This standard also has been used in establishing specific assets or services vibration criteria for the project, in the absence of specific asset owner vibration guidelines.
British Standard BS7385-2:1993 <i>Evaluation and measurement for vibration in buildings, Part 2, Guide to damage levels from ground borne vibration</i>	This Standard indicates limits of vibration for prevention of cosmetic damage. It also notes that: <ul style="list-style-type: none"> <li>• Important buildings which are difficult to repair may require special consideration on a case by case basis</li> <li>• Structures below ground are known to sustain higher levels of vibration and are very resistant to damage unless in very poor condition</li> <li>• There is little probability of fatigue damage in residential building structures due to normal construction vibration.</li> </ul>	This standard was referred by AS2436 (see section 12) and has been used in the project as a guide to establish continuous vibration criteria for building cosmetic damage from dynamic loading potentially caused by continuous vibration generated by mechanical tunnelling equipment.  This standard was also referred by AS2187.2 (see section 12) for the vibration limits for prevention of cosmetic damage and adopted as the project cosmetic damage vibration criteria from blasting.

Document	Description	Requirements / Implications
<p>National / Commonwealth Policy / Guidelines / Standards</p>		
<p>Australian and New Zealand Environment Council Guidelines – Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZEC Guidelines)</p>	<p>These Guidelines have been adopted by the EPA Victoria as human comfort criteria to minimise annoyance and discomfort to persons at sensitive sites (e.g. residences, hospitals, schools etc.) as a result of blasting. The Guidelines are not intended to provide structural damage criteria for vibration. However, they do provide a conservative approach to the assessment of potential impacts on structures, as minimising human annoyance and comfort would inherently minimise structural damage.</p>	<p>The blast vibration criteria identified in these Guidelines are considered conservative and were originally developed to protect communities exposed to long-term blasting operations such as mining sites Development of the vibration limits for blasting operations associated with the project considered these Guidelines as well as the likely duration of blasting activities.</p>
<p>Australian Standard AS2187.2-2006 Explosives - Storage and Use Part 2: Use of Explosives – Appendix J</p>	<p>This Standard recommends ground vibration limits which are consistent with the ANZEC Guidelines but provides more detail with respect to criteria for human comfort and structural damage. This includes consideration of different types of structures such as more sensitive masonry and plasterboard buildings, and less sensitive reinforced concrete buildings.</p>	<p>This Standard defines clearer vibration limits designed to safeguard human comfort than the ANZEC Guidelines, as the limits in this Standard are dependent on the specific duration of the project. Development of the vibration limits for blasting operations associated with the project considered the limits recommended in this Standard.</p>
<p>Victorian / State Legislation</p>		
<p><i>Transport Integration Act 2010</i> (TI Act)</p>	<p>As discussed in section 2, this Act establishes a framework for an integrated and sustainable transport system for Victoria and requires that all decisions affecting the transport system consider the principles and objective set out in the Act.</p>	<p>See section 2. Planning of the transport system should be integrated with that of land use and facilitate access to social and economic opportunities and that social impacts should be part of the 'triple bottom line' assessment used in decision making.</p>

Document	Description	Requirements / Implications
Policy / Guidelines / Standards		
VicRoads Traffic Noise Reduction Policy 2005	<p>This Policy sets objectives for noise levels where a new freeway or arterial road is built, or a freeway or arterial road is upgraded.</p> <p>The Policy also classifies buildings into Category A (residential) and Category B (non-residential) sensitive buildings and sets out modelling and measurement approaches for example measurement at the centre of the window of the most exposed external facade facing the traffic noise at the lowest habitable level of the building.</p>	<p>This policy has informed the development of project-specific noise objectives. While planning and design was guided by this policy, the project will adhere to higher noise standards to protect noise at sensitive receptors to a high standard and to ensure the project delivers effective noise attenuation in the specific environment in which the project is located.</p> <p>These project noise objectives have been reflected in the environmental performance requirements.</p> <p>The classification and measurement approach in the Policy has been applied to the project.</p>
CityLink Concession Deed – Project Scope and Technical Requirements	<p>The CityLink Concession Deed is the agreement between the Victorian Government and the operators of CityLink. The project Scope and Technical Requirements in the CityLink Concession Deed outline the technical requirements for the construction and operation of CityLink infrastructure, including noise limits.</p> <p>While the noise limit for CityLink is generally consistent with the <i>VicRoads Traffic Noise Reduction Policy</i>, CityLink's 63 dB LA10(1.8m) noise limit applies over the life of the project rather than just when the road is new. In addition, the 63 dB noise limit applies at all levels, not just at ground level (that is, it applies to high-rise apartments).</p>	<p>This noise limit in the Deed has informed the development of project-specific noise objectives.</p>
State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No.1 (SEPP N-1)	<p>The SEPP N-1 prescribes procedures for determining the statutory environmental noise limits which apply at noise sensitive locations, such as residential areas, with respect to noise due to commercial, industrial and trade operations.</p>	<p>SEPP N-1 was used to determine the noise limits that would apply to the operation of fixed infrastructure such as the tunnel ventilation system. In accordance with the requirements of SEPP N-1, noise limits were established for the nearest residences adjacent to the potential southern portal locations.</p>
EPA Victoria, Noise Control Guidelines(Publication 1254 October 2008)	<p>There are no statutory noise limits which apply to construction work in Victoria. However, this publication provides guidance on construction noise.</p> <p>These Guidelines recognise the need for community consultation during construction and the need to demonstrate best practice measures. Whilst the Guidelines are a tool "to assist in the resolution of complaints", they also provide guidance for the development of Environmental Management Plans.</p>	<p>These Guidelines formed the basis of the assessment of construction noise undertaken in the EES.</p> <p>Indicative construction noise limits applicable to the project were calculated using background noise level measurements and these Guidelines.</p>

