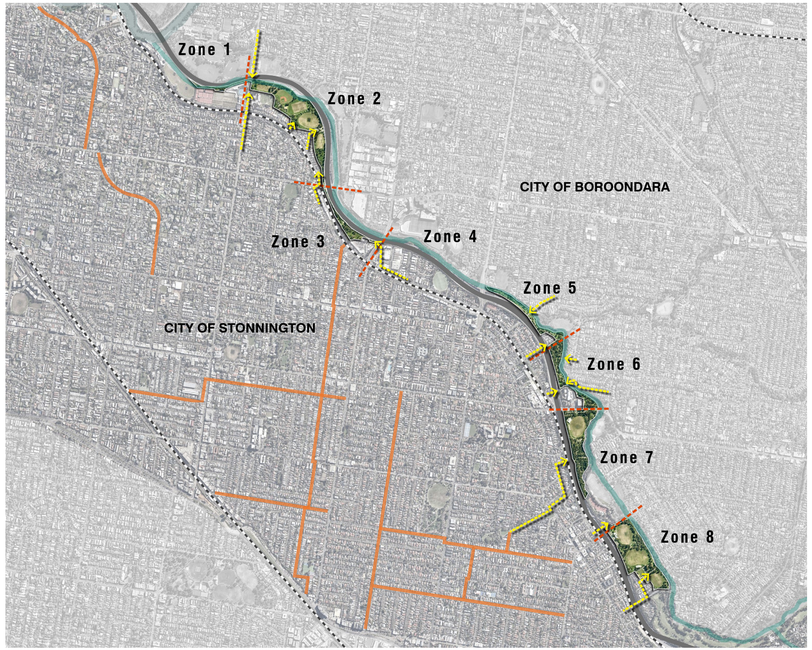



# SHARED USER PATH (ZONES 1 - 8)

## Context

The Shared User Path (Gardiner's Creek Trail) explores a new and upgraded cycle path. It looks into the opportunities to upgrade the main trails as well as pedestrian pathways and boardwalks with associated infrastructure (lighting, drinking fountains, bike hoops and service provisions). See relevant design strategies for information on lighting and furniture

The upgrading of the path network looks at the broader connections into the Gardiners Creek Trail from the surrounding areas - both on road networks and feeder pathways.




Zone Boundary

Feeder Paths

Shimmy Network

T.C.L

## KooyongKoot Typical Path Types

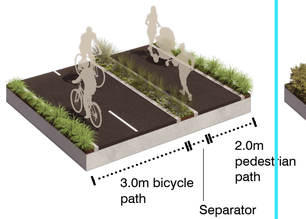
Through the Concept Design Phase the design team was asked to consider the types of paths that were appropriate for the Gardiner's Creek Trail. This included the exploration of the path designation as a C1 trail or shared user path.

The design explored six standard path typologies to improve legibility of hierarchy and wayfinding, user experience, and identity.

These typologies were designed to differentiate paths based on their functional and aesthetic qualities, creating a cohesive and memorable landscape for users to navigate and enjoy.

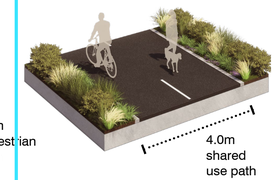
- **Shared use path**
  A wide path where pedestrians and cyclists both use the same path.
- **Segregated path**
  The pedestrian path is adjoining to the bicycle path, usually separated by line marking or visually through the use of different coloured pavements.
- **Separated path**
  Where the path for cyclists is physically separated from the path for pedestrians, e.g. by a barrier or median. The bicycle path component may also be known as an 'exclusive bicycle path'.

### 1. Type 2 C1 Path



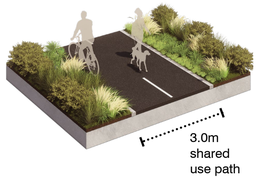

- 3.0m wide bicycle path: 2.6m wide standard asphalt with 200mm concrete edges on either side.
- 0.5m planting buffer to act as a separator.
- 2.0m wide pedestrian path: 1.6m wide standard asphalt with 200mm concrete edges on either side.

### 2. Type 3 Shared Use Path



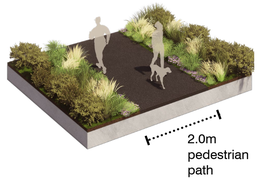

- 4.0m wide shared use path: 3.6m wide standard asphalt with 200mm concrete edges on either side.

