

Warners Bay

Belmont

Glendale

SWANSEA STREETScape MASTER PLAN

ISSUE 01 VERSION 02 - DRAFT SEPTEMBER 2016



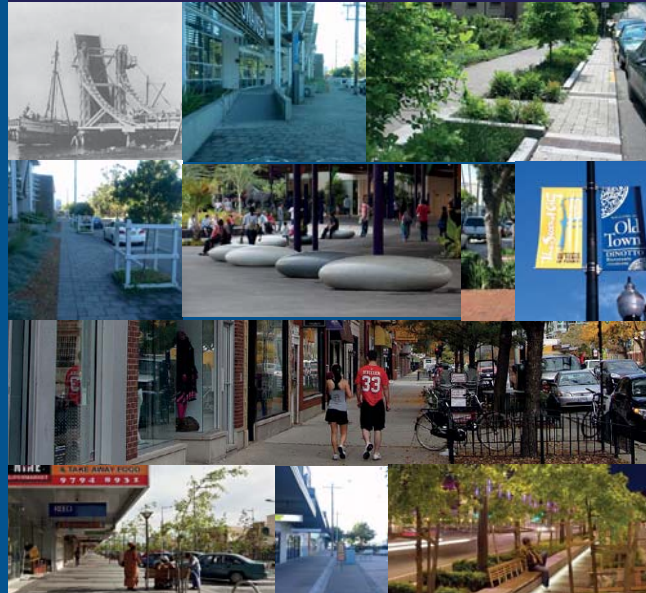
Toronto

Morriset

Cardiff

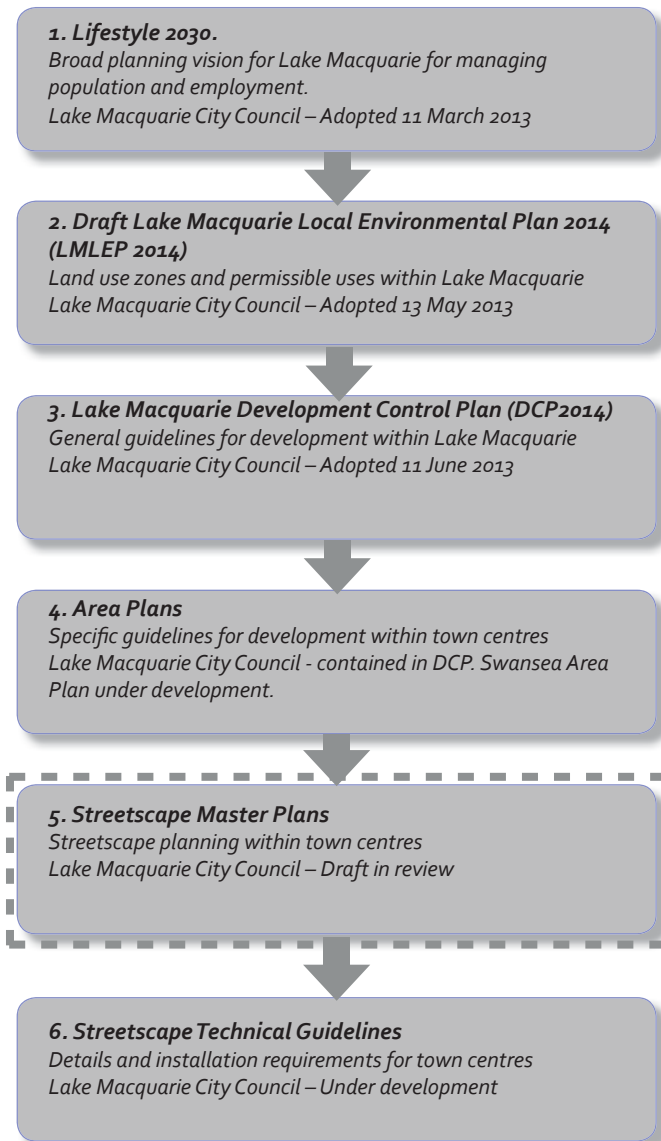
Mount Hutton

Charlestown





PLANNING CONTROLS



Note:
The planning documents listed above are current at the time of adoption of this Streetscape Master Plan. When using these documents please confirm that you have the latest versions.
The Master Plan has been developed from on-site observations, cadastral plans and aerial photographs. Dial Before You Dig (DBYD) service information has been reviewed and considered. It is the responsibility of the planners, developers, and contractors to accurately locate services and adopt this Master Plan for individual sites.
The details are indicative and to be used as a guide only. Measurements may vary on site.

Issue	Version	Date	Notes
01	01	JUNE 2015	Adopted by Council
01	02	FEB 2017	REVISED TO COMPLEMENT THE STREETScape TECHNICAL GUIDELINE

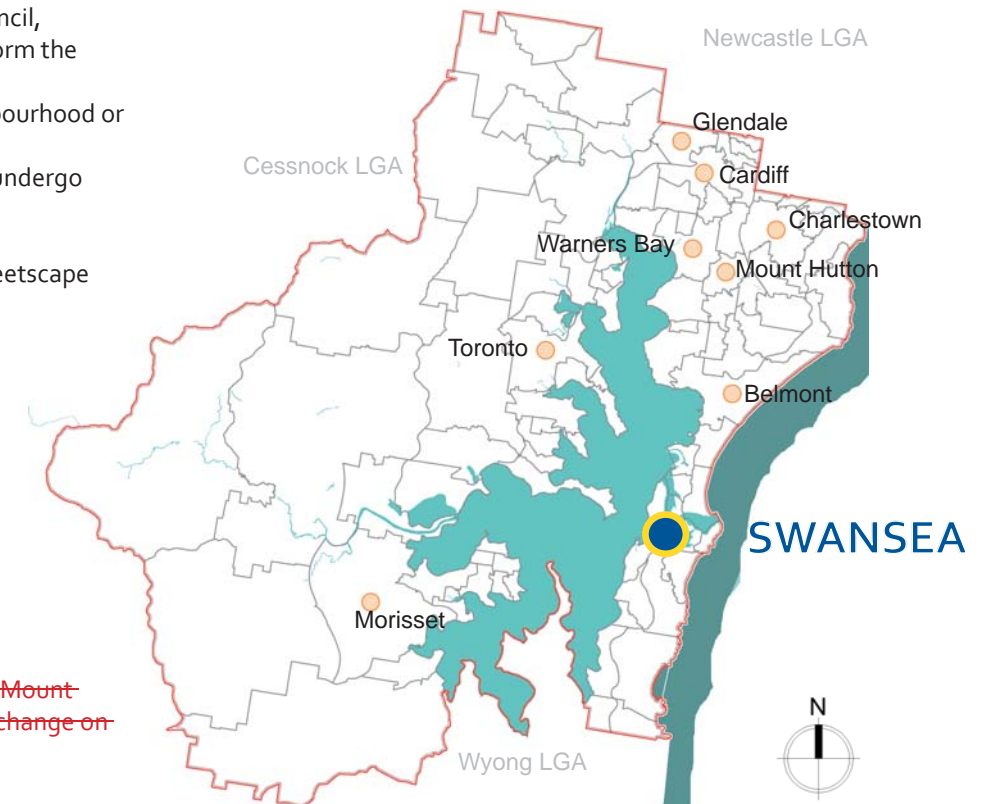
LAKE MACQUARIE TOWN CENTRE STREETScape MASTER PLANS

The 2008/2009 Management Plan and Budget identified the need to provide high quality public domains and a city identity. The Streetscape Master Plans provide a document that identifies this vision and provides a plan for its implementation. The Streetscape Master Plans are intended to improve the aesthetic appearance of the town centres, promote the area's personality, increase opportunity, accessibility, functionality, economic effect and provide a modern easily maintainable public domain. The Streetscape Master Plans ensure a unified approach to undertaking public domain works by Council, developers and the community. It also assists in directing public and private investments and will inform the chamber of commerce in the preparation of strategic plans. The Streetscape Master Plans are substantially focused on the areas currently zoned as local, neighbourhood or mixed - use centres under the Lake Macquarie LEP 2014. These are the areas of each of the town centres where the majority of commercial activity will occur. These areas are also the most likely to undergo change in the future.

The consideration and collation of all relevant issues resulted in this overall priority order for the Streetscape Master Plans for Lake Macquarie City's nine major town centres:

1. Charlestown ~~– completed and adopted by Council.~~
2. Cardiff ~~– completed and adopted by Council.~~
3. Belmont ~~– completed and adopted by Council.~~
4. Toronto ~~– completed and adopted by Council.~~
5. Morisset ~~– completed and adopted by Council.~~
6. Warners Bay ~~– under development.~~
7. Swansea ~~– under development.~~
8. Mount Hutton ~~– under development.~~
9. Glendale ~~– to future design.~~

The priority order adopted by Council has been adjusted for the 2014/2015 financial year to prioritise Mount Hutton ahead of Glendale (as shown above) due to the impact of the Lake Macquarie Transport Interchange on the Glendale Town Centre.



OBJECTIVES OF TOWN CENTRE STREETScape MASTER PLANS

- To provide a clear vision and identity for each town centre.
- To provide a clear guide for Council, the community and developers.
- To create vibrant active town centres.
- To provide consistencies within Lake Macquarie.
- To preserve and enhance the uniqueness of Lake Macquarie's town centres.
- To ensure high quality outcomes.
- To reduce asset maintenance costs.

EXTENT OF TOWN CENTRE STREETScape MASTER PLANS

The areas covered by the Streetscape Master Plan are the public areas owned and /or managed by the council. The focus is on the streetscape elements within the road reserve and include street trees, tree guards, furniture, bins, bike racks, drinking fountains, bollards, lighting, paving, public art and town centre signage. For consistency the streetscape treatments should be extended onto private land at building setbacks, building forecourts, arcade entrances, pedestrian lanes etc. and where logical to address pedestrian links. New development needs to address the streetscape as prescribed by this plan. Items and selections nominated in this plan will be reviewed periodically by LMCC in accordance with relevant legislation.

TOWN CENTRE PERSONALITIES

Town centre personalities have been developed for these nine town centres. These have been derived to provide a strong town centre identity and theme for enhancing character, heritage and sense of place.

- The nine main town centres personalities are:
- Charlestown - the Central Business District
 - Cardiff - the Skills & Trades Centre
 - Belmont - the Activity Centre
 - Toronto - the Lakeside Village
 - Morisset - Nurtures the Spirit of Community
 - Warners Bay - the Lifestyle Centre
 - **Swansea - the Seaside Village**
 - Mount Hutton - the Growing Community
 - Glendale - the Dynamic Services Hub



SWANSEA STREETScape MASTER PLAN

GENERAL TOWN CENTRE OBJECTIVES/VISION

- » To create a vibrant new town centre.
- » To enhance safety and accessibility.
- » To create a walkable connected town centre.
- » To create a consistent character.
- » To link key areas.
- » To provide a sustainable environment.
- » To provide facilities for public art.
- » To provide high quality furniture, lighting and paving.
- » To enhance the character of surrounding streets.
- » To provide for transport options in the town centre.
- » To promote walking, cycling and public transport.
- » To minimise stormwater impacts by use of water sensitive urban design (WSUD)
- » To improve street amenity.
- » To activate the precinct as a safe and inviting destination.

SWANSEA OBJECTIVES AND VISION

- To enhance Swansea's unique physical location as a gateway to Lake Macquarie.
- To build Swansea's identity as a retail and seaside village.
- To maintain significant vistas to Swansea Channel and other landmarks.
- To create clean lines, reduce clutter and improve ambience.
- To improve accessibility to Local Centre (B1) and Mixed Use (B4) zones from other parts of the town centre.
- To consider the impact of Sea Level Rise on new infrastructure.
- To protect and enhance Swansea's heritage.

CONSTRAINTS

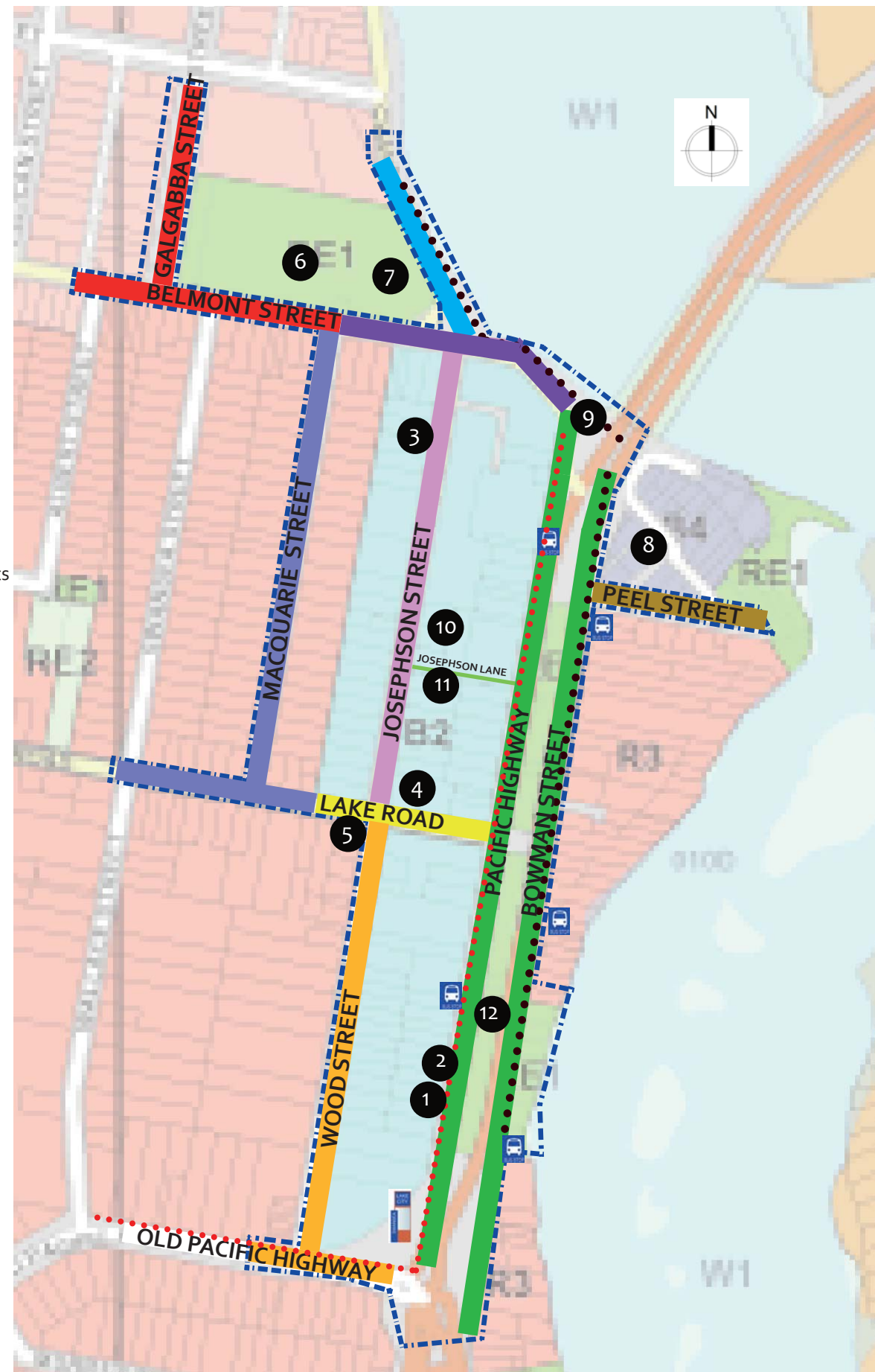
- Services & awnings restrict tree plantings.
- Varied pavement styles.
- High water table.
- Flooding issues, in particular at the intersection of Lake Road and Pacific Highway.
- Projected increase in ocean and lake levels.

NOTE: Refer introduction page for Planning Controls.

ADDITIONAL PLANNING CONSIDERATIONS FOR SWANSEA STREETScape MASTER PLAN:

- LMCC Cycling Strategy 2021.
- LMCC Public Art Strategy.
- LMCC Footpath Strategy.
- Public Art Policy.
- Town Centre Personalities.
- Public Lighting Policy.
- Banner Policy For long-term (ongoing) banner installation - 2012.
- Management of Trees on Roads and Public Reserves Policy.
- LMCC Pool Service Delivery Model 2013 for Swansea Leisure Centre.
- Asset Management Plans - Current conditions and replacement schedule - Draft.

These documents have been reviewed and considered as part of this plan. Where these initiatives or any others are adopted or modified the Streetscape Master Plan should be updated to reflect this.



LEGEND

LEP 2014 PLANNING ZONES

- B2 Local Centre
- B4 Mixed Use
- R3 Medium Density Residential
- RE1 Public Recreation

- Entry Signage
- Existing Off-Road Cycle shared pathway
- Proposed On-Road Cycleway
- Bus Stop

- ① Lake Macquarie Visitors Information Centre
- ② Library
- ③ Police Station
- ④ Post Office
- ⑤ Fire Station
- ⑥ Quinn Park
- ⑦ Swansea Leisure Swim centre
- ⑧ RSL Club
- ⑨ Boat Shed
- ⑩ Swansea Meals on Wheels
- ⑪ Swansea Combined Pensioners Centre
- ⑫ Talbot Park

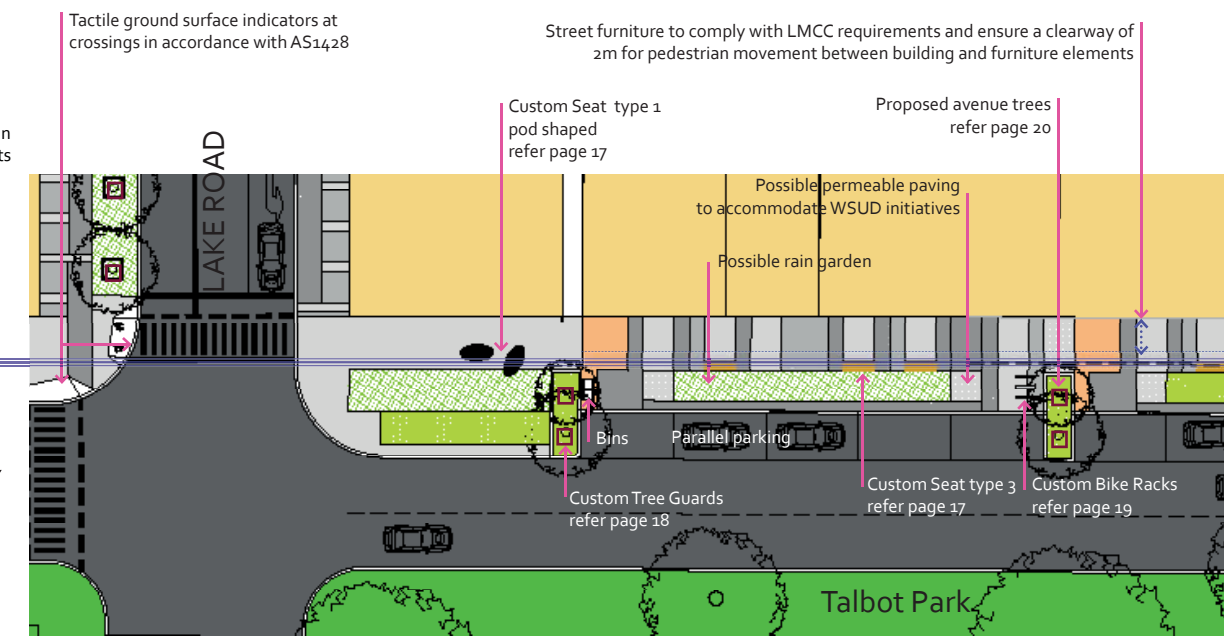
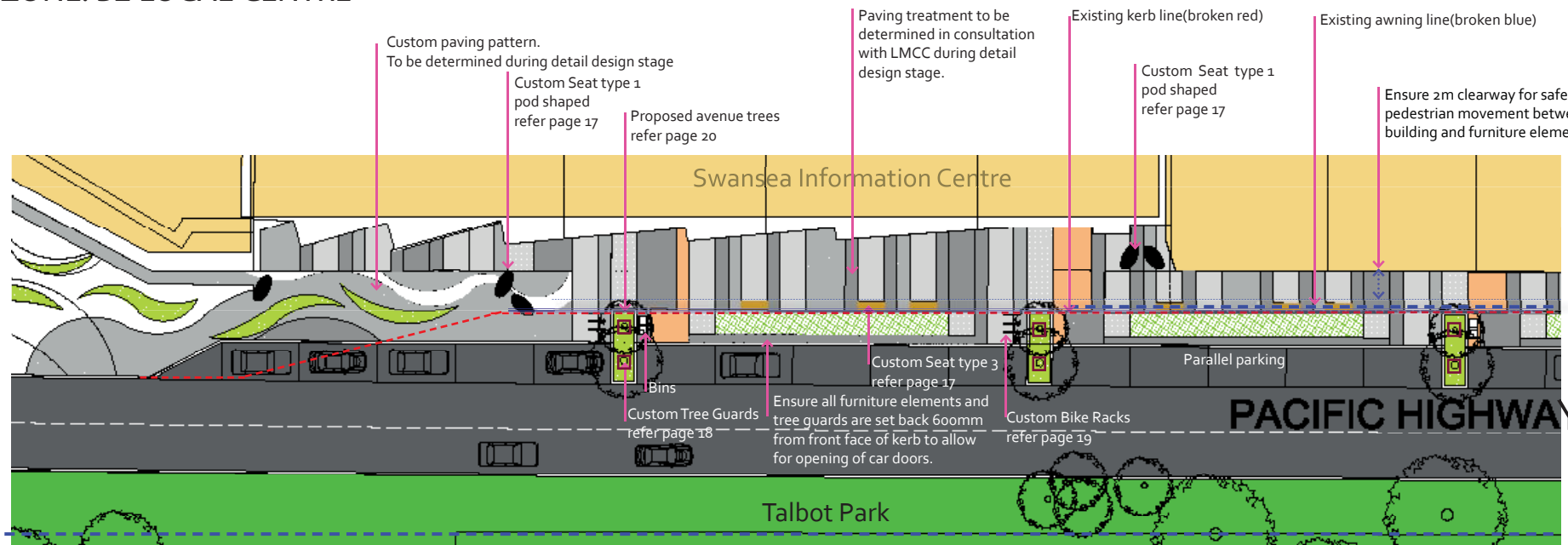
EXTENT OF WORKS FOR THIS MASTER PLAN

