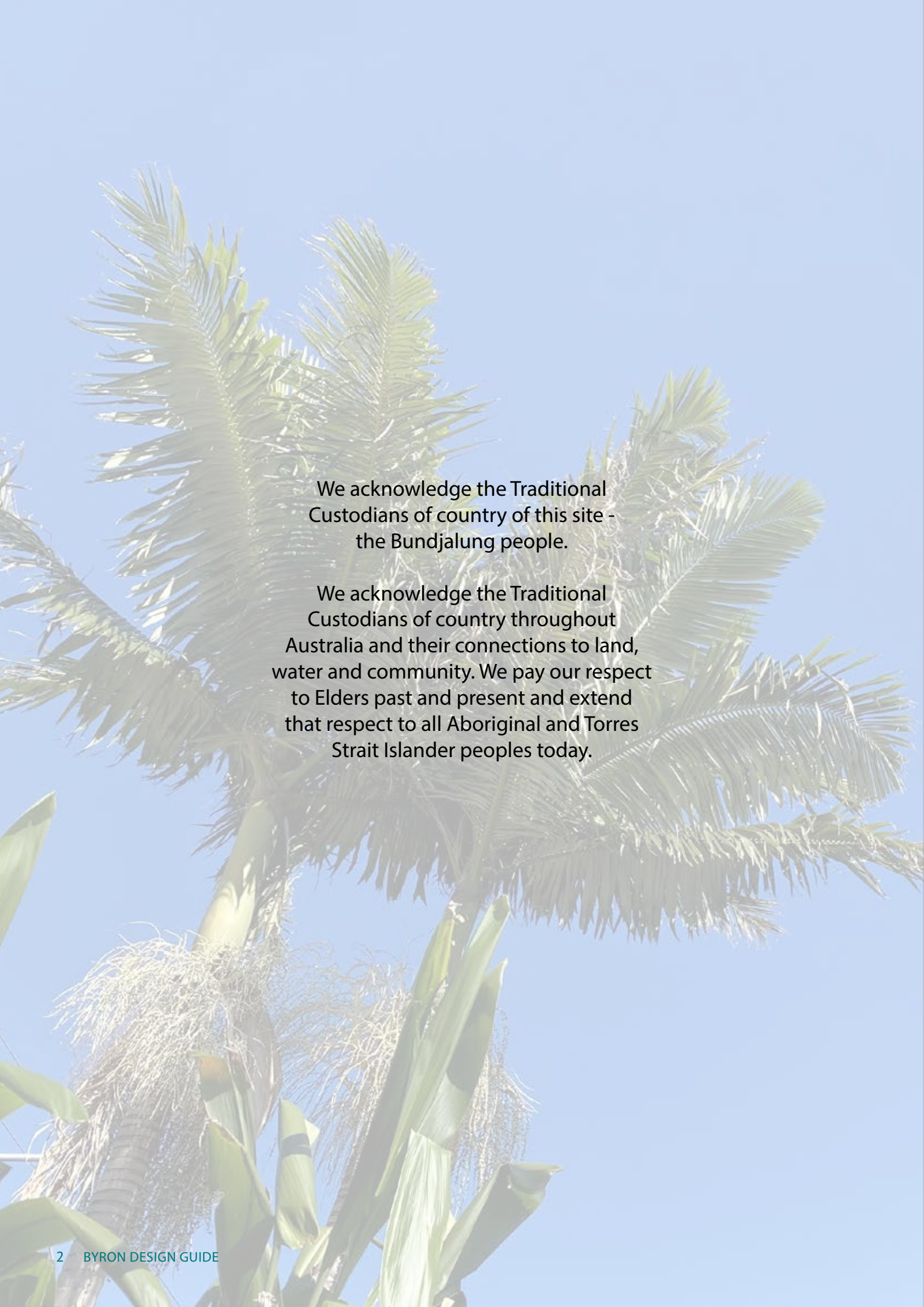


# BYRON DESIGN GUIDE

Prepared by Plummer & Smith Pty Ltd for Byron Shire Council





We acknowledge the Traditional Custodians of country of this site - the Bundjalung people.

We acknowledge the Traditional Custodians of country throughout Australia and their connections to land, water and community. We pay our respect to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

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# 1 OVERVIEW

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## 1.1 Overview

This document is intended to provide a guide for future detailed streetscape works and programming for the Byron Bay town centre. The document provides an audit of existing streetscape areas, including existing infrastructure, planting, opportunities etc. The document also provides guiding plans for streetscape treatments, and material, furniture and planting palettes for use in public domain projects.

The document follows on from the **Byron Bay Town Centre Master Plan**.

### NOTES

1. This document is a guide to streetscape embellishments and planting only. Potential access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in this document.
2. It is intended that key precincts such as Byron Foreshore and the Railway Precinct go through a separate design process to identify opportunities for stand-alone features- bespoke furniture, artworks, play equipment etc. This document is relevant to the streets and spaces 'in-between'.

## 1.2 Guiding Principles

### IMPROVE USER EXPERIENCE

- Improve accessibility and wayfinding
- Improve surface finishes to improve safety and amenity
- Provide comfortable environments for people through the addition of natural shade and amenity
- Improve linkages through and across the town centre
- Capitalise on existing assets including mature vegetation, public domain spaces, public open space linkages
- Capitalise on the community's willingness and desire to have social streets- places to connect with other people and the environment

### RESPECT CHARACTER

- Maintain the essence of the existing atmosphere as a defining characteristic of place

### IMPROVE AMENITY

- Improve surface finishes without creating a uniform treatment that runs counter to the 'free-wheeling' character of the place
- Avoid short term, low quality treatments
- Capitalise on and continue Council's recent garden maintenance and upgrade works
- Increase the number of trees and therefore provision of shade
- Provide additional natural shade in streets where urban heat is an issue

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# 2 SITE AUDIT & ANALYSIS



# 2.1 Existing Vegetation

## KEY OBSERVATIONS

- Large areas of Jonson Street and Lawson Street have minimal planting areas and street trees resulting in low amenity and high levels of sun exposure
- Fletcher Street, Byron Street and Marvel Street benefit from more mature vegetation
- Groundcover planting palette is not evident, species are inconsistent
- A number of feature trees have been consistently used including Paperbarks, Pandanus and Norfolk Island Pines.
- Public domain areas associated with mature vegetation have higher comfort levels and a sense of the natural environment rather than the dominance of urbanity



