

Final Concept Design Report

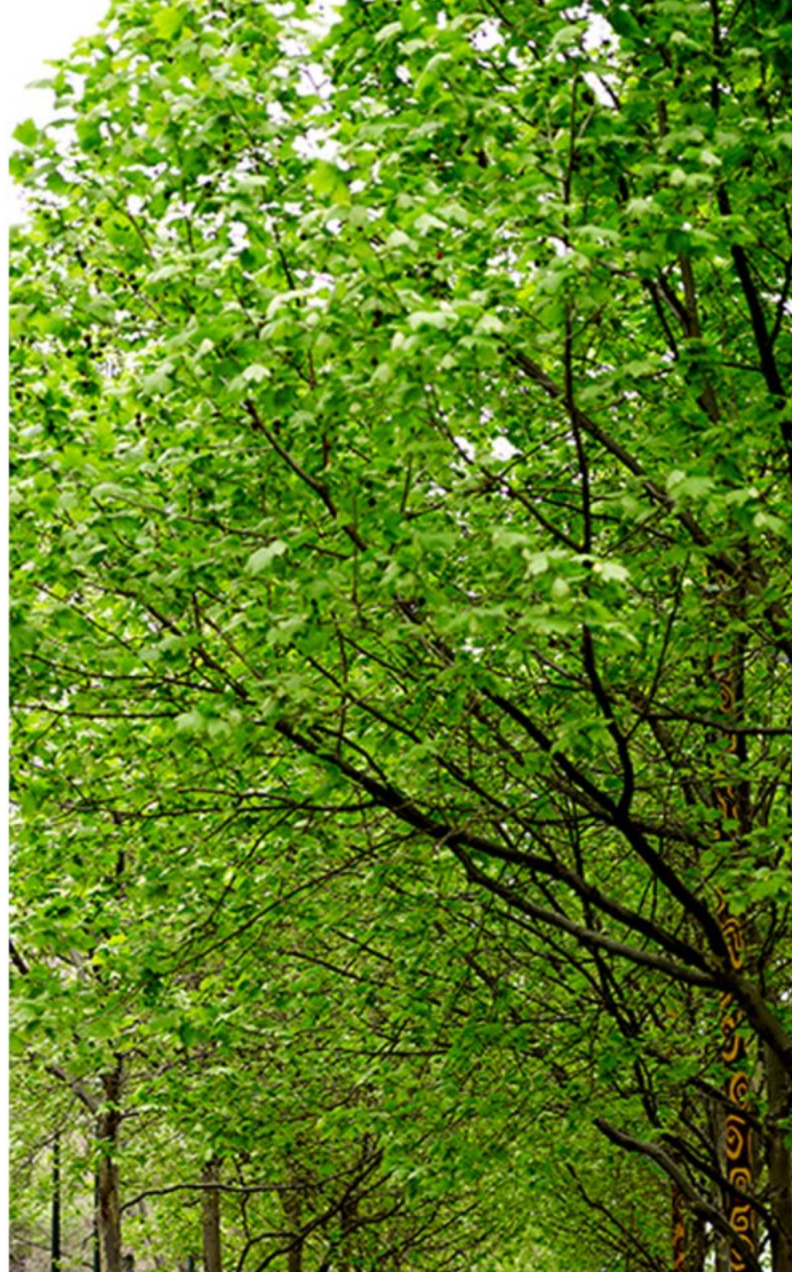
PARK STREET BIKE LINK - SOUTH MELBOURNE
12.10.2021



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Image ref: Rob Adams



Document Control

Name Park Street Bike Link, South Melbourne
Project No 300422120L0
Version Revision C
Date 12/10/2021

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Image on Front and Back cover:

Site photo of landscape to be retained

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Introduction

SMEC have been commissioned by the City of Port Phillip to prepare the Landscape Report for Park Street Bike Link, South Melbourne.

This Landscape Concept Plan will guide the development of the Park Street protected bike lanes from St Kilda Road to Kings Way, the temporary bike separation from Kings Way to Moray Street and aspiration for Little Bank Street.

Some aspects of the Landscape Concept Plan are visionary future works which may be installed at a later stage separate to the Park Street Bike Link works. They have been incorporated in order to provide the community with a comprehensive picture of how the Park Street precinct could develop, whilst ensuring the community is able to provide valuable feedback even during the early stages of strategic development.

The landscape design process has been undertaken in close liaison with the development of the Transport and Civil infrastructure design such that each has informed the other to form a cohesive and integrated design outcome.

The purpose of this Landscape Concept Design Report is to show the proposed integration of Park Street Bike Link into the local and broader precinct. In order to achieve this, soft landscape, surface materials and landscape furniture elements are used in a strategic way by identifying key areas of focus as well as opportunities and constraints for the project. The main objective for this concept is to create a leafy tree canopy boulevard feel for Park Street.

Image ref: <https://smarterlite.com/>



Domain Precinct Public Realm Masterplan - Design Principles

In 2019 the City of Port Phillip endorsed the Domain Precinct Masterplan. The Masterplan identified Park Street as an integral part of the broader context and a priority project, connecting St Kilda Road and Domain Interchange through to South Melbourne.

The Park Street Bike Link project has the opportunity to enhance the surrounding parkland character through drawing the leafy boulevard character of St Kilda rd through to Eastern reserve, adding to the identity of the broader precinct.

The Domain Precinct Masterplan highlights the importance of prioritising pedestrian and bicyclists and the Park street project is recognised as an important East-West link.

Water sensitive urban design (WSUD) and footpath trading are also identified as opportunities for the Park street project.