STREETScape TYPES

	Street Type	Planning Zone	Name of Street	Road Reserve
	Street Type 1	B2 & R3	Pacific Hwy Bowman St	60m
	Street Type 2	B2	Lake Road	20m
	Street Type 3A	B2	Josephson St	20m
	Street Type 3B	B2, R3 & RE1	Belmont St	20m
	Street Type 3C	B2, R3 & RE1	Belmont St	20m
	Street Type 4A	B2 & R3	Wood St	20m
	Street Type 4B	B4 & R3	Peel St	20m
	Street Type 5	R3 & RE1 R3 & RE1	Belmont St Galgabba St	20m 30m
	Street Type 6	R3 R3	Macquarie St Lake St	20m 20m
	Street Type 7	B2	Pacific Hwy & Josephson St	3.2m



PACIFIC HIGHWAY & BOWMAN STREET ZONE: B2 LOCAL CENTRE



PLAN 1- PACIFIC HIGHWAY 1:600 @A3

DESCRIPTION

Street Type 1 comprises of Pacific Highway and Bowman Street. This is a major access way to Lake Macquarie and Newcastle. This road has a high level of vehicular and pedestrian traffic, and is the first impression of Swansea Town Centre for visitors and locals.

OBJECTIVES

To create a strong sense of place and source of pride in the precinct.
To encourage longer visitor duration and social connectivity by providing pleasant places to gather.
To cater for a range of retail, commercial, business and hospitality uses.

EXISTING CONSTRAINTS

Large roundabout at southern end of Pacific Highway.
Swansea Channel Bridge.
Talbot Park in the central median.
Existing and proposed awnings.
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

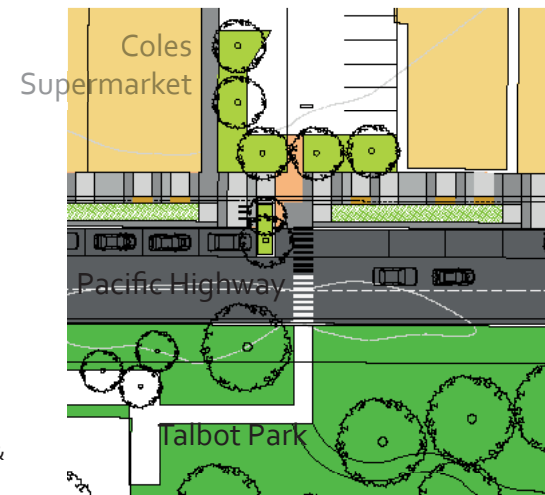
DESIGN RESPONSE

PACIFIC HIGHWAY
To provide for footpath pavement widening to 5.5m.
To provide for full-width unit pavers and contrasting header & banding to shop fronts.
To provide for custom paving pattern in front of Swansea Information centre.
To retain parallel parking.
To provide for medium size tree planting within the parking lane.
To provide for small trees under powerlines.
To provide for appropriate safety elements like bollards, tactile indicators, pram ramps and pedestrian lighting.
To provide for Custom seating - Seat Type 1 pod shaped in precast concrete and Seat Type 3 with timber slats.
To provide for a secure fencing element to Talbot park.
To provide for a public art entry statement.

BOWMAN STREET
To provide for 3m wide shared pathway at existing location.
To provide for Cobble paving 0.8m wide between shared pathway and road.

TYPICAL DIMENSIONS

Road reserve width: 60m
Pacific Highway Pavement width: 5.5 - 6m
Parking Width: 3m



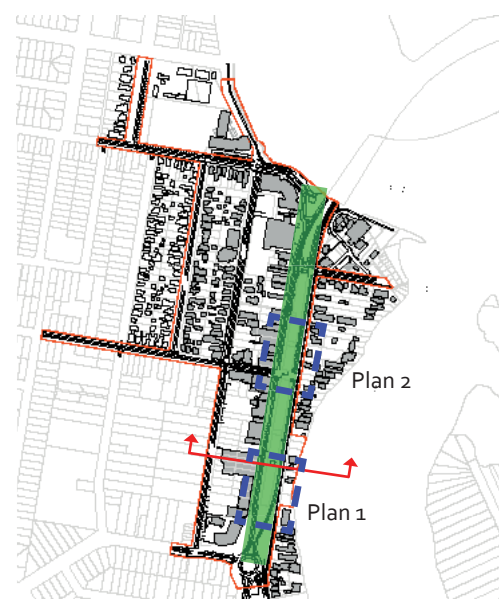
PLAN 3- PACIFIC HIGHWAY 1:800 @A3

Proposed pedestrian links at Coles Supermarket Car Parking and Pacific Highway. Possible road crossing to Talbot Park subject to RMS approval.

NOTE:

Where parallel parking is provided, designated accessible parking bays need to be identified to allow for widths compliant with AS2890 part 5.
Installation of street furniture to be determined in the detailed design stage and in conjunction with LMCC Technical Guidelines.

PLAN 2- PACIFIC HIGHWAY 1:600 @A3



KEY PLAN

PACIFIC HIGHWAY & BOWMAN STREET

ZONE: B2 LOCAL CENTRE



SECTION 1:250@A3



KEY PLAN

PLAN & SECTION TREE PLANTING AND CARPARKING

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Furniture to be clustered at prominent locations including bus stops and shop entries to create activity nodes. Coordinate with town park and cafe frontages.

Custom elements:

Pod shaped precast concrete seat type 1
Location: At key locations in sets of max 3 seats.

Rectangular precast concrete seat type 3.
Locations: At key locations identified by LMCC.

Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations including Bus Stops, Taxi ranks, outside food outlets areas along Pacific Highway and Bowman street.

Bike Racks: Custom bike rack

Locations: At key locations along Pacific Highway as determined at detail design stage. Along shared cycle route from bridge to roundabout including at bus stops on Bowman street.

Drinking Fountains:

Locations: At key locations like local hubs or near pedestrian and cyclist routes.

Bollards:

Locations: where required to prevent and deter vehicular access. Illuminated bollards at selected locations.

Shade Structures:

Locations: at Swansea Information centre. Sail structures in combinations of rectangular / square sails single pole mounted with provision for lighting.

Banner Poles:

Location: Along the Pacific Highway footpath.

PAVEMENT

Footpath:

Main Body: Concrete segmental flags as specified in the *Swansea Streetscape Technical Guidelines*

Border and banding: Concrete segmental flags as specified in the *Swansea Streetscape Technical Guidelines*

Other special pavements:

Permeable: to drinking fountain surrounds and adjacent planted areas.

Feature: In-situ concrete in light and dark grey tones and exposed aggregate finish forming free flow patterns.

Tactile:

Tactile Ground Surface Indicator (TGSi): integrated pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey planting in road reserve. Refer to planting schedule on page 20.

Spacing: Approximately at 10m centres.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

Tree Guards: Tree guard with Swansea custom infill panel



LAKE ROAD ZONE: B2 LOCAL CENTRE

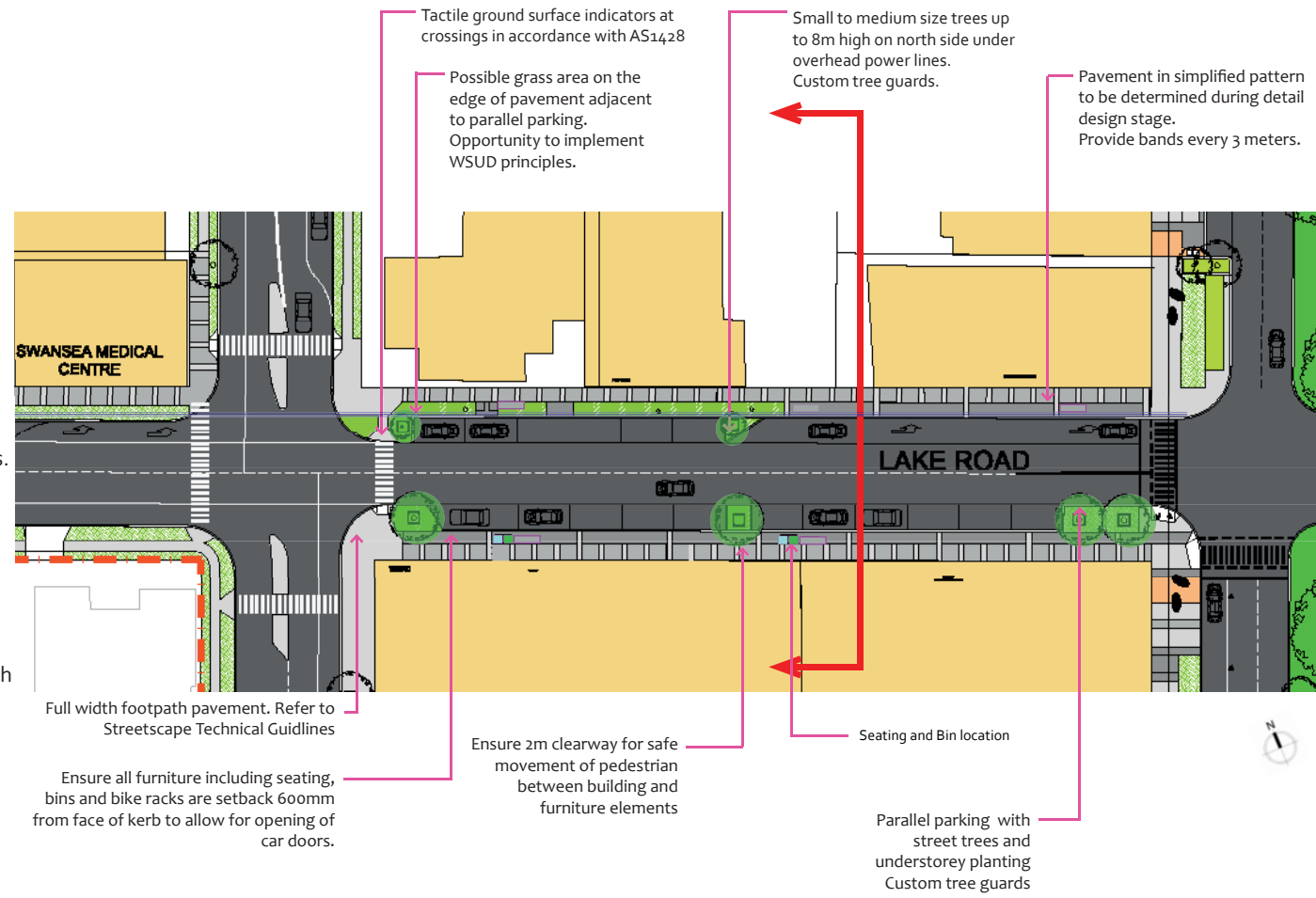
DESCRIPTION
This street type is located between Pacific Highway and Josephson Street. These areas have a high level of vehicle and pedestrian traffic, and are the part of the Local Centre zone of Swansea town centre. The post office and the medical centre has access from this road.

OBJECTIVES
To create a strong sense of place, an attractive street and source of pride in the precinct.
To encourage longer visitor duration and social connectivity by providing pleasant places to gather.
To cater for a range of retail, commercial, business and hospitality uses.

EXISTING CONSTRAINTS
Existing and proposed awnings.
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE
This section will emulate the streetscape type 1 in paving materials with simplified patterns and banding.
To provide for new pavement width retained to 3.5m.
To provide for seating, bins, bike racks and drinking fountains.

TYPICAL DIMENSIONS
Road reserve width: 20m.
Verge width: 3.5m.
Parking lane : As per RMS guidelines.



PLAN - LAKE ROAD 1:800@A3

MATERIALS AND FURNITURE SELECTION

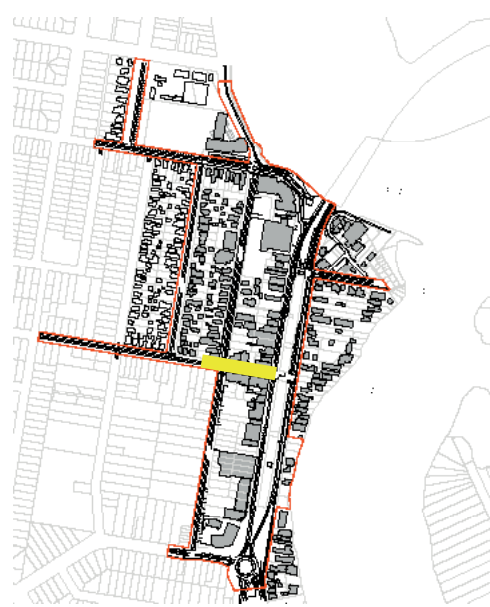
The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

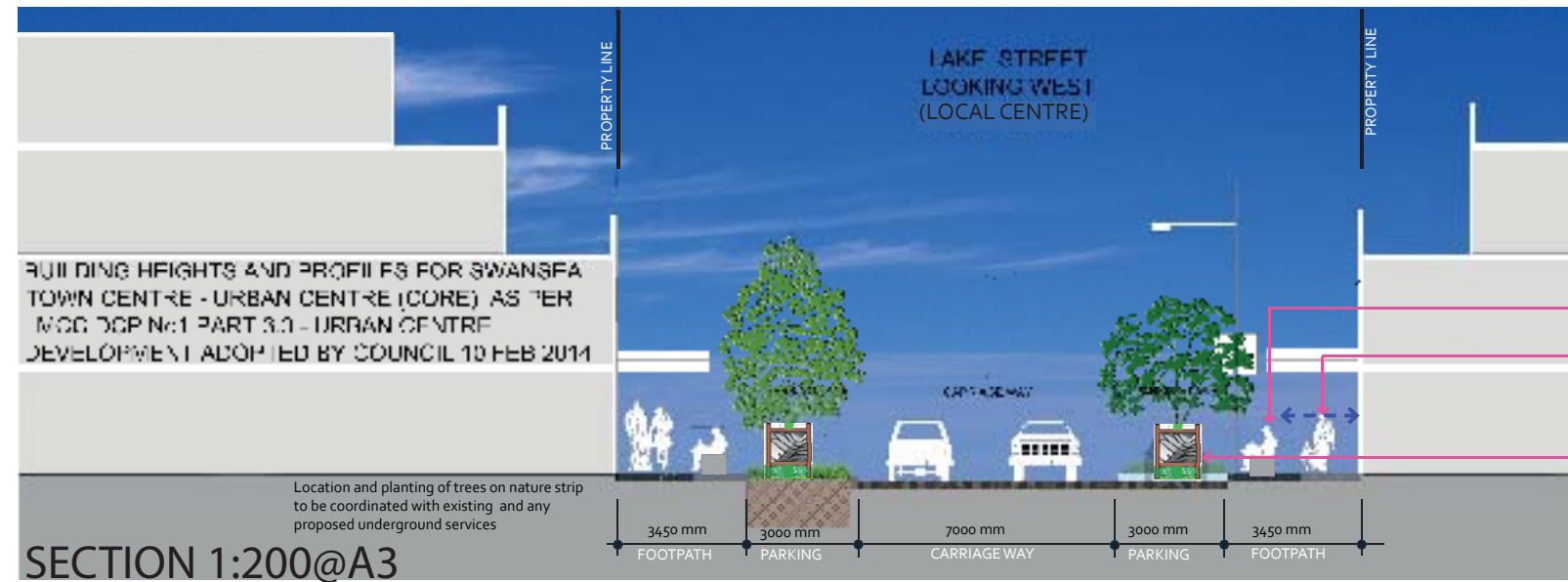
- FURNITURE**
- Custom elements:**
Type: Rectangular precast concrete seat type 3.
Locations: At key locations identified by LMCC.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.
- Waste & Recycling Receptacles – Bins:**
Locations: At existing and key locations including Bus Stops, Taxi ranks, outside food outlets areas.
- Bike Racks - Custom bike rack:**
Locations: At key locations including post office / telephone booth and at alfresco dining areas
- Banner Poles:**
Location: Along the northern verge of Lake Road.