CAR DOMINATED STREETS WITH A LACK OF NATURAL AMENITY AND SHADE



PLANTING PROVIDES STREET AMENITY (BYRON STREET)



AREAS OF AMENITY DISCONNECTED FROM PUBLIC DOMAIN AREAS



MATURE TREE PROVIDING SHADE TO PUBLIC DOMAIN AND STREET AREAS (FLETCHER STREET)



## LEGEND

- Existing trees
- Existing garden bed



## LEGEND

- Ficus microcarpa var. hillii.
- Araucaria heterophylla (Norfolk Island Pine)
- Pandanus tectorius (Screw Pine)
- Callistemon viminalis (Red Bottlebrush)
- Melaleuca quinquenervia (Broad-leaved Paperbark)
- Cupaniopsis anacardioides (Tuckeroo)
- Waterhousia floribunda (Weeping Lilly Pilly)
- Brachychiton acerifolius (Illawarra Flame Tree)
- Syzygium australe (Lilly Pilly)
- Palms - Archontophoenix cunninghamiana (Bangalow Palm), Livistona australis (Cabbage Tree Palm), Dypsis lutescens (Golden Cane Palm)
- Other



# 2.2 User Experience

## KEY OBSERVATIONS

- Tree canopies and building awnings provide shade and a human scale for streets
- Building awnings with posts and large mature trees in narrower streets both create a sense of intimacy
- Ad-hoc placement of furniture-often in areas of low amenity
- Streets that are narrower and cluttered feel enclosed
- The southern side of streets running east to west tend to feel exposed if amenity is not provided.
- Areas that lack shade tree plantings or planting areas feel exposed
- Limited integration of landscape treatments and street amenity



BUILDING AWNINGS AND TREES PROVIDING SHADE AND HUMAN SCALE TO STREETS (FLETCHER STREET)



BUILDING AWNINGS WITH POSTS CREATE A SENSE OF INTIMACY



WIDE AREAS WITHOUT PLANTING OR STREET TREES RESULT IN EXPOSED ENVIRONMENTS AND INCREASED HEAT (JONSON STREET)



STREETS THAT ARE NARROWER AND CLUTTERED FEEL ENCLOSED



## LEGEND

- Building awning
- ⌂ Enclosed, intimate
- ↔ Wide, spacious
- Existing tree



## LEGEND

- Protected
- - - Exposed
- ⚡ Narrow, cluttered
- 👁 Vista

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# 2.3 Access & Movement

## KEY OBSERVATIONS

- Vehicular movement and parking dominate the streetscape
- Poor and inconsistent pedestrian surfaces, footpath is often disrupted by crossings and driveways.
- Traffic congestion, particularly on Jonson Street and Lawson Street
- Cyclists have no obvious route through town
- Footpath widths often incompatible with use.
- Jonson Street is congested and cluttered and narrow for pedestrians
- Laneways offer potential for pedestrians and cyclists
- Physical barriers have been installed to control pedestrian movement- opportunities exist to combine this with amenity planting and seating



VEHICULAR MOVEMENT AND PARKING DOMINATE THE STREETScape (JONSON STREET)



POOR AND INCONSISTENT PEDESTRIAN SURFACES



LANE WAYS WITH SHARED ZONE / ACTIVATION POTENTIAL



PHYSICAL BARRIERS AND FEATURES ARE AD-HOC AND DEGRADE STREET AMENITY (JONSON STREET)



## LEGEND

- Bicycle connection
- Primary pedestrian connection
- Secondary pedestrian connection
- Barrier



## LEGEND

- Primary vehicular connection
- - - Secondary vehicular connection
- Laneway
- Ⓟ Car parking
- - - Driveway crossover



# 2.4 Activation

## KEY OBSERVATIONS

- Out of date kerb alignments resulting in 'left over' areas. These areas are located adjacent existing garden beds with some spaces having a direct connection to the adjacent footpath
- Limited space for impromptu socialising
- Mature shade tree and large pavement areas (usually on intersection corners) provide an activation opportunity



OUT OF DATE KERB ALIGNMENTS RESULTING IN WASTED PUBLIC DOMAIN SPACE



VAST, UNNECESSARY ROAD SURFACE WHERE PUBLIC DOMAIN IMPROVEMENTS COULD PROVIDE PEOPLE PLACES



MATURE SHADE TREES AREAS PROVIDE AN ACTIVATION OPPORTUNITY- FURNITURE AND EDGE IMPROVEMENTS REQUIRED



AREAS OF LARGE PAVEMENT PROVIDE AN ACTIVATION OPPORTUNITY- INCREASED NATURAL SHADE WILL IMPROVE AMENITY



## LEGEND

- ..... Opportunity for extension of pavement
- ▲ Opportunity to reclaim unused space



## LEGEND

- \* Opportunity for activation

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# 2.5 Street Infrastructure

## KEY OBSERVATIONS

- Lack of public seating in streets for resting and socialising
- Public furniture locations have been focused on Jonson Street and open space areas
- Short term solutions resulting in incompatible, messy finishes, and inconsistent furniture element design and style
- Furniture elements hard to locate and are not being used to their potential
- Majority of garden beds do not catch storm-water runoff and are disconnected from footpath
- Limited integration of storm-water



