

12. Landscape and Urban Design Strategy

The Landscape and Urban Design Strategy is a visual summary of mitigation measures (both standard and non-standard) in response to the identified landscape and visual impacts in this Report and the Landscape and Visual Impact Maps in the Appendix. See Appendix items 15.1.6, 15.1.7 and 15.1.8, Landscape and Urban Design Strategy mapping for a visual summary of mitigation recommendations for each sub-study area identified in this report.

Level Crossing Removal Authority (LXRA) Urban Design Guidelines and Principles for Edithvale Road Level Crossing Removal (Edithvale Road, Edithvale, Level Crossing Removal Authority, 2018) have been workshopped and developed rigorously with Victorian State Government, VicRoads and DELWP and are considered as an industry standard and of relevance to this project. These guidelines and principles have been used to ensure a consistency of urban landscape design between the two projects as identified in the Cumulative Risk Assessment. The guiding principles include:

Principle 1. Identity

A well-defined identity and sense of place are key to creating strong and vibrant communities.

Principle 2. Connectivity and wayfinding

Well-connected and legible places contribute significantly to strong economies and healthy, inclusive communities.

Principle 3. Urban integration

Well-integrated environments provide a sound framework for the successful development of great places.

Principle 4. Resilience and sustainability

Places must be sustainable, enduring and resilient to support and nurture current and future generations.

Principle 5. Amenity

High quality urban amenity associated with access to services and the experience of great public places contributes to successful, equitable and prosperous communities.

Principle 6. Vibrancy

Animation of key civic spaces, and diversity in the experience of urban places support prosperous and healthy communities.

Principle 7. Safety

Safe environments are essential for strong, connected and happy communities

Principle 8. Accessibility

Highly accessible and inclusive environments encourage positive activation and contribute to prosperity, wellbeing and the perception of care within communities.

12.1 Project opportunities and benefits

Overall the proposed project will provide increased accessibility across the project study area and to open spaces through active modes of transport (walking and cycling). However, as identified, standard and non-standard mitigation measures should be applied within the design development and construction phase to further minimise anticipated impacts and enhance the projects overall benefit to the community.

The Landscape and Urban Design Strategy maps in the appendix provides a summary of potential:

- ▶ strategic partnership opportunities
- ▶ shared user path connection opportunities
- ▶ landscape treatment areas
- ▶ standard and non-standard mitigation measures and design responses that may minimise impacts of the project, encourage more public use of the site, enhance open space opportunity, recreational benefits and increase passive surveillance levels.

Section 11.1.2 identifies and locates the priority non-standard mitigation measures which have been identified in the Landscape and Urban Design Strategy maps. This does not mean that other mitigation measures should not be employed where practicable and appropriate.

12.2 Proposed landscape treatments

The following precedents illustrate the proposed landscape character and experience of each stretch of the shared user path along the length of the bypass. These precedents are influenced by existing characters in the local area and respond to the potential impacts of the bypass. Design principles have been developed to minimise visual impacts and public safety concerns, enhance opportunities and benefits of the project, and blend with existing landscape characters. All landscape treatments across the project should aim to reflect existing landscape characters surrounding them and enhance amenity where practicable.

Linear neighbourhood park



Figure 188. *Bungalow Way reserve in Aspendale Gardens is an example of a neighbourhood park.*

Design principles

- ▶ Prioritise clear sightlines across the park to improve public safety.
- ▶ Guarantee designed character complements the surrounding context.
- ▶ Ensure ease of maintenance.
- ▶ Encourage more park use. Consider integrating leisure and recreation infrastructure.

Integrated water management landscape/park



Figure 189. A view of Mordialloc Creek and the Waterways wetlands character

Design principles

- ▶ Work with ecologists to identify an appropriate remediation approach.
- ▶ Prioritise ecological enhancement.
- ▶ Integrate best practice water sensitive urban design.
- ▶ Investigate opportunities for water storage for the City of Kingston's open spaces that adjoin the project.

Linear ecological park



Figure 190. Existing path along the Waterways wetlands and Bowen Parkway

Design principles

- ▶ Ensure clear sightlines across the park to improve public safety.
- ▶ Work with ecologists to identify an appropriate remediation approach.
- ▶ Ensure the design prioritises ecological enhancement.
- ▶ Integrate water sensitive urban design.