- PAVEMENT**
- Footpath:**
Main Body: Concrete segmental flags as specified in the *Swansea Streetscape Technical Guidelines*
Border: 1.5m wide from back of kerb to main body paving, in grey concrete with exposed black basalt aggregate.
Bandings: At 3m ctrs, Concrete segmental flags as specified in the *Swansea Streetscape Technical Guidelines*
Tactile:
Tactile Ground Surface Indicator (TGSi): integrated pavers set-out to AS1428.4

- STREET PLANTING**
- Trees:** Street trees and understorey planting in parallel parking area. Small to medium size trees on north side with powerlines and large trees on the southern side.
- Spacing:** Where possible and at the ends where pavement widens for pedestrian movement. Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.
- Tree Guards:** Tree guard with Swansea custom infill panel



KEY PLAN



SECTION 1:200@A3



JOSEPHSON STREET ZONE:B2 LOCAL CENTRE

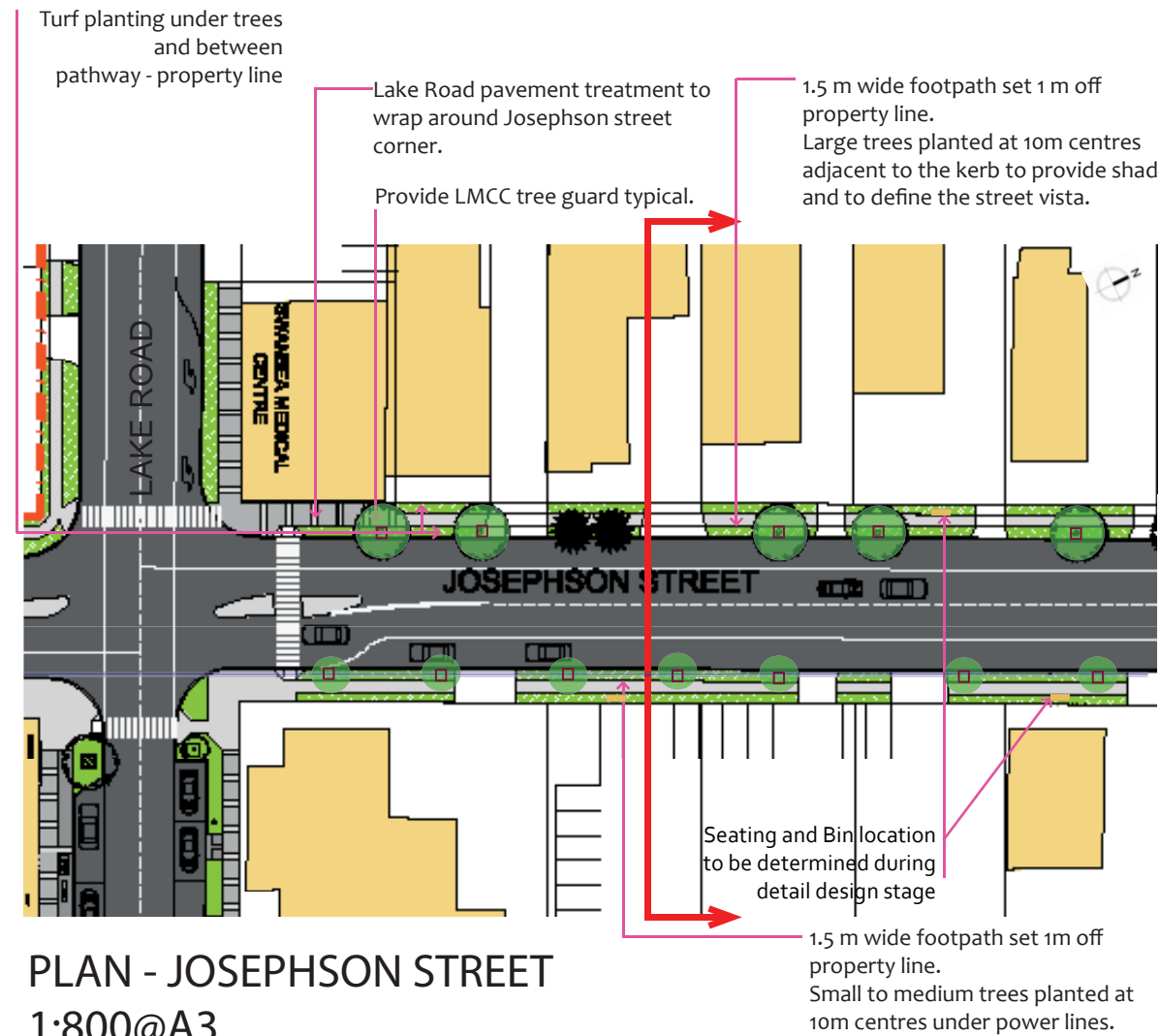
DESCRIPTION
This street type is located between Lake Road and Belmont Street which runs parallel to Pacific Highway. This area has a moderate level of vehicle and pedestrian traffic as the shops carpark traffic exits on to this street.

OBJECTIVES
To create a sense of place and source of pride in the precinct.
To encourage longer visitor duration and social connectivity by providing pleasant places to gather.
To cater for a range of retail, commercial, business and hospitality uses.

EXISTING CONSTRAINTS
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE
To provide for unmarked parallel parking on both sides, with 1.5m wide footpath connections.
To provide shaded footpath by planting trees on the verge.
To provide for appropriate safety elements including tactile indicators and pram ramp crossings.
To comply with CPTED- Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS
Road reserve width: 20m.
Verge width: 3.3m with 1.5m wide pathway.
Parking lane : unmarked and as per RMS Guidelines.



PLAN - JOSEPHSON STREET
1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:
Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC including Police station.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:
Locations: At existing and key locations including Bus Stops, Taxi ranks, outside food outlets areas.

PAVEMENT

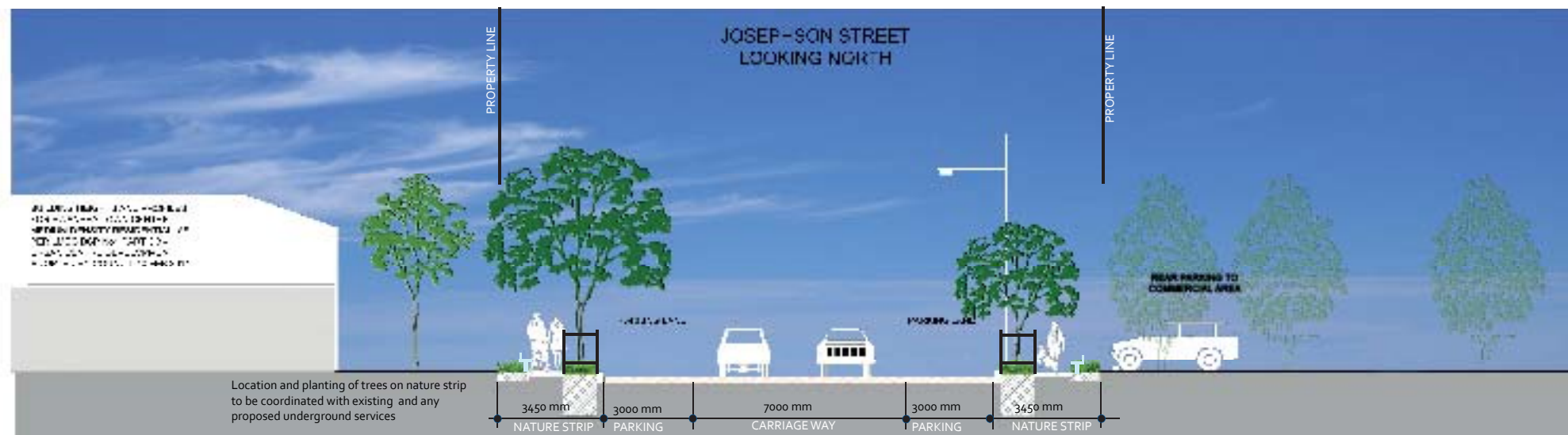
Footpath:
Body: In-situ grey concrete pavement broom finish to LMCC guidelines.
Other open space pavements: Property driveway crossovers in grey concrete broom finish.
Tactile:
Tactile Ground Surface Indicator (TGSi): integrated pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey planting on the verge.
Small to medium size trees on east side with power lines and large trees on the west.
Spacing: 10m centres typical. Where crossovers occur, tree locations to be adjusted.
Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.
Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@



JOSEPHSON STREET cont. ZONE: B2 LOCAL CENTRE

DESCRIPTION

This street type is located between Lake Road and Belmont Street and runs parallel to Pacific Highway. This area has a moderate level of vehicle and pedestrian traffic as the shops carpark traffic exits on to this street.

OBJECTIVES

To create a sense of place and source of pride in the precinct.
To encourage longer visitor duration and social connectivity by providing pleasant places to gather.
To cater for a range of retail, commercial, business and hospitality uses.

EXISTING CONSTRAINTS

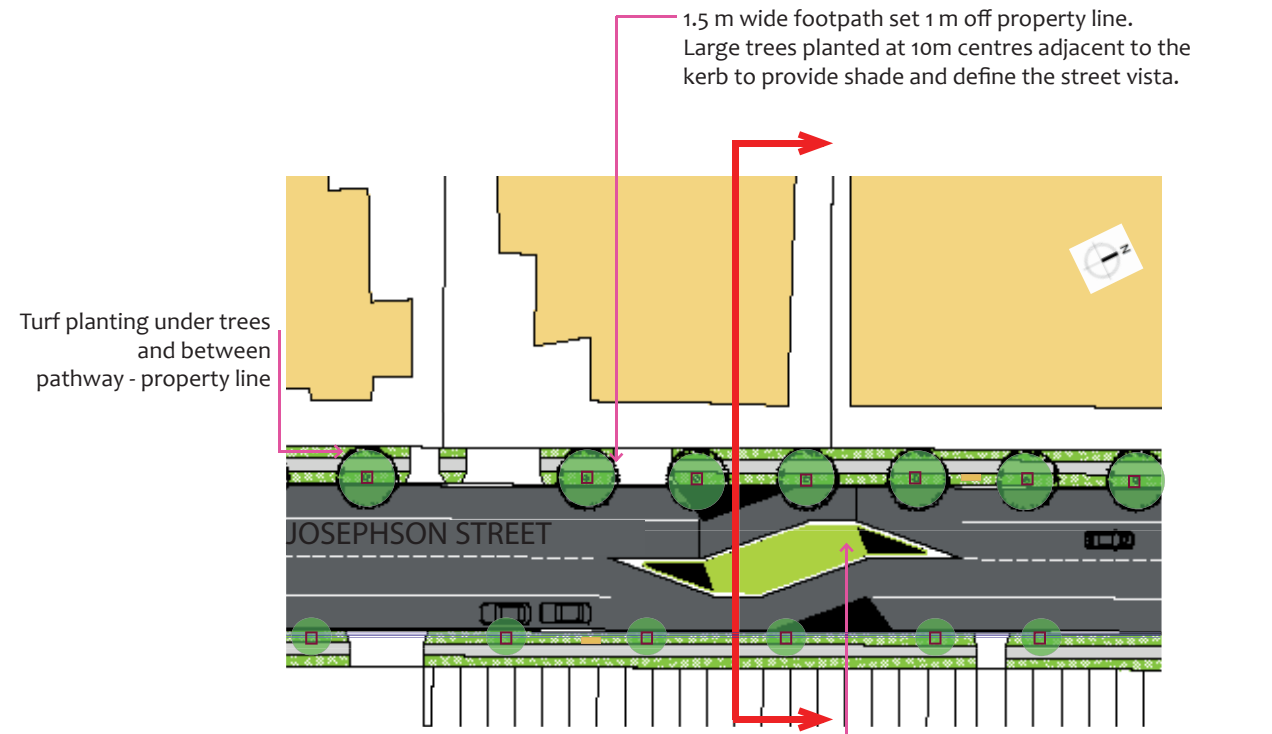
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE

To provide for unmarked parallel parking on both sides, with 1.5m wide footpath connections.
To provide shaded footpath by planting trees on the verge.
To provide for appropriate safety elements where necessary including bollards, tactile indicators and pram ramps.
To comply with CPTED- Crime Prevention Through Environmental Design principles.
To provide for road calmers with 'S' shaped horizontal deflection at locations as advised by RMS guidelines and to LMCC Traffic Control guidelines.

TYPICAL DIMENSIONS

Road reserve width: 20m
Verge width: 3.3m with 1.5m wide pathway and traffic island as calmer
Parking lane : Unmarked and as per RMS guidelines.



PLAN - JOSEPHSON STREET
1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:

Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC including Police station.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations identified by LMCC.

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.
Other open space pavements: Property driveway crossovers in grey concrete broom finish.

Tactile:

Tactile Ground Surface Indicator (TGSi): **integrated** pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey turf on the verge. Refer page 20.
Small to medium size trees on eastern side under powerlines and large trees on the western side.
Spacing: 10m centres typical - adjust for driveway crossings and existing and any proposed underground services.
Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@A3



BELMONT STREET

ZONE: B2, R3 & RE1

DESCRIPTION

This Street type is located on the north of the town centre, between Josephson and Macquarie Streets, with Local Centre zone planned on the south and new refurbished Swansea Leisure Centre on the north.

OBJECTIVES

To create a strong sense of place and an attractive leisure centre precinct.
 To encourage longer visitor duration and social connectivity by providing pleasant places to gather.
 To cater for a range of commercial and hospitality uses.

EXISTING CONSTRAINTS

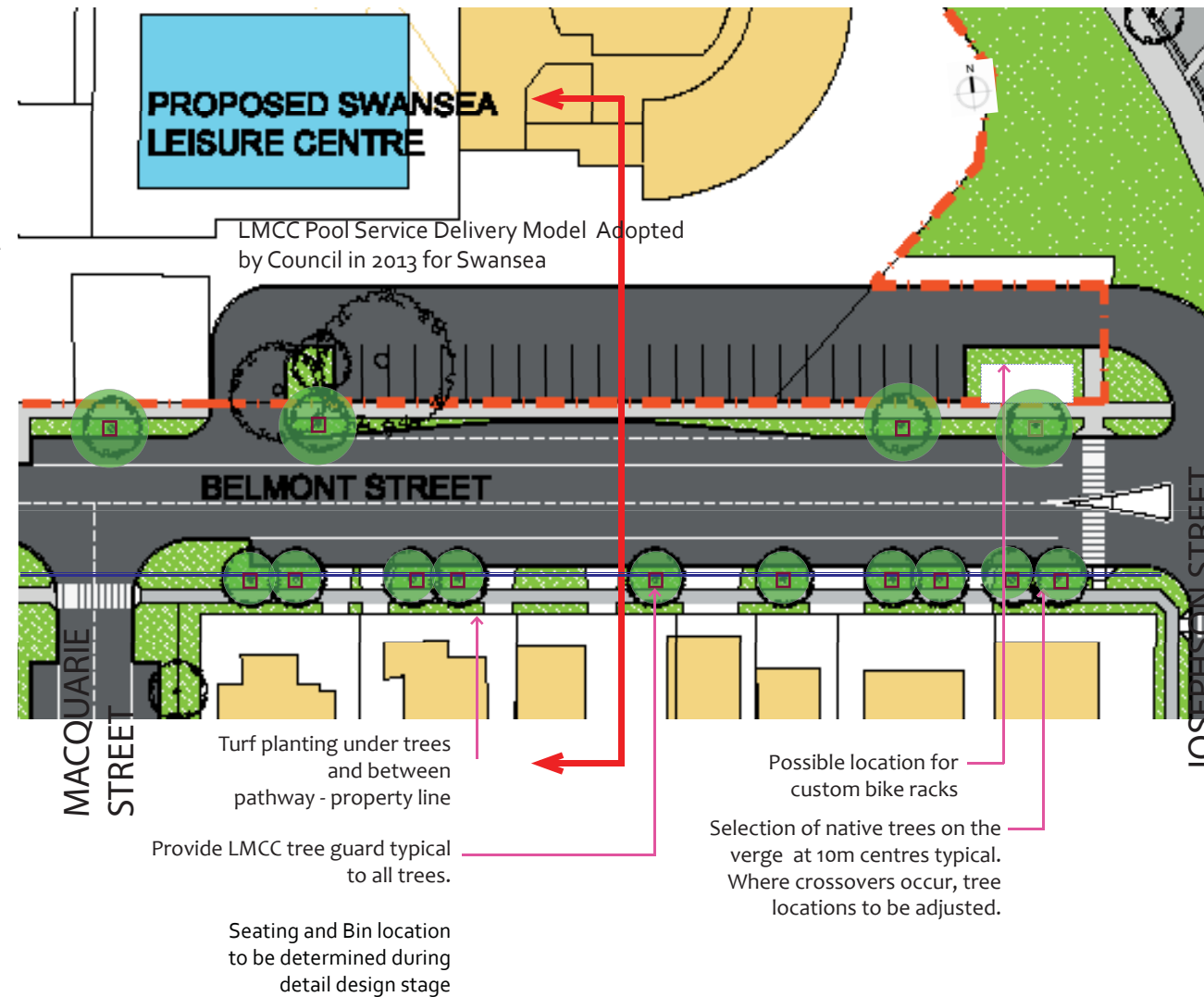
Patchwork of existing paving types.
 In-ground services, overhead power lines and power poles.

DESIGN RESPONSE

To provide for 1.5m wide footpath on southern side of street with small to medium tree planting under overhead power lines.
 To provide tree planting along car park area.
 To provide for appropriate safety elements including tactile indicators and pram ramps.
 To comply with CPTED (Crime Prevention Through Environmental Design) principals.

TYPICAL DIMENSIONS

Road reserve width: 20m.
 Verge width: 3.3m with 1.5m wide pathway on the south side.
 Parking lane : unmarked and as per RMS guidelines.



MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:

Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
 Locations: At key locations identified by LMCC including Bus Stop/Drop zone.
 Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations including Bus Stops, Taxi ranks, outside food outlets areas.

Bike Racks: Custom Bike rack

Locations: At the connecting footpath into the swim centre and as identified by LMCC

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.
 Other open space pavements: Property driveway crossovers in grey concrete broom finish.

Tactile:

Tactile Ground Surface Indicator (TGSi): **integrated** pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey turf on the verge.

Small to medium size trees on southern side under powerlines and large trees on the northern side.

Spacing: At 10m centres typical. Where crossovers occur, tree locations to be adjusted.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

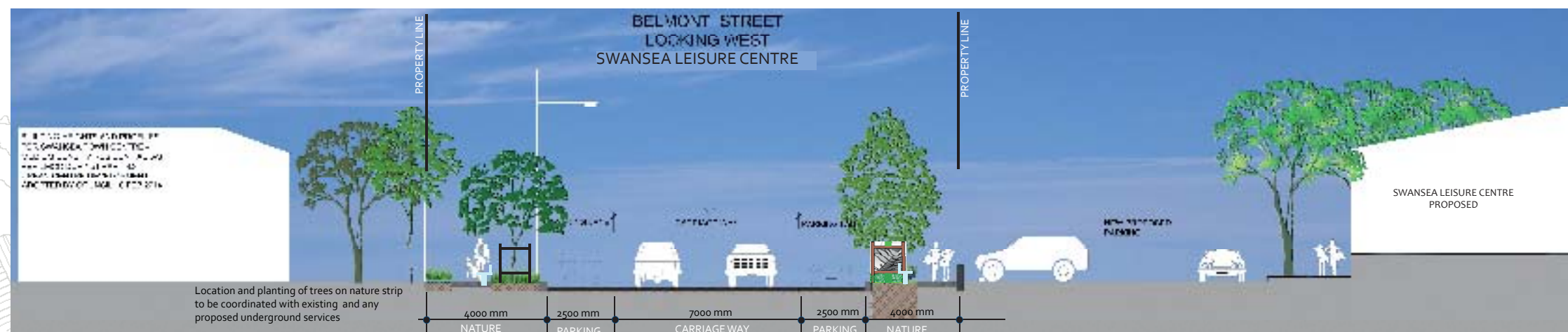
Tree Guards: Tree guard with Swansea custom infill panel on the north verge of street.

LMCC standard tree guard to trees on the south of street.

PLAN - BELMONT STREET 1:600@A3



KEY PLAN



SECTION 1:200@A3



CHANNEL STREET FORESHORE

ZONE: **RE1 & B2**

DESCRIPTION

This street type is located in the space between the proposed refurbishment of Swansea Leisure Centre and Channel Street forming an extension to the existing foreshore. A section of Channel Street is proposed to be disconnected as part of the Swansea Leisure Centre development.

OBJECTIVES

- To create a strong sense of place, an attractive foreshore precinct and to transform into a well developed landscaped space.
- To encourage longer visitor duration and social connectivity by providing pleasant places to gather.
- To cater for a range of public leisure activities with potential for playgrounds, lawn areas, promenade spaces which connect to the existing foreshore.
- To provide an innovative foreshore design that provides protection and public access while accommodating increase in sea levels.
- To introduce public art to depict local Aboriginal cultural elements.