EXAMPLE OF EXISTING STREET FURNITURE



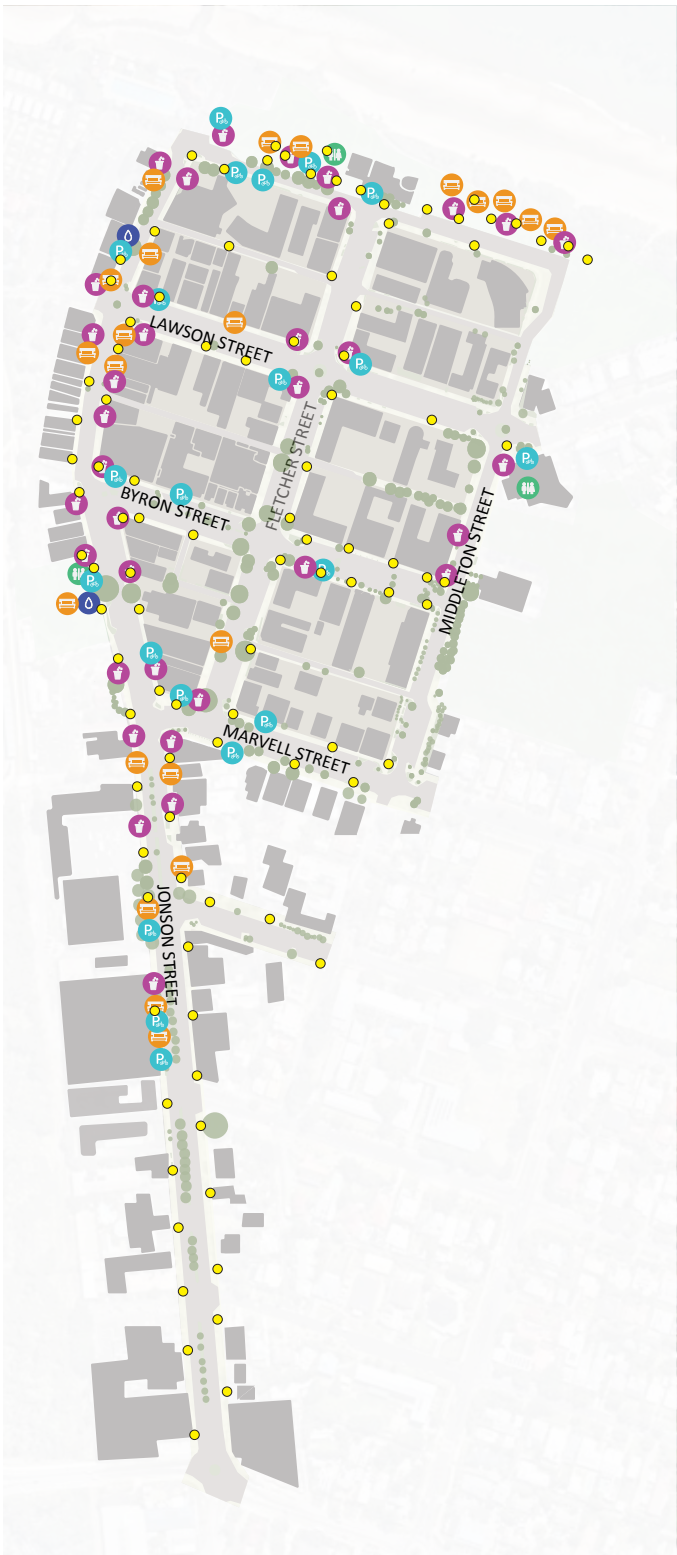
EXAMPLE OF EXISTING STREET FURNITURE



EXAMPLE OF EXISTING STREET FURNITURE



ISLAND GARDEN BEDS THAT DO NOT CATCH STORM-WATER AND ARE DISCONNECTED FROM THE FOOTPATH THEREBY LIMITING AMENITY AND WSUD POTENTIAL



## LEGEND

- Seating
- Bicycle parking
- Rubbish bin
- Public toilets
- Water refill station
- Street Lights



## LEGEND

- WSUD opportunity
- Stormwater drainage





# 3 VISION & STRATEGIES

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## 3.1 Vision

### PROJECT VISION

CREATE COMFORTABLE,  
SOCIAL STREETS  
THAT DELIGHT AND  
ENABLE COMMUNITY  
CONNECTION

## 3.2 Design Strategies

The Byron Bay Town Centre is currently car congested, disjointed, and uninviting to a point that it is jeopardising the much loved relaxed coastal town experience.

Through the following strategies the landscape design aims to enhance the sub-tropical coastal town character and improve its community's experience by creating a flexible high quality vibrant network of streets that reflect the spirit of Byron Bay. A place that attracts people to visit, stay and connect.

BOOST VEGETATION TO  
PROVIDE SHADE, STREET  
AMENITY AND INCREASED  
BIODIVERSITY

MAINTAIN THE BYRON  
COASTAL TOWN  
EXPERIENCE

CREATE A PERMEABLE  
AND CONNECTED TOWN  
CENTRE (AND CONTEXT)

IMPROVE  
ENVIRONMENTAL  
RESILIENCE AND  
SUSTAINABILITY



# 3.3 Strategy 1

## BOOST VEGETATION TO PROVIDE SHADE, STREET AMENITY AND INCREASED BIODIVERSITY

### OPPORTUNITIES:

- Increase street tree planting to improve the visual quality of streets, improve environmental performance of streets, and to provide pedestrian amenity. The proposed tree plantings will build upon each street's existing vegetation character to enhance Byron Bay's subtropical coastal town character
- Create integrated planting areas to define use zones, increase biodiversity, provide WSUD opportunities and enhance overall street amenity
- Upgrade existing planting areas to create consistent and high quality plantings. The use of a resilient and diverse understory palette of native and endemic species will unify the town centre and celebrate Byron's local character and environment
- Utilise the amenity of significant mature trees by integrating seating
- Potential to provide additional shade with green arbours as an extension to building awnings



### LEGEND

- Proposed street tree
- Proposed garden bed
- ▨ Proposed green arbour
- Existing awnings



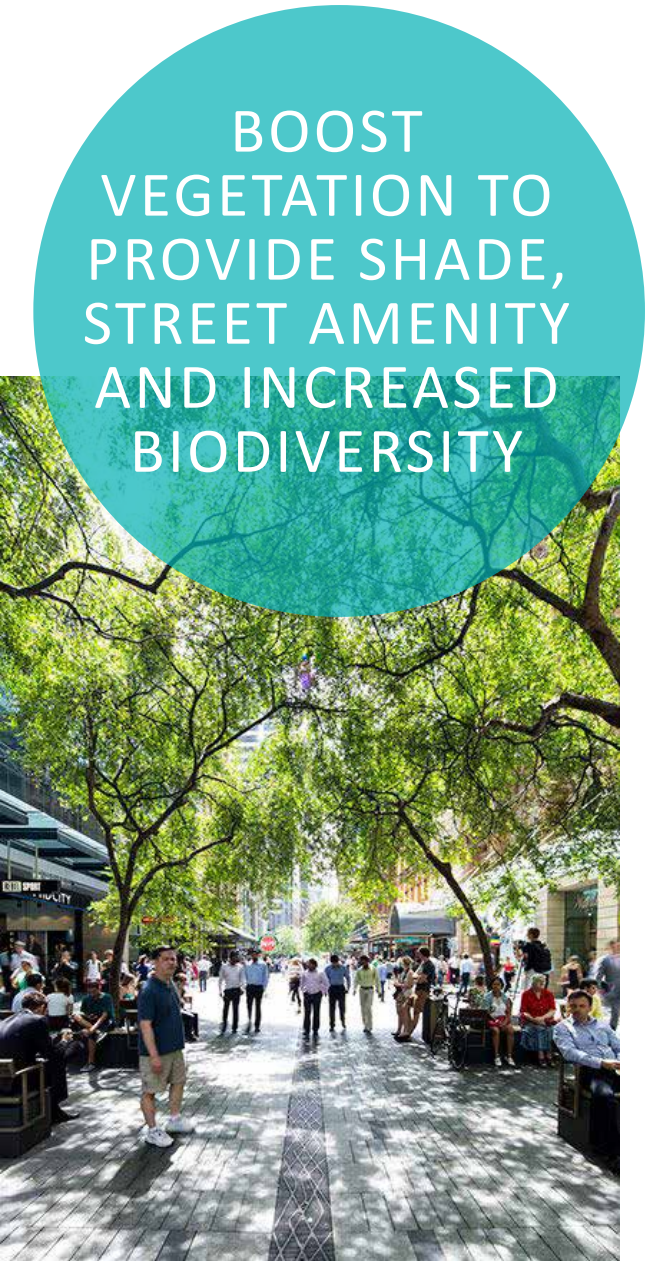
STREET TREES AND GROUNDCOVER PLANTING CREATING A GREEN BUFFER BETWEEN THE FOOTPATH AND ROAD



