

URBAN FOREST PRECINCT PLANS

DESIGN TOOLKIT



JULY 2026

DOCUMENT REGISTER

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Acknowledgement of Country:
Council respectfully acknowledges the Traditional Owners and Custodians of the Kulin Nation. We acknowledge their legacy and spiritual connection to the land and waterways across the City of Port Phillip and pay our heartfelt respect to their Elders, past, present, and emerging.



Eucalyptus leucoxylon
Endemic Species of Bunurong and Wurundjeri Country.

CONTENTS

01. INTRODUCTION

01.1 INTRODUCTION4

01.2 HOW TO USE THE TOOLKIT5

01.3 DESIGN TOOLKIT6

02. TOOLKIT INTERVENTIONS

02.1 LOCALISED LANE NARROWING 8

02.2 CORNER BUILD OUTS 10

02.3 TREE CONTAINERS & TEMPORARY GREENING 12

02.4 PROTECTED PEDESTRIAN CROSSINGS 14

02.5 KERB OUTSTANDS 16

02.6 FOOTPATH WIDENING 18

02.7 TREE CUTOUTS 20

02.8 CENTRAL MEDIANS 22

03. CASE STUDIES

03.1 CASE STUDY 1: USING LOCALISED LANE NARROWING 25

03.2 CASE STUDY 2: USING CORNER BUILD UPS 26

03.3 CASE STUDY 3: PROVIDING NEW TREES IN UNDERUTILISED CARPARKS 27

03.4 CASE STUDY 4: USING IN-ROAD TREE CUTOUT 28

03.5 CASE STUDY 5: PROTECTED PEDESTRIAN CROSSING 29

03.6 CASE STUDY 6: USING FOOTPATH WIDENING 30

01

INTRODUCTION

01.1

INTRODUCTION

The Urban Forest Precinct Plans Design Toolkit (the Toolkit) has been prepared to support the implementation of the City of Port Phillip's Urban Forest Precinct Plans (UFPPs). It is a standalone document that outlines greening approaches for the street typologies identified within each UFPP.

The Toolkit was initially developed alongside the first three UFPPs for the Balaclava and St Kilda East, St Kilda and St Kilda West, and Albert Park and Middle Park neighbourhoods. The consolidated, standalone toolkit will now support implementation across the remaining UFPPs, with the exception of the two Fishermans Bend neighbourhoods, Montague and Sandridge & Wirraway as shown on the adjacent map.

PURPOSE OF THE TOOLKIT

The Toolkit provides a consistent and efficient approach to delivering streetscape greening projects across the neighbourhoods. By using a suite of pre-reviewed design interventions, it reduces the time required to develop concept designs, improves consistency between projects and provides a clear foundation for subsequent detailed design and engineering.

Key benefits include:

- A streamlined approach to concept design and project delivery.
- Design interventions that have undergone internal review and refinement.
- A consistent basis for preparing standard engineering specifications and detailed design documentation.
- Flexibility to assess and compare multiple greening interventions for site-specific conditions.
- An adaptable framework that can be expanded as future Urban Forest Precinct Plans are prepared.
- A proactive tool for identifying and delivering streetscape greening opportunities associated with major redevelopment and other capital works.



01.2 HOW TO USE THE TOOLKIT

The Toolkit is intended to be used alongside the relevant Urban Forest Precinct Plan to identify suitable streetscape greening interventions for a project.

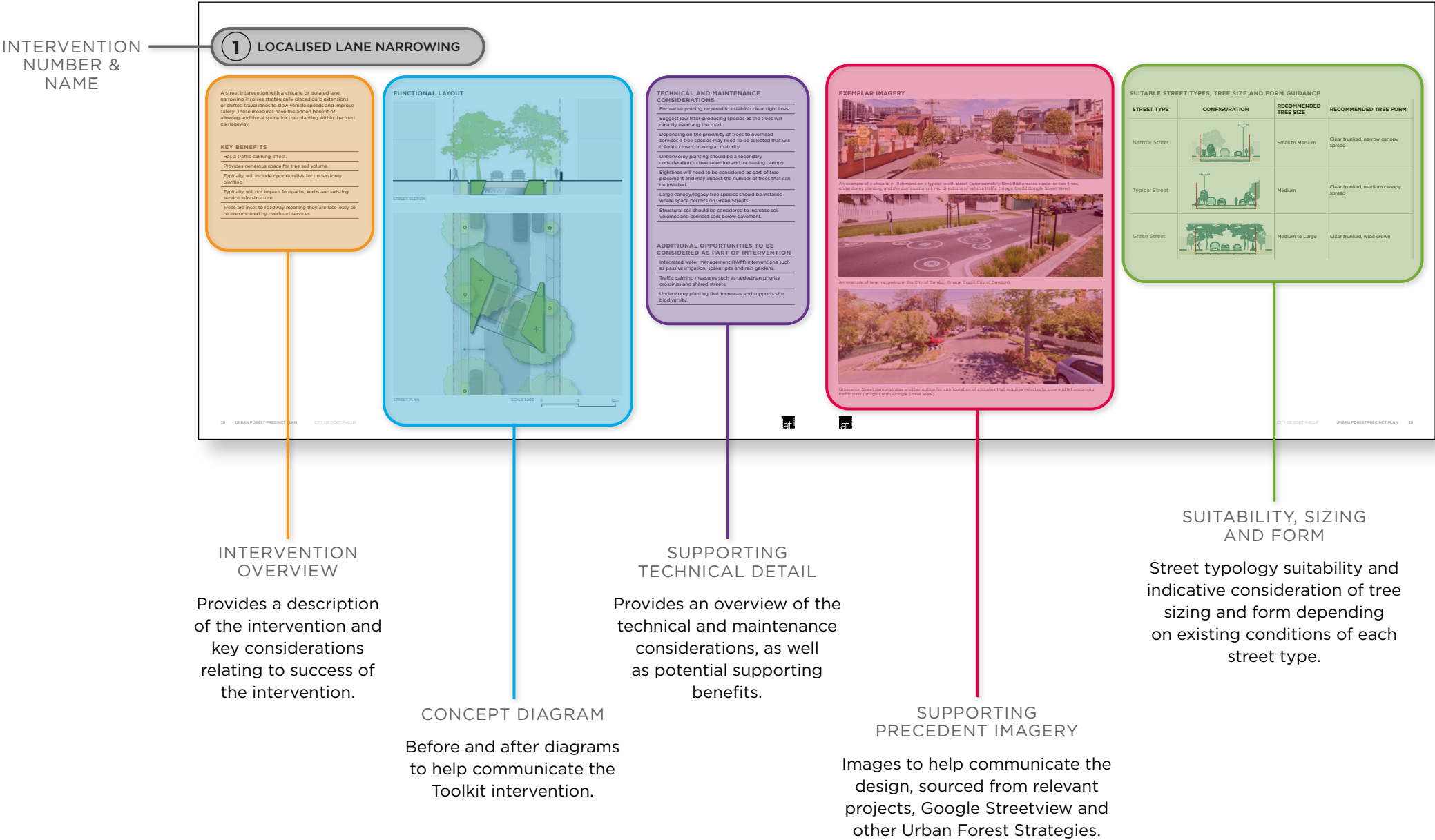
The Toolkit includes:

- A street typology matrix that cross-references the UFPP street types with the design interventions that may be suitable based on typical existing conditions.
- Eight design intervention typologies, each comprising:
 - an overview of the intervention and its intended application
 - Concept diagrams illustrating the design intent
 - Key considerations, opportunities and constraints
 - General guidance of how tree form and sizing may be adjusted for each relevant street type
 - Supporting reference imagery where relevant.

The Toolkit provides high-level concept guidance only. Each project will require site-specific investigation and detailed design to confirm feasibility, response to local constraints, coordination with engineering, servicing and other project requirements.

Projects may be initiated through actions identified in the UFPPs or opportunities that arise through other Council programs, such as capital works, water sensitive urban design, traffic safety improvements, tree renewal programs or major redevelopment. In each case, the Toolkit should be used to identify the most appropriate greening intervention before progressing to detailed design.

Figure 01: Example Toolkit intervention layout



01.3

DESIGN TOOLKIT

A Toolkit of planting opportunities can be applied in various ways across each neighbourhood, the table below outlines which street typologies these design interventions may be suitable for. The following pages provide more detail on each specific intervention.

CHOOSING A SUITABLE INTERVENTION BASED ON STREET TYPOLOGY

	1	2	3	4	5	6	7	8
	Localised Lane Narrowing	Corner Build-outs	Tree Containers & Temporary Greening	Protected Pedestrian Crossings	Kerb Outstands (within road)	Footpath Widening	Tree Cut Outs (within footpath)	Central Medians
Access Laneways	⊘	⊘	✓	⊘	⊘	⊘	⊘	⊘
Micro Street	✓	✓	✓	⊘	✓	⊘	⊘	⊘
Narrow Street	✓	✓	✓	⊘	✓	✓	✓	⊘
Typical Street	✓	✓	✓	✓	✓	✓	✓	⊘
Green Street	✓	✓	⊘	⊘	⊘	⊘	⊘	⊘
Connector Boulevard	⊘	✓	⊘	✓	✓	⊘	⊘	✓
High Street	⊘	✓	✓	⊘	✓	⊘	⊘	⊘
Movement Corridors	Interventions for Movement Corridors will require advocacy with the Department of Transport and Planning.							
Unique Streets	Refer to implementation in Chapter 06 for guidance on these streets where relevant.							
Movement Street	⊘	✓	✓	⊘	✓	⊘	⊘	⊘
Foreshore Boulevard	⊘	✓	✓	⊘	✓	⊘	✓	✓

* Only temporary Greening is recommended for Access Laneways

02

TOOLKIT INTERVENTIONS

1 LOCALISED LANE NARROWING

A street intervention with a chicane or isolated lane narrowing involves strategically placed kerb extensions or shifted travel lanes to slow vehicle speeds and improve safety. These measures have the added benefit of allowing additional space for tree planting within the road carriageway.

KEY BENEFITS

- Has a traffic calming effect.
- Provides generous space for tree soil volume.
- Typically, will include opportunities for understorey planting.
- Typically, will not impact footpaths, kerbs and existing service infrastructure.
- Trees are inset to roadway meaning they are less likely to be encumbered by overhead services.