EXISTING CONSTRAINTS

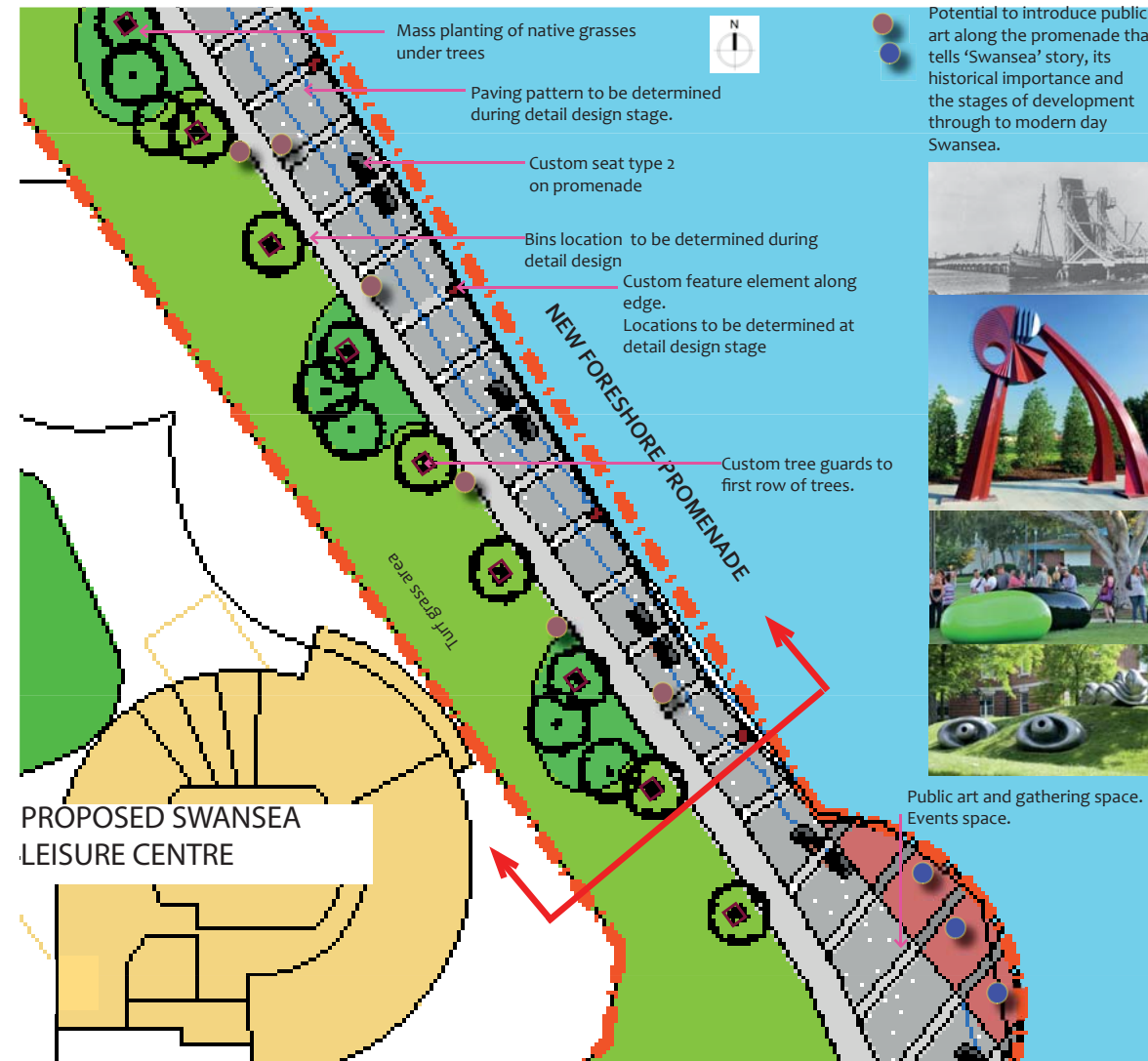
Removal of part of existing Channel Street as per LMCC Pool Service Delivery Model 2013 for Swansea Leisure Centre.

DESIGN RESPONSE

- To provide foreshore protection that can be easily adapted to Sea Level Rise.
- To provide landscaped area between the property line of Swansea Leisure Centre and the footpath.
- To extend existing pathway along the foreshore.
- To provide for appropriate safety elements like bollards, tactile indicators, pram ramps and pedestrian lighting.
- To provide for bins, artwork, lighting, shade structures, etc within the public open space.
- To provide for pod shaped custom design seating in precast concrete, tree planters and standard seating.
- To provide custom design shade structures along promenade.

TYPICAL DIMENSIONS

Road reserve width: 27-21m.
Hard pavement to design and pattern. TBA.



PLAN - CHANNEL STREET 1:1000@A3



KEY PLAN



SECTION 1:100@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Custom elements -

Pod shaped precast concrete seat type 1.
Location: At key locations in sets of 2 or 3 as may be determined at detail design stage.

Rectangular precast concrete seat type 2.
Locations: At key locations identified by LMCC

Provide seating at a **maximum** of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations including Bus Stops, Taxi ranks, outside food outlets areas.

Bike Racks: Custom Bike rack (Refer page 19.)

Locations: At locations as determined by LMCC at detail design stage.

Drinking Fountains:

Locations: At key locations along the promenade as determined at detail design stage.

Bollards:

Locations: where required to prevent unauthorised vehicular access.
Location: Along the foreshore.

PAVEMENT

Footpath:

Main Body: **Concrete segmental flags** as specified in the *Swansea Streetscape Technical Guidelines*
Border and banding: **Concrete segmental flags** as specified in the *Swansea Streetscape Technical Guidelines*

Tactile:

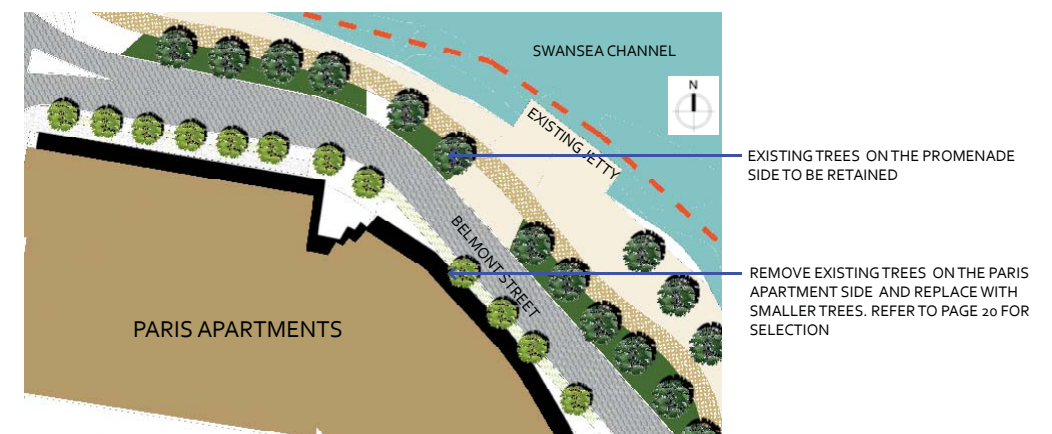
Tactile Ground Surface Indicator (TGSi): **integrated pavers** set-out to AS1428.4

STREET PLANTING

Trees: Large trees and understorey planting with seating and planting edges on promenade. Small to medium size park trees on the building side.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

Tree Guards: **Tree guard with Swansea custom infill panel**



SECTION 1:250@A3



WOOD STREET ZONE: B2 LOCAL CENTRE & R3

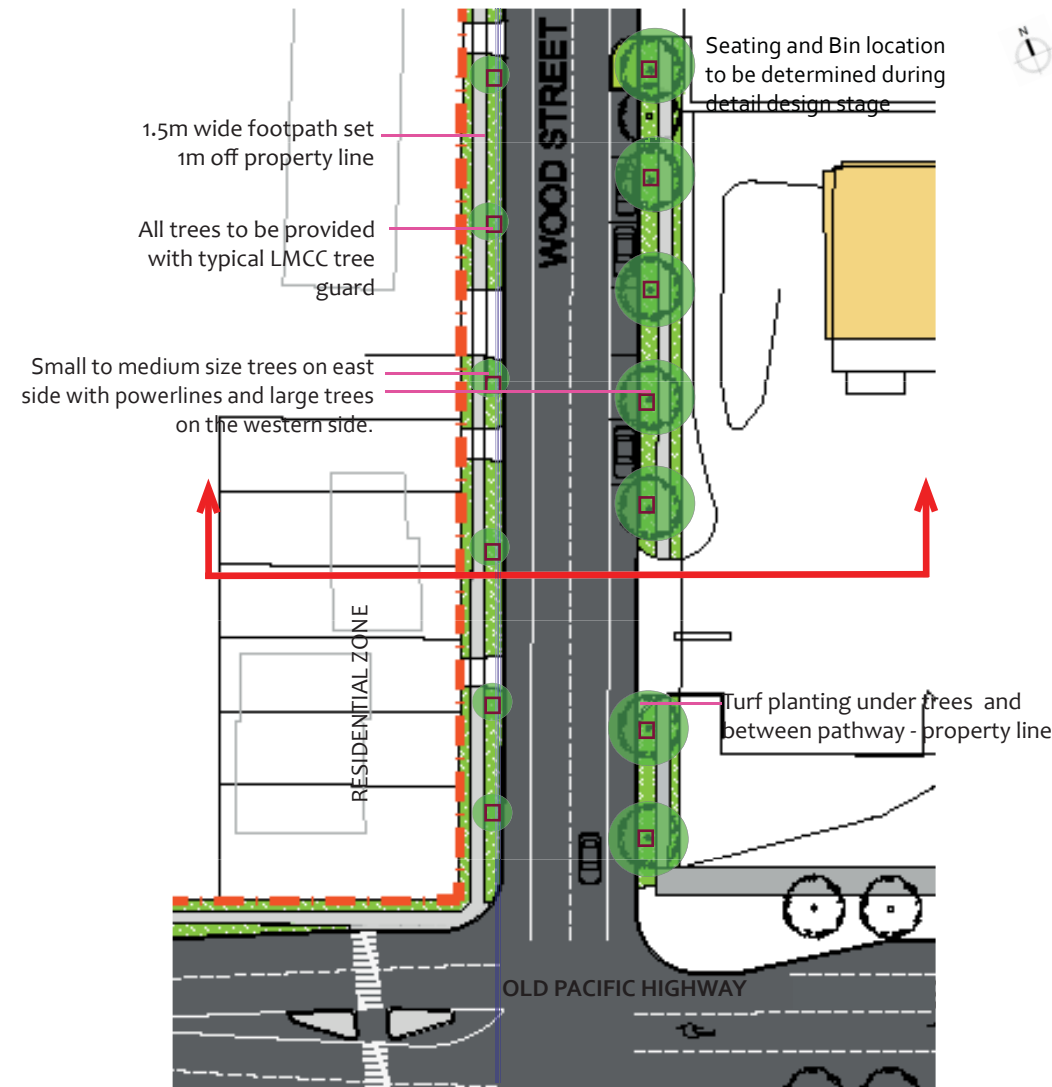
DESCRIPTION
This street type is located on the south of the town centre, between Lake Road and Old Pacific Highway, with B2 Local Centre on the eastern side and residential on the west. Almost all of the eastern side is rear access car parking serving the shops on Pacific Highway.

OBJECTIVES
To create a strong sense of place.
To encourage longer visitor duration and social connectivity.
To cater for a range of retail, commercial, hospitality and a number of aged care and senior living uses.

EXISTING CONSTRAINTS
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE
To provide for unmarked parallel parking on both sides.
To provide 1.5m wide footpaths.
To provide for appropriate safety elements including tactile indicators and pram ramps.
To comply with CPTED - Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS
Road reserve width: 20m
Verge width: 3.3m with 1.5m wide pathway on both sides.
Parking lane : unmarked and as per RMS guidelines.



PLAN - WOOD STREET 1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:
Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:
Locations: At existing and key locations including Bus Stops, Taxi ranks and food outlet areas.

PAVEMENT

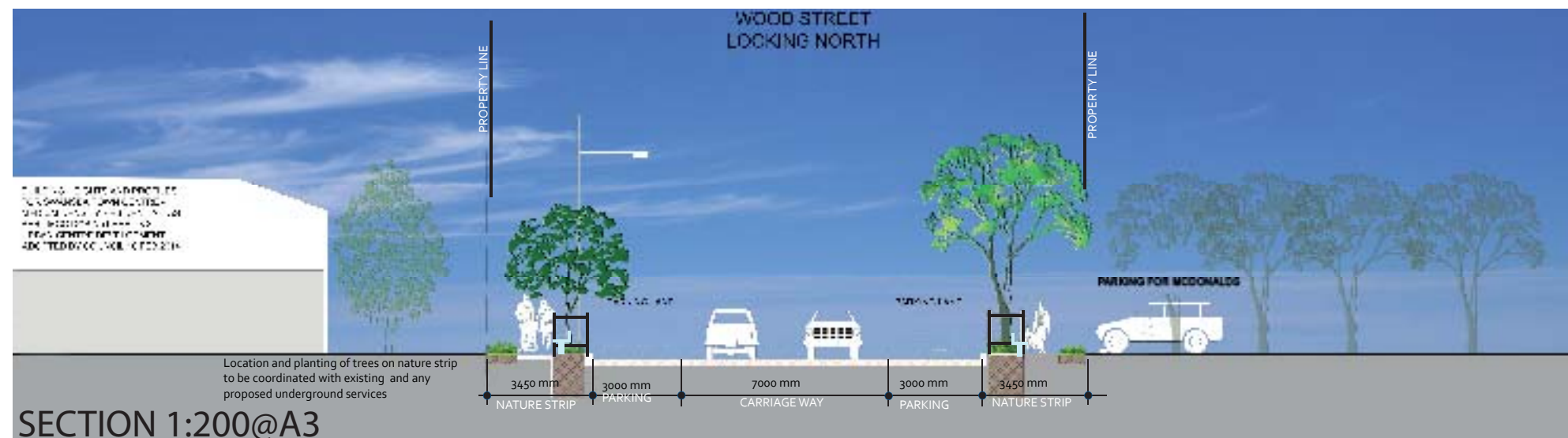
Footpath:
Body: In-situ concrete pavement to LMCC guidelines.
Other open space pavements: Property driveway crossovers in grey concrete broom finish.
Tactile:
Tactile Ground Surface Indicator (TGS): integrated pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey planting to verge.
Small to medium size trees on east side with powerlines and large trees on the western side.
Spacing: 10m centres typical. Where crossovers occur, tree locations to be adjusted.
Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.
Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@A3



PEEL STREET ZONE: B4 & R3

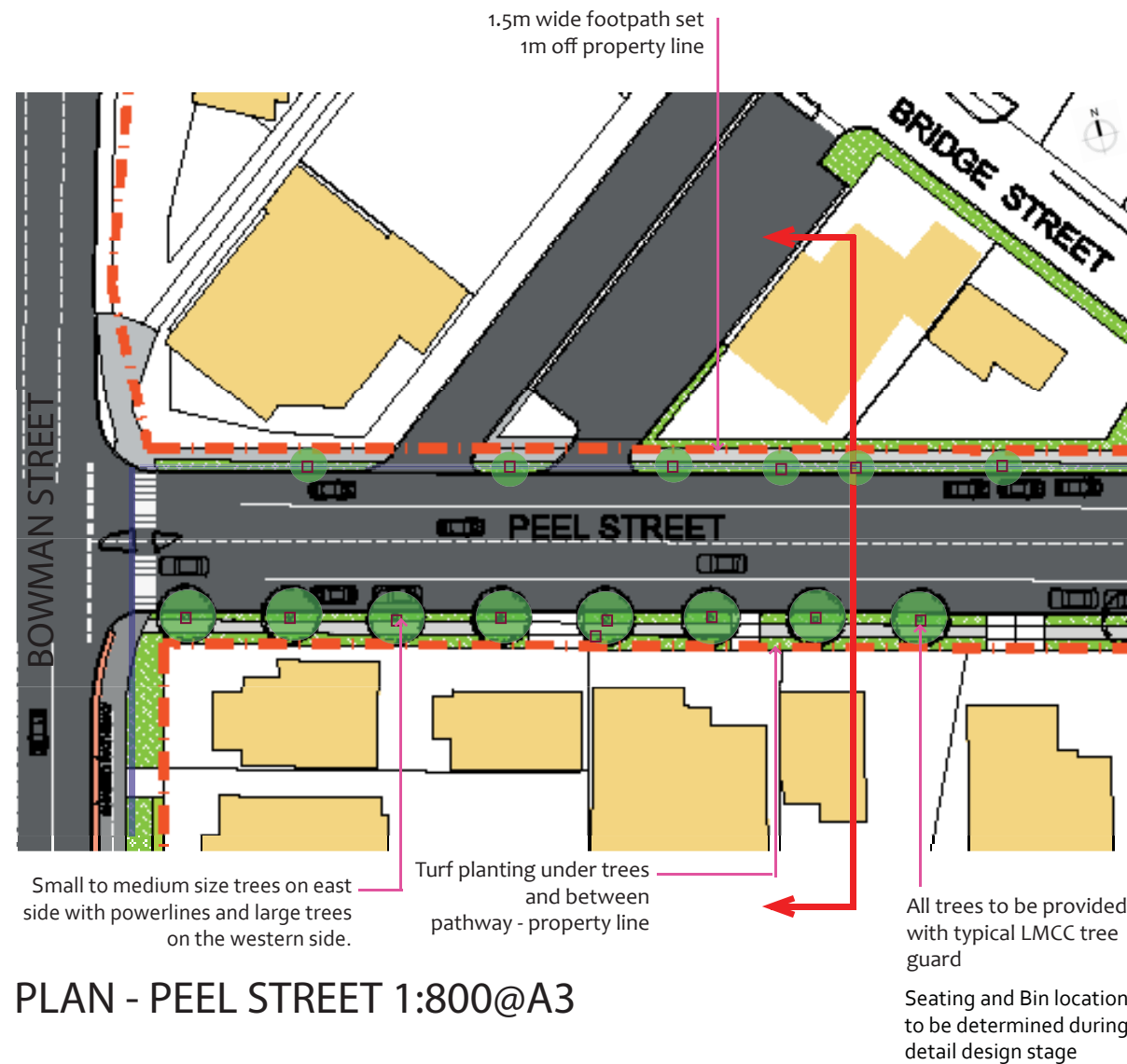
DESCRIPTION
This Street type is located in a east-west direction from Bowman Street towards Black Ned's Bay. Peel street is a mixed zone street with footpaths on both sides. The RSL is located on the north of the street. Residential zone on the south.

OBJECTIVES
To create a strong sense of place.
To create pedestrian links and provide shade with street trees.

EXISTING CONSTRAINTS
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE
To provide for unmarked parallel parking on both sides, and widening of existing footpath to 1.5m wide. Potential to introduce marina and public jetties at end of the street.
To provide for appropriate safety elements where necessary including tactile indicators and pram ramps.
To comply with CPTED - Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS
Road reserve width: 20m.
Verge width: 3.3m with 1.5m wide pathway on the both sides.
Parking lane : unmarked and as per RMS guidelines.



PLAN - PEEL STREET 1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

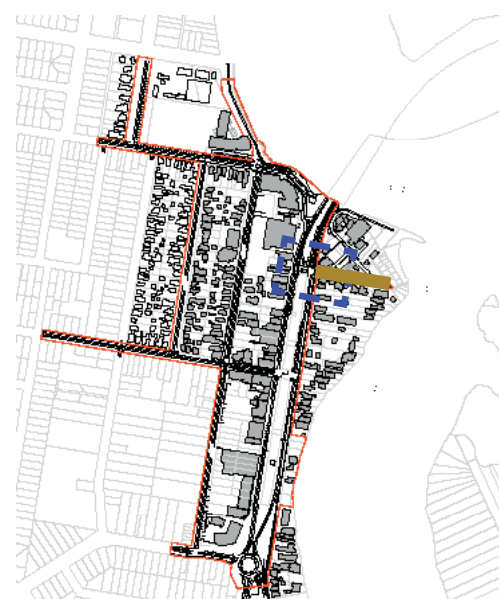
Seats:
Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:
Locations: At existing and key locations including Bus Stops, Taxi ranks, outside food outlets areas.