### 3. Type 2 Shared Use Path



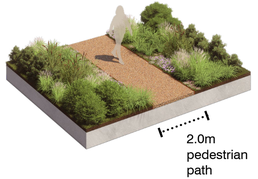

- 3.0m wide shared use path: 3.0m wide standard asphalt with 200mm concrete edges on either side.

### 4. Secondary Path



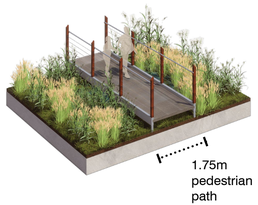

- 2.0m wide pedestrian path: 1.6m wide standard asphalt with 200mm concrete edges on either side.

### 5. Informal Path




- 2.0m wide informal gravel path: 2.0m wide loose aggregate gravel
- Steel edging

### 6. Boardwalk Path



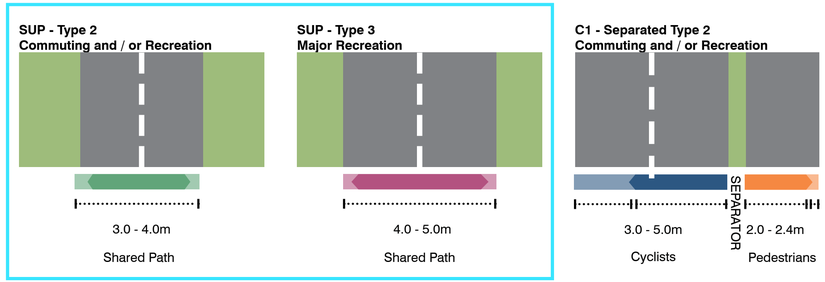

- 1.75m wide boardwalk path: fibreglass panelling with corten and stainless steel balustrade.
- Potential for differing materials.
- 1.5m total clearance

## Design rationale

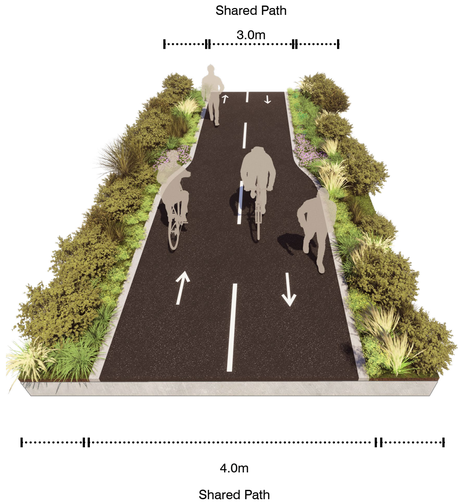
The design team explored the legibility and user experience of an inconsistent path treatment - ie. changing the path from a separated trail to a shared trail every few hundred metres, as the path is either constrained by existing conditions, or transitions back across to Boroondara land.

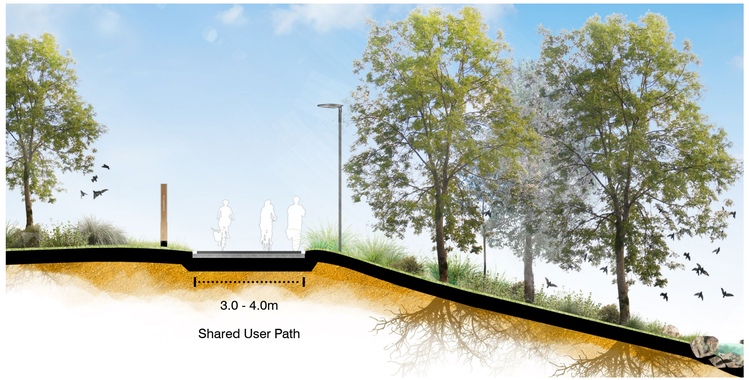
The recommendation from the design team, backed up the number of users on the Gardiners Creek Trail, is to widen the path to a Shared User Path Type 3, where possible - 4 - 5m path.
This would provide additional passing room for commuters and other user groups, without creating additional conflict points.

Additional risk  mitigation strategies include the installation of lighting, line marking, re-surfacing, signage, vegetation management, and improved drainage.