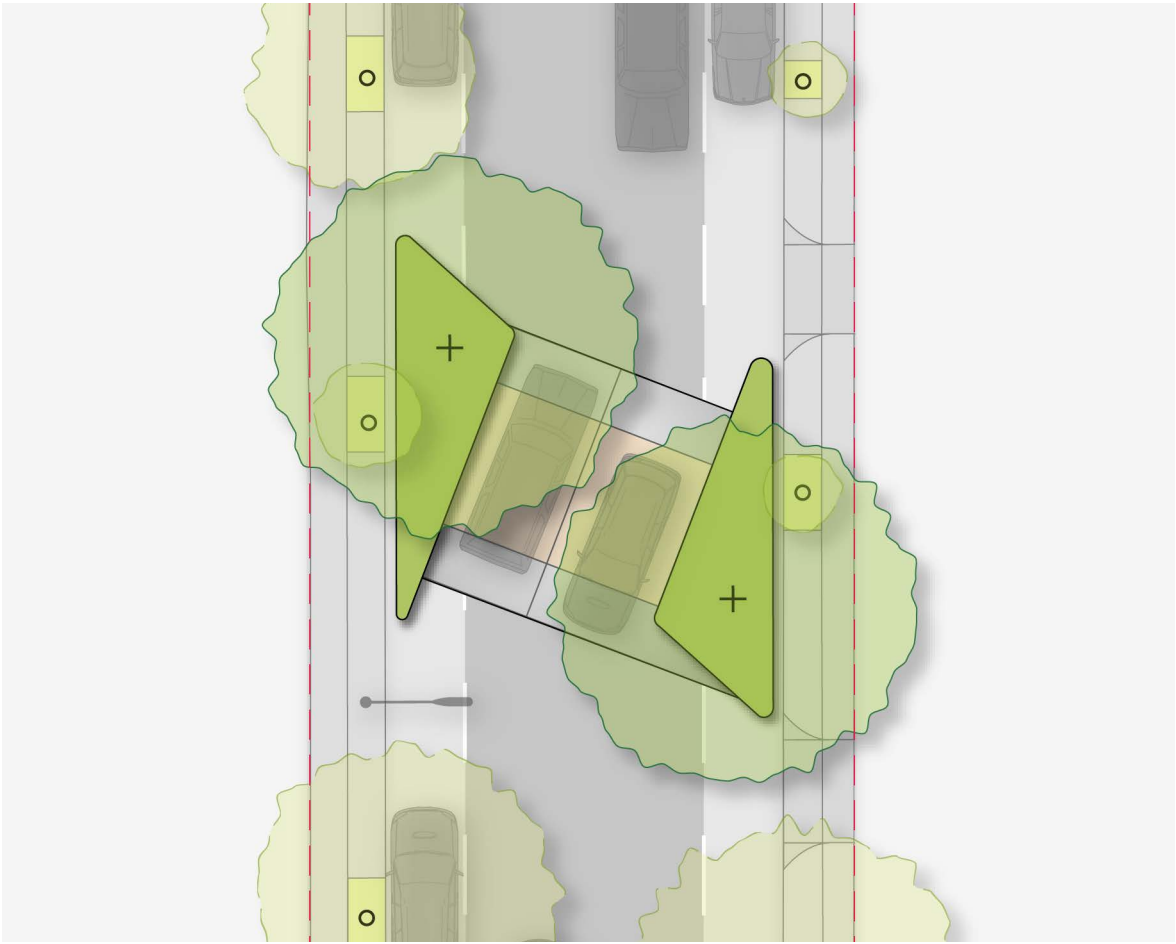


An example of lane narrowing (Image Credit City of Darebin).

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- Formative pruning required to establish clear sight lines.
- Suggest low litter-producing species as the trees will directly overhang the road.
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Understorey planting should be a secondary consideration to tree selection and increasing canopy.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Large canopy/legacy tree species should be installed where space permits on Green Streets.
- Structural soil should be considered to increase soil volumes and connect soils below pavement.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- Integrated water management (IWM) interventions such as passive irrigation, soaker pits and rain gardens.
- Traffic calming measures such as pedestrian priority crossings and shared streets.
- Understorey planting that increases and supports site biodiversity.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

EXEMPLAR IMAGERY



An example of a chicane on a typical width street (approximately 15m) that creates space for two trees, understorey planting, and the continuation of two directions of vehicle traffic (Image Credit Google Street View).



Another option for configuration of chicanes that requires vehicles to slow and let oncoming traffic pass (Image Credit Google Street View).

SUITABLE STREET TYPES, TREE SIZE AND FORM GUIDANCE

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Micro Street		Small	Clear trunked, narrow canopy spread
Narrow Street		Small to Medium	Clear trunked, narrow canopy spread
Typical Street		Medium	Clear trunked, medium canopy spread
Green Street		Medium to Large	Clear trunked, wide crown

2 CORNER BUILD-OUTS

Corner build-outs effectively repurpose unused space at intersections where parking is not permitted—typically 10 metres in each direction from a corner—into planting areas. Whilst it is important to maintain clear sightlines for turning vehicles, these build-outs typically allow space to plant medium or large trees on most street types, with the added benefit of understorey planting.

KEY BENEFITS

- Has a traffic calming effect.
- Provides generous space for tree soil volume.
- Typically, will include opportunities for understorey planting.
- Typically, will not impact footpaths, kerbs and existing service infrastructure.
- Trees are inset to roadway meaning they are less likely to be encumbered by overhead services.
- Promotes safe, legible pedestrian connectivity.

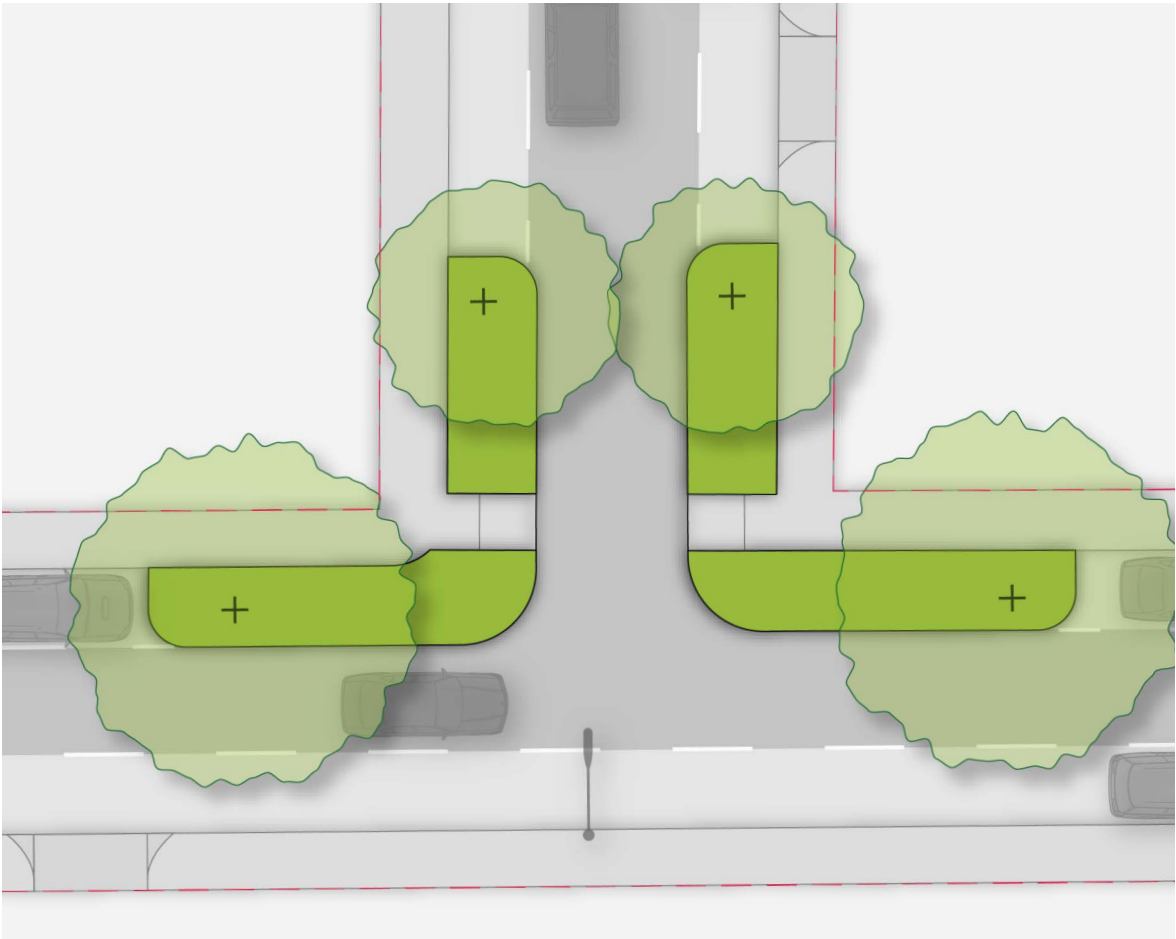


An example of corner build up (Image Credit Google Street View).

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- Formative pruning required to establish clear sight lines.
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Understorey planting should be a secondary consideration to tree selection and increasing canopy.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Large canopy/legacy tree species should be installed where space permits on Green Streets.
- Best-suited to low speed roads where vehicle sightlines can be shorter, allowing more trees to be installed.
- Consideration of vehicle turning radius and road widths will need to be made to determine extent of build-outs.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- Integrated water management (IWM) interventions such as passive irrigation, soaker pits and rain gardens.
- Traffic calming measures such as pedestrian priority crossings and shared streets.
- Understorey planting that increases and supports site biodiversity.
- Placemaking initiatives such as outdoor dining and seating.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

EXEMPLAR IMAGERY

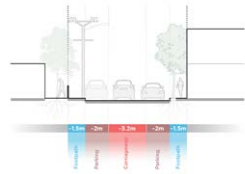
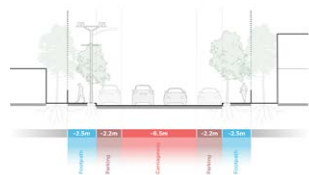
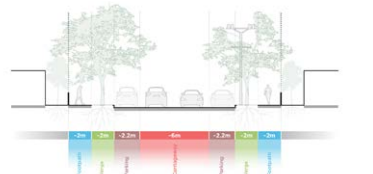
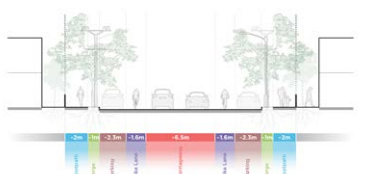
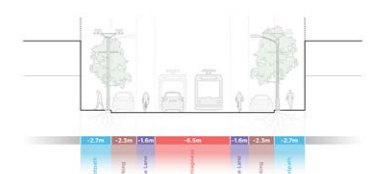


Example of existing corner build-outs on Acland Street, St Kilda (Image Credit Google Street View).