Linear green wedge park



Figure 191. RJ Hamer Arboretum in Olinda, Victoria is an arboretum that attracts thousands of visitors annually to experience the unique and diverse landscapes created by simple planting of an extensive diversity of species.



Figure 192. Slottstradgarden in Malmö, Sweden is a public open space that has community gardens, nurseries, agricultural businesses, and that provides fruit and herbs for the public to pick. Similar examples can be found in Perth, Queensland, New Zealand, London and Berlin.



Figure 193. Alnarp Landscape Laboratory in Sweden is a large test site for universities, scientists and industry (e.g. agroforestry).

Design principles

- ▶ An opportunity exists to work with local stakeholders to create a landscape that draws on the experience of the local nurseries and agricultural industries within the green wedge zone.
- ▶ The park design and plants in these areas could integrate educational aspects, edible plant species, productive species, experimental species for scientific research, an arboretum, community gardens or a nursery depot for local councils.
- ▶ Clear sightlines and safety are a key priority in areas that the shared user path runs through.

13. Environmental Performance Requirements

The EPR's outlined in the table below set out the desired environmental outcomes for the project. The EPRs are applicable to all project phases and provided certainty regarding the projects environmental performance.

13.1.1 Landscape and visual Environmental Performance Requirements.

EPR NUMBER	ENVIRONMENTAL PERFORMANCE REQUIREMENTS	PROJECT PHASE
LV1	<p>Landscape design</p> <p>Landscape design plans must be developed prior to the commencement of works (other than preparatory works referred to in the Incorporated Document) and must be based on relevant standards and the best practice principles of the Urban Design Charter for Victoria and the <i>Urban Design Guidelines for Victoria (DELWP 2017)</i>.</p> <p>The landscape design plans must incorporate, where practicable, mitigation measures to minimise the landscape and visual impact associated with the project, including in respect of:</p> <ul style="list-style-type: none"> ▶ open spaces and recreational spaces ▶ community facilities ▶ residential interfaces ▶ industrial interfaces, and ▶ heritage assets. <p>The landscape design plans must:</p> <ul style="list-style-type: none"> ▶ make use of appropriate ecologically sensitive planting ▶ consider existing landscape character and sensitivities ▶ enhance key gateway streetscapes ▶ maintain and enhance existing pedestrian connections, where practicable ▶ be developed in consultation with appropriate Traditional Owner groups to provide direction on appropriate landscape typologies, land management practices and principles ▶ incorporate requirements of EPR LV2, and ▶ make use of advance tree plantings, where appropriate, to reduce the initial visual impact. <p>In consultation with relevant stakeholders, the landscape design plans must include vegetation screening appropriate for visually impacted community spaces, including residential areas and public open spaces, must be designed and implemented.</p> <p>Landscaping in accordance with the landscape design plans must be implemented and maintained (EPR R-LV7).</p>	All
LV2	<p>Crime prevention through environmental design</p> <p>Landscape design plans must protect and, where practicable, improve access to, and amenity for, potentially affected residents, open spaces, pedestrian and cyclist</p>	All

	networks, social and community infrastructure and commercial facilities, whilst meeting the requirements of EPR B2. This includes implementing the principles and guidelines of <i>Crime Prevention Through Environmental Design (CPTED)</i> and <i>Urban Design Guidelines for Victoria (DELWP 2017)</i> and maximising passive surveillance levels as far as practicable.	
LV3	Reinstatement works Within 12 months of the commencement of operation, the public open spaces, vegetation cover and facilities disturbed by temporary works must be reinstated to the reasonable satisfaction of the relevant land manager.	Operation
LV4	Lighting (operation) All lighting of permanent structures must be designed to minimise light spillage and protect the amenity of adjacent land uses to the extent practicable. Lighting in sensitive areas around wetlands and Braeside Park must also comply with EPR B2.	All
LV5	Light spillage (construction) All lighting during construction must be managed in such a way as to minimise light spill to surrounding residential land uses, sensitive areas including wetlands and Braeside Park, and neighbourhoods. The strategies and techniques to do so must be included in the CEMP.	Construction
LV6	Tree removal Minimise the removal of mature trees, particularly large amenity trees and those within or connected to public open spaces, that are not currently protected by no-go zones as described in EPR B3.	Construction
LV7	Landscape management strategy A landscape management strategy must be developed and implemented to ensure healthy growth of planted vegetation. The strategy will include weed management.	Construction, Operation

Figure 194. *Environmental Performance Requirements table*