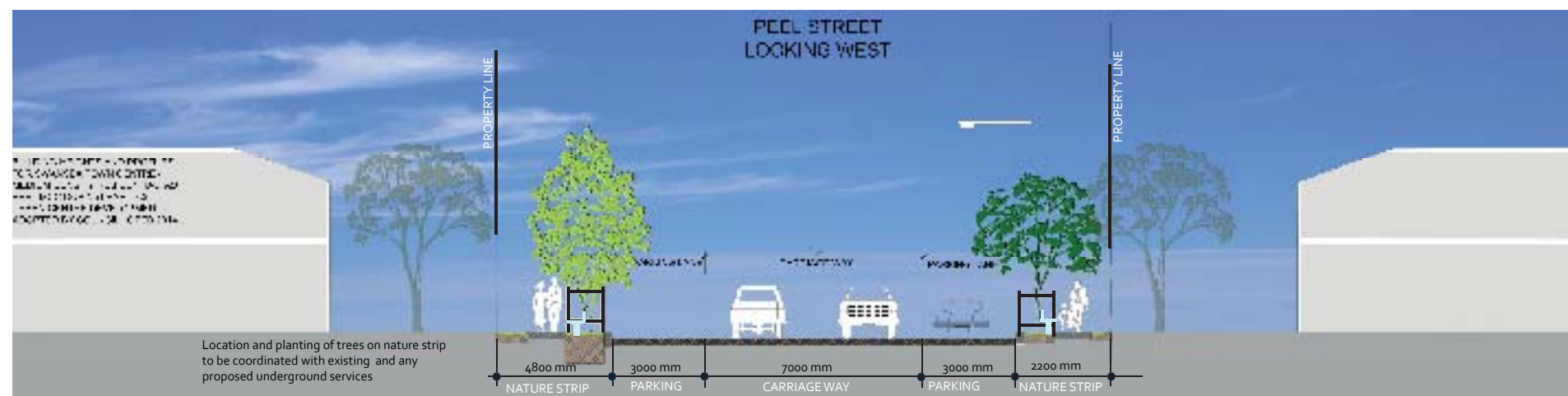
Bike Racks:
Type: Swansea standard bike rack selection, refer to the *Swansea Streetscape Technical Guidelines*.
Locations: At key locations identified by LMCC.

PAVEMENT
Footpath:
Body: In-situ concrete pavement to LMCC guidelines.
Other open space pavements: Property driveway crossovers in grey concrete broom finish.
Tactile:
Tactile Ground Surface Indicator (TGSi): *integrated* pavers set-out to AS1428.4

STREET PLANTING
Trees: Street trees and understorey turf to verge.
Small to medium size trees on north side under powerlines and large trees on the southern side.
Spacing: 10m centres typical. Where crossovers occur, tree locations to be adjusted.
Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.
Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@A3



BELMONT STREET ZONE: R3 & RE1

DESCRIPTION

This street type runs east-west direction along Quinn Park, which is on the northern side of street.

OBJECTIVES

To create a strong sense of place and compliment Quinn Park.
To encourage longer visitor duration and social connectivity by providing pleasant places to gather.

EXISTING CONSTRAINTS

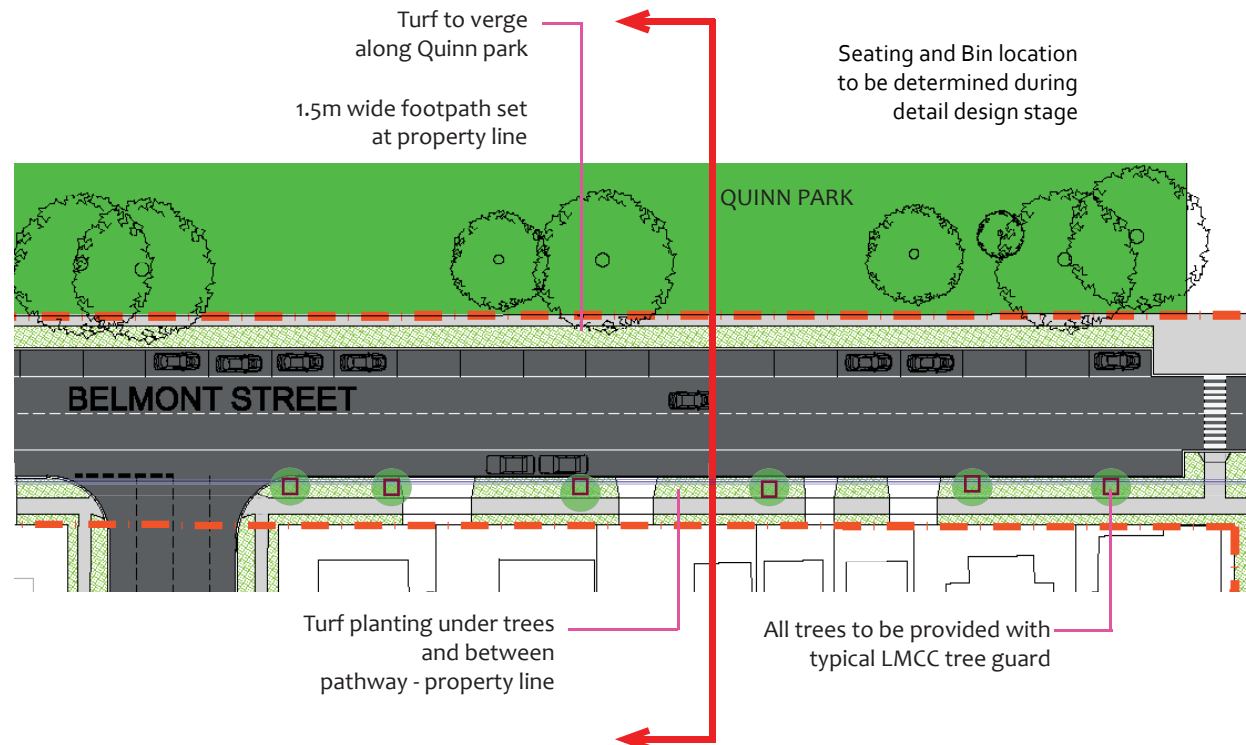
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE

To provide pathway along the park and link with pedestrian crossing near proposed Swansea Leisure Centre.
To provide for unmarked parallel parking on both sides, and widening of existing footpath to 1.5m wide.
To provide for appropriate safety elements where necessary including tactile indicators and pram ramps.
To comply with CPTED- Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS

Road reserve width: 20m
Verge width: 3.3m with 1.5m wide pathway on the south side.
Parking lane : unmarked and as per RMS guidelines.



PLAN - BELMONT STREET, QUINN PARK 1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:

Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC. Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations identified by LMCC.

Bike Racks:

Type: Swansea standard bike rack selection, refer to the *Swansea Streetscape Technical Guidelines*.
Locations: At the connecting footpath into Swansea Leisure Centre, if applicable.

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.
Other open space pavements: Property driveway crossovers in grey concrete broom finish.

Tactile:

Tactile Ground Surface Indicator (TGSi): **Integrated** pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey turf planting to verge.

Small to medium size trees on southern side under powerlines.

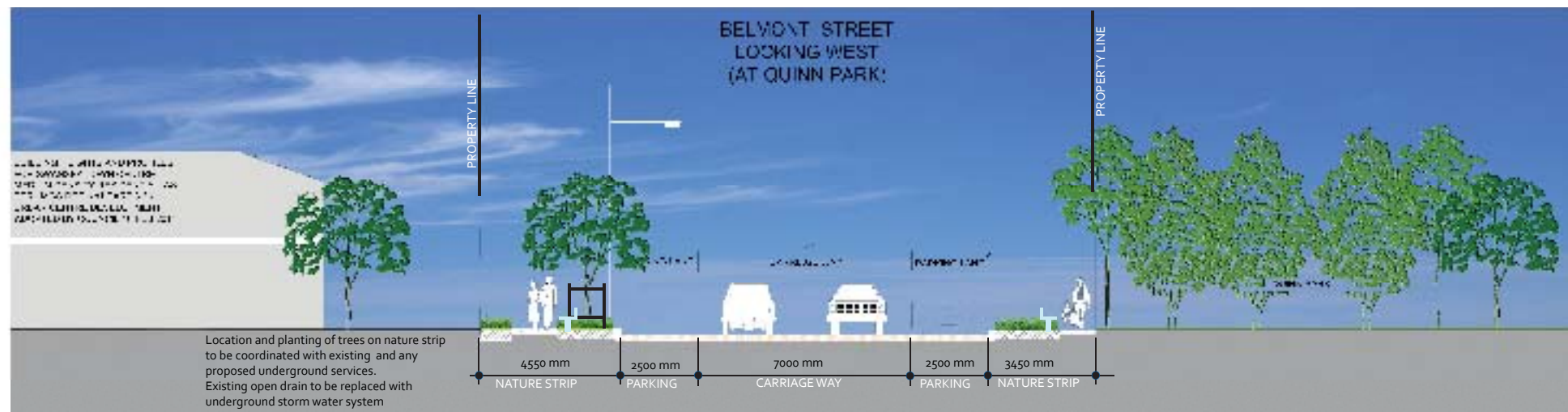
Spacing: 10m centres typical. Where crossovers occur, tree locations to be adjusted.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@A3



GALGABBA STREET ZONE: R3 & RE1

DESCRIPTION

This Street type runs north- south, Residential zone on the west and Quinn Park on the east.

OBJECTIVES

To create a well planned residential streetscape with avenue planting on both sides.

To create straight access along the property line of Quinn Park for safe pedestrian movement.

EXISTING CONSTRAINTS

Wide verge on the west of the road is being used as a unregulated parking area.

Patchwork of existing paving types.

In-ground services, overhead power lines and power poles.

DESIGN RESPONSE

To provide 1.5m wide pathway 2m off the kerb on the residential side.

To provide 1.5m wide pathway 1m off property line on Quinn Park side.

To provide for unmarked parallel parking on residential side and marked parking on Quinn Park side.

To provide for appropriate safety elements where necessary including, tactile indicators and pram ramps.

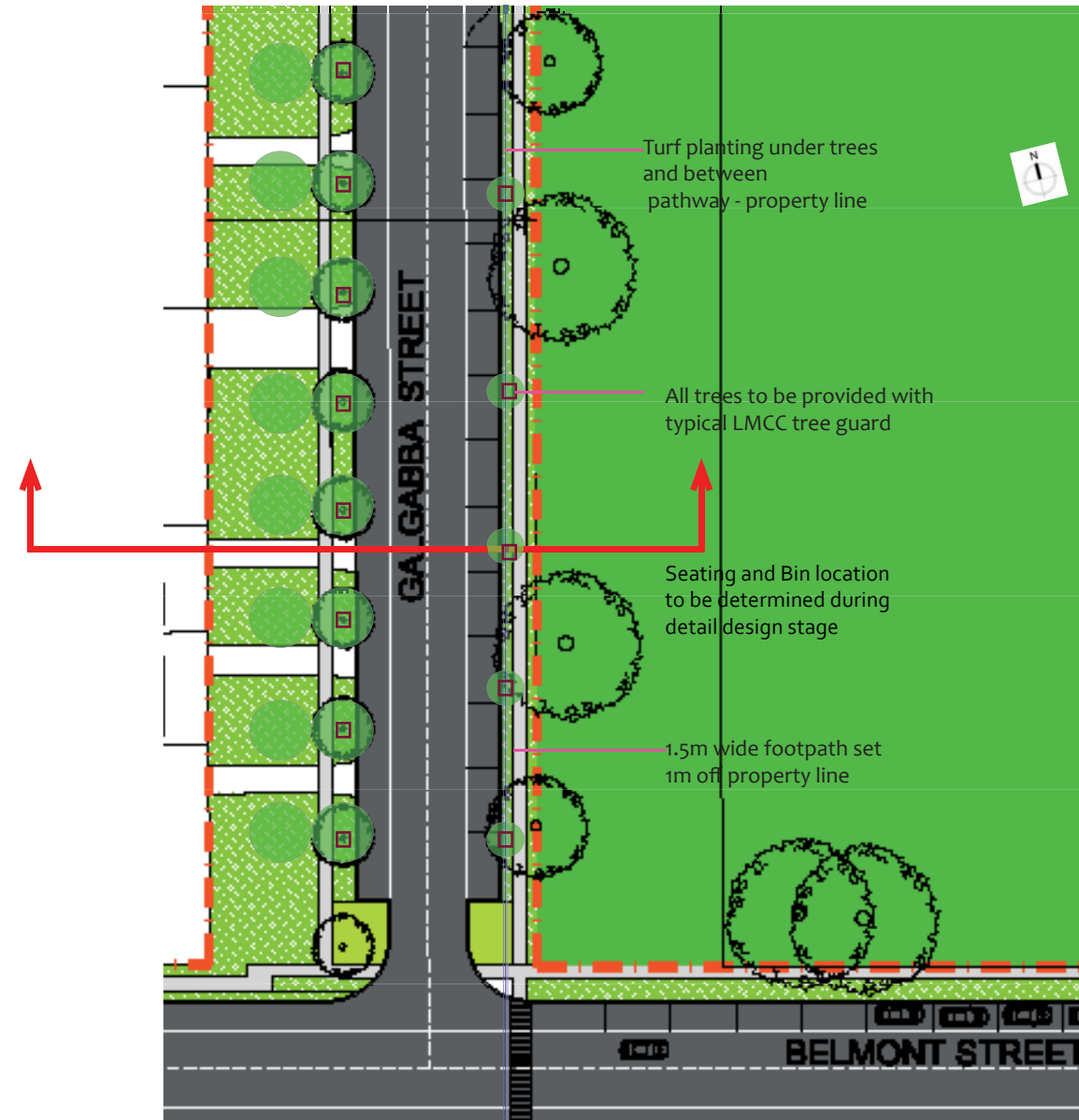
To comply with CPTED Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS

Road reserve width: 30m.

Verge width: 3.3m with 1.5m wide pathway on the park side.

Parking lane : unmarked on residential side marked on park side as per RMS guidelines.



PLAN - GALGABBA STREET 1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:

Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*

Locations: At key locations identified by LMCC, including bus stop/ drop zone.

Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations including Bus Stops areas.

Bike Racks:

Type: Swansea standard bike rack selection, refer to the *Swansea Streetscape Technical Guidelines*.

Locations: At the connecting footpath into the swim centre.

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.

Other open space pavements: Property driveway crossovers in grey concrete broom finish.

Tactile:

Tactile Ground Surface Indicator (TGSi): **integrated** pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey turf planting to verge.

Small to medium size trees under powerlines on Quinn Park side and 2 rows of large native trees on the western side.

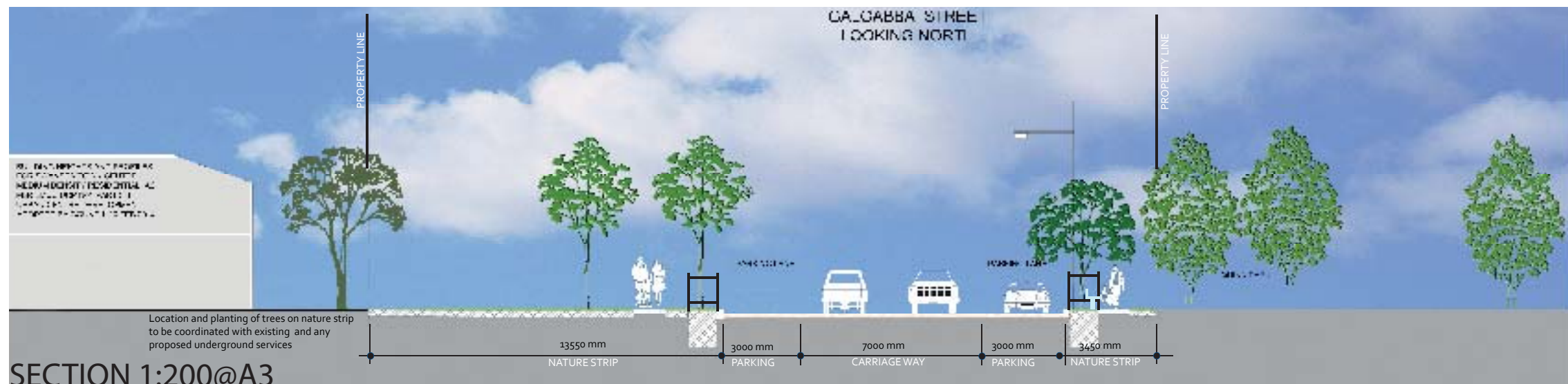
Spacing: 10m centres typical. Where crossovers occur, tree locations to be adjusted.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@A3



LAKE ROAD ZONE: R3

DESCRIPTION

Located between Pacific Highway and Macquarie Street, an extension of Street type 2.
This street provides a major linkage and route from Pacific Highway to Swansea foreshore. It is important to maintain an attractive and efficient treatment to this area.

OBJECTIVES

To create a residential streetscape with pathways and grass verges.
To encourage large tree planting to create vistas and provide shade to the street.

EXISTING CONSTRAINTS

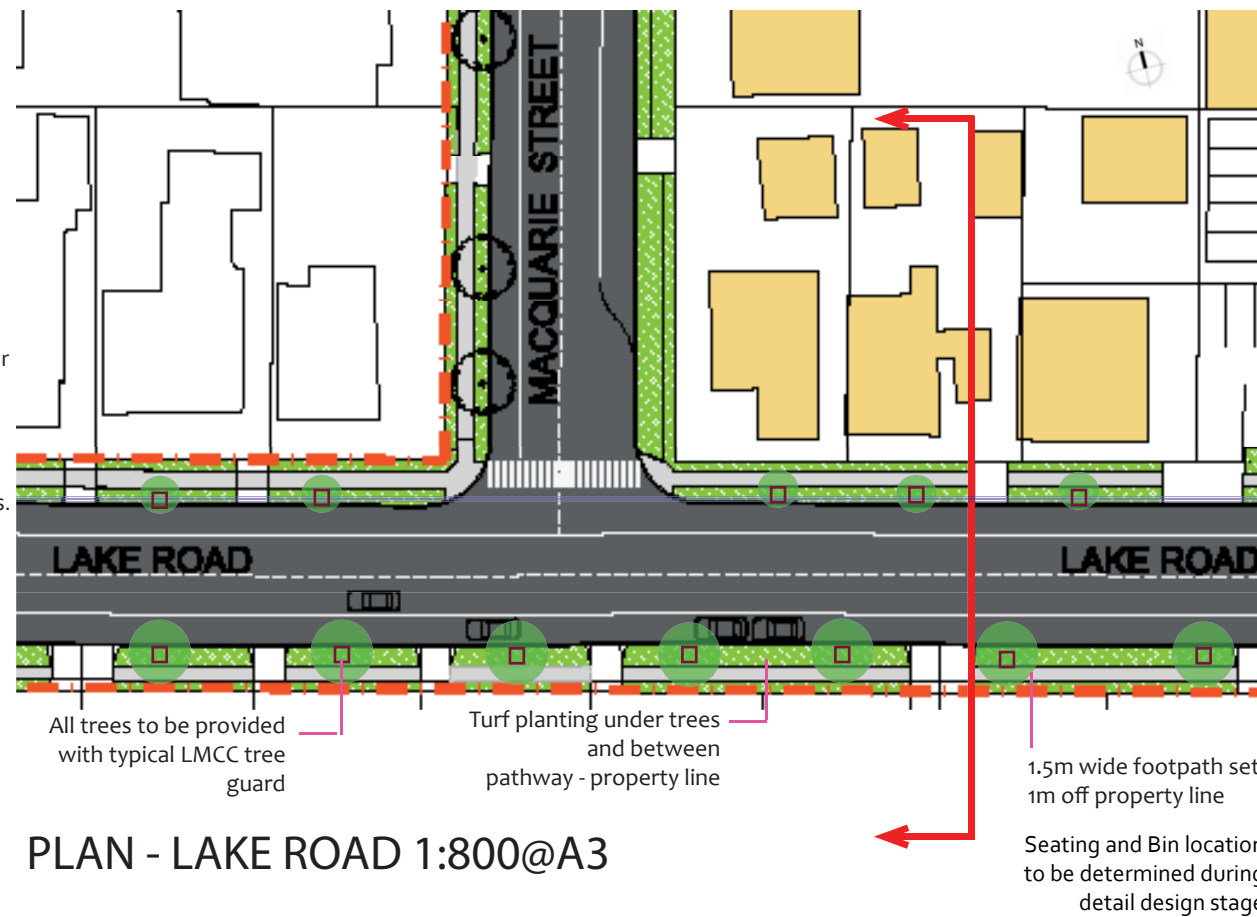
Patchwork of existing paving types.
In-ground services, open storm water drains, overhead power lines and power poles.