Example of existing corner build-outs with passive irrigation in the City of Sydney (image credit City of Sydney)

SUITABLE STREET TYPES, TREE SIZE AND FORM GUIDANCE

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Micro Street		Small to Medium	Clear trunked, narrow canopy spread
Narrow Street		Small to Medium	Clear trunked, narrow or medium canopy spread
Typical Street		Medium	Clear trunked, medium canopy spread
Green Street		Medium to Large	Clear trunked, wide crown
Connector Boulevard		Large	Clear trunked, wide crown
High Street		Large (dependent on overhead services)	Clear trunked, wide crown
Foreshore Boulevard		Large (dependent on overhead services)	Clear trunked, wide crown

3 TREE CONTAINERS & TEMPORARY GREENING

While the installation of permanent in-ground trees is strongly preferred, there may be situations where tree containers are appropriate as a temporary initiative or as a more permanent solution when in-ground tree installation is not viable. Tree containers and parklets can also be a viable option as a temporary greening measure while more long-term streetscape re-design projects are being completed.

KEY BENEFITS

- Can be used by CoPP to trial street tree canopy interventions.
- Can be used as a temporary intervention to boost canopy.
- Can be used to introduce canopy where service or cost constraints may be prohibitive to installing permanent tree installations.
- The selected container can contribute to placemaking and neighbourhood character identity.

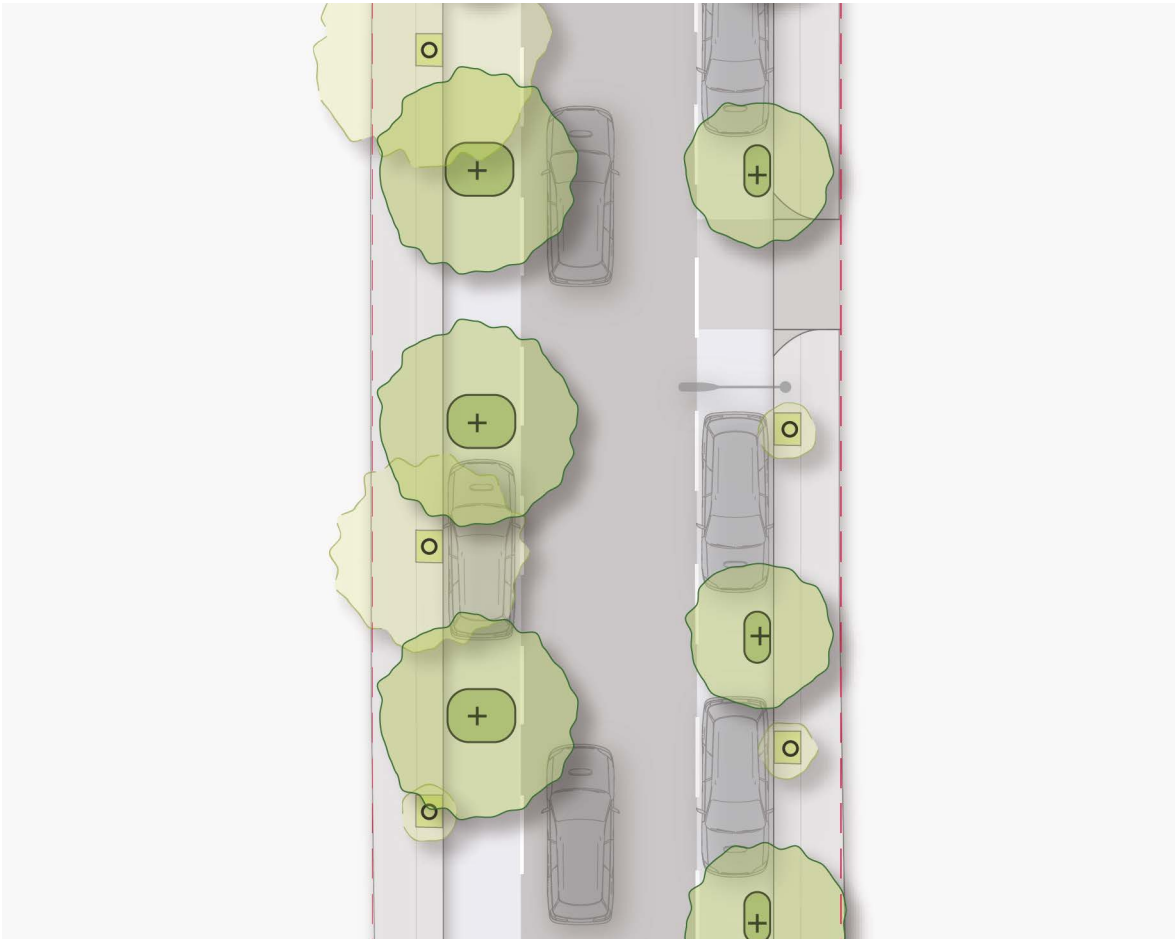


Planting containers along road, (Image Credit Google Street View).

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- Tree planters should be as large as practicable in order to increase soil volume, water retention and reduce heat vulnerability.
- Planters should be designed to be moveable via a forklift or similar.
- Irrigation or hand watering required year-round, particularly during hot dry periods.
- Suggest low litter-producing species as the trees will directly overhang the road.
- Where planters are to be permanent it is vital they provide the minimum rooting area for the size of the desired tree.
- A robust community engagement framework is imperative, finding community champions.
- Prioritising community driven support for the projects and in some cases, co-funding partnerships with businesses and building owners.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- May form part of a temporary pop-up park design.
- Consider planting food-producing species for additional community benefits.
- Container design can be commissioned to local artists.
- Laneway greening is an opportunity for trial programs or pilot projects which could be scaled up across the precinct.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

EXEMPLAR IMAGERY

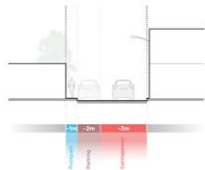
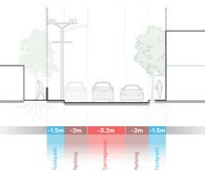
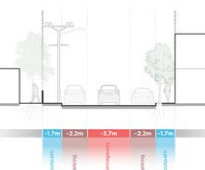
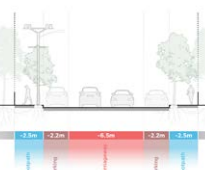
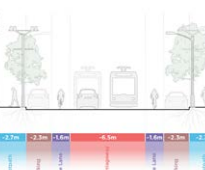
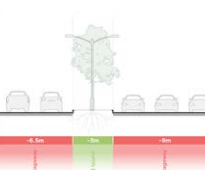


An example of a planting container with sufficient soil volume for a tree by Street Furniture Australia (Image Credit Street Furniture Australia).



Temporary tree container planters in the City of Melbourne (Image Credit City of Melbourne).

SUITABLE STREET TYPES, TREE SIZE AND FORM GUIDANCE

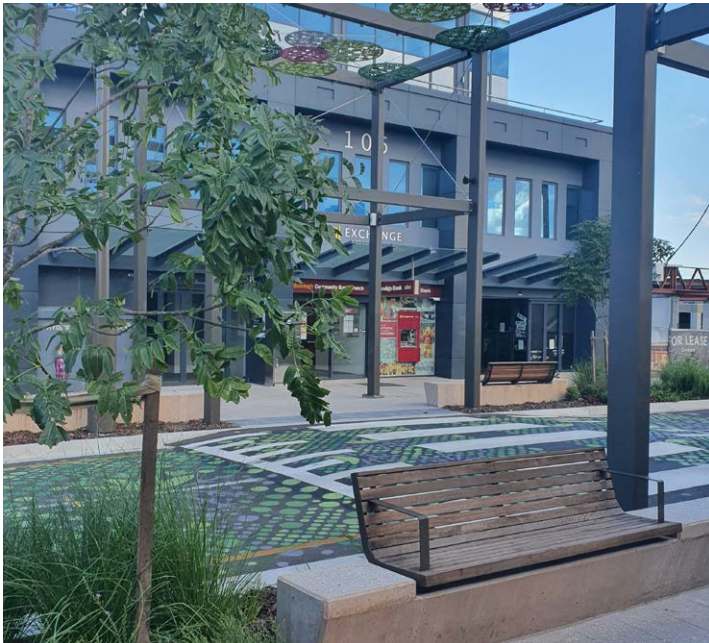
STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Access Laneways			
Micro Street		Dependent on container size (likely Small to Medium)	Narrow canopy spread
Narrow Street		Dependent on container size (likely Small to Medium)	Narrow to medium canopy spread
Typical Street		Dependent on container size (likely Small to Medium)	Medium canopy spread
High Street		Dependent on container size (likely Small to Medium)	Medium to large canopy spread
Foreshore Boulevard		Dependent on container size (likely Small to Medium)	Medium to large canopy spread

4 PROTECTED PEDESTRIAN CROSSINGS

Pedestrian crossings not only enhance pedestrian connectivity by providing a safe, legible crossing point, but the build-outs on either side of the crossing also create planting spaces for trees and understorey vegetation. This allows trees to be planted away from constraints of powerlines and underground services, increasing shade over a larger portion of the road surface.

KEY BENEFITS

- Has a traffic calming effect.
- Promotes pedestrian connectivity.
- Provides generous space for tree soil volume.
- Typically, will include opportunities for understorey planting.
- Typically, will not impact footpaths, kerbs and existing service infrastructure.
- Trees are inset to roadway meaning they are less likely to be encumbered by overhead services.
- Promotes safe, legible pedestrian connectivity.