Document	Description	Requirements / Implications
EPA Victoria, Environmental Guidelines for Major Construction Sites (Publication 480 1996)	This Publication provides guidance on management measures to be considered when works are being undertaken at major construction sites to ensure that nuisance from noise and vibration does not occur.	The Guidelines have informed project-specific environmental performance requirements for noise and surface vibration associated with construction of the project
VicRoads Noise Guidelines – Construction and Maintenance Works, VicRoads 2007	These guidelines provide details of the regulatory framework for control of construction and demolition noise in Victoria and include examples of noise mitigation measures. The guidelines reference the Guidelines for Noise Control (2008) (EPA Victoria Publication 1254) and the Best Practice Environmental Guidelines for Major Construction Sites (1996) (EPA Victoria Publication 480).	The Guidelines have informed project-specific environmental performance requirements have been developed for noise and surface vibration associated with construction of the project.
State Planning Policy Framework (SPPF)	As discussed in section 3 of this Table, SPPF is common to all Victorian planning schemes, and contains policies in relation to various themes including Clause 13.04-1 in relation to noise abatement. The objective of this clause is to ensure that development is not prejudiced and community amenity is not reduced by noise emissions, using a range of building design, urban design and land use separation techniques as appropriate to the land use functions and character of the area. The SPPF makes no reference to vibration impacts from the operation of roads.	Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.
Local Planning Policy Framework (LPPF)	As discussed in section 3, each of the Melbourne, Port Melbourne, Hobsons Bay, Brimbank, Maribyrnong and Wyndham Planning Schemes contain a Local Planning Policy Framework setting out the municipal strategic statement and local planning policies that apply to the planning schemes, in addition to the SPPF. The local planning policy for transport in the Maribyrnong Planning Scheme (Clause 21.09) makes specific reference to residential areas currently being impacted by noise pollution due to road traffic, and the need to manage the impacts of heavy trucks across the municipality.	Consideration of the LPPFs is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.

Document	Description	Requirements / Implications
Local Policies Noise and Vibration Management Guidelines, City of Melbourne	<p>The City of Melbourne requires developers and builders to manage noise and vibration from excavation, demolition and construction sites.</p> <p>These Guidelines outline:</p> <ul style="list-style-type: none"> <li>• The relevant local and state laws</li> <li>• Ways to monitor, manage and measure noise</li> <li>• The obligations that builders, contractors and developers must meet.</li> </ul> <p>The Guidelines state that “the requirements do not apply to civil infrastructure works such as bridges, freeways and tram or train track works.”</p> <p>Additionally, it is noted that whilst the suggested City of Melbourne limits are conservatively targeted to prevent building damage, these limits may not necessarily be sufficiently protective of personal amenity for use on the project.</p>	<p>These Guidelines have not been applied to this project, as they do not apply to civil infrastructure works associated with the project and the proposed vibration limits may not be sufficiently protective of personal amenity for this project.</p>

## 12 Regenerated Noise and Vibration

Document	Description	Requirements / Implications
<b>International Guidelines</b> German Standard DIN4150.2 <i>Structural vibration – Human exposure in buildings</i>	This Standard specifies a method for measuring and evaluating the effects of vibration on structures. See section 11 for further discussion.	See section 11.
British Standard BS6472-1:2008 <i>Guide to evaluation of human exposure to vibration in buildings, Part 2: Blast induced vibration</i>	This Standard provides information to identify vibration values that when complied with (dependent upon frequency) should be expected to have no adverse comments, sensations or complaints for the vast majority of persons. See section 11 for further discussion.	See section 11. This standard also has been used in establishing project specific criteria as set in the environmental performance requirements.
British Standard BS5528-2:2009 <i>Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration</i>	Appropriate vibration performance guidelines for each asset/service affected by the project should be based upon the asset owners' guidelines, or where these do not exist or are irrelevant for the service type, this Standard values should be applied. Where the condition of the asset is shown to be sound, the elevated values in other standards such as the DIN4150-3:1999 may be applied.	See section 11.
British Standard BS7385-2:1993 <i>Evaluation and measurement for vibration in buildings, Part 2, Guide to damage levels from ground borne vibration</i>	This Standard indicates limits of vibration for prevention of cosmetic damage. See section 11 for further discussion.	See section 11. The values have informed the development of project specific criteria as set in the environmental performance requirements.
<b>National / Commonwealth</b> Legislation		
There is no specific Commonwealth legislation applicable to regenerated noise and vibration.		

Document	Description	Requirements / Implications
<b>Policy / Guidelines / Standards</b>		
Australian Standard AS2436-2010 Guide to noise and vibration control on construction, demolition and maintenance sites	This Standard is an over-arching qualitative guide to noise and vibration control on construction, demolition and maintenance sites. The standard does not directly propose permissible levels of vibration but rather references other Australian Standards, British Standards and guidelines such as the NSW Assessing Vibration technical guide.  This standard is applicable to the protection of personal amenity from blasting, as well as other construction aspects that generate infrequent, short duration, impulsive vibration events.	Provides guideline values for assessing the impact of vibration on structures and infrastructure.
Australian Standard AS2187.1-1998 Explosives - Storage, transport and use  Australian Standard AS2187.2-2006 Explosives - Storage and Use: Part 2: Use of Explosives	AS2187.1-1998 provides acceptable requirements to ensure the security and safety of explosives and detonators.  AS2187.2-2006 proposes limits to ground vibration for maintaining human comfort, together with limits for preventing cosmetic damage to structures.	Provides guideline values for assessing the impacts associated with blasting, including human comfort criteria and criteria associated with building damage.  The values have informed the development of project specific criteria as set in the environmental performance requirements
<b>Victorian / State Legislation</b>		
There is no specific Victorian legislation applicable to regenerated noise and vibration.		
<b>Policy / Guidelines / Standards</b>		
Assessing Vibration: a technical guideline (Department of Environment and Conservation NSW, 2006)	This guideline proposes vibration limits in accordance with the British Standard BS6472-2:1992 recommendations. The guideline presents preferred and maximum vibration values for use in assessing human responses to vibration and provides recommendations for measurement and evaluation techniques.	Provides personal amenity performance guidelines for vibration associated with tunnelling activity or mechanical equipment in residential environments.
Noise and Vibration Management Guidelines, City of Melbourne	The City of Melbourne requires developers and builders to manage noise and vibration from excavation, demolition and construction sites. See section 11 for further discussion.	See section 11.

## 13 Historic Heritage

Document	Description	Requirements / Implications
<p>National / Commonwealth Legislation</p>		
<p><i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)</p>	<p>As discussed in section 2, this Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation. Among the matters of national environmental significance protected by the legislation are World Heritage Properties and National Heritage Places.</p>	<p>The project is not a controlled action requiring assessment and approval under the Act. See section 2 for further details.</p>
<p>Policy / Guidelines / Standards</p>		
<p>Australia ICOMOS Charter for Places of Cultural Significance 2013 (Burra Charter)</p>	<p>This is an industry standard which is frequently referenced as a guide to best practice management of cultural heritage places in Australia. It is recognised by both the Heritage Council and the Executive Director, Heritage Victoria and is also sometimes referenced by planning authorities. The Burra Charter provides definitions for terms and processes associated with conservation of places of cultural significance and establishes a series of conservation principles, conservation processes and guidelines for conservation practice.</p>	<p>The Burra Charter is referenced in the LPPF for heritage in the Melbourne Planning Scheme (Clause 22.04) and the Maribyrnong Planning Scheme (Clause 22.01).</p>