SUBTROPICAL PLANTINGS OF STREET TREES, PALMS AND GROUNDCOVERS



STREET TREES AND PLANTING DEFINING SEATING ZONES



CONSISTENT STREET TREE PLANTING INCREASES VISUAL QUALITY AND AMENITY



GREEN ARBOUR PROVIDING HUMAN SCALE AND PROTECTION FROM THE ELEMENTS

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## 3.3 Strategy 1

CREATING  
COOLER  
STREETS

BOOST  
VEGETATION TO  
PROVIDE SHADE,  
STREET AMENITY  
AND INCREASED  
BIODIVERSITY

As part of this project BMT Group provided heat mapping analysis of the town centre. This research identified temperature and urban heat issues across the town centre. This enables data driven understanding of heat issues within the town centre, allowing the verification of on the ground analysis.

Assessment identified Jonson Street and the western / north-western edge of the town centre as the most dominantly hot zones. It also highlighted Lawson Street and Lateen Lane as areas of higher temperatures.

BMT Group also ran several scenarios of potential treatment measures and what impact they may have on temperatures (see diagrams right). Scenarios include:

- tree planting
- cool pavement adaptation
- cool roof adaptation

The research is valuable in verifying and highlighting areas of high temperatures. Future works can be part of the ongoing management of this increasing issue. Mapping suggests that particular thought should be given to treatments in the north west area of the town centre and the western fringe.

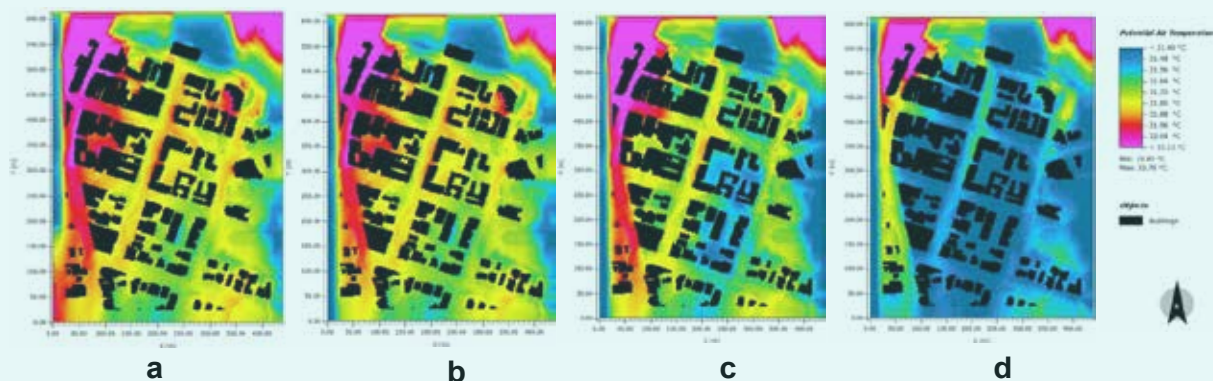
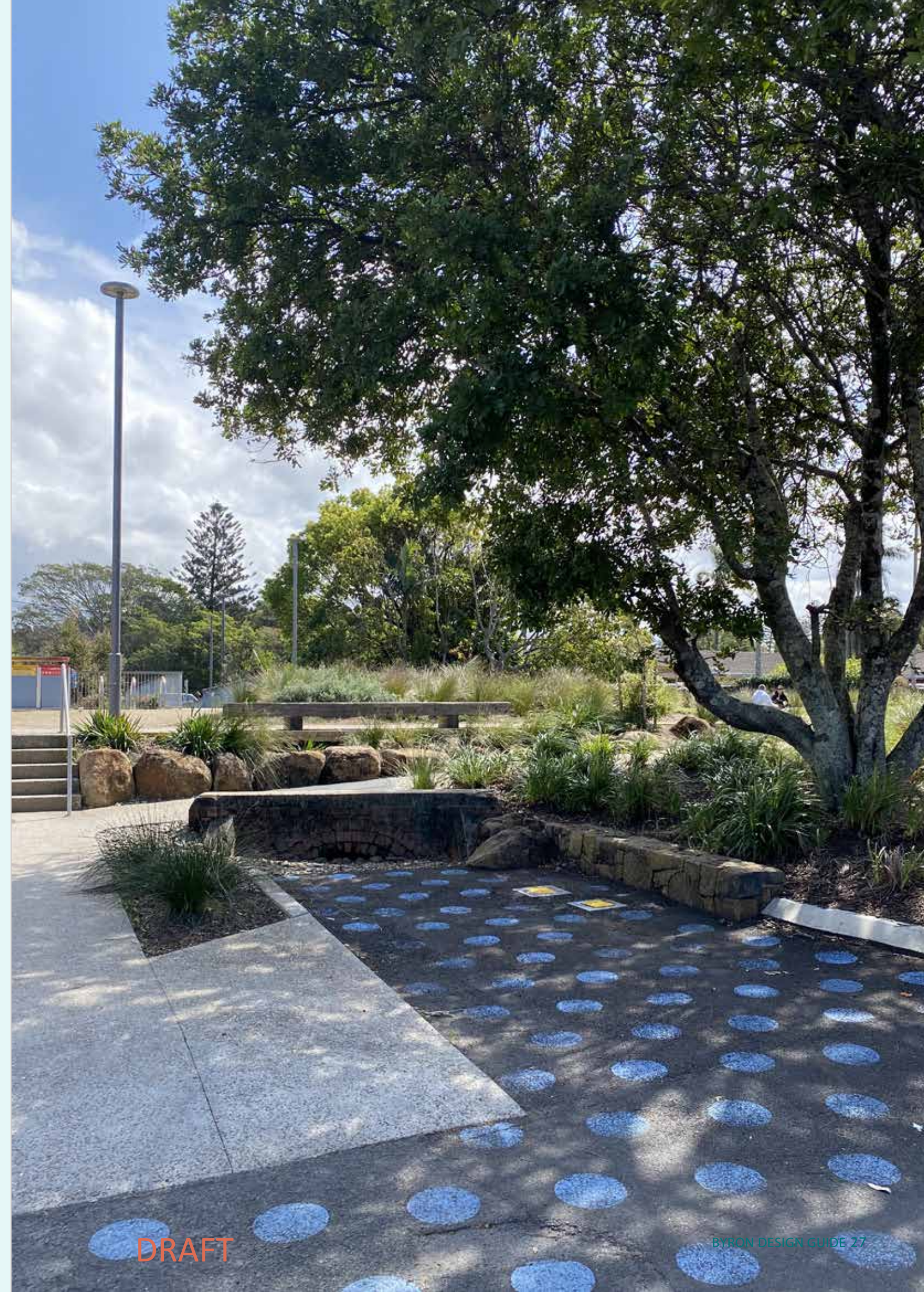