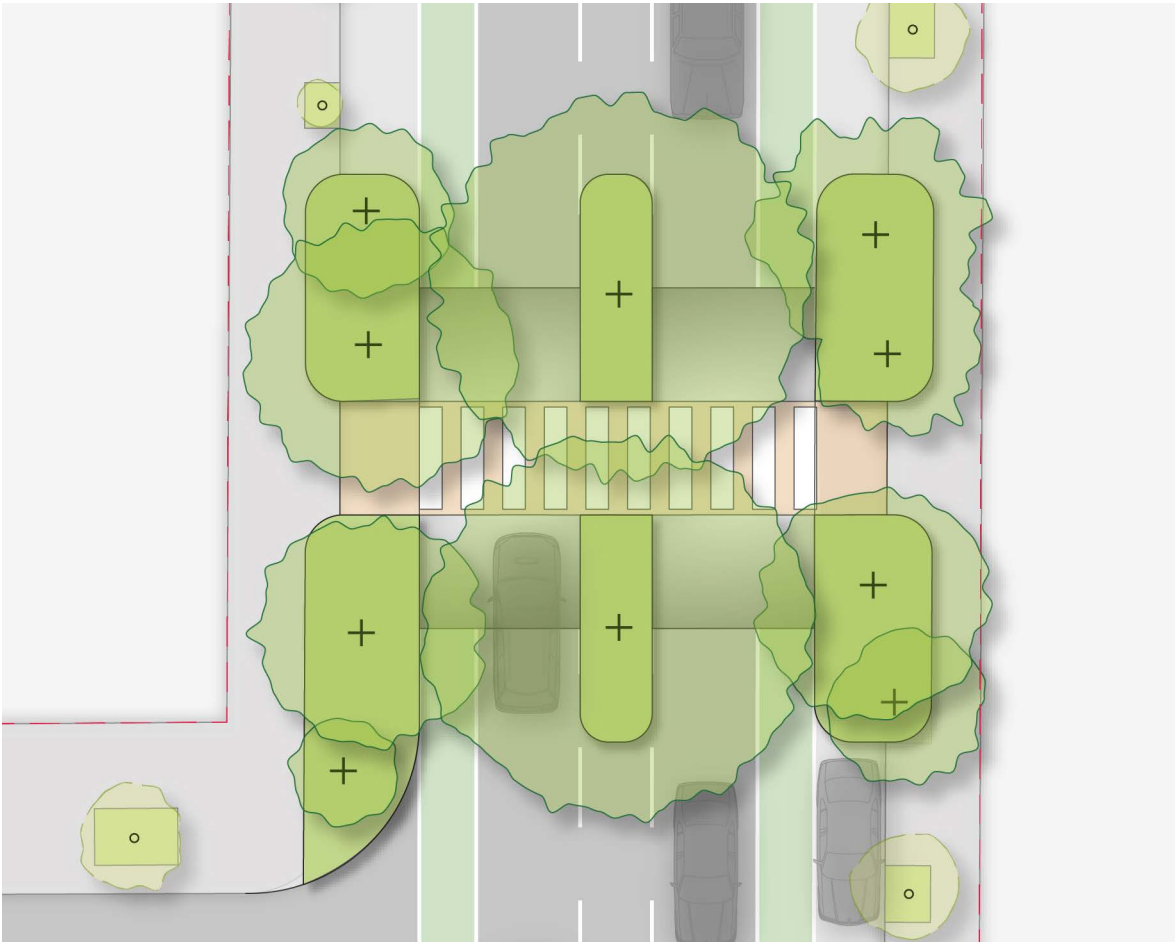


Protected pedestrian crossing with placemaking benefits, (Image Credit LatStudios).

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- Crossings should be located on pedestrian desire routes, or spaced along emerging retail and activity areas.
- Formative pruning required to establish clear sight lines.
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Understorey planting should be a secondary consideration to tree selection and increasing canopy.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Consideration of vehicle turning radius and road widths will need to be made to determine extent of build-outs.
- Irrigation or hand watering required during hot dry periods.
- Suggest low litter-producing species as the trees will directly overhang the road and crossing.
- Large canopy/legacy tree species should be installed where space permits on Connector Boulevards.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- Integrated water management (IWM) interventions such as passive irrigation, soaker pits and rain gardens.
- Understorey planting that increases and supports site biodiversity.
- Placemaking initiatives such as outdoor dining and seating.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

EXEMPLAR IMAGERY

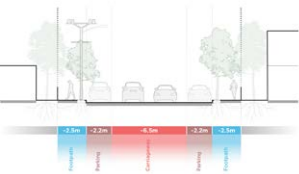
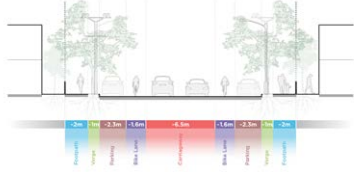


Pedestrian crossing could produce high-quality landscaping outcomes with placemaking benefits (Image Credit LatStudios).



A raised crossing with planting areas created in the adjacent build-outs (Image Credit NSW Government)

SUITABLE STREET TYPES, TREE SIZE AND FORM GUIDANCE

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Typical Street		Medium to Large	Clear trunked, medium canopy spread
Connector Boulevard		Large	Clear trunked, medium to large canopy spread

5 KERB OUTSTANDS (WITHIN ROAD)

This intervention involves an audit of parking areas to identify surplus space for tree planting in additional outstands in-between driveway crossovers. This is a low-cost intervention that does not reduce car park numbers. Depending on budget, re-paving car parks with permeable material can allow for connected soil between tree outstands and for better-integrated stormwater management.

KEY BENEFITS

- Can provide generous space for tree soil volume.
- Typically, will not impact footpaths, kerbs and existing service infrastructure.
- Trees are inset to roadway meaning they are less likely to be encumbered by overhead services.
- The increased permeable surface area can aid stormwater runoff management.

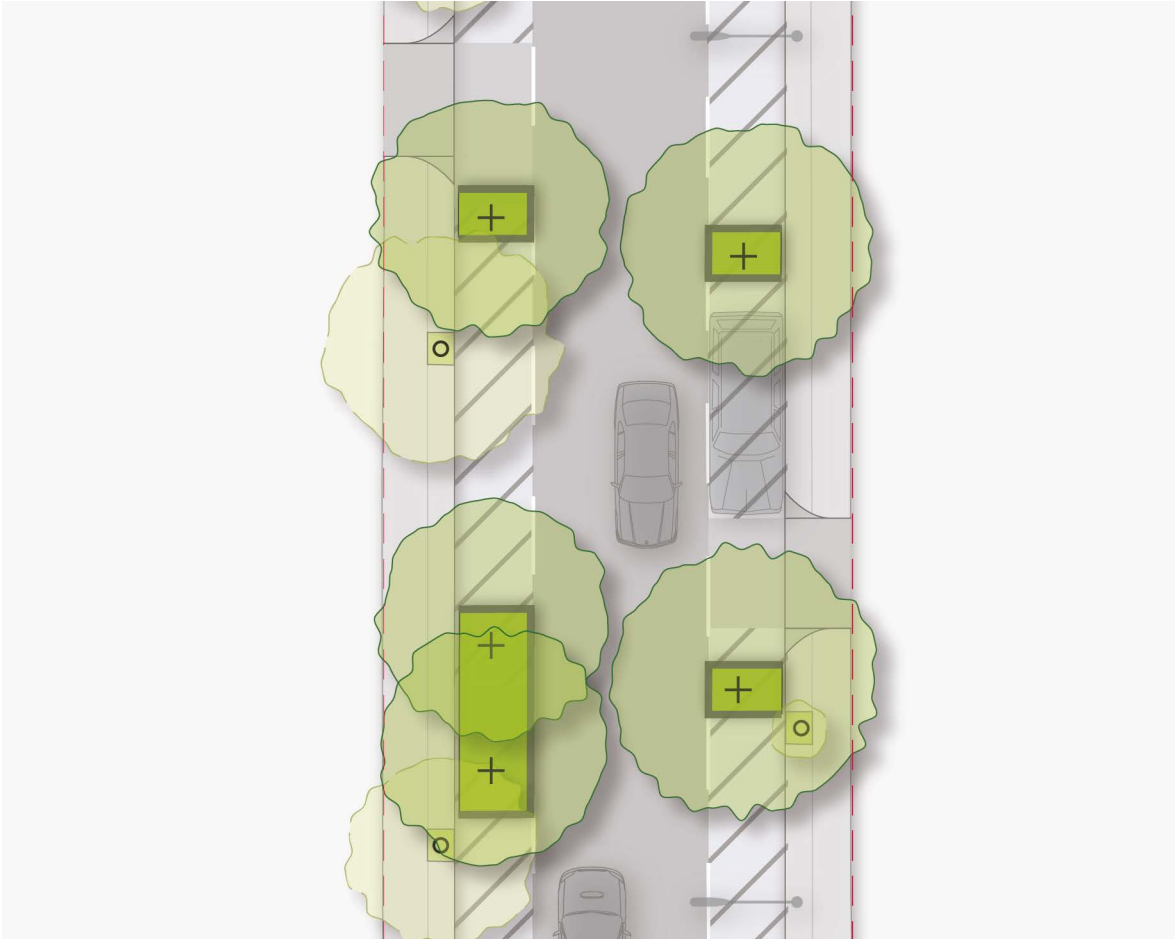


An example of a tree outstand with a flush bluestone kerb, rather than a raised kerb.

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

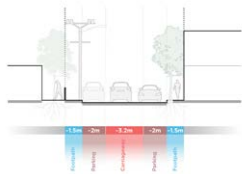
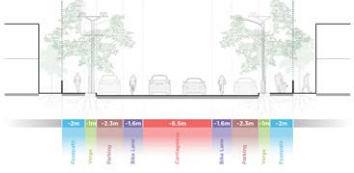
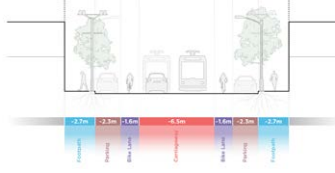
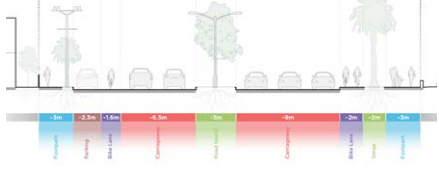
- Formative pruning required to establish clear sight lines.
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Understorey planting should be a secondary consideration to tree selection and increasing canopy.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Structural soil should be considered to increase soil volumes and connect soils below pavement.
- Irrigation or hand watering required during hot dry periods.
- Suggest low litter-producing species as the trees will directly overhang the road.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- More frequent and larger outstands are possible if car parking numbers can be reduced.
- Repaving parking spaces with permeable paving will further increase stormwater directed to tree root zones.
- Integrated water management (IWM) interventions such as passive irrigation, soaker pits and rain gardens.
- Understorey planting that increases and supports site biodiversity.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m
Per cut-out	For a whole street			

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Micro Street		Small	Clear trunked, narrow canopy spread
Narrow Street		Small to Medium	Clear trunked, narrow to medium canopy spread
Typical Street		Medium	Clear trunked, medium canopy spread
Connector Boulevard		Medium to Large	Clear trunked, large canopy spread
High Street		Medium to Large	Clear trunked, large canopy spread
Foreshore Boulevard		Medium to Large	Clear trunked, large canopy spread

6 FOOTPATH WIDENING

In this intervention the central trafficable lane is reduced to a minimum width, with the surplus space being attributed to one side of the street for a larger verge zone to be planted with trees and understorey vegetation.