Design Principles from Domain Precinct Public Realm Masterplan

Existing Conditions

Eastern Reserve (to the west end of the Park Street site) provides a strong identity for Park Street, with plenty of mature leafy Elm trees. Although Park Street runs through the middle of Eastern reserve, the Elms provide an aesthetic connection to link the north and south.

There is also a strong native vegetation presence through tree numbers 101-110 noted on the southern side of Park Street below. *Eucalyptus nicholii* and *Callistemon viminalis* are the dominant species. These mature trees play an important role within the existing streetscape, countering heat island effect and linking tree canopy cover along Park Street West and East across Kings way.

Park street to the East of Kings way (over-page) demonstrates a mix of young, healthy Elm trees and inconsistently developed *Brachychiton aceritolius*. There is a mix of poor quality pavement surfaces completed at different times, largely due to underground service works. There are a number of footpath trading areas to note, including The Olive Tree restaurant, with a mature olive tree located within the footpath.

The strong presence of elm trees throughout Park Street provides an opportunity to draw on and retain this existing landscape character.



1 Eastern Reserve (South): Existing Trees #111-115



2 Eastern Reserve (North)



3 Existing Trees #107-109
139 Park St



4 Existing Church Building, 77 Park St

LEGEND

-  Existing Tree to be retained and protected to AS 4970-2009 (Refer to arborist report)
-  Existing Tree to be removed



Tree Removal Plan - NTS



5 Elm Trees: Existing Trees #51-54
88 Park St



6 Brachychiton Tree: Existing Tree #94
39 Park St



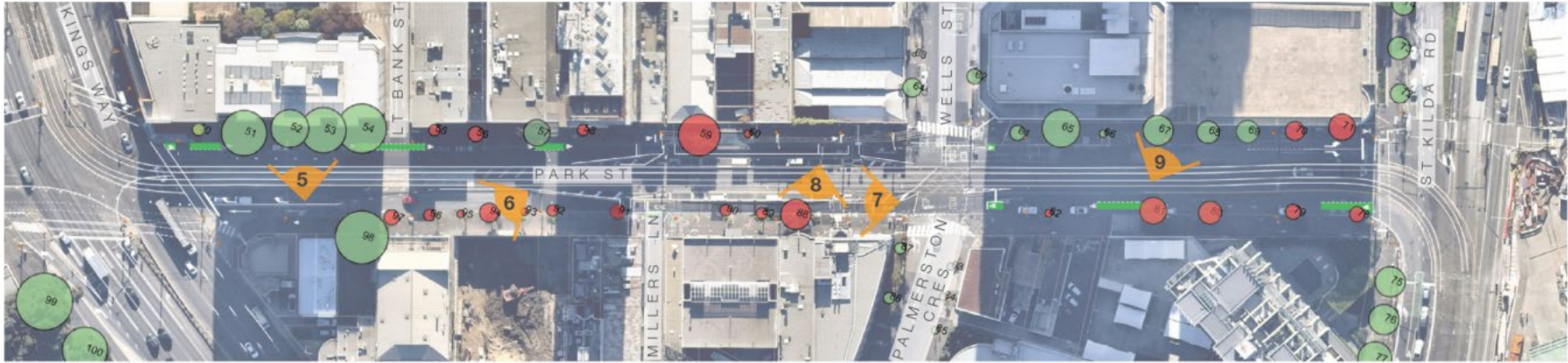
7 Wells St / Park St Tram Stop



8 The Olive Tree Bistro: Existing Tree #94
19 Park St



9 Elm Trees: Existing Trees #67-68
380 Park St



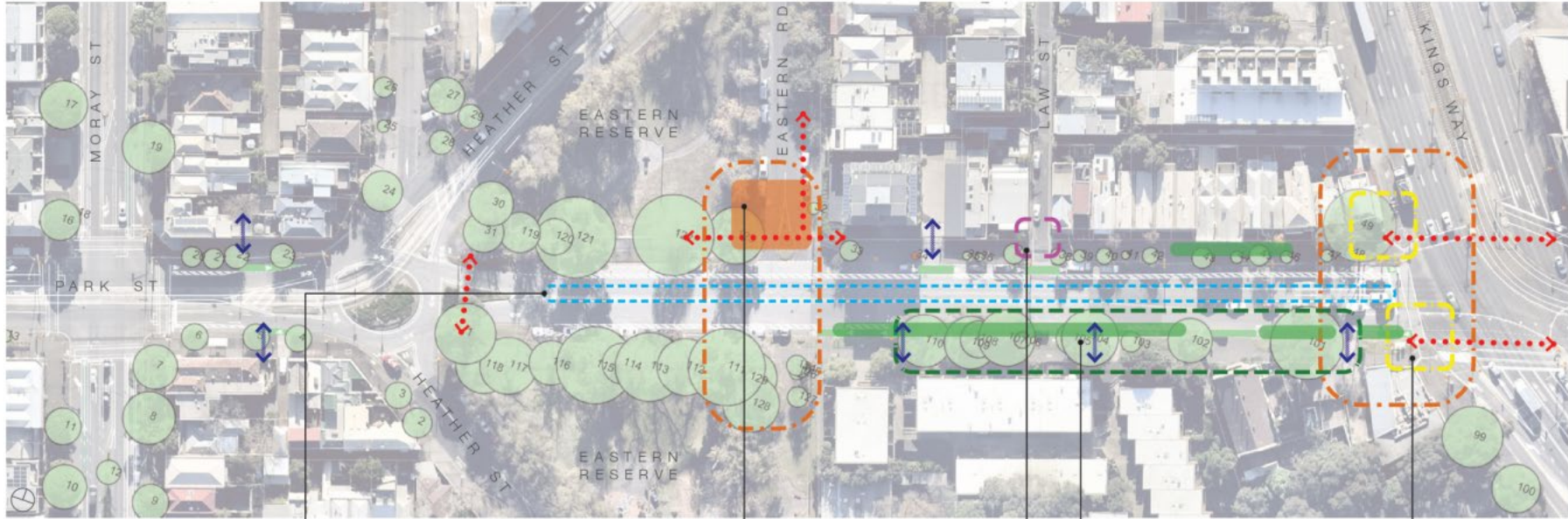
Tree Removal Plan - NTS

Opportunities and Constraints

This Landscape Concept identifies a number of opportunities and constraints for this project and potential future projects in the immediate context. The plan below highlights the key focus areas and strategic thinking.