Figure 4-11 Comparison of modelling scenarios: a) reference summer scenario, b) mitigation scenario-1: tree only, c) mitigation scenario-2: tree plus cool pavement, e) mitigation scenario-3: tree plus cool pavement plus cool roof Adaptation strategy and recommendation





## 3.4 Strategy 2

### MAINTAIN THE BYRON COASTAL TOWN EXPERIENCE

#### OPPORTUNITIES:

- Create a pedestrian prioritized beach axis along Jonson Street to provide an active connection between the town centre and Main Beach
- Provide wider footpaths where possible, shared zones and raised crossing to allow the pedestrian and cyclists to move freely through the town
- Use a consistent material palette that is resilient and low maintenance that responds to and reflects the local environmental conditions
- Introduce a consistent furniture style that reflect the Byron's unique character by using select natural materials and simple detailing
- Create 'service areas' with grouped street furniture elements to avoid cluttered streets
- Provide spaces for social interaction - social streets make safe streets
- Place public seating nodes in key locations to create opportunity for activation and encourage social engagement
- Create a network of streets that are walkable and rideable by increasing street amenity and providing street furniture and access to amenity
- Redefine identified 'left over' spaces to extend the pedestrian pavement, creating additional space for activation opportunities including implementation of street furniture, additional areas for circulation or additional tree plantings
- Provide space for alfresco dining, active buildings encourage pedestrian use and circulation
- Retain and celebrate existing key features including natural features and unique street elements



#### LEGEND

- Pedestrian prioritised beach axis (shared zone)
- |||| Primary social streets
- Secondary social streets
- ⊙ Proposed activation zone
- ✱ Primary 'service area'
- ✱ Secondary 'service area'



A TRAFFIC CALMED STREET WITH RAISED CROSSING ALLOWING THE PEDESTRIAN AND CYCLISTS TO MOVE FREELY



FLEXIBLE AREAS FOR ALFRESCO DINNING



VIBRANT AND ACTIVATED STREET WHICH PRIORITISES THE PEDESTRIAN



MATERIALITY THAT REFLECTS BYRON'S UNIQUE CHARACTER- USE HIGHLIGHT TREATMENTS SPARINGLY



PUBLIC SEATING NODES IN LEFT OVER SPACES



## 3.5 Strategy 3

### CREATE A PERMEABLE & CONNECTED TOWN CENTRE

#### OPPORTUNITIES:

Ensure that town centre treatments and strategies align with contextual spaces and environmental and movement flows, including;

- cyclist and pedestrian
- open space and transport
- environmental- biodiversity and water
- foreshore amenity



CREATE A  
PERMEABLE AND  
CONNECTED  
TOWN CENTRE



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## 3.6 Strategy 4

### IMPROVE ENVIRONMENTAL RESILIENCE & SUSTAINABILITY

#### OPPORTUNITIES:

- Implement long term design solutions instead of a band aid approach
- Integrate WSUD devices where-ever possible to improve street amenity and storm-water / environmental performance
- Use permeable paving in streets to allow infiltration where applicable
- Installing WSUD measures where possible provides for multiple uses and benefits- eg joining isolated planting islands to footpaths to provide WSUD treatments, increased street amenity, and gathering space opportunities
- Promote sustainable initiatives - native planting, locally sourced materials and recycled materials
- Create streets that are flexible and resilient allowing for change and growth
- Make appropriate changes now that enable the town centre, the community, and the environment to manage issues in a way that retains the atmosphere of the place

**When deciding on materials for sustainability, the following should be considered:**

- *Is it made from recycled materials? Eg recycled concrete, recycled plastic, recycled glass*
- *Is it fabricated from re-used materials?*
- *Does it have a long lifespan with little maintenance?*
- *Is there an end of life market?*
- *Will it be damaged in weather events eg flood water?*
- *Is it repairable?*
- *What is the life cycle assessment of the material?*



#### LEGEND

- High implementation area - infrastructure, permeable paving, rain gardens
- ..... Lower implementation area - permeable paving, rain gardens
- Opportunity for WSUD in existing garden beds