Document	Description	Requirements / Implications
Victorian / State Legislation		
<i>Heritage Act 1995</i> (Heritage Act)	<p>This Act creates a system to protect and conserve places and objects of cultural heritage significance in Victoria. Responsibilities under the Act is split between the following two bodies:</p> <ul style="list-style-type: none"> <li>Executive Director, Heritage Victoria administers the Act and associated registers (see below) and issues permits for changes to heritage listed items.</li> <li>Heritage Council of Victoria determines what goes on the registers and hears appeals against permit decisions made by the Executive Director Heritage Victoria.</li> </ul> <p>The Act establishes:</p> <ul style="list-style-type: none"> <li>The Victorian Heritage Register (VHR) lists heritage places (buildings, streets, precincts properties etc) and heritage objects (moveable items such as signs, wrecks artefacts) within a defined extent, generally stating why they are significant. The VHR is aimed at preserving listed items and any subdivisions or physical works to a listed item will require a Heritage permit unless there is an exemption or only works with no adverse heritage impact are proposed.</li> <li>The Victorian Heritage Inventory (VHI) lists known historical (non-Aboriginal) archaeological sites of unknown or less than state significance. There is currently no significance threshold for VHI places and recording, excavating and monitoring are the usual methods of assessing and managing the heritage values of a site. Section 129 of the Act provides that any activities that would result in the excavation of or disturbance to an archaeological site or its objects included on the VHI must first obtain the consent of Heritage Victoria.</li> </ul> <p>The Heritage Act requires consent to carry out works or activities to a VHI site, and a permit to carry out works or activities to a heritage place or heritage object listed on the VHR.</p>	<p>The Act is relevant to the project as there are VHR or VHI places within the investigation area.</p> <p>The Act is also relevant as it contains particular requirements for historical archaeology in Victoria which may be encountered during the construction of the project.</p> <p>Consent is required from Heritage Victoria for any heritage listed sites affected by the project, in particular consent to disturb an archaeological site. A formal heritage assessment is occurring as part of the EES process which will identify any heritage sites impacted by the project.</p> <p>Where approval is required under the Act, no planning approval is required under the Heritage Overlays of the relevant planning schemes.</p>
<i>Planning and Environment Act 1987</i> (P&E Act)	<p>This Act establishes the framework for planning the use, development and protection of land in Victoria and provides for the preparation of planning schemes based on the Victoria Planning Provisions.</p> <p>Specific measures for preservation of local and state heritage under the relevant planning schemes are discussed below.</p>	See below.
Policy / Guidelines / Standards		
State Planning Policy Framework (SPPF)	<p>As discussed in section 3 of this Table, SPPF is common to all Victorian planning schemes, and contains policies in relation to various themes including Clause 15 (Built Environment and Heritage). This has a series of specific provisions for the conservation of places of heritage significance and requires that new land use and development appropriately responds and is sympathetic to its cultural and heritage context.</p>	Consideration of the SPPF is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.
State Planning Policy Framework (SPPF) - Planning Scheme	<p>As discussed in section 3, each of the relevant planning schemes contain planning controls, provisions and requirements for planning approval under various zones, overlays and particular provisions which (without the planning scheme amendment) would apply to the project.</p>	See below.

Document	Description	Requirements / Implications
<p>Provisions and Controls</p> <p>State Planning Policy Framework (SPPF) - Planning Scheme Provisions and Controls</p>	<p>Heritage Overlays (HOs) designate places of recognised local heritage significance to conserve and enhance them, and can include places listed on the VHR or VHI (though these are still regulated at a State level). HOs are either site specific or cover whole precincts and have associated schedules with specific heritage controls for a range of actions such as subdivision, demolition, external alterations (e.g. painting). On occasion, the requirements of the HO may be moderated by incorporated plans which are referenced in the Schedule to the HO.</p>	<p>A large number of HOs are potentially affected by the project which will need to be considered in the evaluation of the project.</p>
<p>Local Planning Policy Framework (LPPF)</p>	<p>As discussed in section 3, each of the Melbourne, Port Melbourne, Hobsons Bay, Maribyrnong and Wyndham Planning Schemes contain a Local Planning Policy Framework setting out the municipal strategic statement and local planning policies that apply to the planning schemes, in addition to the SPPF.</p> <p>The local planning policies in the planning schemes for the municipalities intersected by the project address issues of full or partial demolition of heritage buildings and places, alterations and additions to heritage buildings and places, and provide guidance on the preferred outcomes (from a heritage perspective) in terms of new development.</p> <p>In some cases, the LPPF lists reference documents and Incorporated Documents (documents which form part of the planning scheme, for example, an archaeological management plan) that need to be considered when assessing a planning application.</p> <p>Typically, these include place-specific citations and can also include building or place 'gradings' reflecting relative local significance.</p>	<p>Consideration of the LPPFs is relevant to the evaluation of the project, and the planning scheme amendment which is required for the project.</p>
<p>Conservation Management Plans (CMPs)</p>	<p>Conservation Management Plans (CMPs) are typically prepared for places included in the VHR and for some places of local significance. CMPs follow a standard format as endorsed by Heritage Victoria and most other heritage bodies.</p> <p>The principal purpose of the CMP is to establish the nature and extent of heritage significance and provide guidance on future works and development. Such a plan is a relatively standard document for heritage properties and is often a requirement of heritage permits. CMPs usually are a key reference tool in making decisions on applications for heritage places. On occasion, CMPs are referenced in the permit policy or other guidelines for those places.</p>	<p>Where applicable CMPs will need to be considered in the evaluation of the project.</p>

## 14 Aboriginal Cultural Heritage

Document	Description	Requirements / Implications
<p>National / Commonwealth Legislation</p>		
<p><i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)</p>	<p>As discussed in section 2, this Act is the Commonwealth's principal environmental protection and biodiversity conservation legislation. Among the matters of national environmental significance protected by the legislation are World Heritage Properties and National Heritage Places.</p>	<p>The project is not a controlled action requiring assessment and approval under the Act. See section 2 for further details.</p>
<p><i>Native Title Act 1993</i></p>	<p>This Act recognises and protects the native title rights and interests of Aboriginal and Torres Strait Islanders across Australia. The Act provides a mechanism for acknowledging the existence of native title and sets out procedures that managers of Crown land must comply with. Any activity on Crown land where native title is not considered to be extinguished may impact on native title. Native title does not provide Indigenous people with ownership of the land. Freehold titles and most leases over land extinguish (or finish) native title completely (except some titles held by Aboriginal people). Pastoral leases only partially extinguish native title and, Aboriginal titles, like land rights title or Aboriginal- owned pastoral stations, will generally have no effect.</p>	<p>There is unreserved and reserved Crown land within the vicinity of the project (including the M80 interchange and tunnel portals). The majority of the project is located on existing declared roads where native title has already been extinguished.</p>