The removal of impermeable surfaces between the trees will allow for connected soil volumes. This concept can also apply to streets identified for conversion to one-way.

KEY BENEFITS

- Lower speed limits (30km/hr) and traffic calming can be implemented for the reduced lane width.
- Provides generous space for tree soil volume.
- Typically, will include opportunities for understorey planting.
- Provides a wider footpath and more comfortable pedestrian environment.

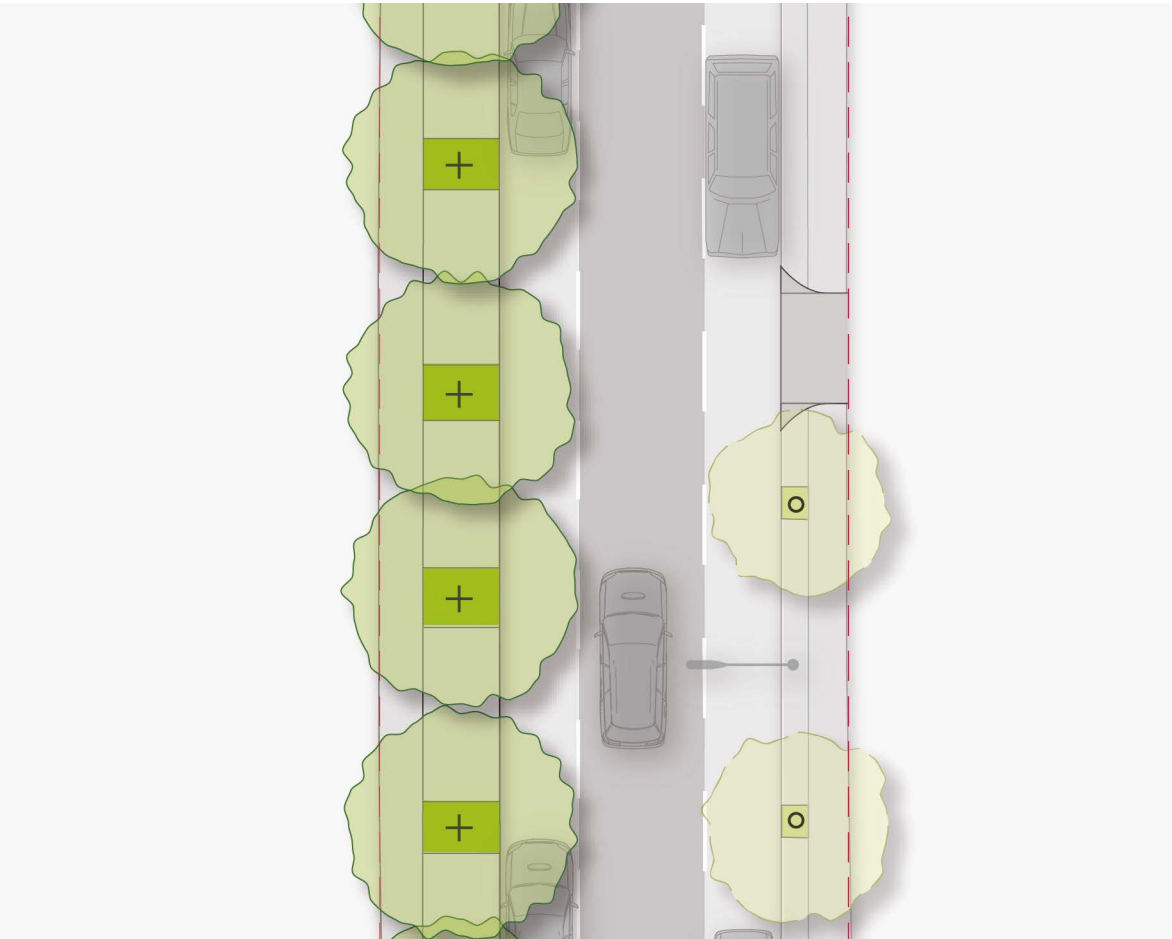


An example of foot path widening with tree and planting on verge, (Image Credit City of Sydney)..

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- It is recommended that the surplus width be added to the western or northern kerb (depending on street orientation).
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Understorey planting should be a secondary consideration to tree selection and increasing canopy.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Structural soil should be considered to increase soil volumes and connect soils below pavement.
- Irrigation or hand watering required during hot dry periods.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- IWM interventions such as passive irrigation, soaker pits and rain gardens.
- Traffic calming measures such as pedestrian priority crossings and shared streets.
- Understorey planting that increases and supports site biodiversity.
- Placemaking initiatives such as outdoor dining and seating.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

EXEMPLAR IMAGERY



A widened footpath in Clowes Street, Melbourne, has generated a new strip of biodiverse planting along the building boundary (Image Credit University of Melbourne).



An example of a street that was narrowed, with the additional space being used to widen the footpath and create space for planting in Geelong (Image Credit Revitalising Central Geelong).

SUITABLE STREET TYPES, TREE SIZE AND FORM GUIDANCE

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Narrow Street		Small to Medium	Clear trunked, narrow to medium canopy spread
Typical Street		Medium to Large	Clear trunked, medium to large canopy spread

7 TREE CUT OUTS (WITHIN FOOTPATH)

In this intervention designated planting spaces for street trees are created by cut outs in the footpath, in locations where underground and overhead services are not constraints, and footpath widths can be maintained. These cut outs are the lowest-cost initiative and do not require net loss of car parks. On busy streets, tree guards should be incorporated into the cut out to protect the tree.

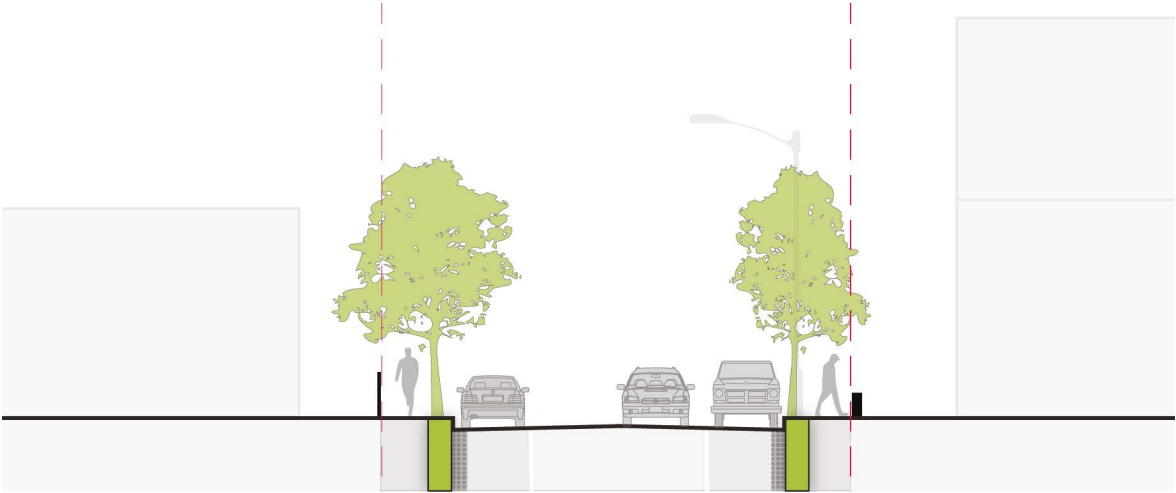
KEY BENEFITS

- No net loss of car parking.
- Low-cost and adaptable initiative.



An example of a tree planted into cut outs within the footpath

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- Formative pruning required to establish clear sight lines.
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Structural soil should be considered to increase soil volumes and connect soils below pavement.
- Irrigation or hand watering required during hot dry periods.
- Suggest low litter-producing species as the trees will directly overhang the road and footpath.

ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- IWM interventions such as passive irrigation, soaker pits and rain gardens.
- Understorey planting that increases and supports site biodiversity.

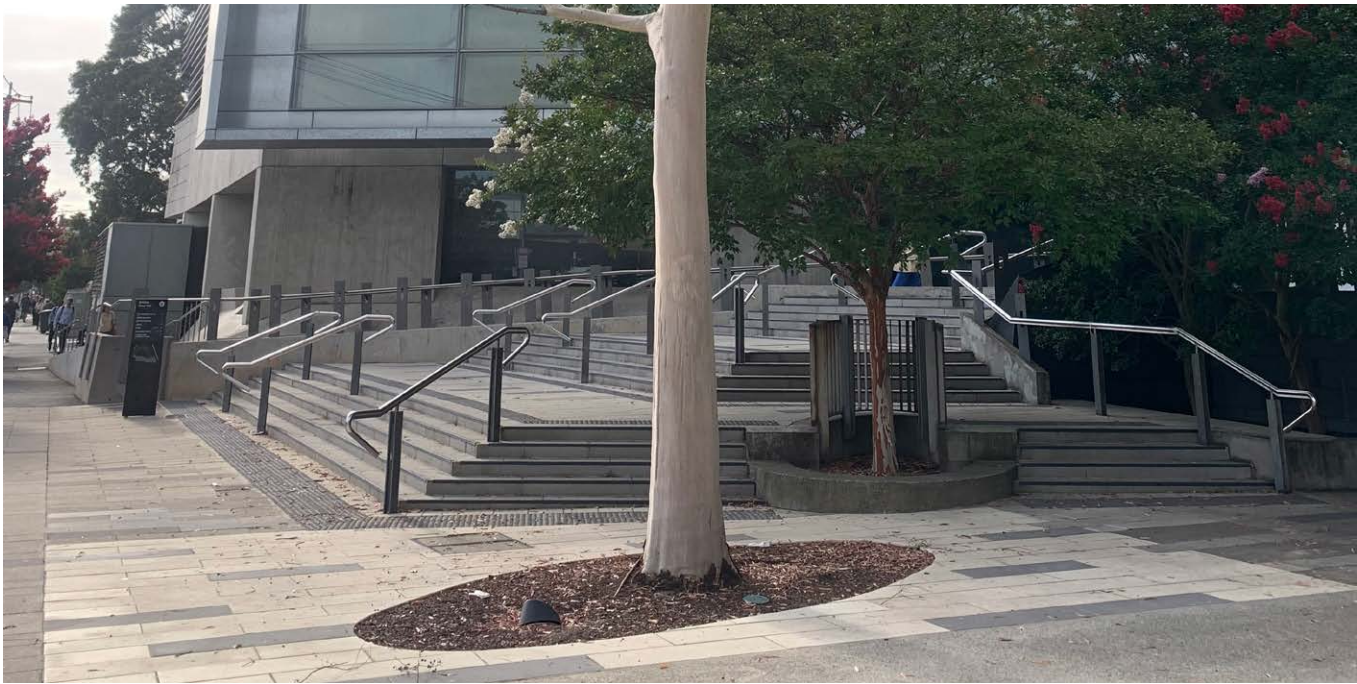
INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

EXEMPLAR IMAGERY



An example of tree cut outs with trees planted into pits large enough for connected soil between pairings.