**Alternative shared use path junction point**



# Lighting

**Introduction**
The lighting design will generally conform to the following parameters:

**Luminaires**

Lighting  along the path will be from LED luminaires with the following characteristics:

- Asymmetric side throw distribution with peak no higher than 65 degrees to the horizontal.
- Not to be tilted above the horizontal plane and designed for light to not enter the night sky directly (dark sky compliant).
- Be controllable in terms of colour and dimmability.
- Provided with outreach arms as necessary to avoid foliage and direct the light onto the path and not the surrounds..
- Be fitted with internal shielding as necessary to reduce back lighting.
- Be a similar shape as illustration below:

**Lighting Poles**



The poles shall have the following characteristics.

- Shall be approximately 4.5m high and be spaced approximately 15m apart.
- Be located generally at least 1m from the path
- Poles (except possibly in car parks) will be aluminium, preferably with a large aluminium recycling component in their manufacture. Aluminium has the advantages of a much longer installation life than galvanised steel particularly in flood prone areas, is more easily installed and replaced if damaged. Aluminium poles have no seam and can be extruded to shape desired.

**Reducing Ecological Effects**
Latest research indicates that extremely warm light with a minimised blue component is preferable from an ecological viewpoint for insects, birds, nocturnal mammals and aquatic life.

Particularly in areas close to the river and in natural zones, the lighting proposed would provide a warm, white light during the busy periods as chosen by council and during the quiet periods the lighting would switch to a more monochromatic light with no blue or green components.

The use of dimming the output would ensure that the path is illuminated to the level required and not excessively.

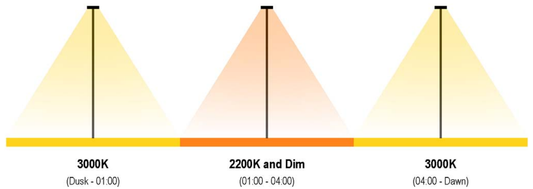



*Figure 2: Colour temperature and dimming levels for different time periods.*



**LEGEND**

PP2 Lighting  PP3 Lighting  PC3 Lighting  Opportunities for Photovoltaic systems  Ecological Lighting Areas



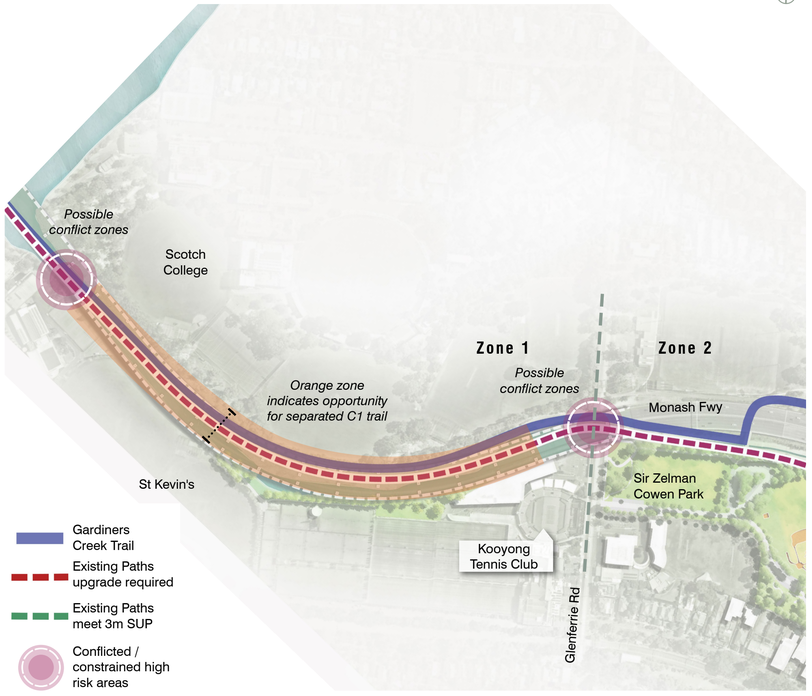


# Zone 1

**Zone 1 - Existing Plan**

NTS @ A3








**Zone 1 - Existing Typical Cross Section**

Zone 1 extends from Birrarung to Glenferrie Rd.