### IMPROVE ENVIRONMENTAL RESILIENCE AND SUSTAINABILITY



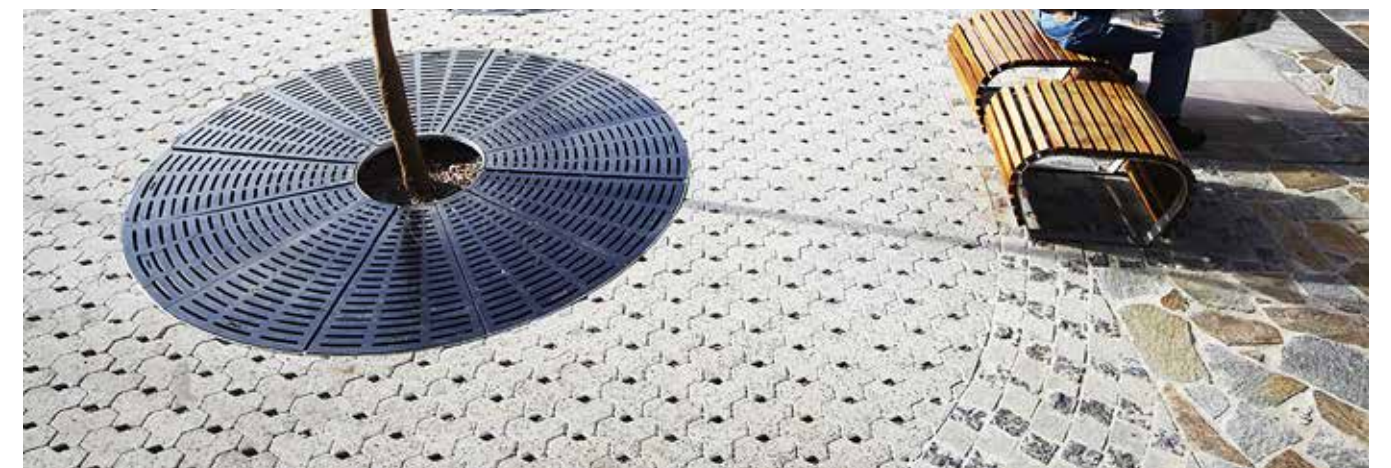
TREE GRATES IMPLEMENTED TO ALLOW FULL WIDTH PAVEMENTS WHILE STORM-WATER IS CAPTURED TO WATER



RAIN GARDENS IN STREETScape



PAVED CHANNELS WITH CUT OUT IN KERBS ALLOW STORM-WATER TO BE COLLECTED IN RAIN GARDENS



PERMEABLE PAVING USED TO ALLOW TREES TO BE WATERED BY STORM-WATER





# 4 STREETScape PLANS

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4.1 Key





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# Detail Plan 1

## LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

## KEY STRATEGIES

- Landscape amenity / increased provision of shade to reduce heating and increase pedestrian comfort

## IMPORTANT NOTE:



The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans





# Detail Plan 2

## LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

### KEY STRATEGIES - FLETCHER STREET

- Landscape amenity / increased shade in northern area
- Improved retaining / integrated seating edges around Melaleuca planting areas

### IMPORTANT NOTE:


The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans





# Detail Plan 3

## LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

### KEY STRATEGIES - LAWSON, JONSON & BYRON STREETS

- Extended footpath along southern side of Lawson Street to allow for increased streetscape space and improved accessibility
- Increase amenity and provision of natural shade through the planting of shade trees in the median (Lawson and Byron Streets)- creating cooler streets
- Investigate the potential of undergrounding power for the main commercial block to allow for larger street tree planting (Lawson Street)

#### IMPORTANT NOTE:


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# Detail Plan 4

## LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

### KEY STRATEGIES - FLETCHER STREET

- Landscape amenity / increased shade in northern area
- Improved retaining / integrated seating edges around Melaleuca planting areas

### IMPORTANT NOTE:



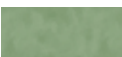




The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans





# Detail Plan 5

## LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

### KEY STRATEGIES - FLETCHER STREET

- Improved retaining / integrated seating edges around Melaleuca planting areas

### IMPORTANT NOTE:



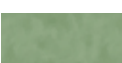




The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans





# Detail Plan 6

LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

**IMPORTANT NOTE:**  
The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans






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# Detail Plan 7

LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

IMPORTANT NOTE:

The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans






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# Detail Plan 8

LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

IMPORTANT NOTE:








The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans





# Detail Plan 9

LEGEND

-  Existing tree
-  Proposed tree
-  Proposed palm
-  Planting area
-  Open space
-  Seat
-  Bicycle racks
-  Bins
-  WSUD opportunity

IMPORTANT NOTE:

The following plans are a guide to streetscape embellishments and planting only. Access and movement strategies and upgrades for the town centre, including bike paths and potential traffic changes, are not included in these plans







# 5

## FURNITURE, MATERIALS & PLANT PALETTE

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# 5.1 Materials

The following pages provide the base material and furniture palette range for town centre streets. Elements not outlined in this guide include lighting and wayfinding and signage.

The proposed material palette and design elements aims to celebrate the natural environment through the use of selected natural materials .

The material palette will work towards enhancing the Town Centre to reflect Byron's unique character. The proposed materials will endeavour to be cost effective where possible.

The proposed materials include:

- Concrete pavement
- Feature pavement
- Permeable pavers
- Locally sourced stone
- Sustainably sourced Australian hardwood timber

Concrete surfaces to be sealed to enable easy cleaning.

## ON-GOING REVIEW

- The material palette should be regularly reviewed to ensure it capitalises on any improved material options. This may include new and improved products and suppliers. It will also enable the material selections for various projects to benefit from new sustainable products.

When deciding on materials for sustainability, the following should be considered:

- *Is it made from recycled materials? Eg recycled concrete, recycled plastic, recycled glass*
- *Is it fabricated from re-used materials?*
- *Does it have a long lifespan with little maintenance?*
- *Is there an end of life market?*
- *Will it be damaged in weather events eg flood water?*
- *Is it repairable?*
- *What is the life cycle assessment of the material?*



FOOTPATH - CONCRETE PAVEMENT  
Colour A: Belongil White  
Colour B: Woody Head Brown (Coomera)  
Finish: Lightly Exposed  
Pattern: 'wave' to match existing



FOOTPATH - EXPOSED AGGREGATE  
Example exposed aggregate finish



CONCRETE SEATING WALL  
Colour: Natural Grey  
Finish: Off form  
Height: 450mm  
Width: Varies



PLACED BOULDER  
Stone: Locally sourced basalt bush rock



PERMEABLE PAVEMENT - PRE-CAST CONCRETE PAVER  
Type: EcoTrihex  
Dimensions: 188L x 92D x 60H  
Colour: Natural, Charcoal  
Finish: Shotblast, Honed  
Supplier: Adbri Masonry



## 5.2 Furniture Palette

### ON-GOING REVIEW

The material palette should be regularly reviewed to ensure it capitalises on any improved material options. This may include new and improved products and suppliers. It will also enable the material selections for various projects to benefit from new sustainable products.