Document	Description	Requirements / Implications
Victorian / State Legislation	<p><i>Aboriginal Heritage Act 2006</i> (AH Act)</p> <p>This Act provides for the protection of Aboriginal cultural heritage in Victoria. The objectives of the Act are contained in section 3 of the Act and are set out in full below:</p> <ul style="list-style-type: none"> <li>To recognise, protect and conserve Aboriginal cultural heritage in Victoria in ways that are based on respect for Aboriginal knowledge and cultural and traditional practices</li> <li>To recognise Aboriginal people as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage</li> <li>To accord appropriate status to traditional owners, including a preference to appoint traditional owner bodies corporate as registered Aboriginal parties</li> <li>To promote the management of Aboriginal cultural heritage as an integral part of land and natural resource management</li> <li>To promote public awareness and understanding of Aboriginal cultural heritage in Victoria</li> <li>To establish an Aboriginal cultural heritage register to record Aboriginal cultural heritage</li> <li>To establish processes for the timely and efficient assessment of activities that have the potential to harm Aboriginal cultural heritage</li> <li>To promote the use of agreements that provide for the management and protection of Aboriginal cultural heritage</li> <li>To establish mechanisms that enable the resolution of disputes relating to the protection of Aboriginal cultural heritage</li> <li>To provide appropriate sanctions and penalties to prevent harm to Aboriginal cultural heritage</li> <li>To recognise, protect and conserve Aboriginal intangible heritage by recording it on the Victorian Aboriginal Heritage Register.</li> </ul> <p>Section 49 of this Act states that a Cultural Heritage Management Plan (CHMP) is required to be prepared where an EES under the EE Act is required in respect of any works. This plan must be prepared prior to the commencement of works.</p>	<p>As the project requires an EES, a CHMP must also be prepared prior to the commencement of works.</p>
<i>Aboriginal Heritage Regulations 2007</i>	<p>These Regulations set standards and fees for the preparation of a CHMP.</p>	<p>Consideration must be had to these Regulations when preparing the CHMP for the project.</p>

## 15 Social

Document	Description	Requirements / Implications
National / Commonwealth Legislation		
There is no specific National or Commonwealth legislation applicable to social.		
Victorian / State Legislation		
<i>Planning and Environment Act 1987</i> (P&E Act)	<p>This Act establishes the framework for planning the use, development and protection of land in Victoria. Its role in project approval and land use planning are discussed in sections 2 and 3 respectively.</p> <p>The Act includes the following objectives in relation to improving and maintaining social conditions:</p> <ul style="list-style-type: none"> <li>To secure a pleasant, efficient and safe working, living and recreational environment</li> <li>To protect public utilities and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the community</li> <li>To ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land.</li> </ul>	See sections 2 and 3.
<i>Transport Integration Act 2010</i> (TI Act)	<p>This Act establishes a framework for an integrated and sustainable transport system for Victoria and requires that all decisions affecting the transport system consider the principles and objective set out in the Act. Its role in relation to the project is further outlined in section 2.</p>	<p>See section 2.</p> <p>Planning of the transport system should be integrated with that of land use and facilitate access to social and economic opportunities and that social impacts should be part of the 'triple bottom line' assessment used in decision making.</p>
<i>Public Health and Wellbeing Act 2008</i> (PHW Act)	<p>This Act outlines the state's role in promoting, protecting and reducing inequalities in public health and wellbeing. See section 17 for further discussion.</p>	See section 17.

Document	Description	Requirements / Implications
<i>Land Acquisition and Compensation Act 1986 (LACA)</i>	This Act provides statutory authorities, water authorities, municipal councils and government departments with the powers to acquire interest in private land without the owner's consent. See section 3 for further discussion.	A small number of businesses are likely to be compulsorily acquired under the Act as a result of the project.
<b>Policy / Guidelines / Standards</b>		
Victorian Charter of Human Rights and Responsibilities Act 2006	This charter is a tool to protect human rights and freedoms. The most relevant section for this assessment is section 20 Property Rights which provides that a person must not be deprived of his or her property other than in accordance with the law.	Reinforces the rights of property owners with respect to voluntarily and compulsory acquisition of land associated with the project.
State Planning Policy Framework (SPPF)	<p>The State Planning Policy Framework (SPPF) is common to all Victorian planning schemes. See section 3 for further discussion.</p> <p>The key SPPF clauses of relevance to this area are:</p> <ul style="list-style-type: none"> <li>• Clause 11 - Settlement requires planning to facilitate sustainable development that takes full advantage of existing settlement patterns, an investment in transport and communication, water, sewerage and social facilities.</li> <li>• Clause 15 - Creating quality built environments supports the social, cultural, economic and environmental wellbeing of our communities, cities and towns</li> <li>• Clause 15 - Land use and development planning must support the development and maintenance of communities with adequate and safe physical and social environments for their residents, through the appropriate location of uses</li> <li>• Clause 19 - Planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely.</li> </ul>	To ensure integrated decision-making, planning authorities and responsible authorities must take account of the general principles and the specific policies contained in the SPPF.
<b>Local Policies</b>		
Social Impact Assessment for Significant Residential Developments (Maribyrnong City Council, adopted July 2002)	<p>This policy outlines Council's commitment to social consideration in land use planning, and a requirement for all significant residential developments and rezoning to follow the guidelines in preparing SIA's and part of the planning application process.</p> <p>The guidelines focus primarily on:</p> <ul style="list-style-type: none"> <li>• Social infrastructure demand resulting from residential development including accessibility considerations</li> <li>• Choice in housing, shopping, recreational and leisure services</li> <li>• Meeting community needs</li> <li>• Residential amenity considerations.</li> </ul>	Although this policy is specific to residential development, it provides an indication of the social issues that are important to consider in relation to significant projects in the City of Maribyrnong.
Preparing Social Impact Assessments: Applicant Guidelines (Hobsons Bay City Council, adopted 2011)	The objective of these guidelines is to ensure that social considerations are an integral part of the development assessment or planning scheme amendment process (where applicable).	Key social impacts and focus areas are broadly the same as for Maribyrnong however these cover residential and non-residential proposals that are considered and assessed.