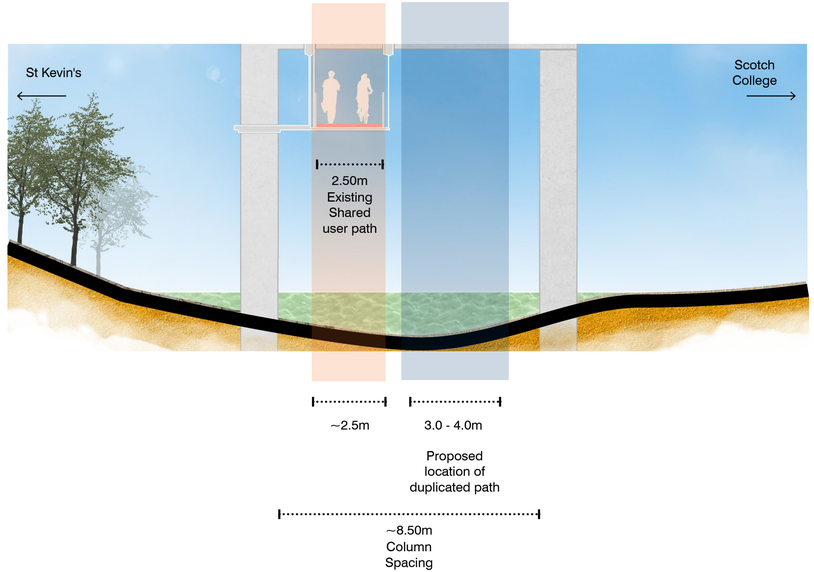
The current shared cycle and pedestrian path is suspended under the Monash Freeway.

For the extent of path from the elevated boardwalk (near the entry to St Kevin's College) to the on grade path west of Glenferrie Road underpass, the suspended path could be duplicated.

The recommendation would be to create a duplication of the path, and explore feasibility of directional separation compared to separation of users (ie. pedestrians and cyclists).

The feasibility of such a proposal requires extensive advocacy and would need to be thoroughly investigated to explore engineering, height clearance, cost and safety.

1:100 @ A3



# Zone 2

**Zone 2 - Existing Plan**

NTS @ A3







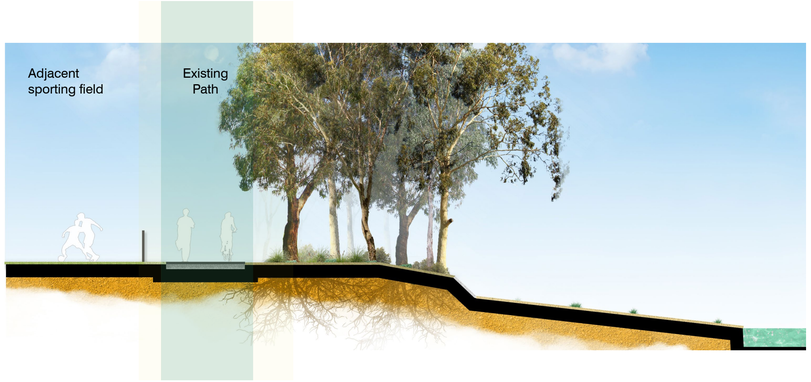

**Zone 2 - Existing Typical Cross Section**

A 200m portion of the path network in Zone 2 is also the Gardiners Creek Trail - this area is from Glenferrie Road underpass to the bridge crossing.

This portion of trail is currently constrained by sporting fields to the south and existing vegetation to the north.

The area of path between Glenferrie Rd and Muir Pavilion has been identified as not meeting the SUP requirements, of a consistent minimum width of 3m, with concrete kerbs either side.

It would seem feasible to upgrade the existing path to a Type 2 Shared User Path.