LEGEND

-  Pedestrian Connections
-  Vehicle Threshold Opportunities
-  Vehicle Crossovers
-  Opportunities: Seating, Planting & Street Art
-  Opportunities: WSUD & Innovative Planting
-  Opportunities: Retention and enhancement of Existing Vegetation
-  Opportunities: Intersection improvements



Opportunities and Constraints Plan - Park Street (West of Kings Way) - NTS

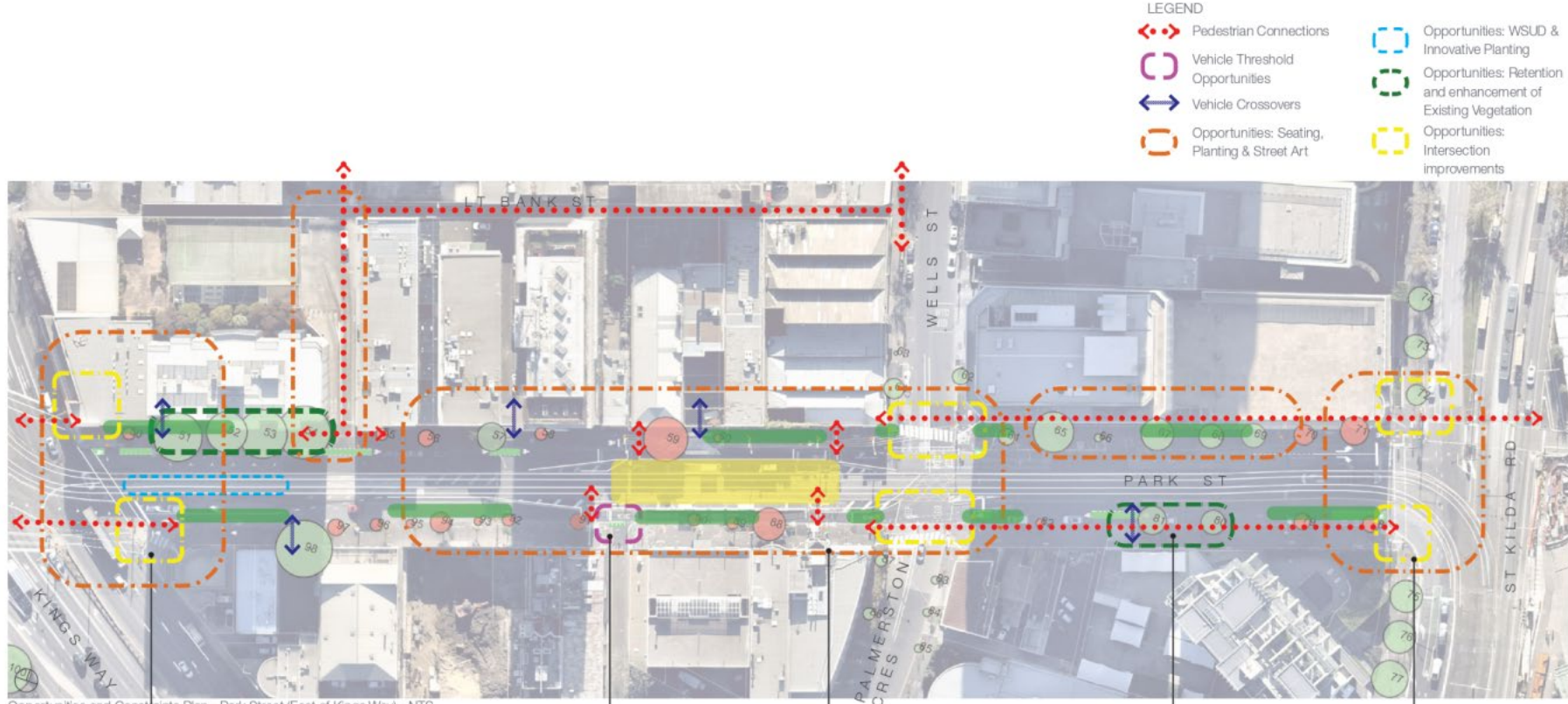
- 3 Opportunities:**
- Consider improving micro-climate to "Park St" precinct, through WSUD and planted median within "Future Tram Tracks"

- 2 Future Opportunities Subject to City of Port Phillip Public Space Strategy:**
- Create improved amenity through consideration of additional seating and bike storage to encourage park use
 - Potential for different paving treatments
 - Link the park spaces through aesthetic connection across Park Street
- Constraints / Risks:**
- Future tram infrastructure will create separation between the adjacent reserves

- 1 Opportunities:**
- Potential to prioritise pedestrian and bicycles at laneway crossings through raised thresholds and pavement treatments

- Opportunities:**
- Protect and retain existing trees to create contrasting natural character to the existing heritage
 - Potential for inclusion of native planted nature strip to improve the micro-climate and biodiversity