When deciding on materials for sustainability, the following should be considered:

- Is it made from recycled materials? Eg recycled concrete, recycled plastic, recycled glass
- Is it fabricated from re-used materials?
- Does it have a long lifespan with little maintenance?
- Is there an end of life market?
- Will it be damaged in weather events eg flood water?
- Is it repairable?
- What is the life cycle assessment of the material?



**BICYCLE PARKING**  
Name: Semi-Hoop  
Code: BST03  
Dimensions: 845L x 120W x 850H  
Fixing: Surface mounted  
Material: Stainless 316  
Finish: No.4 Finish (brushed)  
Supplier: Street Furniture Australia



**BOLLARD**  
Name: Slim Bollard  
Code: SLIM  
Dimensions: 115 Ø x 875H  
Head Type: Dome  
Fixing: Surface mounted  
Material: Stainless 316  
Finish: No.4 Finish (brushed)  
Supplier: Street Furniture Australia



**DUAL RUBBISH AND RECYCLE BINS**  
Name: Macquarie Bin Enclosures  
Finish: Byron Shire Custom Design  
Supplier: Gossi Park



**TIMBER BOLLARD**  
Name: Heavy Duty Traffic Barrier timber bollard  
Material: Hardwood  
Supplier: Outdoor Structures Australia



**TIMBER BENCH**  
Name: Classic Plaza Bench  
Material: Jarrah hardwood slats  
Finish: Medium Textures finish (steel components)  
Colour: Textura Woodland Grey  
Supplier: Street Furniture Australia



**TIMBER SEAT WITH BACKREST**  
Name: Classic Plaza Seat  
Material: Jarrah hardwood slats  
Finish: Medium Textures finish (steel components)  
Colour: Textura Woodland Grey  
Supplier: Street Furniture Australia



**WATER BOTTLE REFILL STATION**  
Name: Aquafil Flexifountain  
Code: AQ-FF2100BF  
Material: Stainless Steel and Aluminium  
Finish: Anodised  
Dimension: 2109 H 600 L 310 W



## 5.3 Distinctive Places & Features

The following pages provide examples of materials and furniture treatments that may be relevant to distinctive spaces within the town centre- eg public domain nodes and public open spaces.

### ON-GOING REVIEW

The material palette should be regularly reviewed to ensure it capitalises on any improved material options. This may include new and improved products and suppliers. It will also enable the material selections for various projects to benefit from new sustainable products.

When deciding on materials for sustainability, the following should be considered:

- Is it made from recycled materials? Eg recycled concrete, recycled plastic, recycled glass
- Is it fabricated from re-used materials?
- Does it have a long lifespan with little maintenance?
- Is there an end of life market?
- Will it be damaged in weather events eg flood water?
- Is it repairable?
- What is the life cycle assessment of the material?



EXAMPLE - FOOTPATH - BRICK FEATURE PAVEMENT  
Colour: Various  
Supplier: Lincoln Bricks  
*Note: the use of segmental pavers shall be minimal to ensure manageable on-going maintenance*



EXAMPLE - BACKLESS TIMBER BENCH SEAT  
Custom timber bench seat in the Byron Rail Corridor Park



EXAMPLE - PEDESTRIAN THRESHOLD TREATMENT  
*Note: the use of segmental pavers shall be minimal to ensure manageable on-going maintenance*



EXAMPLE - BASALT ROCK SEATING WALL  
Stone: Locally sourced basalt bush rock  
Height: 450mm  
Width: 450mm



EXAMPLE - STONE BOLLARD AND STOOL SEAT  
Name: Scoop - Round  
Code: SCP02- R2  
Dimensions: 500L x 520D x 450 H  
Material: Granite  
Supplier: UAP Company (Supply)



EXAMPLE - BICYCLE PARKING FEATURE  
Name: Happy Hoops (4 options)  
Code: varies  
Fixing: Surface mounted  
Material: Stainless 316  
Finish: Painted (4 options)

NOTE: Coordinate with Council for particular design and locations of bespoke bike racks.



EXAMPLE - FEATURE TREATMENTS - CONCRETE PAVEMENT  
Potential to pattern feature concrete areas to highlight local creative talent- sandblast treatments or similar



EXAMPLE - TIMBER BENCH SEAT WITH BACK  
Name: Flip Seat  
Material: Powdercoated steel, spotted gum slats  
Supplier: MOS Urban





EXAMPLE - FEATURE BRICK SEATING WALL



EXAMPLE - PERMEABLE PAVEMENT - PRE-CAST CONCRETE PAVER  
Type: EcoTrihex  
Dimensions: 188L x 92D x 60H  
Colour: Natural, Charcoal  
Finish: Shotblast, Honed  
Supplier: Adbri Masonry



EXAMPLE - RECYCLED BRIDGE TIMBER SEAT



EXAMPLE - SMALL TABLE AND SEAT  
Supplier: MOS Urban



EXAMPLE - FEATURE ART WORK



EXAMPLE - CUSTOM TIMBER BENCH - CURVED  
HDG steel structure and hardwood (spotted gum) slats



EXAMPLE - ROUNDABOUT TREATMENT  
*Site specific round about and median treatments to create a sense of place and low key coastal atmosphere while considering maintenance, view lines and safety.*



EXAMPLE - SHADED STREETS MEDIAN PLANTING  
*Creating shaded streets with appropriate street trees to enhance the comfort, walk-ability and visual aesthetic of the streets while considering safety and view lines.*






EXAMPLE - MEDIAN TREATMENTS  
*Streets median treatments to incorporate planting, walk-ability and access and WSUD principles such as permeable pavement and infiltration gardens while considering view lines and safety.*



# 5.4 Pavement

Creating a guiding approach to pavement treatments across the town centre areas. See key plan to right.

## LEGEND

-  Feature pavement streets- *note that even in feature streets the use of segmental pavers shall be minimal to ensure manageable on-going maintenance*
-  Typical 'wave pattern' streets
-  Standard footpath streets

# 5.5 Wayfinding & Signage

A wayfinding and signage strategy and design palette for the town centre is not included in this design guide. An integrated wayfinding and signage strategy and palette should be undertaken to guide future signage decisions.