3.0m

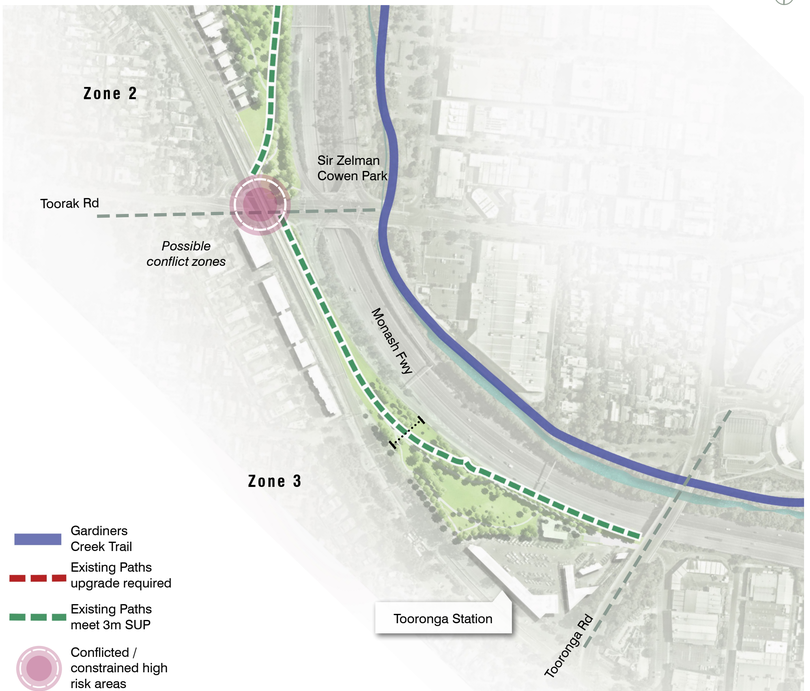
Shared User Path
Type 2

0.65m 2.60m 1.20m
Indicative Existing Dimensions

# Zone 3

**Zone 3 - Existing Plan**

NTS @ A3








**Zone 3 - Existing Typical Cross Section**

The path network through Zone 3, Tooronga Park, is not part of the Gardiners Creek Trail, but is still a well utilised local bike and pedestrian network.

A large portion of this path network, between Toorak Road and the west end of Tooronga Park, has recently been upgraded as part of the Toorak Rd Level Crossing Removal. This path is high quality, 3m in width and built with concrete edges. The path continues through Tooronga Park at this width, until it abruptly ends at Weir St.

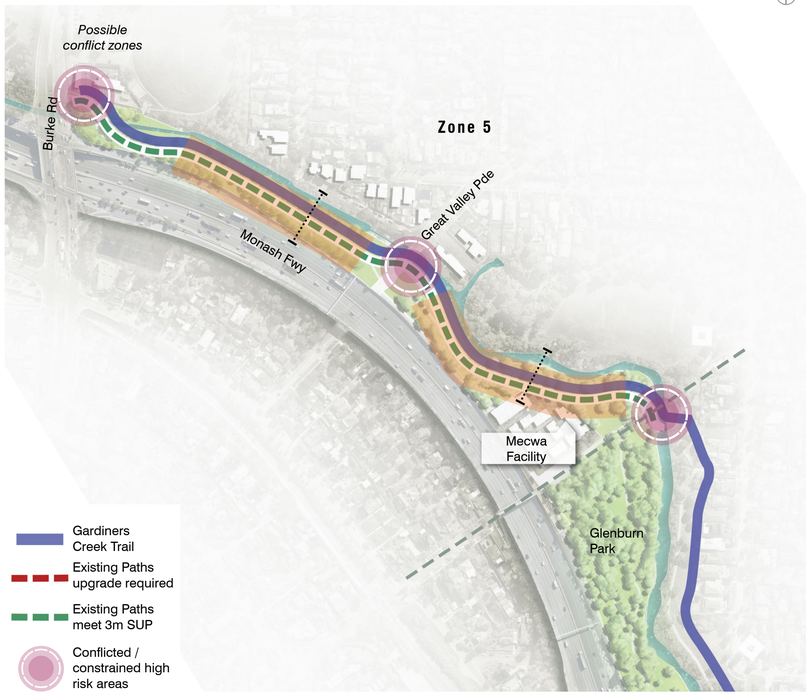
No upgrade to the existing path is required, however the resolution of the east path connection is needed, and options for this are discussed within the Tooronga Park concept. Lighting may also be considered