- Opportunities:**
- Potential to introduce garden bed to soften interface



Opportunities and Constraints Plan - Park Street (East of Kings Way) - NTS

LEGEND

- Pedestrian Connections
- Vehicle Threshold Opportunities
- Vehicle Crossovers
- Opportunities: Seating, Planting & Street Art
- Opportunities: WSUD & Innovative Planting
- Opportunities: Retention and enhancement of Existing Vegetation
- Opportunities: Intersection Improvements

- 4** Opportunities:
- Consider removal of left hand turn onto Kings Way to improve amenity for pedestrians and cyclists
 - Potential to introduce planting and different pavement types to highlight entrance to Park St precinct
 - Draw landscape character West of Kings Way into the East to highlight as project Threshold/ Transition
- Constraints / Risks:
- Impact on transport modeling

- 1** Opportunities:
- Prioritise pedestrian and bicycles at laneway crossings through consideration of raised thresholds and pavement treatments
- Constraints / Risks:
- Existing services and co-ordination
 - Grading and drainage

- 2** Opportunities:
- Create improved amenity through potential addition of seating and planting
 - Consider highlighting retail / commercial strip through different pavement types
- Constraints / Risks:
- Tram superstop and proposed bike lane restrict available space to increase amenity
 - Reduced space for footpath trading
 - Vehicle crossovers
 - Existing trees removed with limited space for adequate tree growth

- Opportunities:
- Connect Domain interchange to Park St precinct by enhancing the boulevard feel of Park St
- Constraints / Risks:
- Garbage truck access to bin collection points

- Opportunities:
- Potential to highlight entrance to Park St precinct through soft landscaping and different pavement treatments
 - Reduce heat island effect through consistent tree canopy cover

Precedents & Local Context

There are a number of local precedents which can be drawn on through the Park Street project. The Southbank Boulevard redevelopment project next to MTC shows some great examples of prioritising pedestrians and cyclists and separating the different modes with strategic garden bed locations. This is also a good example of water sensitive urban design through passive irrigation of street trees and combating heat island effect by breaking up concrete in between tram tracks.

There is a rich variety of local street art to the West of Park Street, in the laneways of South Melbourne. Little Bank Street provides an opportunity for this project to enhance this character and local identity.

There are also some good precedents around Melbourne demonstrating successful design of seating node spaces within small reserves. These highlight the importance of furniture design, surface treatment selection and a scale of design relative to immediate context.



Opportunities at street intersection thresholds



Potential street art, seating and small tree planting precedents



WSUD & innovative planting precedents seen at Southbank Blvd public realm

Landscape Concept Plan

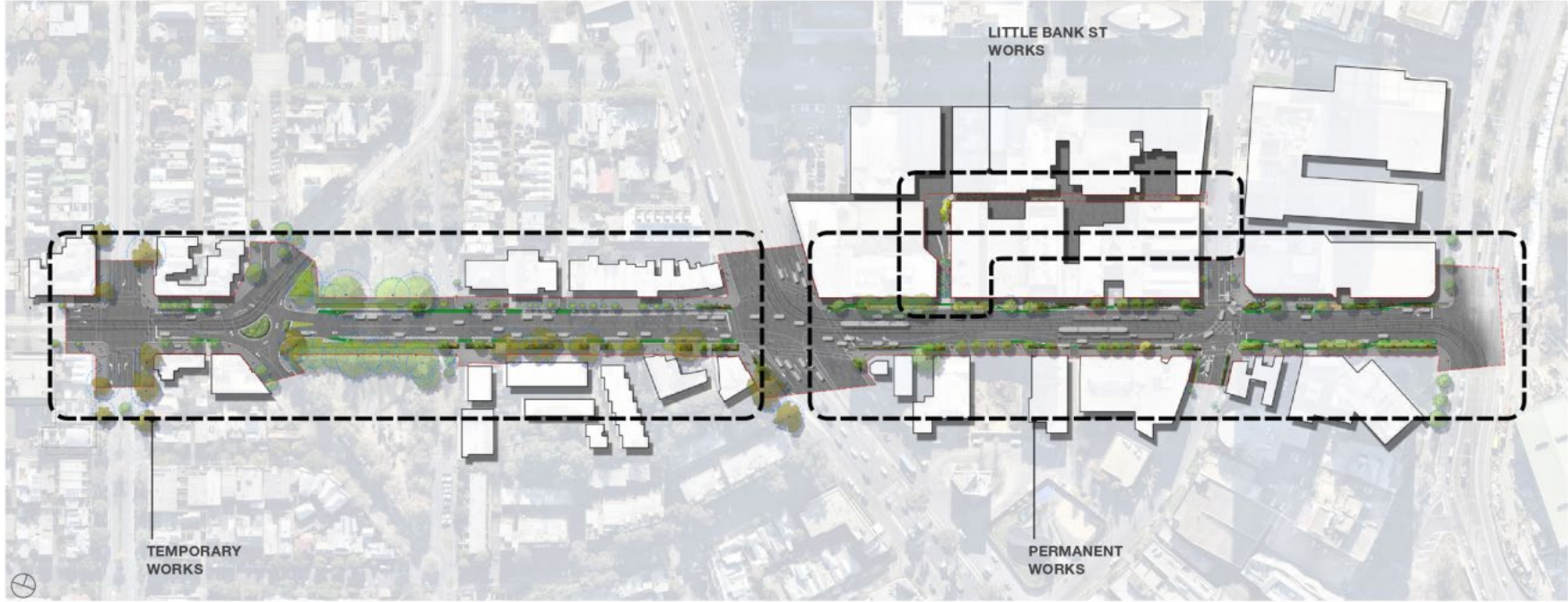
Scope

The Park Street Bike Link works are separated into three stages.