## 16 Business

Document	Description	Requirements / Implications
<p>National / Commonwealth Legislation</p> <p>There is no specific National or Commonwealth legislation applicable to business.</p>		
<p>Victorian / State Legislation</p>		
<p><i>Transport Integration Act 2010</i> (TI Act)</p>	<p>This Act establishes a framework for an integrated and sustainable transport system for Victoria and requires that all decisions affecting the transport system consider the principles and objective set out in the Act. See section 2 for further discussion.</p>	<p>See section 2. Planning of the transport system should facilitate economic prosperity by enabling efficient and effective movement of people and goods and provide a predictable and reliable transport system where disruptions are minimised.</p>
<p><i>Planning and Environment Act 1987</i> (P&amp;E Act)</p>	<p>This Act establishes the framework for planning and managing the use, development and protection of land in Victoria. Its role in project approval and land use planning are discussed in sections 2 and 3 respectively. Specific measures for promoting the economy enabled by the Act are discussed below.</p>	<p>See sections 2 and 3.</p>
<p><i>Land Acquisition and Compensation Act 1986</i> (LACA)</p>	<p>This Act provides statutory authorities, water authorities, municipal councils and government departments with the powers to acquire interest in private land without the owner's consent. See section 3 for further discussion.</p>	<p>A small number of businesses are likely to be compulsorily acquired under the Act as a result of the project, this will need to be considered as part of the approvals process.</p>

Document	Description	Requirements / Implications
<p>Policy / Guidelines / Standards</p> <p>State Planning Policy Framework (SPPF)</p>	<p>The State Planning Policy Framework (SPPF) is common to all Victorian planning schemes including those which encourage and facilitate sustainable landuses related to business and industrial landuses. See section 3 for further discussion.</p> <p>The key SPPF clauses of relevance to business are:</p> <ul style="list-style-type: none"> <li>• Clause 11 which states that planning is to respond to the needs of existing and future communities through provision of zones and serviced land for, amongst other things, employment, commercial and community facilities and infrastructure</li> <li>• Clause 17.01-1 which aims to meet the community's needs for retail, entertainment, office and other commercial services and provide net community benefit in relation to accessibility, efficient infrastructure use and the aggregation and sustainability of commercial facilities</li> <li>• Clause 18 which states that planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe.</li> </ul>	<p>To ensure integrated decision-making, planning authorities and responsible authorities must take into account the general principles and the specific policies contained in the SPPF. The project is likely to deliver improved access and efficiency associated with transport. However, access to jobs and network efficiency may be temporarily interrupted during construction.</p>
<p>Local Planning</p> <p>Policy Framework (LPPF)</p>	<p>The Local Planning Policy Framework (LPPF) is specific to each planning scheme. It includes a Municipal Strategic Statement (MSS) and Local Planning Policies, which are tools used to implement the objectives and strategies of the MSS. See section 3 for further discussion.</p>	<p>To ensure integrated decision-making, planning authorities and responsible authorities must take account of the general principles and the specific policies contained in the MSS and LPPF.</p> <p>The majority of planning schemes intersected by the project include relevant economic development policies:</p> <ul style="list-style-type: none"> <li>• Wyndham – encouragement of business development within the LGA reducing need for long distance commuting</li> <li>• Brimbank – maintenance of its existing industrial areas and role as a transport and logistics hub</li> <li>• Hobsons Bay – protection of industry and employment in core and secondary industrial zones</li> <li>• Maribyrnong – maintain existing industrial zones while moving freight away from local roads</li> </ul> <p>Melbourne – increase employment of the central city whilst encouraging better integrated planning of the Port of Melbourne.</p>

## 17 Human Health

Document	Description	Requirements / Implications
National / Commonwealth Legislation		
There is no specific National or Commonwealth legislation applicable to human health.		
Policy / Guidelines / Standards		
enHealth Health Impact Assessment Guidelines 2001	These guidelines promote the consideration of health issues in environmental impact assessment and planning through the use of a Health Impact Assessment (HIA). The document introduces the HIA process, the types of HIAs, the principles to be addressed in a HIA, the roles of those involved and other general information.	Provides the framework for the HIA, and the methodology used to undertake the impact assessment.
Health Impact Assessment: A Practical Guide 2007	This document provides a practical overview of the HIA process in Australia. It outlines the key concepts and steps involved in conducting a HIA, explains the different levels of assessment and suggests HIA approaches.	Provides the framework for the HIA, and the methodology used to undertake the impact assessment.
enHealth Environmental Health Risk Assessment: Guidelines for Assessing Human Health Risks from Environmental Hazards 2012	This document outlines the national approach for assessing environmental health risks, when applied to HIA focuses on elements where more detailed assessment of exposure, toxicity and health risk are required.	Provides the framework for the health risk assessment, particularly in relation to air emissions and noise exposure.
enHealth Australian Exposure Factors Guide 2012	This is a compendium to the enHealth (2012a) guidelines. This document provides a review of quantitative exposure factors that may be used in the conduct of a quantitative health risk assessment.	Provides the exposure factors used to assess the specific health impacts of the project on surrounding communities and sensitive receptors.
NEPC National Environment Protection (Ambient Air Quality) Measure 2003	This guidance is implemented under Section 14 of the <i>National Environment Protection Council Act 1994</i> and provides the desired environmental outcomes and protection standards and goals for ambient air quality in Australia. See section 10 for further discussion.	See section 10.
NEPC National Environment Protection (Air Toxics) Measure 2004	This guidance is implemented under Section 14 of the <i>National Environment Protection Council Act 1994</i> and provides the desired environmental outcomes, protection protocols, sampling methods, and monitoring investigation levels for benzene, benzo(a)pyrene, formaldehyde, toluene and xylenes in ambient air in Australia. See section 10 for further discussion.	See section 10.

Document	Description	Requirements / Implications
National Environment Protection Council (NEPC) Schedule B8 Guideline on Community Consultation and Risk Communication, National Environment Protection (Assessment of Site Contamination) Measure 1999 (amended 2013)	This guideline provides an approach to effective community engagement and risk communication in relation to the assessment of environmental health risk issues.	See section 15.
Air Quality in and Around Traffic Tunnels (National Health and Medical Research Council, 2008)	This document provides a review of data and information relevant to characterising and evaluating air quality in and around road tunnels, and the factors that are associated with poor air quality within tunnels. The review is dated, however it provides a summary of key issues relevant to the assessment of air quality in and around tunnels.	See section 10.
<b>Victorian / State</b> Legislation		
<i>Public Health and Wellbeing Act 2008</i> (PHW Act)	<p>This Act outlines the state's role in promoting, protecting and reducing inequalities in public health and wellbeing. Under Part 5, Division 3, the Minister may require the conduct of a Health Impact Assessment (HIA) of the public health and wellbeing impact of a matter. The timing for completion of the HIA may be determined in such a direction.</p> <p>The most relevant section of the Act is the objective in Part 2, section 4 which provides:</p> <ul style="list-style-type: none"> <li>Public health and wellbeing includes the absence of disease, illness, injury, disability or premature death and the collective state of public health and wellbeing</li> <li>The objective of this Act is to achieve the highest attainable standard of public health and wellbeing by promoting conditions in which persons can be healthy and reducing inequalities in the state of public health and wellbeing.</li> </ul>	No such direction has been issued from the Minister in relation to this project. The Act does not specify any details in relation to the completion of a HIA. This assessment has been included within the EES as part of the Scoping Requirements issued under the EEA (See section 2).
<i>Environment Protection Act 1970</i> (EP Act)	<p>This Act is the primary legislation regulating the protection of different aspects of Victoria's environment including protecting water environments from pollution. See section 6 for further discussion.</p> <p>Although the Act does not specifically require a HIA for new projects, it states that health and wellbeing, local amenity and aesthetic considerations are important in defining the beneficial uses and values of the environment.</p>	The role of the Act in protecting health relates to its regulation of emissions to different media: noise (see sections 11 and 12), air quality (see section 10), surface water (see section 6) and land (see section 9)