Trees planted into cut outs within the footpath

SUITABLE STREET TYPES, TREE SIZE AND FORM GUIDANCE

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Narrow Street		Small to Medium	Clear trunked, narrow canopy spread
Typical Street		Medium to Large	Clear trunked, medium canopy spread
Foreshore Boulevard		Medium to Large	Clear trunked, medium canopy spread

8 CENTRAL MEDIAN

This intervention involves using the excess width of a street to create a central median strip for tree planting. Centrally planted street trees are generally unencumbered by underground and overhead service constraints, allowing for the largest, widest-spreading tree species. The central median enables extended strips of connected soil and canopy, and can be used to capture road runoff.

KEY BENEFITS

- Has a traffic calming effect.
- Provides generous space for tree soil volume and connected soil.
- Typically, will include opportunities for understorey planting.
- Typically, will not impact footpaths, kerbs and existing service infrastructure.
- Trees are inset to roadway meaning they are less likely to be encumbered by overhead services.

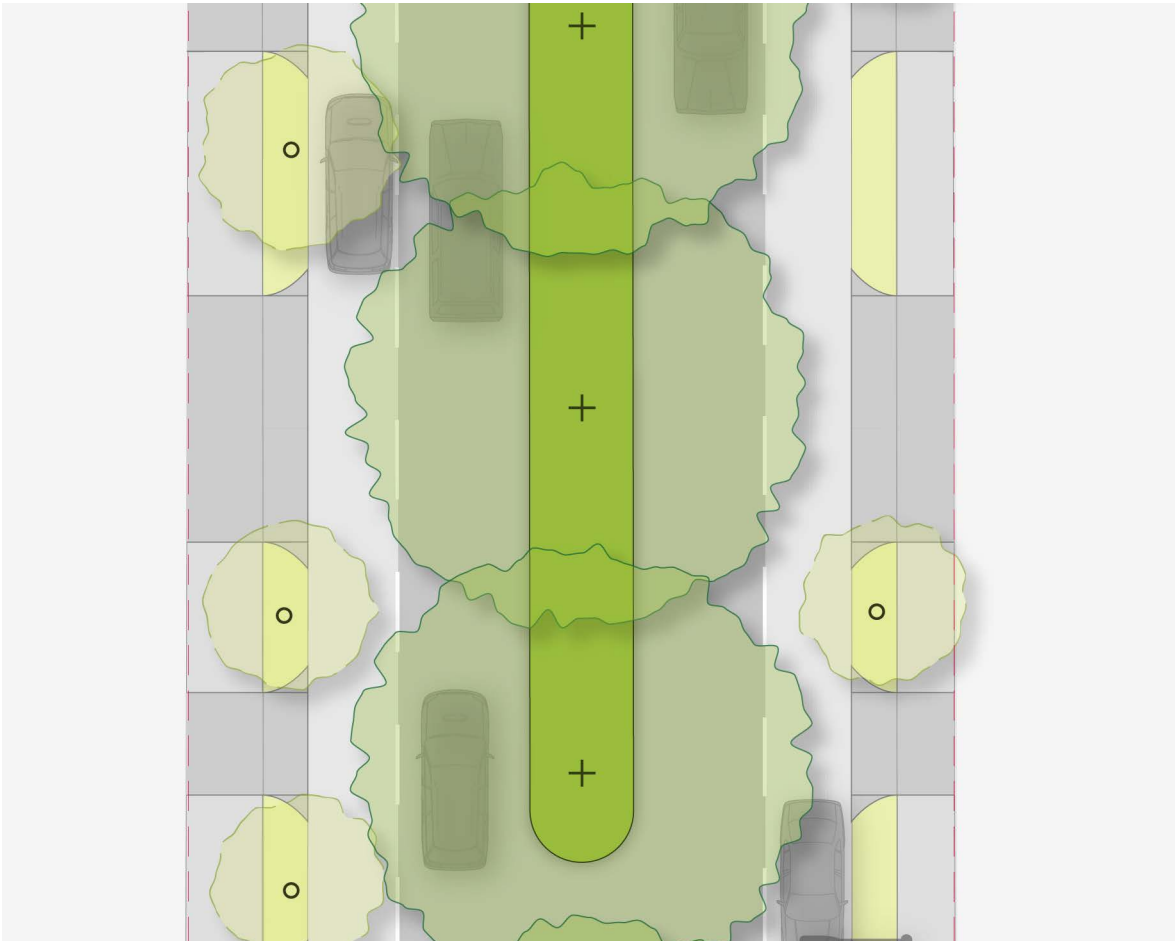


A central median strip (Image Credit Google Street View)

FUNCTIONAL LAYOUT



STREET SECTION



STREET PLAN

SCALE 1:200 0 5 10m

TECHNICAL AND MAINTENANCE CONSIDERATIONS

- Formative pruning required to establish clear sight lines.
- Prioritise tree species that maintain consistent natural form and lend well to formative pruning, in particular those in close proximity to overhead services.
- Understorey planting should be a secondary consideration to tree selection and increasing canopy.
- Sightlines will need to be considered as part of tree placement and may impact the number of trees that can be installed.
- Large canopy/legacy tree species should be installed where space permits on Connector Boulevards.
- Structural soil should be considered to increase soil volumes and connect soils below pavement.
- Irrigation or hand watering required during hot dry periods.

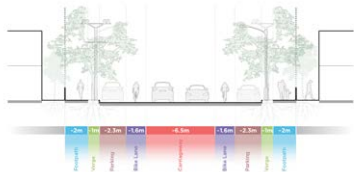
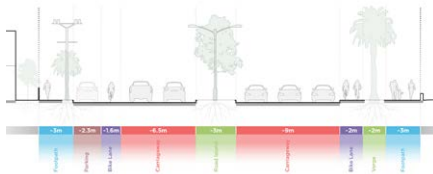
ADDITIONAL OPPORTUNITIES TO BE CONSIDERED AS PART OF INTERVENTION

- Integrated water management (IWM) interventions such as passive irrigation, soaker pits and rain gardens.
- Traffic calming measures such as pedestrian priority crossings and shared streets.
- Understorey planting that increases and supports site biodiversity. Particularly wide medians can become bio-links.
- Placemaking initiatives such as outdoor dining and seating.

INDICATIVE IMPLEMENTATION COST

\$	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$
< \$50k	\$50 - \$250k	\$250k - \$600k	\$600k - \$1m	> \$1m

A photograph of a modern residential street. In the foreground, a landscaped median with tall, green grasses and young trees separates the road from the sidewalk. The road is paved with asphalt and features a brick-paved crosswalk. Modern houses with large windows and dark roofs are visible in the background. The scene is bright and sunny, with shadows cast on the road.

STREET TYPE	CONFIGURATION	TREE SIZE	TREE FORM
Connector Boulevard		Large (the largest species is considered)	Clear trunked, largest canopy spread
Foreshore Boulevard		Large (the largest species is considered)	Clear trunked, largest canopy spread