# Zone 5

**Zone 5 - Existing Plan**

NTS @ A3








1:100 @ A3

**Zone 5 - Existing Sections**

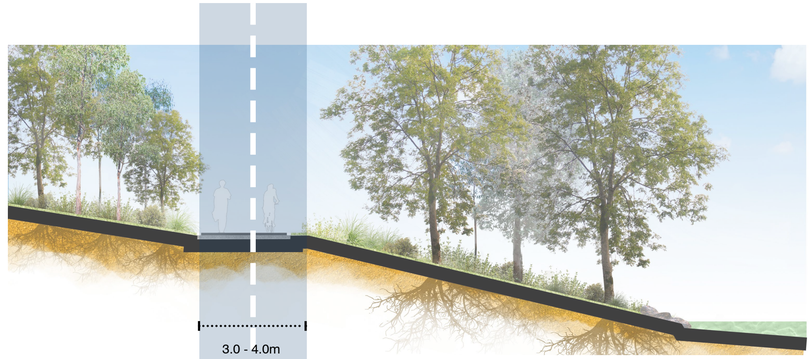
Between Burke Rd and the Mecwa facility the concept design explored the option for the existing Gardiners Creek path to be widened and separated to meet the requirements of a C1 trail in some areas.

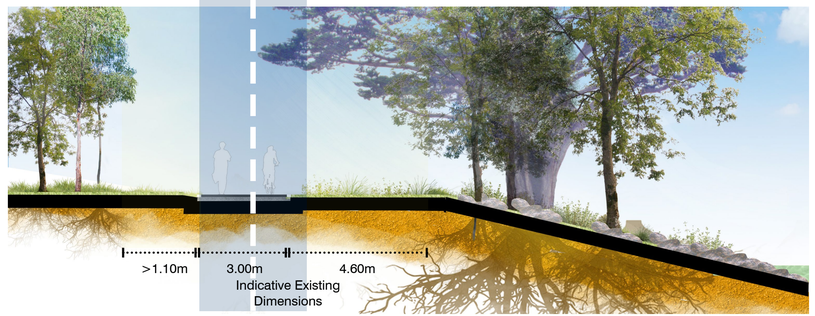
There are constraints around the path width at road and creek crossing points. From the west as the path passes under Burke Rd, the Great Valley Parade underpass, and the bridge crossing east of the Mecwa facility.

Between Burke Rd and Great Valley Parade, the path has room to be widened possibly as part on grade, and part elevated boardwalk to deal with the existing embankment levels.

Between Great Valley Parade and the Mecwa Facility there is a generous amount of level ground either side of the existing pathways.

As a result of the Gardiners Creek Pedestrian & Cyclist Monitoring data, the recommendation is to widen the Shared User Pathway to a dimension of up to 4m.