Document	Description	Requirements / Implications
<b>Policy / Guidelines / Standards</b>		
State Environmental Protection Policy (Ambient Air Quality), (SEPP-AAQ)	This policy applies the standards and objectives of the Air NEPM to Victoria. Health and wellbeing are identified as a beneficial use to be protected throughout Victoria. This policy outlines objectives and goals for air quality.	See section 10.
State Environment Protection Policy (Air Quality Management) (SEPP-AQM)	The SEPP (AQM) sets out legislative requirements for managing and assessing air emissions in Victoria. See section 10 for further discussion.	See section 10.
VicRoads 2005, Traffic Noise Reduction Policy	This is the current policy related to road traffic noise.	See section 11.
VicRoads 2007, Noise Guidelines – Construction and Maintenance Works	This document provides guidance for construction and maintenance projects to minimise and manage noise impacts.	See section 11.
<b>Local Policies</b>		
Municipal Public Health and Wellbeing Plan (MPHWP)	Under the PHW Act (see above) each council in Victoria has a Municipal Public Health and Wellbeing Plan (MPHWP). The MPHWP sets the broad mission, goals and priorities to achieve maximum health and wellbeing for its inhabitants. The MPHWP must be consistent with the Council's corporate plan and land use plan required by the Municipal Strategic Statement (MSS). MPHWPs need to consider the directions and priorities of the Victorian Public Health and Wellbeing Plan 2015–2019.	<p>The project should take into account the objectives and requirements of relevant MPHWPs for the:</p> <ul style="list-style-type: none"> <li>• City of Wyndham</li> <li>• City of Hobsons Bay</li> <li>• City of Maribyrnong</li> <li>• City of Melbourne.</li> </ul>

## 18 Greenhouse Gas

Document	Description	Requirements / Implications
National / Commonwealth Legislation	<p>This Act outlines the national reporting framework for corporations and facilities required to report their energy use and GHG emissions. Under this Act, a corporation is considered to be the entity that has operational control. Controlling corporations that exceed the following thresholds are required to under this Act:</p> <ul style="list-style-type: none"> <li>For corporations, consumption of more than 100 terajoules (TJ) of energy annually or emits over 25,000 tonnes CO<sub>2</sub>-e annually</li> <li>For facilities, consumption of more than 200TJ of energy annually or emits 50,000 tonnes CO<sub>2</sub>-e annually.</li> </ul> <p>The <i>National Greenhouse and Energy Reporting (Measurement) Determination 2008</i> provides methods and criteria for calculating greenhouse gas emissions and energy data under the NGER Act.</p>	Annual reporting on energy consumption and production and greenhouse gas emissions to the Clean Energy Regulator is required if the relevant thresholds are exceeded.
Policy / Guidelines / Standards	<p><b>Direct Action Plan</b></p> <p>On 17 July 2014, the <i>Clean Energy Act 2011</i> was repealed, abolishing the Carbon Pricing Mechanism. The Australian Government replaced it with the Direct Action Plan, a policy consisting of programs including the Emissions Reduction Fund (the Fund) directed at reducing carbon emissions.</p> <p>The Government committed to reviewing its climate change policies during 2017 when it announced Australia's 2030 emissions reduction target (26-28 per cent below 2005 levels) in August 2015.</p> <p>The review will take stock of Australia's progress in reducing emissions, and ensure the Government's policies remain effective in achieving Australia's 2030 target and Paris Agreement commitments. The review will commence in early 2017 with the release of a discussion paper and call for public submissions, and conclude by the end of 2017.</p>	The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the need to minimize greenhouse gas emissions in the context of Government commitments.

Document	Description	Requirements / Implications
Victorian/State Legislation		
<i>Climate Change Act 2017</i>	<p>The <i>Climate Change Act 2017 (Vic)</i> sets the legislative foundation to manage climate change risks, and drive Victoria's transition to net zero emissions by 2050. The Act embeds the 2050 net zero emissions target and provides for the setting of 5-yearly interim greenhouse gas emissions reduction targets, climate change strategies, and adaptation action plans to ensure the 2050 target is achieved and vulnerabilities to climate change impacts are reduced while potential opportunities are realised. Adaptation action plans will cover systems including the built environment and transport.</p> <p>The Act requires decision-makers to take climate change into account when making specified decisions under the <i>Catchment and Land Protection Act 1994 (Vic)</i>, <i>Coastal Management Act 1995 (Vic)</i>, <i>Environment Protection Act 1970 (Vic)</i>, <i>Flora and Fauna Guarantee Act 1988 (Vic)</i>, <i>Public Health and Wellbeing Act 2008 (Vic)</i> and <i>Water Act 1989 (Vic)</i>.</p> <p>More specifically, the Environment Protection Agency (EPA) must regulate the potential impacts of climate change and greenhouse gas emissions in relation to the Victoria's long-term and interim emissions reduction targets as part of the works or other development approvals process.</p> <p>The Act requires the Minister to undertake additional periodic reporting and publishing of 5-yearly climate science reports and end of interim target period reports, and annual greenhouse gas emissions reports, to provide transparency, accountability, and meet community engagement principles.</p>	<p>A works approval is required to be obtained from EPA Victoria under the EP Act for the tunnel ventilation system prior to its construction. EPA Victoria is required to consider the impact of the tunnel ventilation system on greenhouse gas emissions as part of its assessment of the works approval application.</p>
<i>Environment Protection Act 1970 (EP Act)</i>	<p>This Act is the primary legislation regulating the protection of different aspects of Victoria's environment including protecting water environments from pollution. See section 6 for further discussion.</p> <p>Under this Act, GHGs are defined as a waste. The Act authorises the EPA to issue works or other development approvals and licenses to regulate State Environment Protection Policies (SEPP).</p> <p>Further details of requirements related to GHGs are outlined in the SEPP AQM and the Protocol for Environmental Management: Greenhouses Gas Emissions and Energy Efficiency in Industry (PEM) (see below).</p>	<p>A works approval is required to be obtained from EPA Victoria under the Act for the tunnel ventilation system prior to its construction.</p> <p>The project's tunnels will be scheduled premises as defined in the EP Act under category L03 of the Environment Protection (Scheduled Premises and Exemptions) Regulations due to the proposed tunnel ventilation systems.</p>
Policy / Guidelines / Standards		
State Environment Protection Policy (Air Quality Management) (SEPP AQM) 2001	<p>The SEPP AQM is a framework for managing emissions to the air environment. Objectives of this SEPP are supported through protocols for environmental management (PEM), specifically GHG emissions and energy.</p>	<p>The SEPP AQM requires the implementation of the PEM (see below).</p>