DESIGN RESPONSE

To provide 1.5m wide pathway 1m off the kerb on both sides of street.
To provide for appropriate safety elements like tactile indicators, pram ramps.
To comply with CPTED - Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS

Road reserve width: 20m.
Verge width: 3.3m with 1.5m wide pathway on both sides of the road.
Parking lane : unmarked and as per RMS guidelines.



MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:

Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations including Bus Stop areas.

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.
Other open space pavements: Property driveway crossovers in grey concrete broom finish

Tactile:

Tactile Ground Surface Indicator (TGSi): integrated pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey turf planting to verge.

Small to medium size trees on north side under power lines. Large native trees on the southern side.

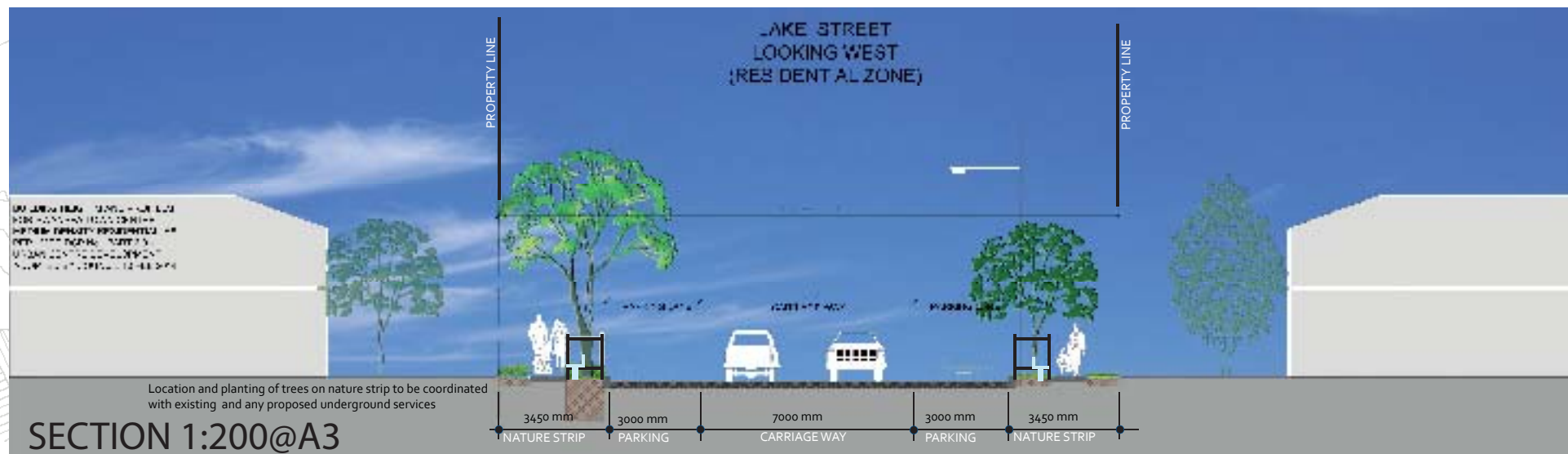
Spacing: 10m centres typical. Where crossovers occur, tree locations to be adjusted.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



MACQUARIE STREET

ZONE: R3

DESCRIPTION

This Street type runs north south between Belmont and Lake streets. Residential zones on both sides.

OBJECTIVES

To create a residential streetscape with pathway and grass verge.
To encourage large tree planting to create vistas and provide shade to the street.

EXISTING CONSTRAINTS

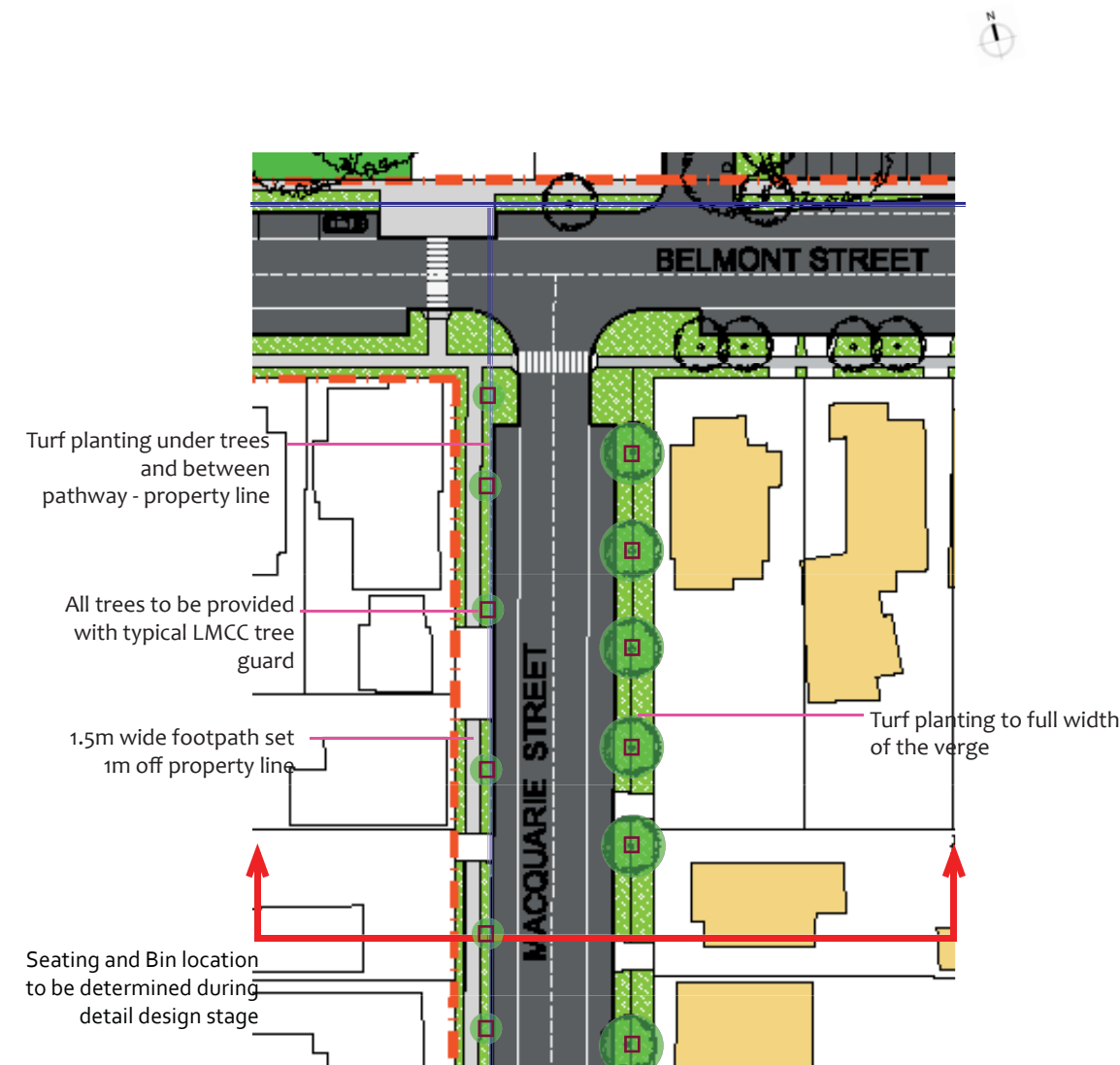
Patchwork of existing paving types.
In-ground services, overhead power lines and power poles.

DESIGN RESPONSE

To provide 1.5m wide pathway 1m off the kerb on the west side of the street.
To provide total grassed verge on the east side of the street.
To provide for appropriate safety elements including tactile indicators and pram ramps.
To comply with CPTED- Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS

Road reserve width: 20m.
Western Verge width: 1.5m wide pathway 1m off property line.
Eastern Verge width: No pathway. Totally grass verge.
Parking lane : unmarked as per RMS guidelines.



PLAN - MACQUARIE STREET 1:800@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Seats:

Type: Swansea standard selection, refer to the *Swansea Streetscape Technical Guidelines*
Locations: At key locations identified by LMCC.
Provide seating at a maximum of 60m intervals to comply with disabled/ ageing requirements.

Waste & Recycling Receptacles – Bins:

Locations: At existing and key locations including Bus Stops / drop off zones.

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.
Other open space pavements Property driveway crossovers in grey concrete broom finish.

Tactile:

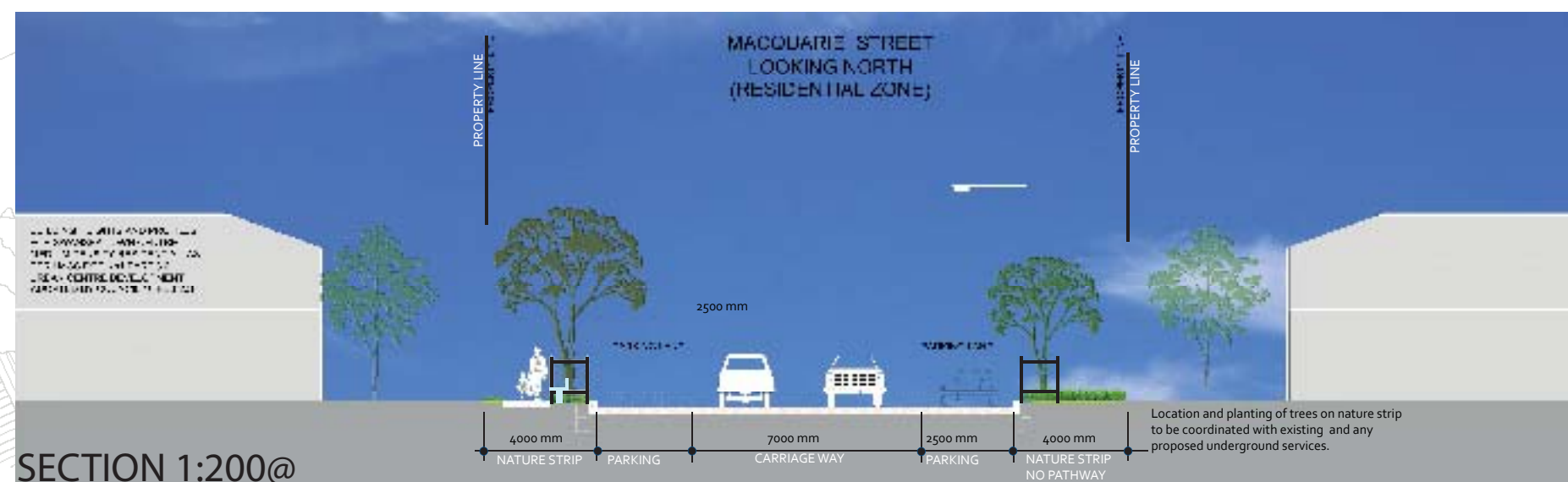
Tactile Ground Surface Indicator (TGSi): *integrated* pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and turf understorey to verge.
Small to medium size trees on west side under power lines . Large native trees on east side.
Spacing: At 10m centres typical. Where crossovers occur, tree locations to be adjusted.
Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.
Tree Guards: LMCC standard tree guard, paint finish as specified in the *Swansea Streetscape Technical Guidelines*



KEY PLAN



SECTION 1:200@



JOSEPHSON LANEWAY

ZONE: B2

DESCRIPTION

This street type is a lane-way between Pacific Highway and Josephson Street along car parking areas.

OBJECTIVES

To create a strong pedestrian connection between the streets.
To encourage movement by providing a safe and attractive environment and providing clear sight lines for pedestrians.
To provide art installation opportunities.

EXISTING CONSTRAINTS

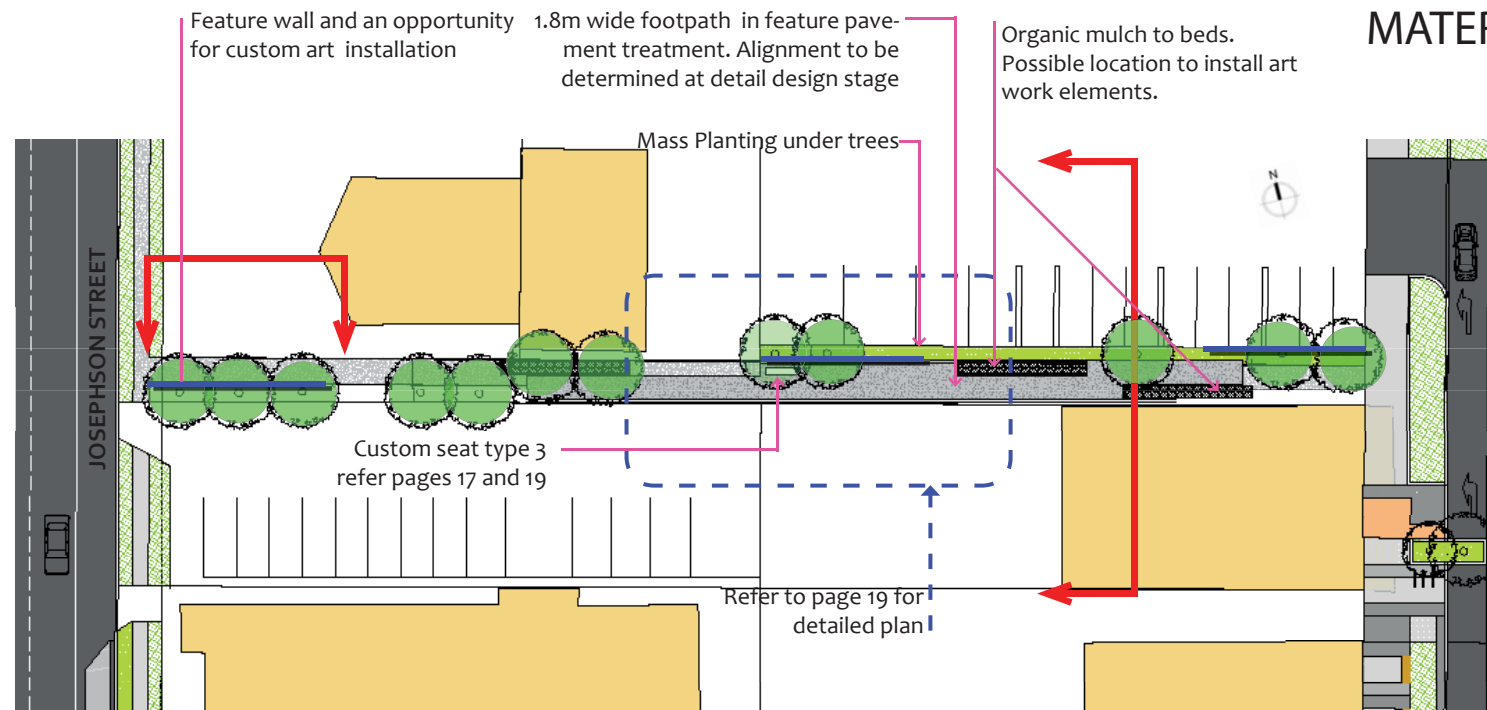
Narrow pathway.
Over growth of trees with low limbs.

DESIGN RESPONSE

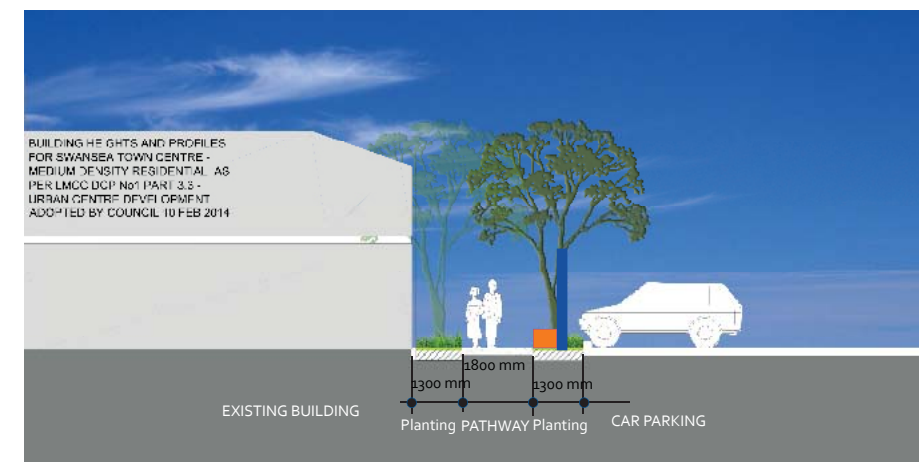
To provide a 1.8m wide concrete pathway.
To provide tall trees with clear trunks for clear sight lines.
To provide mulched soft areas and understorey planting.
To provide for appropriate safety elements like tactile indicators, pram ramps.
To comply with CPTED- Crime Prevention Through Environmental Design principles.

TYPICAL DIMENSIONS

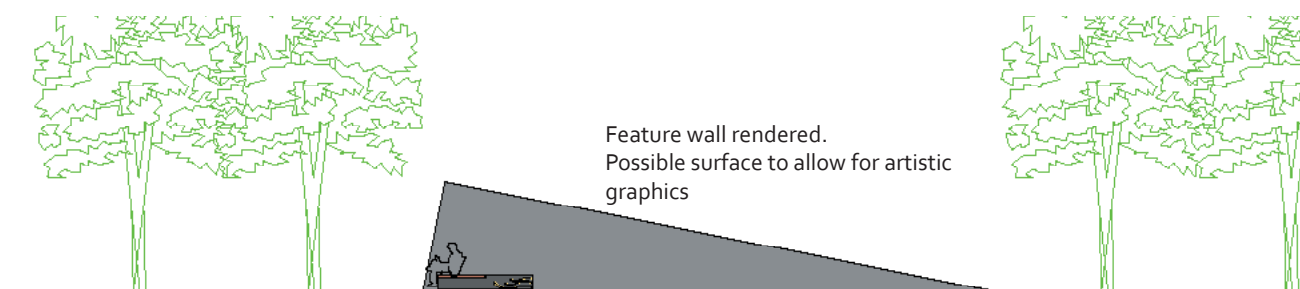
Lane way width: 3.5m.
Verge width: 1m mulched / planted sides.



PLAN - JOSEPHSON LANE WAY 1:800@A3



SECTION 1:200@A3



ELEVATION OF FEATURE WALL 1:200@A3

MATERIALS AND FURNITURE SELECTION

The following provides general guidelines for the location of furniture elements. Specific locations for furniture items are to be determined by LMCC at detailed design stage. Additional furniture items may be required for some developments.

Refer to the *Swansea Streetscape Technical Guidelines* for specification guidance on streetscape element selections and pavement types.

FURNITURE

Custom Seat: Seat type 3. Refer page 17.
Locations: At key locations identified by LMCC

Waste & Recycling Receptacles – Bins.

Locations: At key locations including the start and end of lane-way.

PAVEMENT

Footpath:

Body: In-situ concrete pavement to LMCC guidelines.

Feature: Coloured concrete, colour as specified in the *Swansea Streetscape Technical Guidelines*. Broom finish to LMCC guidelines.

Tactile:

Tactile Ground Surface Indicator (TGSi): integrated pavers set-out to AS1428.4.

STREET PLANTING

Trees: Street trees and understorey planting to verge.

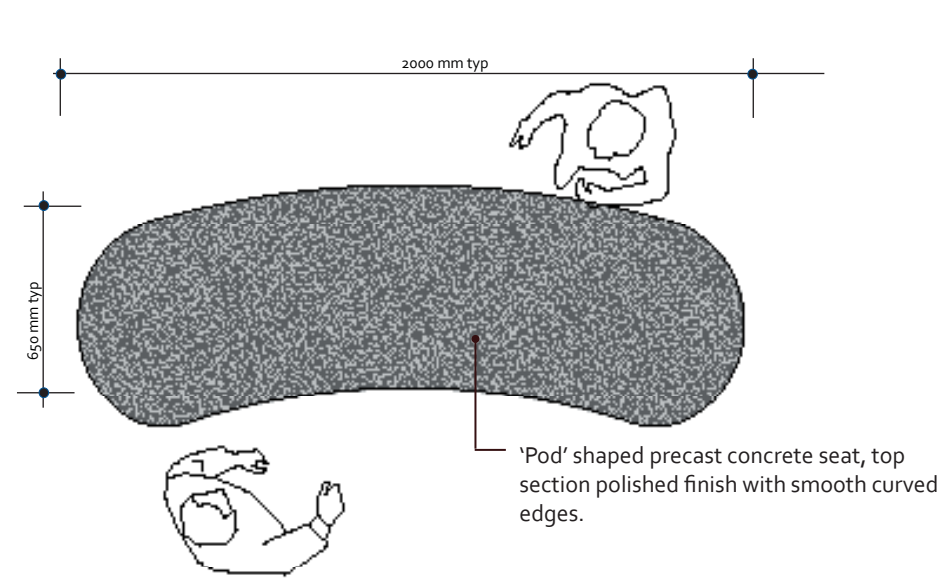
Spacing: Grouping of max. 3 trees and not exceeding 15m between groups.