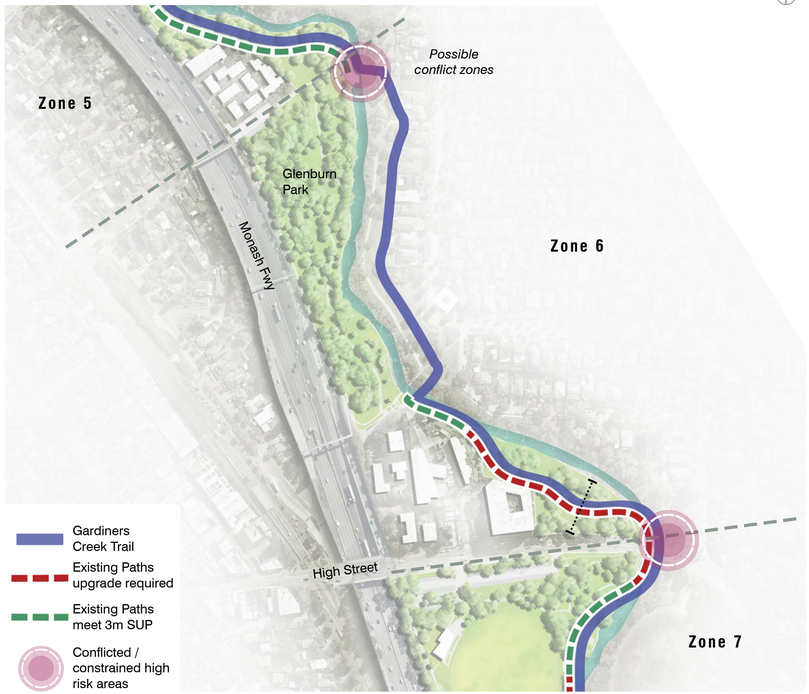


# Zone 6

**Zone 6 - Existing Plan**

NTS @ A3








**Zone 6 - Existing Typical Cross Section**

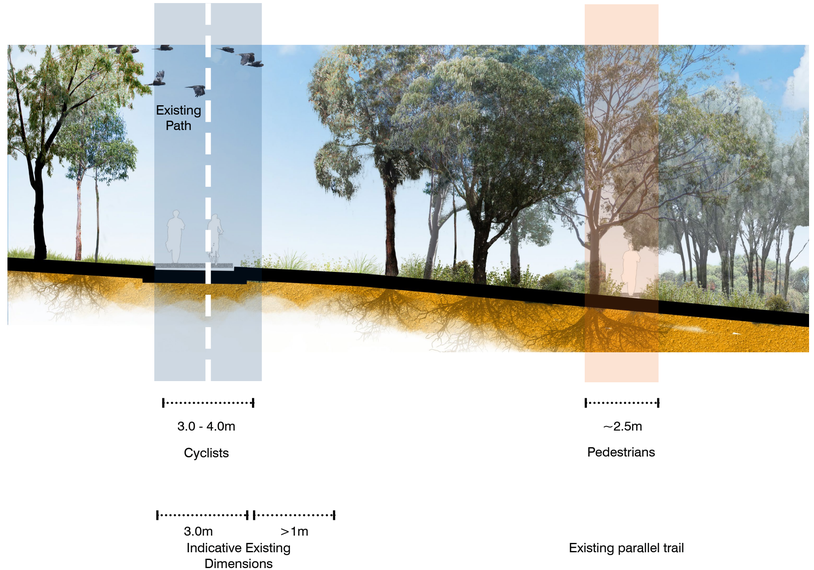
Through Zone 6, the Gardiners Creek Trail is picked up from Brixton Rise, heading east towards High Street.

At Brixton Rise, adjacent to Glenburn Park, the Gardiners Creek Trail crosses the creek, onto the southern side of KooyongKoot. The Trail as it follows Brixton Rise, has been recently upgraded, and is a 3m concrete shared path within the footpath zone.

As the Trail moves back through parkland the path decreases in size to around 2.5m, and continues to narrow to around 2m to pass under High Street.

It would seem feasible to upgrade the existing path to a Type 2 Shared User Path.

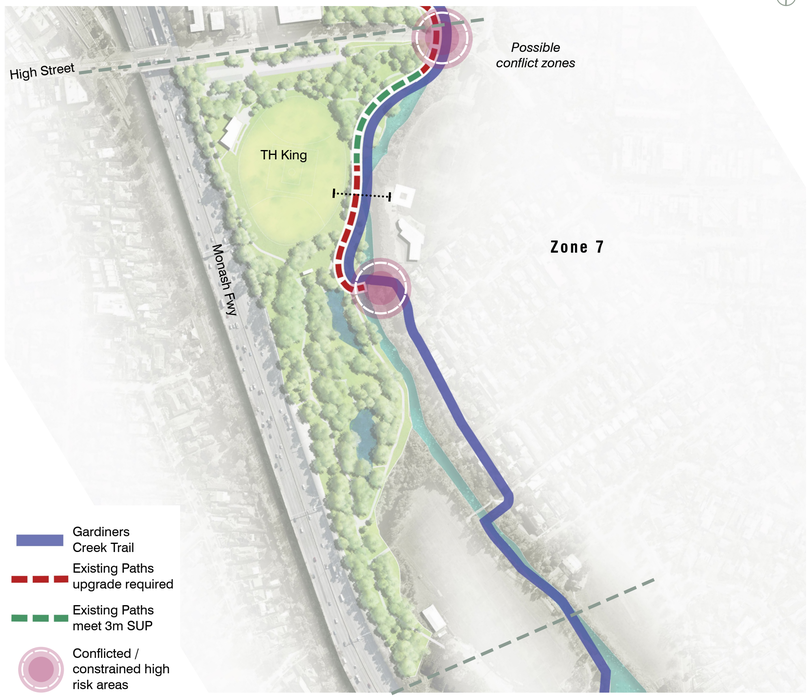
There is ample space through the parkland to increase the path to a minimum 3m width. The narrow path under High Street has been identified as a high conflict zone, and path duplication has been explored in the Zone 7 section of this concept report.