Document	Description	Requirements / Implications
<p>Protocol for Environmental Management: Greenhouses Gas Emissions and Energy Efficiency in Industry (PEM)</p>	<p>The PEM aims to ensure that entities subject to an EPA works approval or licence manages GHG and energy issues associated with their activities. Currently the thresholds are set at 500GJ of energy used or 100t GHGs emitted annually. Where a works approval is required or a licence is in place under the EP Act and Scheduled Premises and Exemption Regulations and the thresholds are exceeded, the proponent will be required to implement GHG emissions and energy use reduction best practice as outlined in the PEM. For the project, this is likely to be relevant during the construction phase and for any installed facilities during operation, such as the operation of the tunnels' ventilation systems. Energy and GHGs will need to be addressed as part of environmental management procedures and programs for construction and operation.</p>	<p>The PEM requires that the works approval application proponent demonstrates that best practice has been applied in the choice of the tunnel ventilation system including in minimising its energy consumption and associated greenhouse gas emissions. EPA Victoria will assess this when making a decision about whether to grant a works approval application.</p>
<p>Victorian Climate Change Framework 2016</p>	<p>Victoria's Climate Change Framework is Victoria's long term plan to 2050, with the overarching goal of limiting warming to 1.5°C above pre-industrial levels while safeguarding Victoria's economic competitiveness. The Framework contains a 2020 emissions reduction target of 15-20 per cent below 2005 levels and achieving net zero emissions by 2050. The Framework sets out actions in four areas: energy efficiency and productivity, grid decarbonisation, economy electrification and switch to clean fuels, and carbon capture and storage and non-energy emissions reduction. Investment in the public transport system is identified as a priority including the following initiatives: purchasing renewable energy to power Melbourne's trams and supporting projects including the Metro Tunnel, High Capacity Metro Trains and Regional Network Development Plan. Other priorities for the transport sector include supporting walking and cycling, and encouraging the manufacturing and development of electric and autonomous vehicles.</p>	<p>While the Framework contains no direct requirements, the project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance of reducing GHG emissions.</p>
<p>Local Policies</p>		
<p>City of Melbourne Zero Net Emissions Strategy 2020</p>	<p>This strategy aims to increase the number of trips using low emissions modes of transport.</p>	<p>The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.</p>
<p>Hobsons Bay Climate Change Policy 2013</p>	<p>This policy includes the objective of undertaking actions to reduce the community's greenhouse gas emissions and lead the community towards achieving zero net greenhouse gas emissions by 2030.</p>	<p>The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.</p>
<p>Hobsons Bay Community Greenhouse Strategy 2013-2030</p>	<p>This strategy includes a range of actions aimed to meet the objective of becoming a zero net emissions community by 2030.</p>	<p>The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.</p>

Document	Description	Requirements / Implications
Brimbank Greenhouse Reduction Strategy 2013-2023	This strategy includes actions aimed at reducing community related transport emissions.	The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.
Maribyrnong Integrated Transport Strategy (Maribyrnong City Council, 2012) (MITS)	<p>This strategy is for the development of Maribyrnong's transport network for the next decade, taking into account the projected growth within and outside of Maribyrnong. See section 5 for further discussion.</p> <p>This strategy includes the vision of reducing greenhouse gas emissions and improving air quality through efficiency improvements.</p>	The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.
Wyndham City Council Environment and Sustainability Strategy 2011-2015	This strategy includes a focus of reducing GHG emissions from Council's fleet.	The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.
Western Alliance Greenhouse Action's (WAGA) <i>Low Carbon West Project</i>	Aims to grow a vibrant economy in Victoria's western region while reducing GHG emissions.	The project's objectives of understanding and managing GHG emissions from construction and operational activities acknowledge the importance to local stakeholders of reducing GHG emissions.
<b>Additional Policy / Guidelines / Standards</b>		
Victoria's Climate Change Adaptation Plan 2017-2020	<p>The Climate Change Adaptation Plan 2017-2020 is a blueprint to prepare Victoria to meet the challenges of climate change, setting out the strategic priorities, measures, and responses for adaptation in Victoria to 2020. The Plan encourages effective risk management for government assets, services and public goods, assists communities to understand and manage climate change risks and encourages adaption plans across all policy areas and sectors of the economy, including the built environment. The includes measures to build the resilience of Victoria's transport system to extreme weather and increasing pressures on infrastructure from climate change through the consideration of future environmental changes and impacts.</p> <p>In addition to sectoral plans, the State Government will "embed climate change considerations into policy, regulation and decision-making" and factor climate change impacts into land-use planning through a review of land-use planning policies and provisions, the development of standards for managing climate change risks in land-use planning, reviewing building and planning measures to reduce flooding risk and producing whole-of-settlement adaptation and risk mitigation strategies.</p>	<p>The adaptation plan states that design of the West Gate Tunnel Project "will consider future environmental changes and impacts so this infrastructure is better able to withstand extreme weather conditions".</p>

## 19 Landscape and Visual

Document	Description	Requirements / Implications
National / Commonwealth		
Legislation		
There is no specific National or Commonwealth legislation applicable to landscape and visual.		
Policy / Guidelines / Standards		
Creating Places for People: An Urban Protocol for Australian Cities (2011)	This Protocol is developed for urban design in Australian cities founded on five pillars: productivity, sustainability, liveability, leadership and design excellence, defining a series of principles for each. The aim of this Protocol is to create productive, sustainable and liveable places for people through leadership and the integration of design excellence.	Provides guidance for urban design associated with the project.
Victorian / State		
Legislation		
<i>Environment Effects Act 1978</i> (EEA)	This Act contains a framework for the assessment of potential environmental impacts or effects of certain developments, enabling statutory decision-makers to decide whether a project with potentially significant environmental effects should proceed. See section 2 for further discussion.	See section 2.
<i>Heritage Act 1995</i> (Heritage Act)	This Act creates a system to protect and conserve places and objects of cultural heritage significance in Victoria. See section 13 for further discussion.	See section 13.
Policy / Guidelines / Standards		
Good Design + Transport, Office of the Victorian Government Architect (2014)	A guidance document for the integration of good design into Victorian transport projects providing advice to Government departments, transport agencies and other involved with new transport projects. It presents principles and key actions to promote good design.	Provides guidance on the design of the project including its visual appearance and setting.
Landscapes of Cultural Heritage Significance: Assessment Guidelines (2015)	This provides guidance for the assessment of the cultural values of landscapes in Victoria.	Provides guidance on the assessment of the project's impacts on the cultural values of landscapes.