Location and planting of trees on nature strip to be coordinated with existing and any proposed underground services.

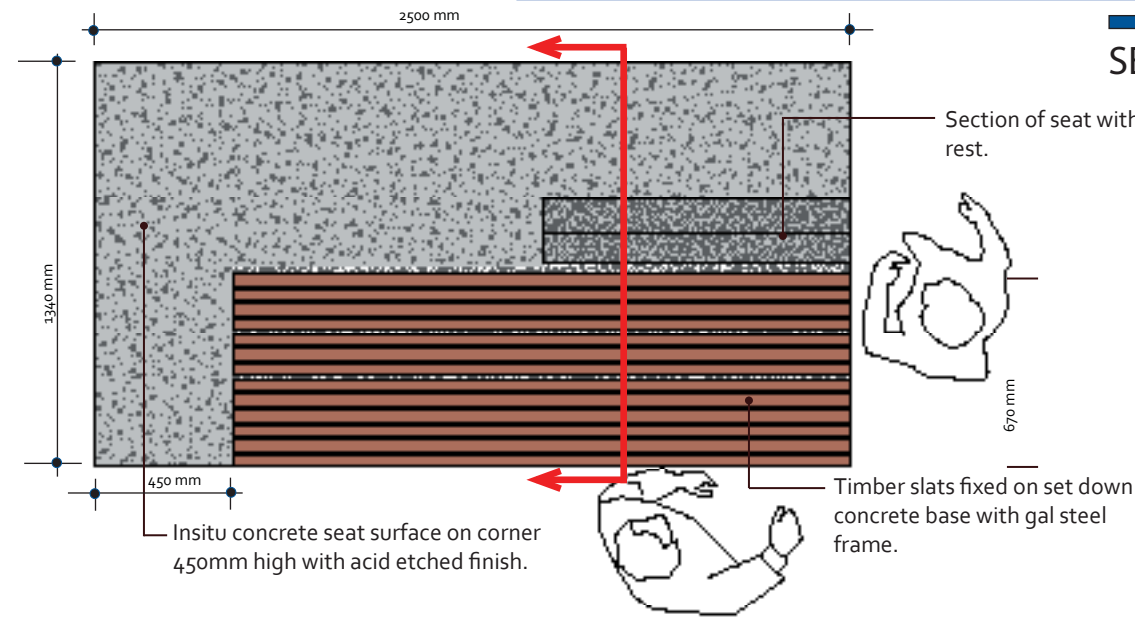
Tree Guards: N/A



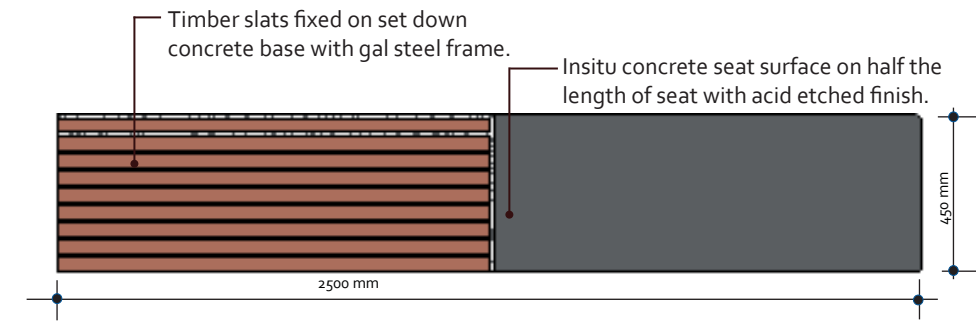
KEY PLAN



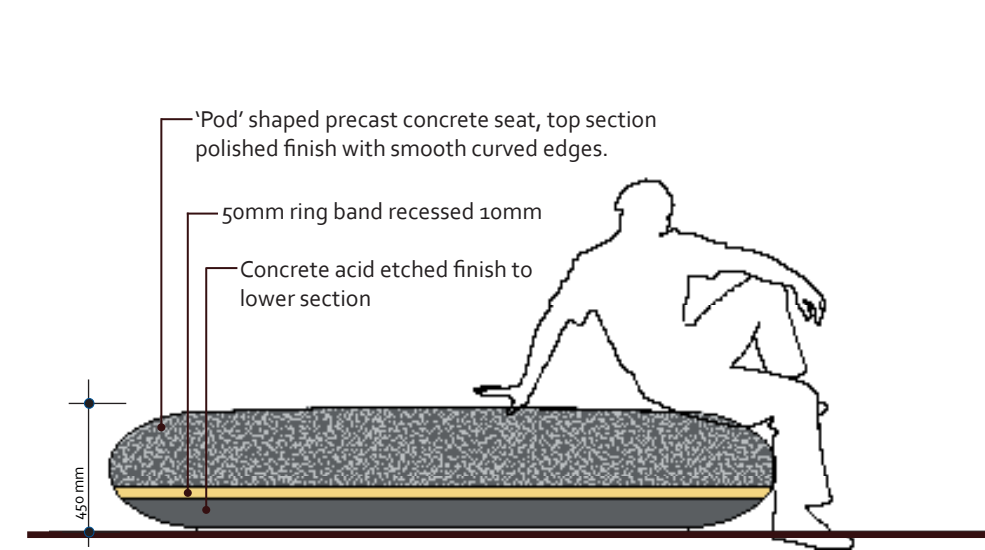
SEAT TYPE 1 - PLAN 1:25@A3



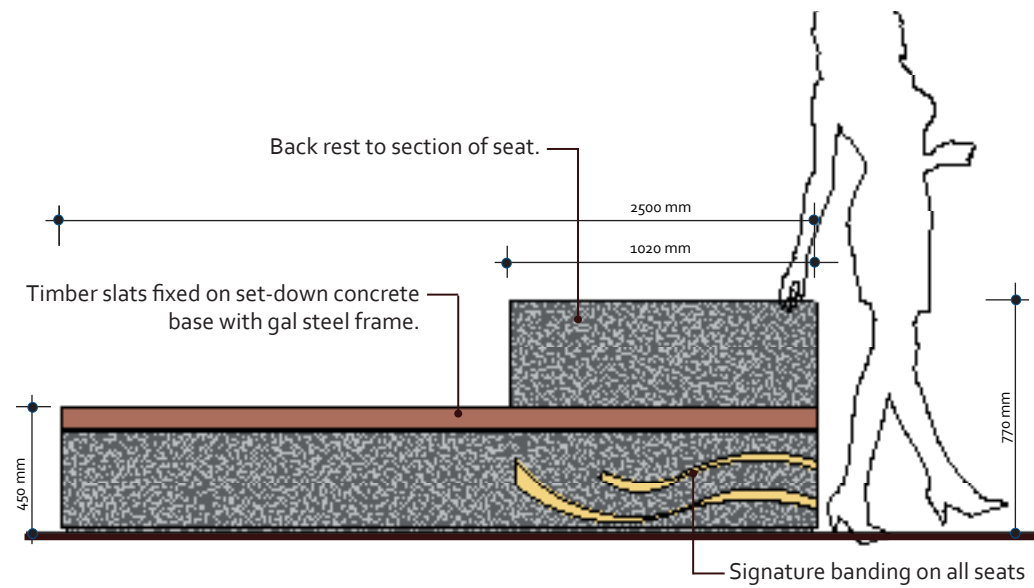
SEATING



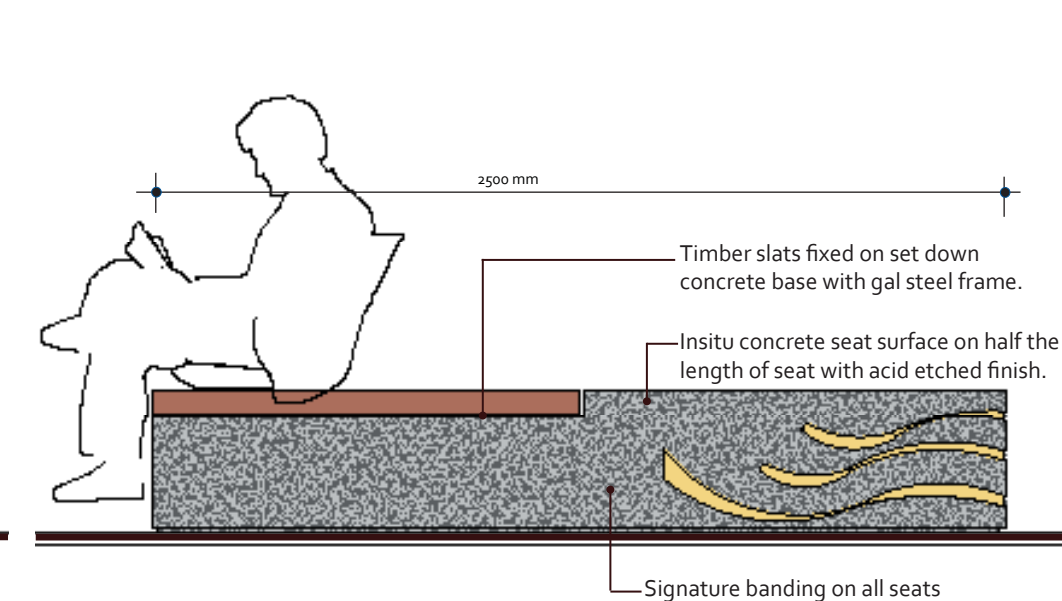
SEAT TYPE 3 - PLAN 1:25@A3



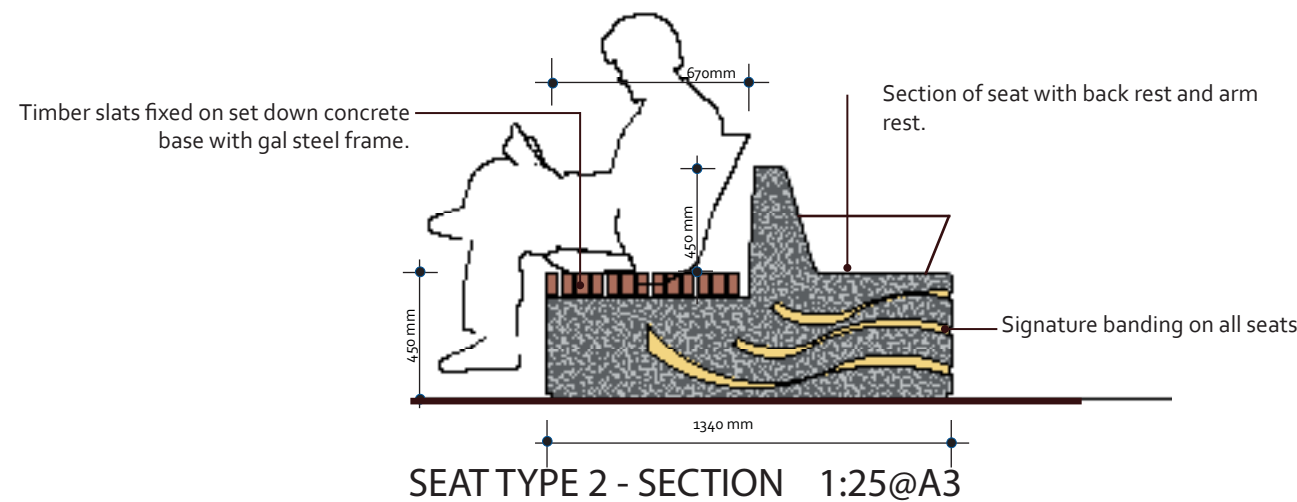
SEAT TYPE 1 - ELEVATION 1:25@A3



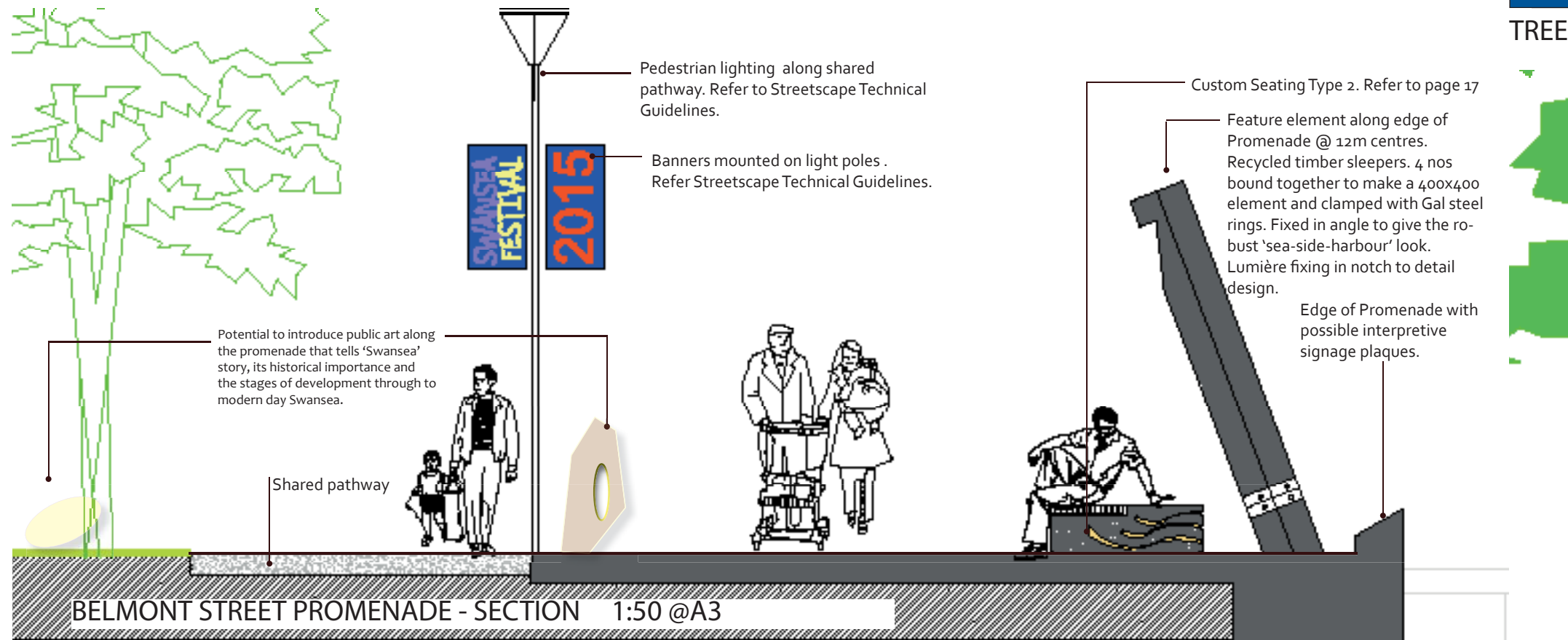
SEAT TYPE 2 - ELEVATION 1:25@A3



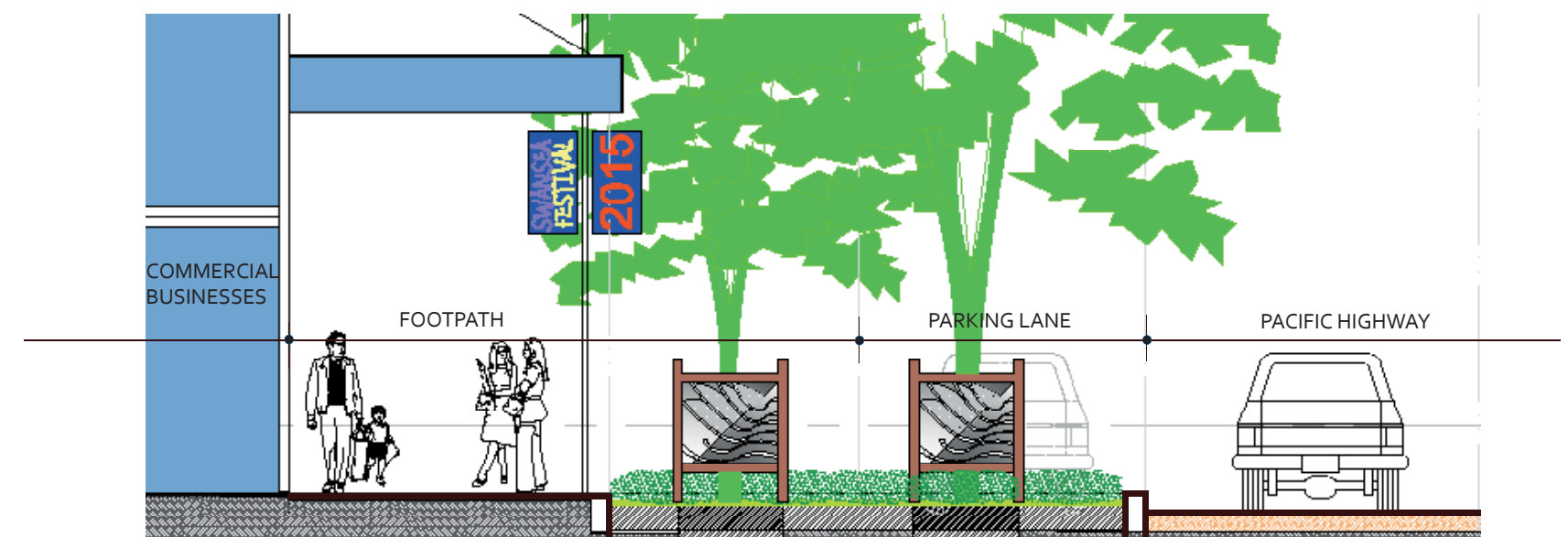
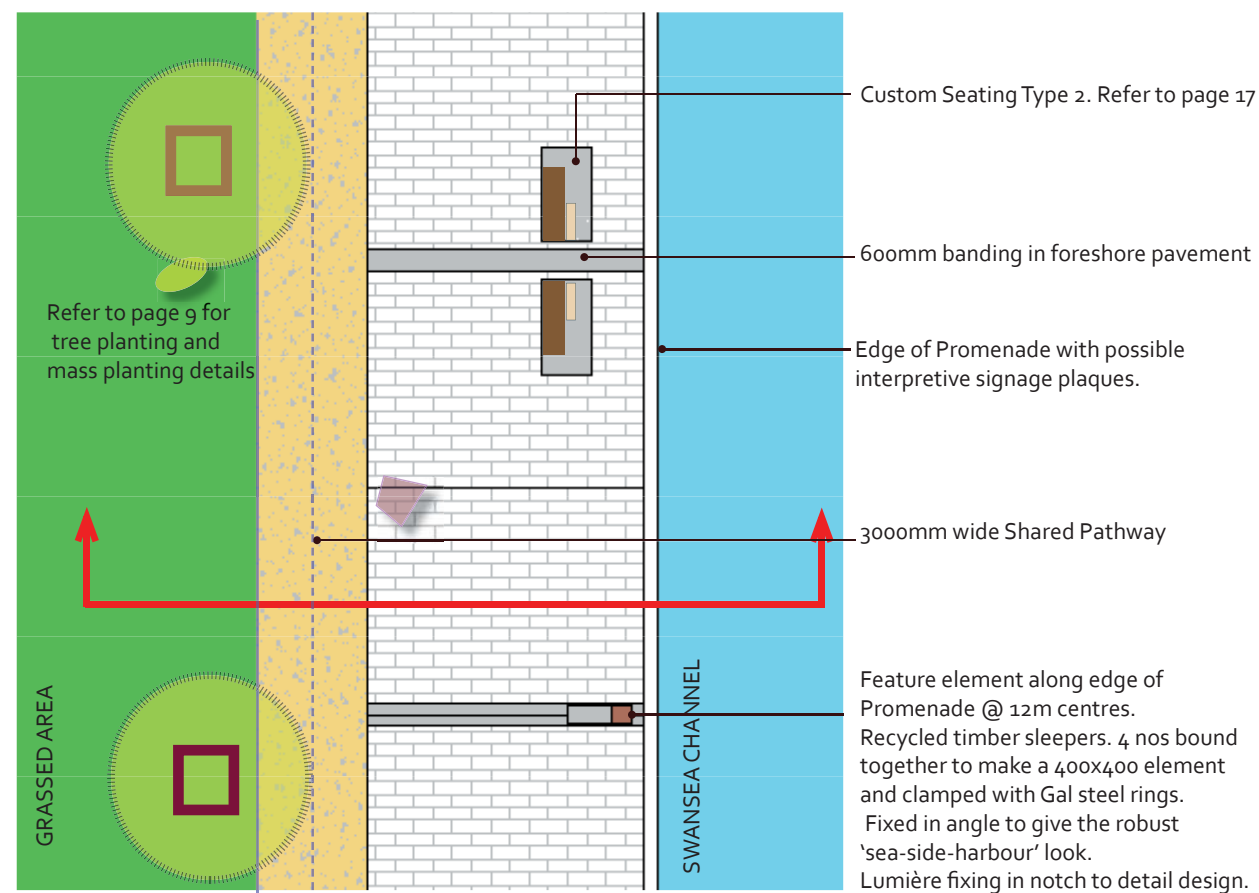
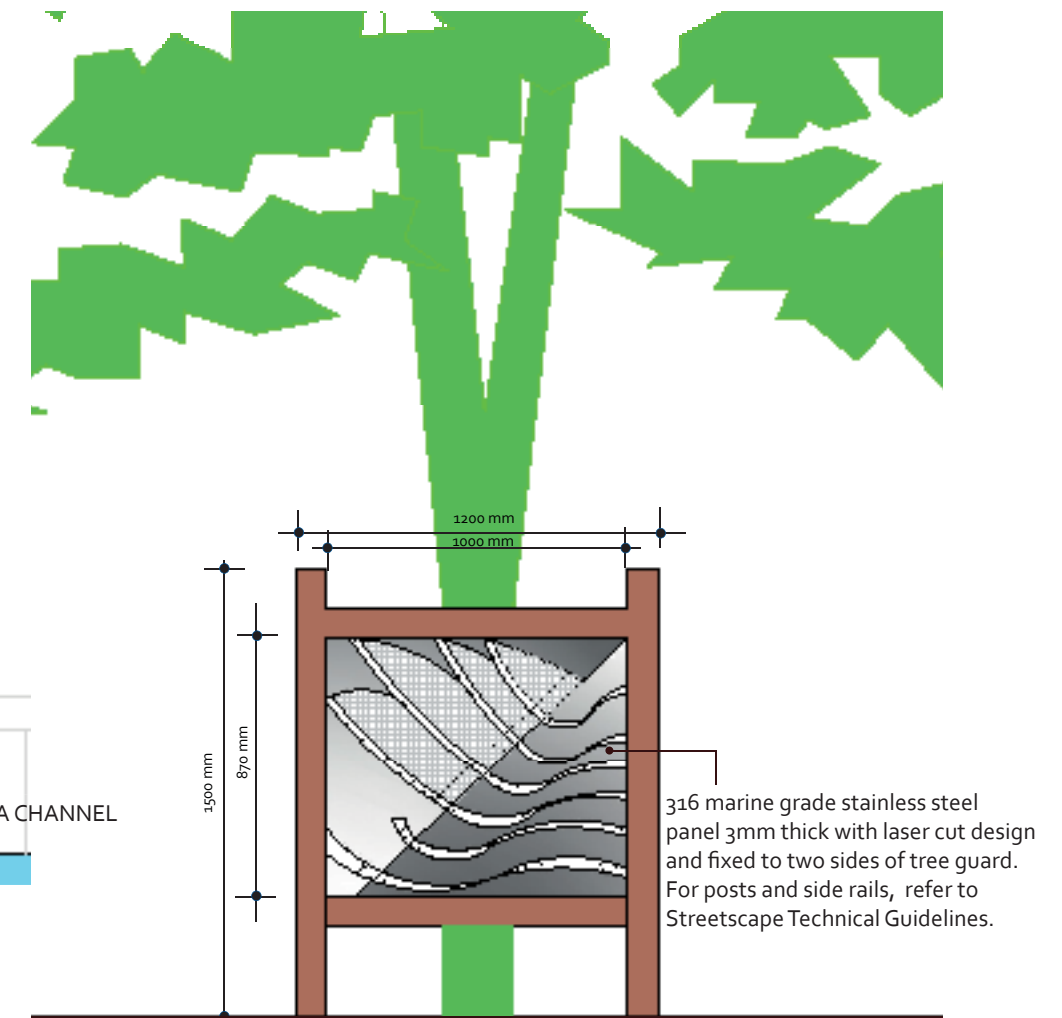
SEAT TYPE 3 - ELEVATION 1:25@A3



SEAT TYPE 2 - SECTION 1:25@A3

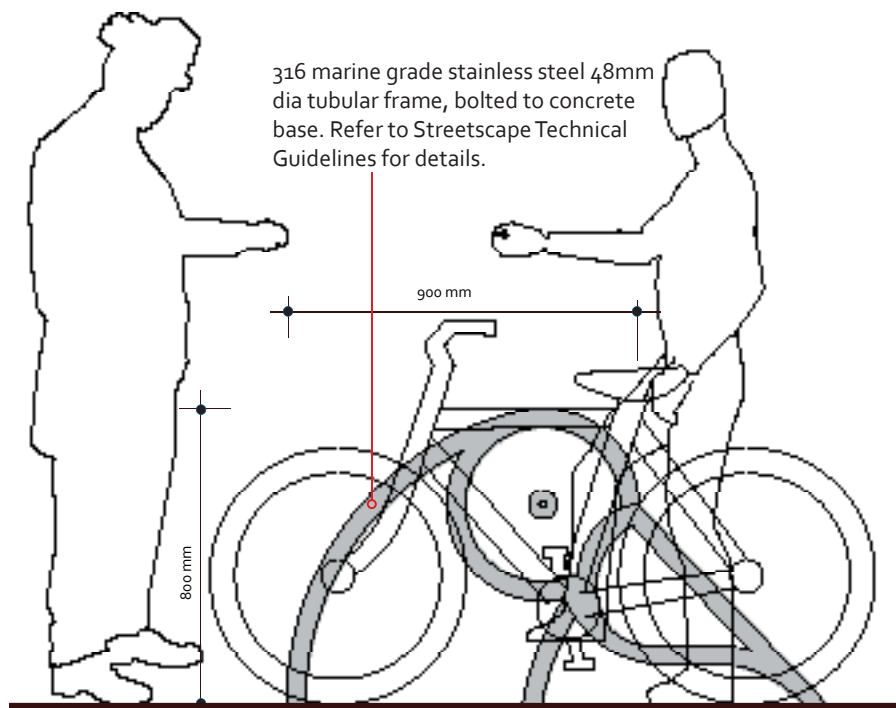


TREE GUARD & OTHER FEATURE ELEMENTS

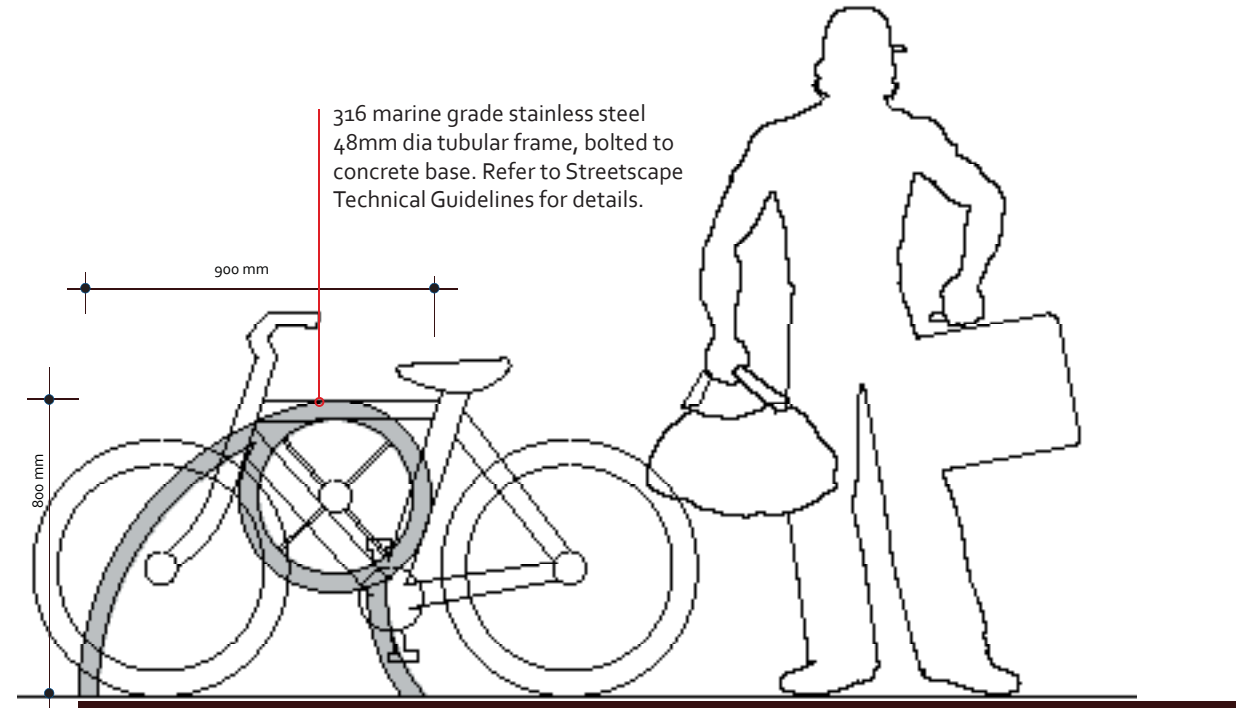




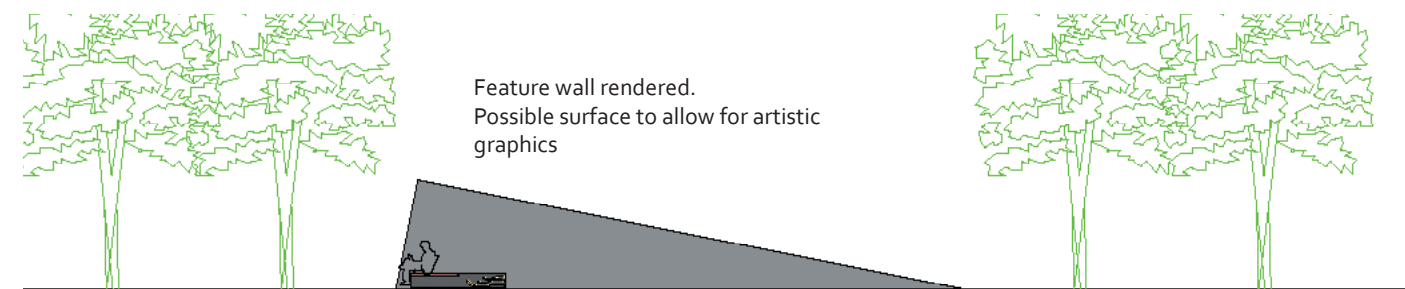
BIKE RACKS AND FEATURE WALLS



CUSTOM BIKE STAND option 1 1:20 @ A3



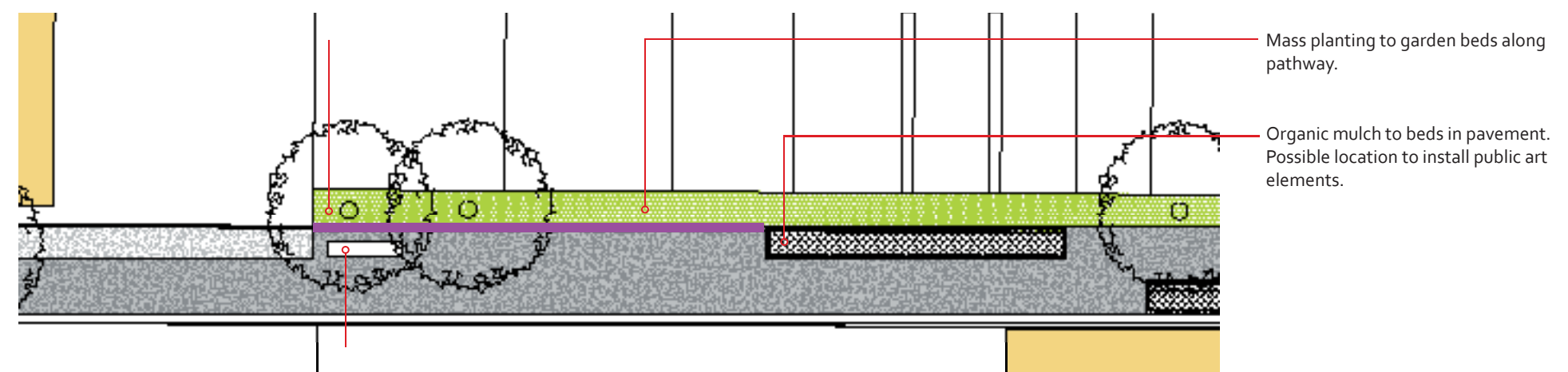
CUSTOM BIKE STAND option 2 1:20 @ A3



LANEWAY PART ELEVATION 1:250 @ A3



KEY PLAN - JOSEPHSON LANE NTS @A3



LANEWAY PART PLAN 1:250 @ A3



Street Tree Master Plan

DESCRIPTION

This plan identifies street trees to be planted as part of implementation of this plan and in consultation with the LMCC Town Centres DCP No 1 PART 3.3 Urban Centre development adopted by council 10 Feb 2014.

Street trees provide many benefits in an urban environment. They provide shade, reducing heat on the street and surrounding buildings. They provide habitat for native fauna. They change throughout the year with flowers, fruit and leaves, creating visual interest. They create a pleasant environment in which to spend time.