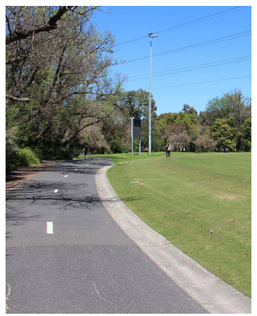


# Zone 7

**Zone 7 - Existing Plan**

NTS @ A3





**Zone 7 - Existing Typical Cross Section**

As the Gardiners Creek Trail emerges from under High Street, the path widens to around 2.6m, and then 3m as it passes TH King sporting ground.

The existing path lacks defined concrete edges, however in certain portions the placement of concrete edges may impede on the significant existing trees.

The recommendation is to achieve the minimum 3m width, and where possible, formalise the edges of the path.

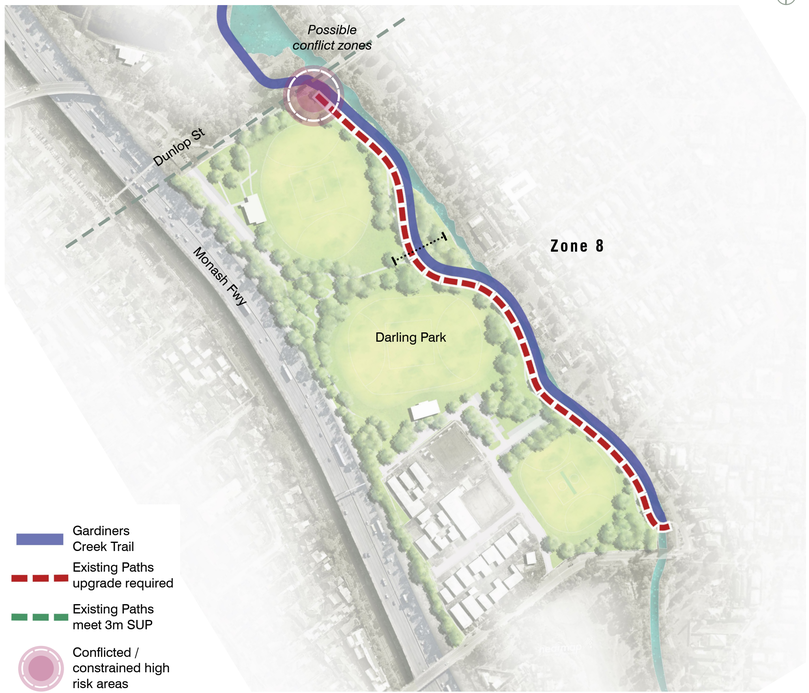
In areas that have sufficient space and where visibility is reduced by curving, or vegetation, it is recommended to widen the path to 4m (for example, the path as it approaches the bridge crossing to Estella Street).



# Zone 8

**Zone 8 - Existing Plan**

NTS @ A3



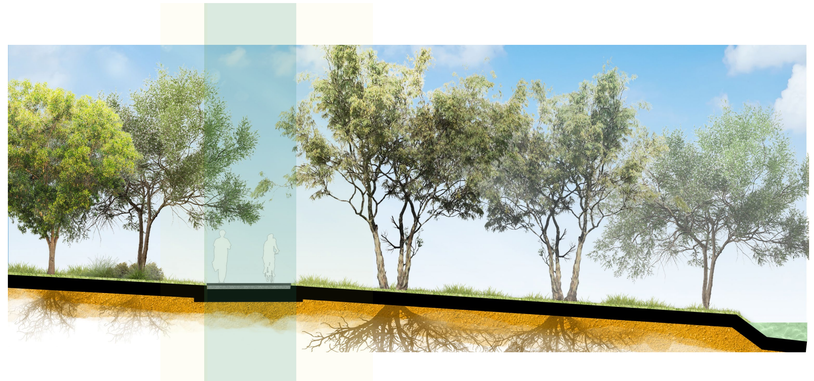



**Zone 8 - Existing Section**

Zone 8 area of path is not currently consistently compliant to the Shared User Path.

The existing trees and levels constrain the amount the path could be widened, and implementation of a C1 separated trail in this location was not feasible.

The recommendation is to upgrade to the Shared User Path Type 2, tree management is a significant component of the upgrade.



3.0m

Shared User Path
Type 2

1.30m 2.60m ~2.90m
Indicative Existing
Dimensions