The permanent works are located between Kings Way and St Kilda Road, and aim to build upon and strengthen the existing character of the precinct whilst streamlining pedestrian, cycle and vehicular traffic.

Works located to the east between Kings Way and Moray Street will be installed as a temporary measure in anticipation of a future tram track extension. This extension will be subject to a separate future design work process.

Little Bank Street will undergo a strategic activation which will aim to provide improved amenities for the community whilst facilitating pedestrian movement. Little Bank Street sits surrounded by a number of residential developments due for completion in the nearby future and presents an opportunity to enhance both atmosphere and connectedness.



Park Street Plan - Scale 1:2000

Landscape Concept Plan

Key Design Principles

The Landscape Concept Plan shows the overall design approach for Park Street, which will be carried through to the detail design phase. Some elements shown still require funding and approval, however, the concept plan illustrates the key landscape design elements that the project aspires to deliver.

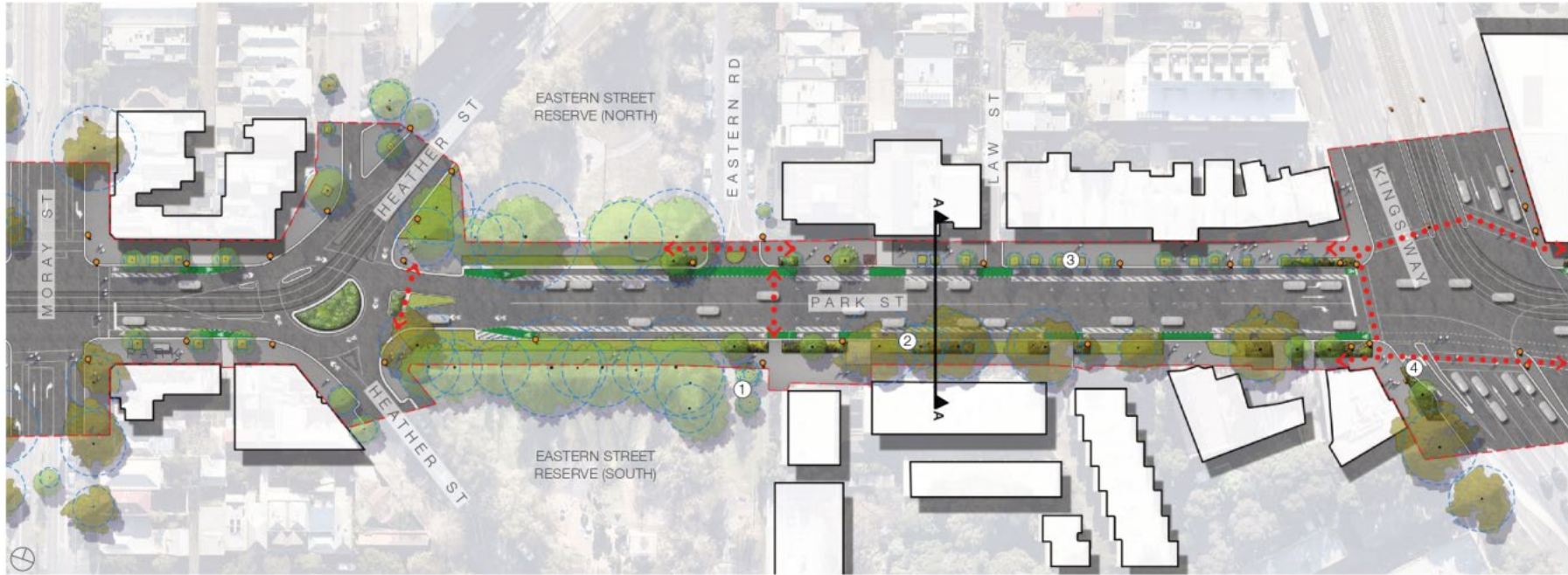
In summary, these elements are:

1. Eastern Street Linear Reserve (South)
2. Retain and protect existing native trees. Introduce low height garden beds with native and indigenous

3. Retain and protect existing young Elm tree planting
4. Soften interface to Kings Way with proposed garden bed and tree canopy planting, creating a stronger connection from West to East

LEGEND

- | | | | |
|---|-------------------------------|---|---|
|  | Proposed trees |  | Grass |
|  | Existing trees to be retained |  | Asphalt paving |
|  | Existing trees to be removed |  | Existing electrical tram pole constraints |
|  | Garden Bed |  | Proposed seating |
|  | Tuscan Toppings |  | Proposed Bike Storage |
| | |  | Pedestrian connections |