03 CASE STUDIES

URBAN FOREST DESIGN TOOLKIT - CASE STUDIES

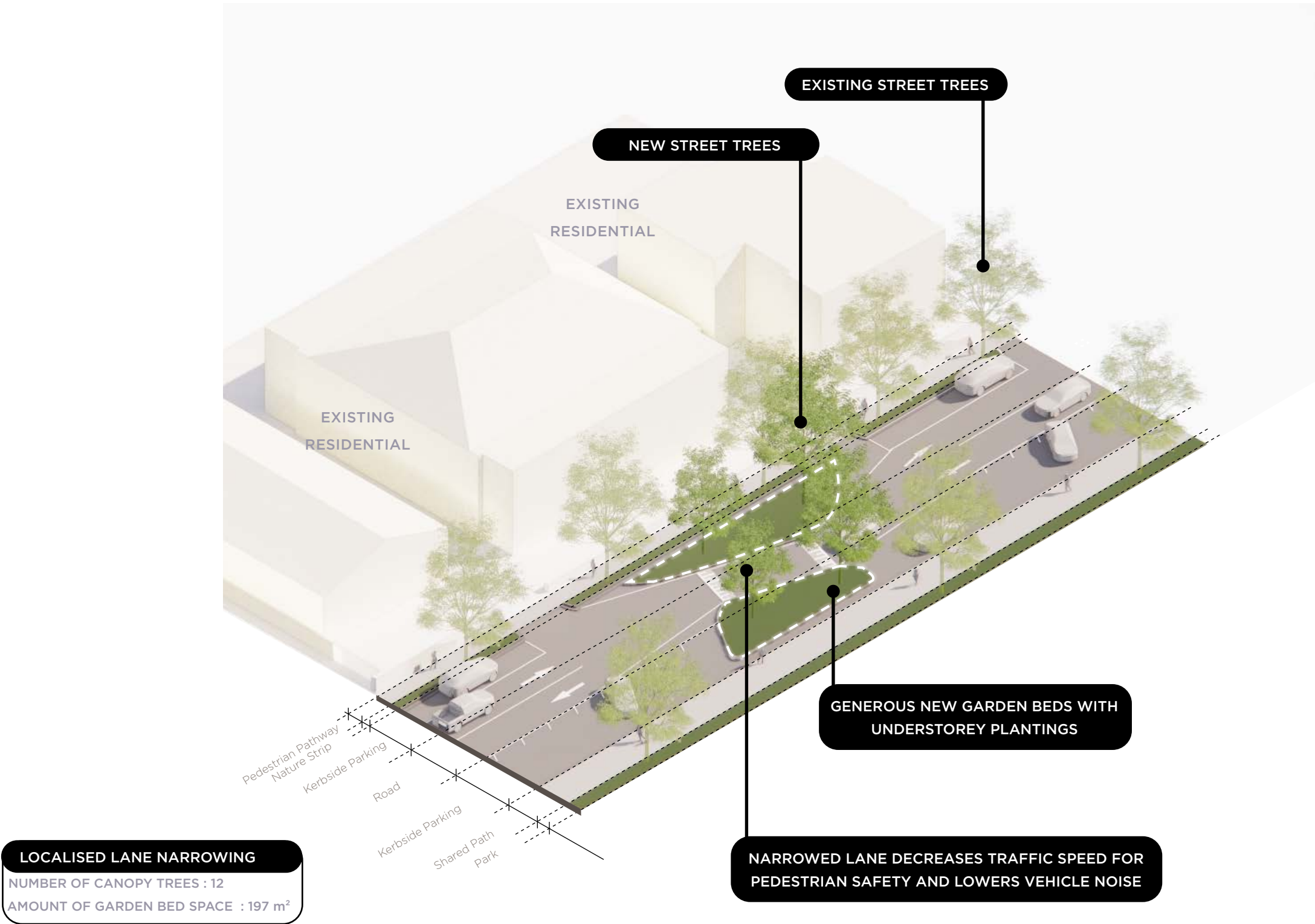
03.1

CASE STUDY 1: LOCALISED LANE NARROWING FOR INCREASED CANOPY AND GREENING

Strategic lane narrowing creates the opportunity to reallocate road width for urban greening and canopy expansion. Incorporating tree planting zones and low-maintenance vegetation helps moderate traffic speeds, improve microclimates, and strengthen neighbourhood character. The adjacent diagrams demonstrate how the Design Toolkit supports this approach.



NUMBER OF CANOPY TREES : 8
AMOUNT OF GARDEN BED SPACE : 85m²



NUMBER OF CANOPY TREES : 12
AMOUNT OF GARDEN BED SPACE : 197 m²

URBAN FOREST DESIGN TOOLKIT - CASE STUDIES

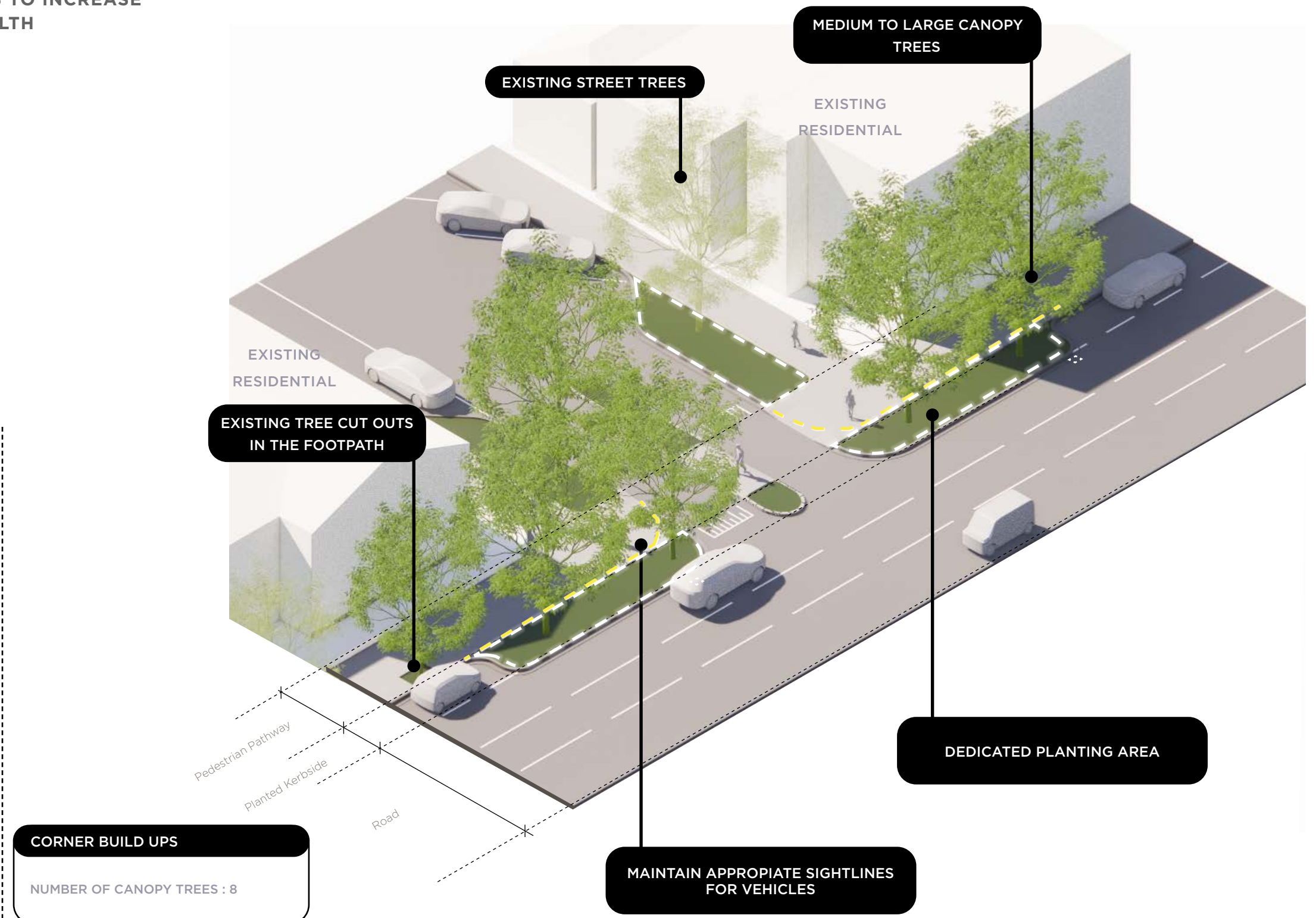
03.2

CASE STUDY 2: USING CORNER BUILD OUTS TO INCREASE CANOPY AND SOIL VOLUME FOR TREE HEALTH

Corner build-outs repurpose kerbside space at intersections, typically within the no-parking zone extending 10 metres from each corner, into dedicated planting areas. When designed to maintain appropriate sightlines for turning vehicles, these interventions can accommodate medium to large canopy trees on most street types, together with understorey planting that contributes to biodiversity, improves streetscape character and increases urban canopy cover



NUMBER OF CANOPY TREES : 2



URBAN FOREST DESIGN TOOLKIT - CASE STUDIES

03.3

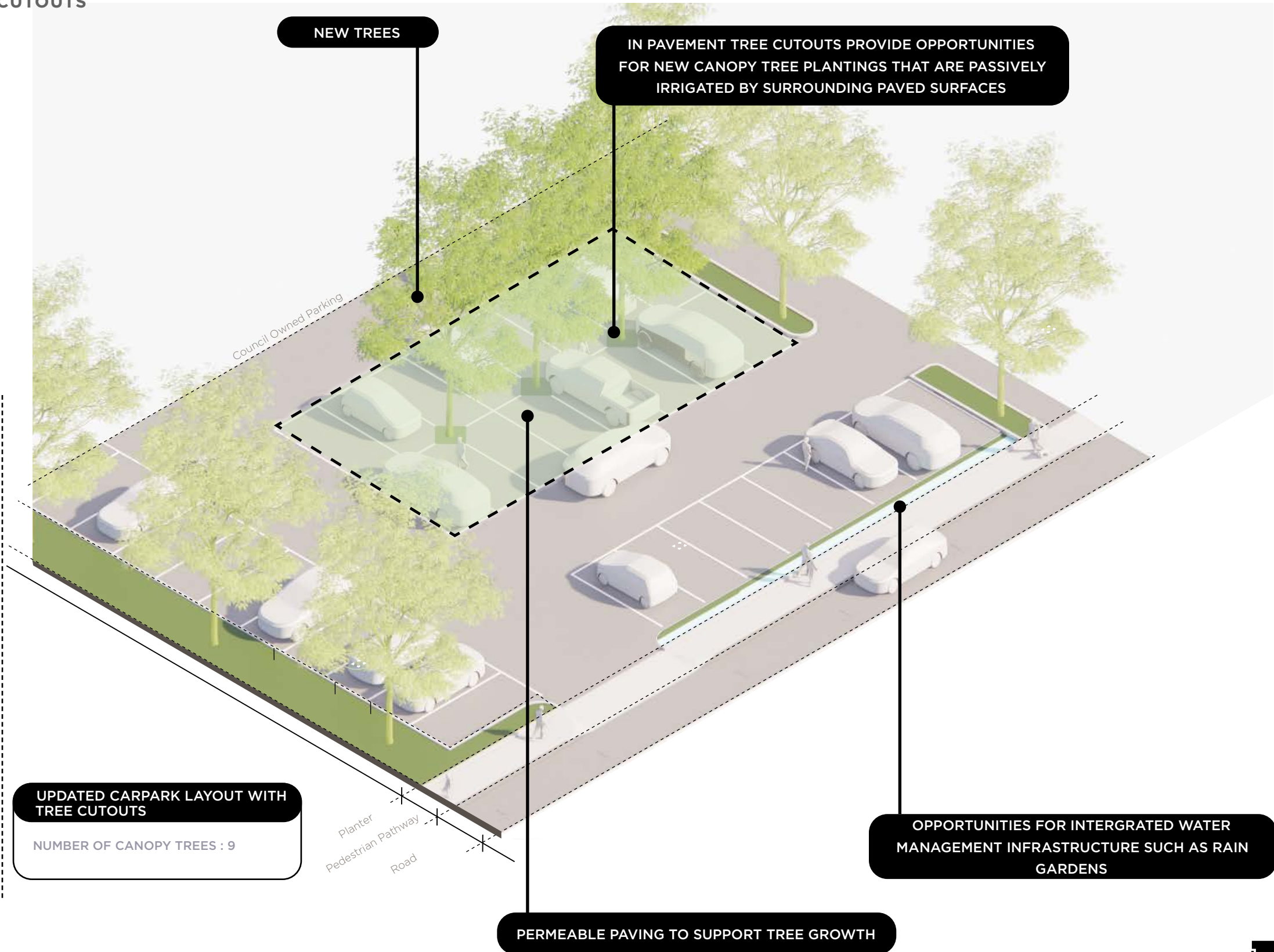
CASE STUDY 3: PROVIDING NEW TREES IN UNDERUTILISED COUNCIL CARPARKS USING IN ROAD TREE CUTOUTS

Underutilised Council carparks present an opportunity for new canopy tree plantings, greening and Integrated Water Management infrastructure to manage storm water flows whilst boosting greening efforts. The adjacent diagrams illustrate how the Design Toolkit can be applied effectively within car park environments.