Typical spacings as well as proposed locations for trees within the road reserve have been detailed within the street types, sheets 3 - 16. The locations shown in street type plans are guidelines only and will be determined at the time of detail design. Allow for at least one tree at 10m centres. Where crossovers occur, tree location is to be adjusted.

Typical nature strip planting needs to be shared with underground services including power, gas, water, communications, and storm water. Wherever possible, the determined location for tree planting is to be considered in consultation with all services.

OBJECTIVES

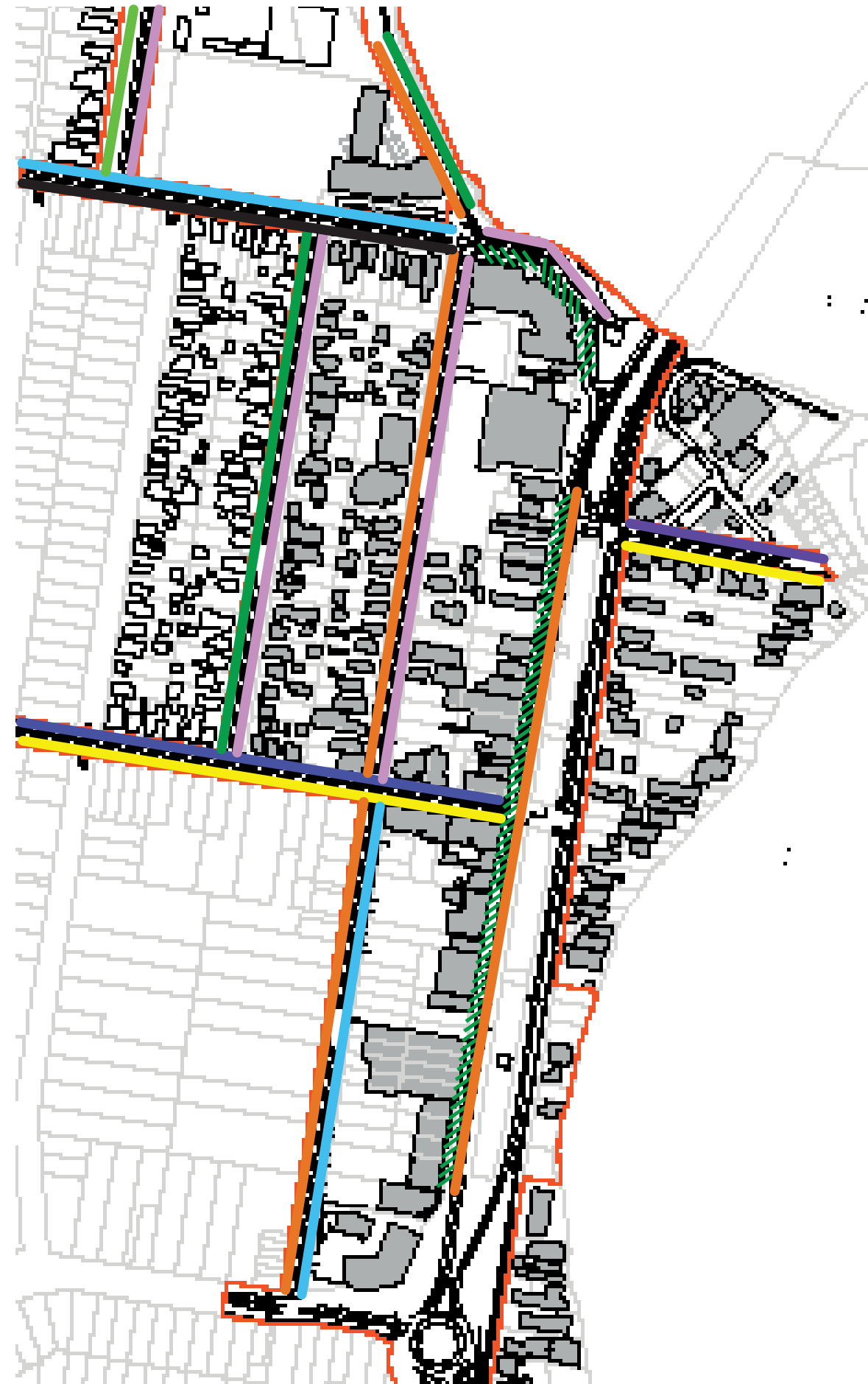
- To provide a pleasant, tree-lined space.
- To differentiate the town centre in a formal style.
- To highlight special areas of the town centre with different planting.
- To use local native trees, where appropriate.
- To provide small to medium size trees under overhead power lines.

EXISTING CONSTRAINTS

- Overhead power lines.
- Undeveloped lots and lack of kerbing, guttering, open drain and footpaths.

CRITERIA

- Local native species.
- Evergreen or deciduous in specific locations.
- Flowers - for show and native fauna value.
- Potential flower, fruit and branch drop.
- Tolerance of high level of saline ground water.
- All plant selection to be in consultation with this Master Plan, LMCC Technical Guidelines and approval from Community Planning Asset Management.



LEGEND

- Melaleuca quinquenervia (Broad-leaf paperbark), Backhousia myrtifolia (Grey myrtle)
- Banksia integrifolia (Coast banksia), Lagestromia natchez (Crepe myrtle)
- Tristaniopsis laurina (Water gum)
- Geijera parviflora (Wilga)
- Corymbia gummifera (Red bloodwood)
- Synoum glandulosum (Scentless rosewood), Cupaniopsis anacardioides (Tuckeroo) (existing trees)
- Alloxylon flammeum (Queensland tree waratah)
- Angophora hispida (Dwarf apple)
- Ulmus parvifolia (Chinese elm)
- Hymenosporum flavum (Native frangipani)
- Stenocarpus sinuatus (Firewheel tree)



Cupaniopsis anacardioides (Existing Tree)