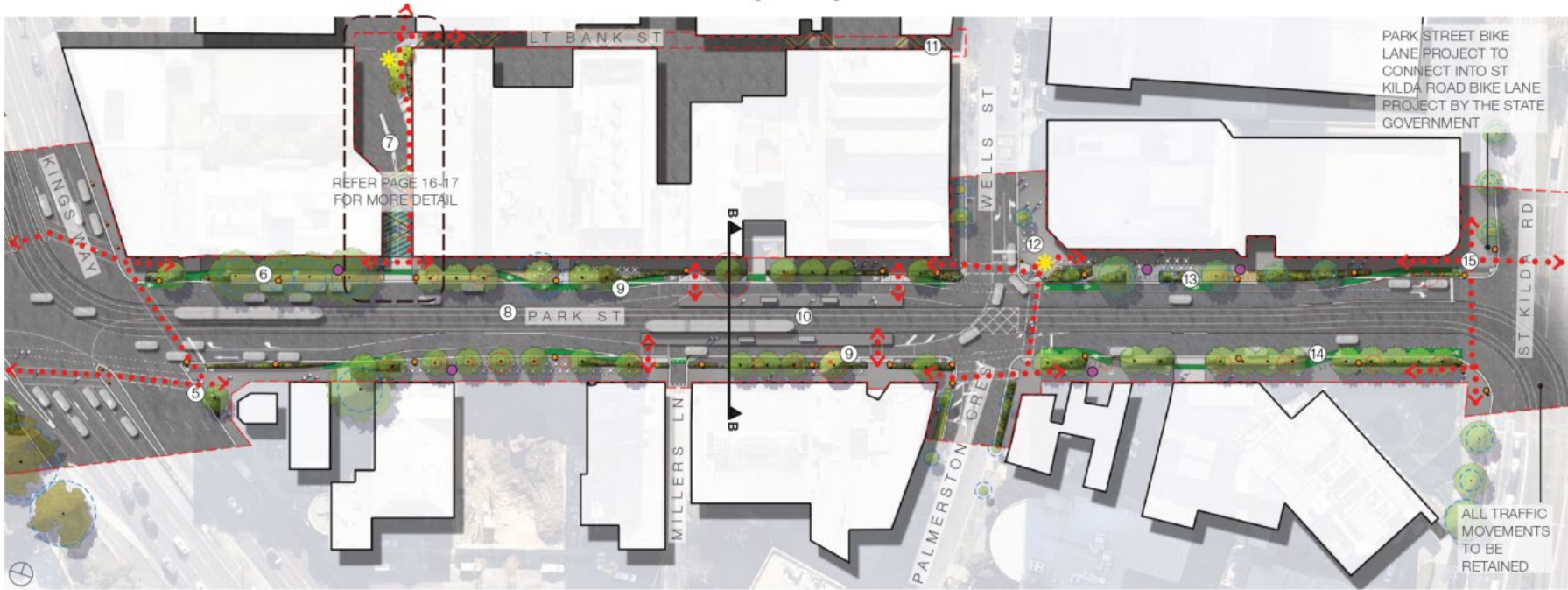


Park Street Plan - Scale 1:1000

- 5. Soften interface to Kings Way with proposed garden bed and tree planting, creating a stronger connection from East to West.
- 6. Retain and protect existing mature Elms
- 7. Lt Bank Street (refer specific page)
- 8. Introduce Elm tree planting to enhance boulevard character throughout Park street. **Refer Note.
- 9. Retain Footpath Trading where possible
- 10. Tram stop (refer page 15 for section)

- 11. Little Bank St entrance from Wells St. Alternative paving treatment, feature lighting and potential for public art.
- 12. Provide seating node and planting to highlight intersection with Wells st and Palmerston Cres.
- 13. Retain and protect existing mature Elms
- 14. Introduce Elm tree planting to enhance boulevard character throughout Park street
- 15. Provide planting to highlight Park street entrance from St Kilda Rd.

**Note: Tree locations have been arranged to maximise canopy cover whilst accommodating existing services. Consideration of future on street trading to be confirmed on final street tree positions during Detail Design



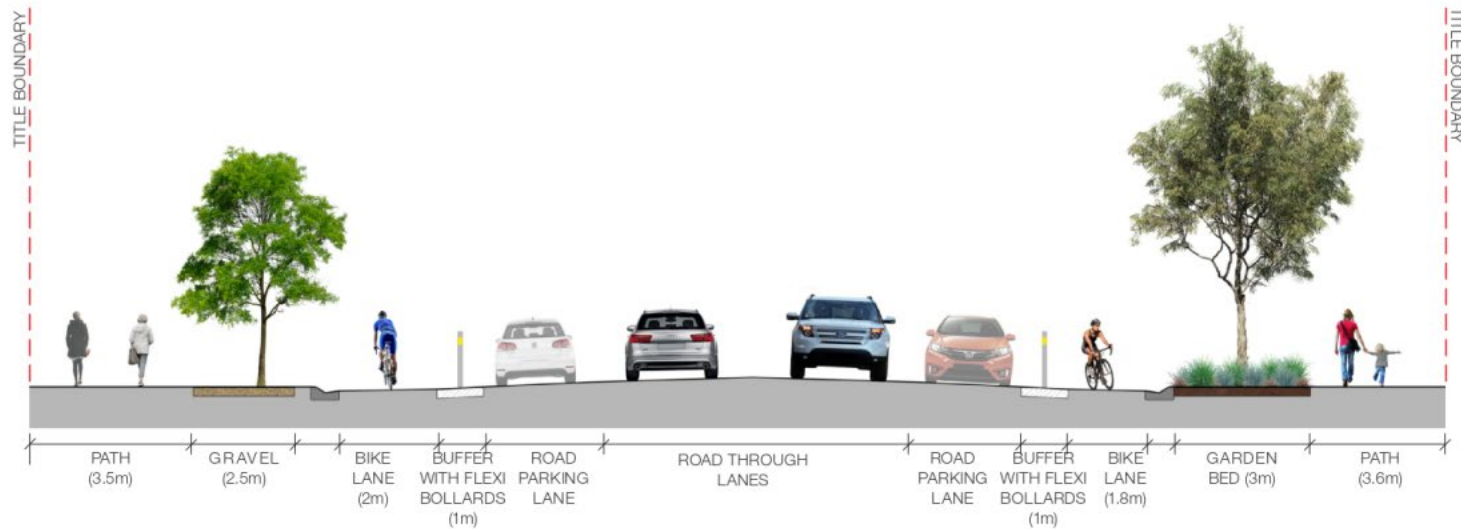
Park Street Plan - Scale 1:1000

Landscape Concept: Temporary Works

The Park Street bike lane will continue west from Kings Way through to Moray St. The future alignment of this portion of bike lane will be subject to the design of the tram track extension works. In the meantime, the bike lane will be separated from parked vehicle with a buffer strip and 'Flexi Bollards' similar to the example image on this page.