EXISTING CONDITION

NUMBER OF CANOPY TREES : 6



UPDATED CARPARK LAYOUT WITH TREE CUTOUTS

NUMBER OF CANOPY TREES : 9

URBAN FOREST DESIGN TOOLKIT - CASE STUDIES

03.4

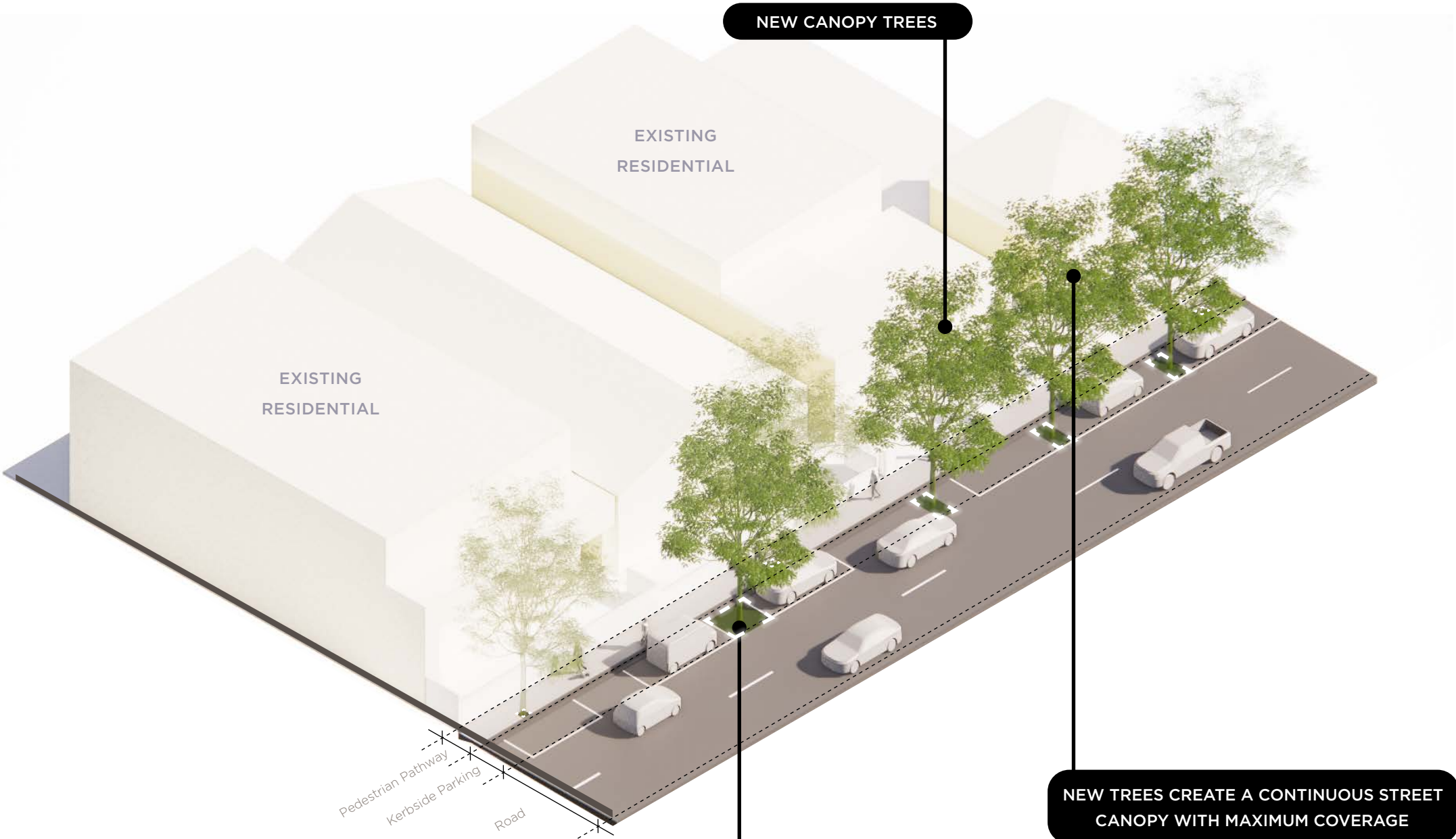
CASE STUDY 4: USING IN-ROAD TREE CUTOUTS TO PROVIDE INCREASED CANOPY

In-road tree cut-outs allow for canopy planting within existing carriageways, making use of otherwise hard surfaced areas. By introducing trees closer to the centreline, this intervention supports urban cooling, improves habitat connectivity, and adds visual interest. The adjacent diagrams demonstrate how the Design Toolkit can guide cut-out placement and design.



EXISTING CONDITION

NUMBER OF CANOPY TREES : 3



TREE CUTOUTS (WITHIN ROAD)

NUMBER OF CANOPY TREES : 7

NEW IN-ROAD TREE CUTOUTS CREATE SPACE FOR NEW STREET TREES CANOPY

NEW TREES CREATE A CONTINUOUS STREET CANOPY WITH MAXIMUM COVERAGE

URBAN FOREST DESIGN TOOLKIT - CASE STUDIES

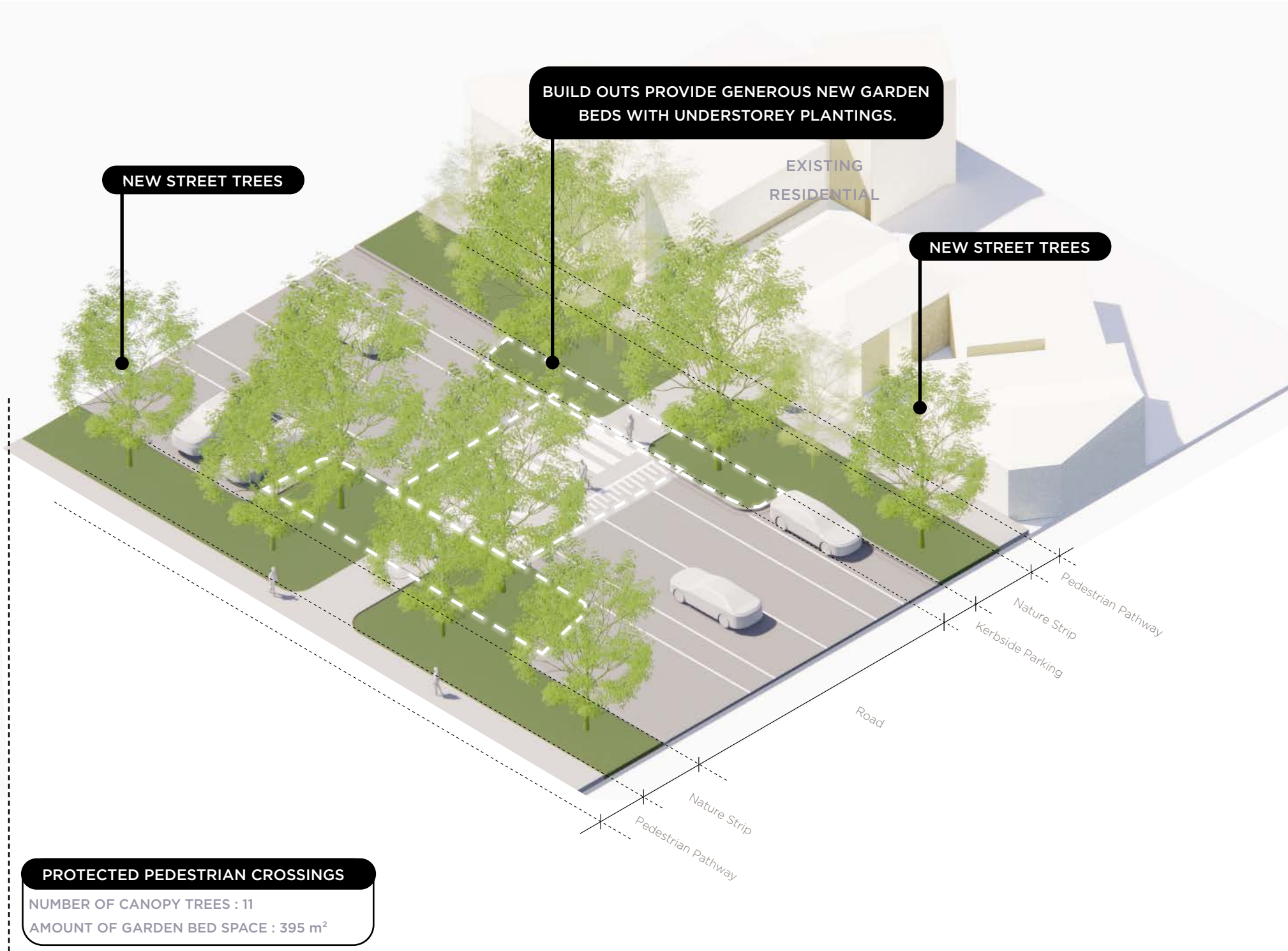
03.5

CASE STUDY 5: PROTECTED PEDESTRIAN CROSSINGS FOR INCREASED CANOPY AND GREENING

Protected pedestrian crossings present opportunities to integrate canopy trees and planting zones within crossing islands and approach treatments. These enhancements improve pedestrian safety, increase shade, and contribute to broader greening networks. The adjacent diagrams illustrate how the Design Toolkit informs planting and design outcomes at crossing points.



NUMBER OF CANOPY TREES : 3
AMOUNT OF GARDEN BED SPACE : 300.57 m²



PROTECTED PEDESTRIAN CROSSINGS
NUMBER OF CANOPY TREES : 11
AMOUNT OF GARDEN BED SPACE : 395 m²

URBAN FOREST DESIGN TOOLKIT - CASE STUDIES

03.6

CASE STUDY 6: USING FOOTPATH WIDENING TO PROVIDE ADDITIONAL CANOPY AND URBAN GREENING

Footpath widening creates space for canopy trees, understory planting, and water-sensitive urban design elements. These upgrades not only improve pedestrian comfort and accessibility but also deliver meaningful increases in shade, biodiversity, and stormwater management capacity. The adjacent diagrams show how the Design Toolkit can guide greening within widened footpaths.



EXISTING CONDITION

NUMBER OF CANOPY TREES : 4
AMOUNT OF GARDEN BED SPACE : 80m²



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