Document	Description	Requirements / Implications
<p>Plan Melbourne, Department of Transport, Planning and Local Infrastructure (2014)                      Plan Melbourne Refresh Discussion Paper (2015)</p>	<p>Plan Melbourne is a state government document released in 2014 outlining a vision for Melbourne's growth to the year 2050. It is referenced in the SPPF. The Plan Melbourne Refresh Discussion Paper was released in October 2015. See section 3 for further discussion.</p>	<p>Of particular relevance to landscape and visual impact assessment (LVIA) is the volume on 'Liveable Communities and Neighbourhoods' which among other things, have strategies to:</p> <ul style="list-style-type: none"> <li>• Avoid 'inappropriate development'</li> <li>• Make the city greener</li> <li>• Support high quality design</li> <li>• Respect heritage.</li> </ul>
<p>Local Government</p>		
<p>State Planning Policy Framework (SPPF)</p>	<p>The State Planning Policy Framework (SPPF) is common to all Victorian planning schemes including those which encourage the protection and enhancement of the visual environment. See section 3 for further discussion.</p> <p>The key SPPF clauses of relevance to landscape and visual are:</p> <ul style="list-style-type: none"> <li>• Clause 12.04 - protect areas of landscape value, particularly where these contribute to character and identity</li> <li>• Clause 15.01 - protect areas with significant aesthetic value and protect and enhance landmarks, views and vistas</li> <li>• Clause 15.01 - respond appropriately to the values, needs and aspirations of the community</li> <li>• Clause 18.01 - coordinate public transport improvements with the ongoing development and redevelopment of urban areas and minimising disruption of residential communities and their amenity.</li> </ul>	<p>To ensure integrated decision-making, planning authorities and responsible authorities must take account of the general principles and the specific policies contained in the SPPF. The assessment of landscape and visual impacts of the project will take into account aesthetic effects on the liveability of neighbourhoods.</p>
	<p>The Local Planning Policy Framework (LPPF) is specific to each planning scheme. It includes a Municipal Strategic Statement (MSS) and Local Planning Policies, which are tools used to implement the objectives and strategic of the MSS. See section 3 for further discussion.</p>	<p>To ensure integrated decision-making, planning authorities and responsible authorities must take account of the general principles and the specific policies contained in the MSS and LPPF.</p> <p>Each scheme has distinct priorities for landscape and the visual character of neighbourhoods within them and these are delivered through various zones, overlays and other strategies discussed below.</p>

Document	Description	Requirements / Implications
	<p>Zones and overlays:</p> <ul style="list-style-type: none"> <li>• Environmental Significance Overlay (ESO) which aims to identify environmental constraints to development and ensure development is compatible with identified environmental values</li> <li>• Heritage Overlay (HO). As discussed in section 13 this protects significant heritage features, important components of which are their appearance and visual context</li> <li>• Vegetation Protection Overlays (VPO). As discussed in section 4 this is applied to areas where vegetation of significance exists</li> <li>• Significant Landscape Overlay (SLO) to identify conserve and enhance the character of significant landscapes.</li> </ul>	<p>No SLOs are affected by the project.</p> <p>ESOs of particular relevance to the project are:</p> <ul style="list-style-type: none"> <li>• ESO4 of the Brimbank Planning Scheme protecting Kororoit Creek</li> <li>• ESO6 of the Wyndham Planning Scheme protecting Kororoit Creek</li> <li>• ESO1 of the Hobsons Bay Planning Scheme protecting Hyde Street Reserve, Powder Magazine and Mowling's Soap and Candle building between Lyons and Napier Streets and Kororoit Creek.</li> </ul> <p>HOs affected by the project are discussed in section 13.</p>
Other local policies and guidelines		
<p>Open Space Plans and Strategies</p>	<p>Local Councils have developed their own plans and strategies for access provision and enhancement of open space:</p> <ul style="list-style-type: none"> <li>• Hobsons Bay Open Space Plan (2005) (under review) has a focus on creating a diverse and integrated public open space network, enhance the relationship of open space and adjacent land uses and protect biodiversity and environmental values</li> <li>• City of Maribymong Open Space Strategy (2014) has a particular focus on establishing continuous open space corridors along Maribymong River and Stony Creek. Views along valley towards the Melbourne city are highly valued</li> <li>• City of Melbourne's Open Space Strategy – Planning for Future Growth (2012) aims to tackle open space deficiency on the Western side of the city and also improving the open space corridor along Moonee Ponds Creek.</li> </ul>	<p>The assessment and design of the project will have to take into account the aims of these strategies.</p>
<p>Neighbourhood Character Studies</p>	<p>Hobsons Bay and Maribymong Councils have undertaken Neighbourhood Character Studies which define local precincts on the basis of consistent style and era of development and help to ensure that residential development respects and enhances the future preferred character of the city.</p>	<p>The assessment and design of the project will have to take into account the findings and recommendations of these studies.</p>

Document	Description	Requirements / Implications
Local Plans and Frameworks	<p>A number of specific plans and frameworks have been prepared to provide specific rules and guidance for the development of areas local area with focus, among other things, on landscape and visual amenity. These include:</p> <p>Maribymong River Valley Design Guidelines (DPCD, April 2010) which is a set of design guidelines that intend to influence the form or proposed buildings and works along the river and inform prospective developers, land managers, landowners and the wider community.</p> <p>A Plan for Stony Creek (Maribymong) (2010) considers future landscape and recreational improvements to four sections along the Stony Creek.</p> <p>West Footscray Urban Design Framework (March 2008) provides a 15-year action plan to improve the quality, function and amenity of key public and private spaces across West Footscray.</p> <p>Arden-Macaulay Structure Plan, Planning for Future Growth (2012) plan for the urban renewal of the area including opens space development.</p> <p>Docklands Public Realm Plan (City of Melbourne) (2012) which provides long-term strategies, principles and guidelines for the design and programming of the public realm.</p>	<p>The assessment and design of the project will have to take into account the aims of these plans and frameworks.</p>