Example of temporary road arrangement at Albert Street, East Melbourne.
Photos: Lorenza Casini



Section AA - Park Street Temporary Road Arrangement Typical Section - Scale 1:100

Landscape Concept : Tram Stop

This concept highlights the opportunity to use planting to separate different modes of transport from each other and from pedestrians. The opportunity for soft landscape along Park Street is perhaps most limited adjacent to the existing tram stop where the amount of available space for planting of trees is especially constrained. In order to promote healthy tree growth, trees must be allocated sufficient space for their roots to grow.

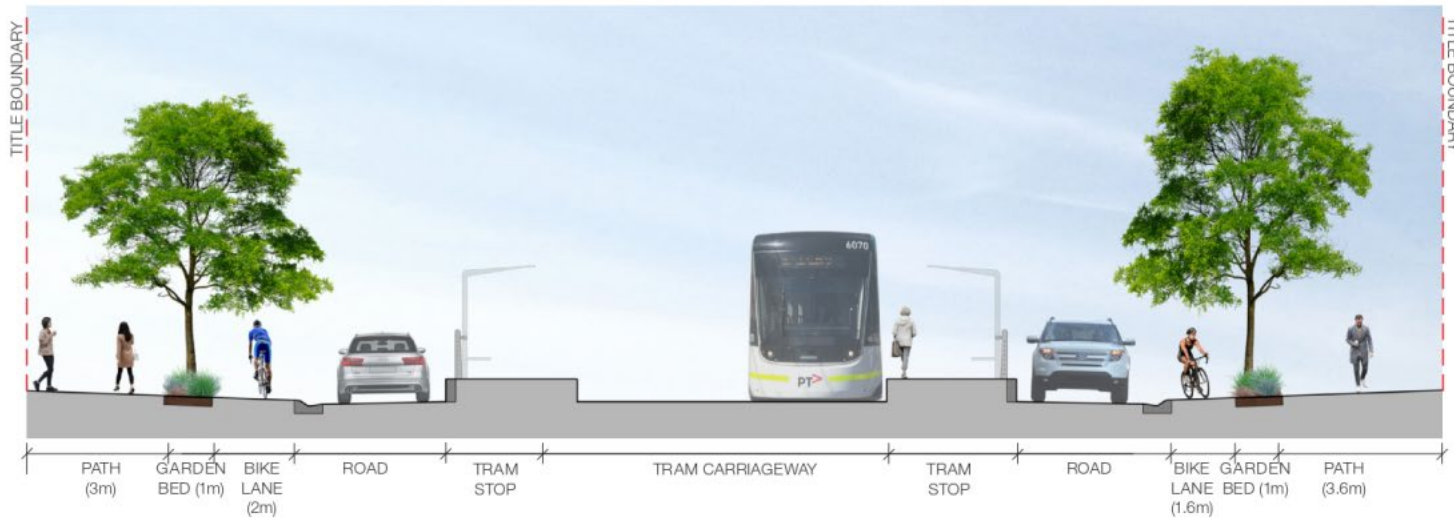
The Park Street Bike Link project may look to use innovative structural soil systems in order to enable successful tree planting in these constrained areas whilst ensuring that the structural integrity of the surrounding streetscape and its elements are not compromised. Street trees located where there is seemingly little room for healthy growth may be planted over a structural soil system which will promote healthy growth without disturbing the structures above.



Structural Soil System



Example of successful narrow garden beds adjacent to MTC



Section BB - Park Street Tram Stop Typical Section - Scale 1:100

Landscape Concept : Outdoor Dining Opportunities

Outdoor dining areas have become essential features in Melbourne in the last two years, contributing in their traditional way through streetscape activation and neighbourhood livening, whilst now also providing safer dining opportunities in an age where the need for well ventilated spaces has become a priority.

Park Street's existing layout currently accommodates some outdoor dining areas, however the Park Street Bike Link upgrade works present an opportunity to increase this capacity through optimisation of the streetscape layout.

Proposed avenue tree plantings will greatly enhance the atmosphere of Park Street, whilst garden beds and other surface treatments can be used to frame dining areas and contribute to the safety of patrons through separation from traffic.

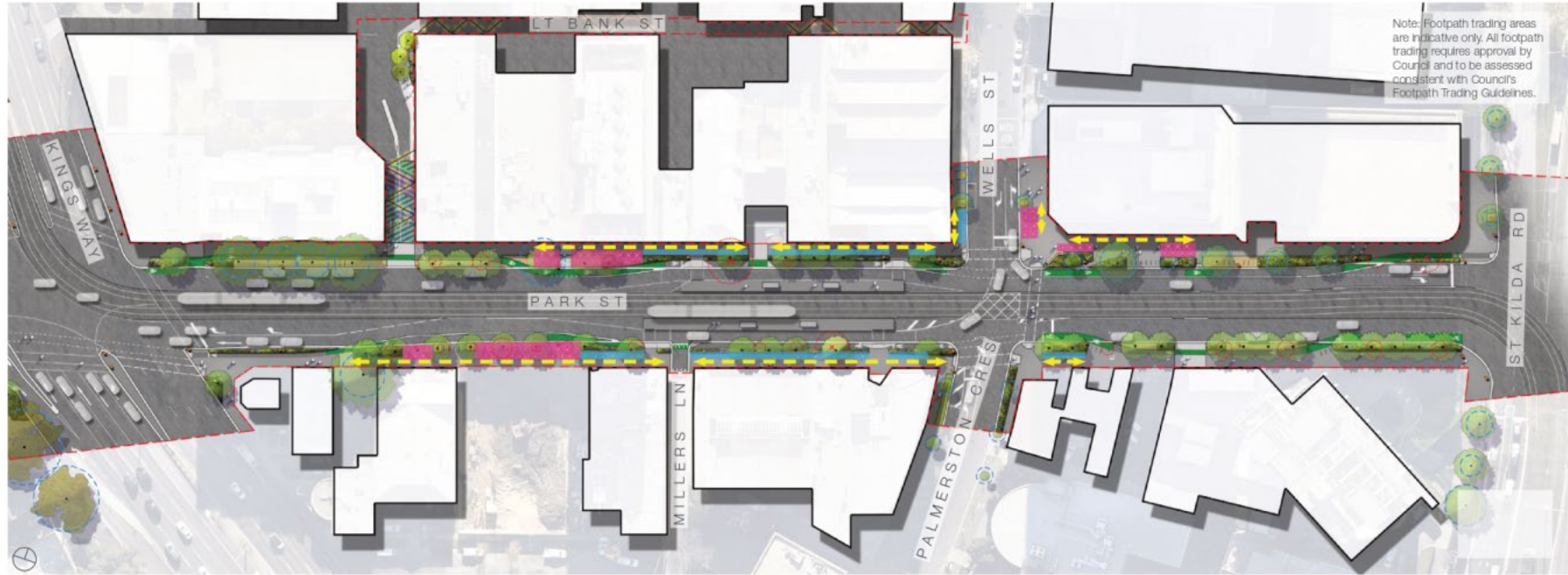
Opportunities for outdoor dining areas have been marked on the below concept plan and separated into wide [magenta] and narrow [blue] categories, with both options allowing for 1.8m wide footpath free flow adjacent to those areas.



Example of outdoor dining in a streetscape

LEGEND

- Proposed trees
- Existing trees to be retained
- Existing trees to be removed
- Garden Bed
- Tuscan Toppings
- Grass
- Asphalt paving
- Potential outdoor seating area (wide)
- Potential outdoor seating area (narrow)
- 1.8m wide footpath



Note: Footpath trading areas are indicative only. All footpath trading requires approval by Council and to be assessed consistent with Council's Footpath Trading Guidelines.

Park Street Plan - Scale 1:1000



Little Bank Street Plan - Scale 1:400



Little Bank Street existing photos



Location Plan - NTS

Landscape Concept : Little Bank Street

Little Bank Street provides great opportunity for activation within the Park Street Bike Link Project. The existing space is currently functional for vehicles but it does not provide any amenity or ease of use for pedestrians. With current residential developments under construction adjacent to the site shown, there will be an increase in pedestrian traffic through this space. This concept illustrates opportunities to activate this portion of Little Bank Street, enabling better pedestrian movements and providing a unique landscape character and entrance from Park Street. Vehicle movements and lighting will need to be considered further through detail design.

The key design elements are:

1. Alternative pavement treatment types to suggest pedestrian friendly environment
2. Custom seating
3. Garden beds and tension wires for climbing plants (see elevation over page)
4. Cutouts for small feature tree planting
5. Potential for street art to wall of existing building (see elevation over page)
6. Road artwork
7. Potential for Catenary Lighting (see elevation over page)



Street art example near MTC



Catenary lighting, Pridham St Linear Reserve, Flemington



Street furniture and tree cut outs, Robert St, Richmond



Road artwork, Stewart St, Richmond (adjacent to Richmond Station)



Lt Bank Street Elevation - Scale 1:100

Street Tree, Planting Strategy & Materials

The tree planting strategy is to retain and protect existing Elm trees as well as the native canopy trees on the Southern side of park street, West of Kings way. Nearly all proposed trees on Park street will be *Ulmus parvifolia* 'Burnley Select', with exception to one Olive tree, to replace the existing olive that will need to be removed. This is to ultimately create a boulevard feeling the length of the street and to tie in with character provided by the existing mature Elms.

The garden bed planting palette will be predominately native and indigenous species, enhancing the existing Native character provided by the afore mentioned canopy trees to the West of Kings way. The species selected are drought tolerant, require minimal maintenance, and provide great colour and interest year round. All species selections will be in consultation with Council.

This concept also highlights the opportunity to re-surface asphalt paving areas which have been disturbed for different reasons over the years. Pavement resurfacing will be subject to funding and programming with other works such as underground services and residential/commercial development.

Whilst not exhaustive or explicit, the imagery on this page is intended to provide an indication of the overall look and feel of the public realm.

Surface Materials



Asphalt Paving



Tuscan Topping

Garden Bed Palette



Carpatotus rossii



Lomandra Lime Tuff



Senecio oleraria Silver Dust



Westringia fruticosa Grey Box



Parthenocissus tricuspidata Boston Ivy



Grevillea juniperina Gold Cluster



Fuchsia nodosa Club Rush



Senecio serpens Blue Chalksticks



Tree Palette



Ulmus parvifolia 'Burnley Select'
Chinese Elm
(9 x 7m)



Olea europea 'Kalamata'
(grafted)
Kalamata Olive
(6 x 3m)



Hymenosporum flavum
Native Frangipani
(7 x 5m)