# 5.6 Street Tree Masterplan

Species and locations are a guide only- case by case assessment required as potential works progress. Council to also continue their on-going review of species across the town centre to hone the planting palette insitu, ensuring plantings are utilising species with a track record of success and health.

The following species lists have been established in coordination with Byron Shire Council's on-going species trials and assessments.

### ON-GOING REVIEW

The species outlined above and in the following pages should form the basis for a 'live' species list. This will enable the species list to be adjusted as required based on the performance of species in-situ.

LEGEND	
	Araucaria heterophylla, Casuarina equisetifolia
	Araucaria heterophylla, Elaeocarpus reticulatus
	Acmena hemilampra, Cupaniopsis anacardioides
	Cupaniopsis anacardioides, Elaeocarpus reticulatus
	Flindersia schottiana, Archontophoenix cunninghamiana, Livistona australis, Tristainiopsis laurina Luscious
	Melaleuca quinquenervia, Archontophoenix cunninghamiana
	Waterhousia floribunda, Atractocarpus fitzilani, Archontophoenix cunninghamiana
	Acmena smithii, Livistona australis, Waterhousia floridunda
	Waterhousia floribunda, Cupaniopsis anacardioides

DOUBLE CHECK TREE LOCATIONS AND SP





# 5.6 Street Tree Masterplan

## TREES & PALMS

Botanical Name	Common Name
ARAUCARIA heterophylla	Norfolk Island Pine
ARCHONTOPHOENIX cunninghamiana	Bangalow Palm
ACMENA hemilampra	Lilly Pilly
ACMENA smithii	Lilly Pilly
ATRACTOCARPUS fitzilani	Native gardenia
BACKHOUSIA myrtifolia	Grey Myrtle
BANKSIA integrifolia	Coast Banksia
CALLISTEMON viminalis	Weeping Bottlebrush
CASUARINA equisetifolia	Coastal Sheoak
CUPANIOPSIS anacardioides	Tuckeroo
ELAEOCARPUS eumundi	Eumundi Quandong
ELAEOCARPUS obovatus	Hard Quandong
ELAEOCARPUS reticulatus	Blueberry Ash
FICUS microcarpa hillii	Hills Weeping Fig
FLINDERSIA bennettiana	Bennetts Ash
FLINDERSIA schottiana	Cudgerie
HIBISCUS tiliaceus	Cottonwood
LIVISTONA australis	Cabbage Tree Palm
LOPHOSTEMON confertus	Brush Box
LOPHOSTEMON suaveolens	Swamp Box
MELALEUCA quinquenervia	Paperbark
PANDANUS tectorius	Screw Pine
STENOCARPUS sinuatus	Firewheel
SYZYGium leuhmanii	Riberry
TRISTANIOPSIS laurina	Water Gum
WATERHOUSIA floribunda	Weeping Lilly Pilly



ARCHONTOPHOENIX cunninghamiana



LOPHOSTEMON confertus



HIBISCUS tiliaceus



CALLISTEMON viminalis



CUPANIOPSIS anacardioides



CASUARINA equisetifolia



PANDANUS tectorius



FLINDERSIA bennettiana



ELAEOCARPUS reticulatus



ARAUCARIA heterophylla



BANKSIA integrifolia



MELALEUCA quinquenervia



# 5.7 Plant Palette

## GROUNDCOVERS, GRASSES & CLIMBERS

Botanical Name	Common Name	Sun	Shade	Wet	Dry	WSUD	Feature
ANIGOZANTHOS flavidus	Kangaroo Paw						
BLECHNUM cartilagenium	Gristle fern						
CALOCHLAENA dubia							
CARPOBROTUS glaucescens	Pig Face						
CASUARINA glauca Cousin It	Cousin It						
CASUARINA glauca Green Wave	Green Wave						
CONOSTYLUS Silver Sunrise	Cotton Heads						
DIANELLA caerulea	Flax Lily						
DIANELLA Emerald Fountain	Emerald Fountain						
DICHONDRA repens	Kidney Weed						
ERIOSTEMON myoperoides Profusion	Long-Leaf Wax Flower						
FICINIA nodosa	Knobby Clubrush						
DOODIA aspera	Prickly Rasp Fern						
HARDENBERGIA violacea	Happy Wanderer						
HIBBERTIA scandens	Snake Vine						
HOYA australis	Wax Vine						
LIBBERTIA paniculta	Grass Flag						
LOMANDRA Cracker Jack	Cracker Jack						
LOMANDRA hystrix	Lomandra						
LOMANDRA Little Con	Little Con						
LOMANDRA Lime Tuff	Lime Tuff						
LOMANDRA Tropic Cascade	Tropic Cascade						
LOMANDRA Verday	Verday						
MICROSORUM pustulatum	Kangaroo Fern						
MYOPORUM ellipticum	Coastal Boobiala						
MYOPORUM parvifolium Yareena	Yareena						
PANDOREA jasminoides Southern Belle	Wonga Vine						
PHEBALIUM woombye Prostrate	Woombye Prostrate						
PLATYCERIUM bifurcatum	Elkhorn Fern						
VIOLA hederaceae	Native Violet						



ANIGOZANTHOS Kangaroo Paw



CALOCHLAENA dubia



CARPOBROTUS glaucescens



CASUARINA glauca Green Wave



DIANELLA caerulea



FICINIA nodosa



HOYA australis



DOODIA aspera



HARDENBERGIA violacea



LOMANDRA hystrix



MYOPORUM parvifolium Yareena



VIOLA hederaceae

DRAFT



# 5.6 Plant Palette

## SHRUBS & FEATURE PLANTS

Botanical Name	Common Name	Sun	Shade	Wet	Dry	WSUD	Feature
ADENANTHOS sericeus Silver Streak	Silver Woolly Bush						
AUSTROMYRTUS dulcis	Midgen Berry						
AJUGA australis	Australian Bugle						
ALOCASIA brisbanensis	Cunjevoi						
ANIGIOPTERIS evecta	King Fern						
ASPLENIUM australasicum	Birds Nest Fern						
BAEKEA virgata Dwarf	Baekea						
BANKSIA Coastal Cushions	Coastal Cushions						
BANKSIA collina Little Eric	Little Eric						
BANKSIA Honey Pots	Honey Pots						
BANKSIA integrifolia Coastal Beacon	Coastal Beacon						
BANKSIA spinulosa Bush Candles	Bush Candles						
BANKSIA robur	Swamp Banksia						
CORDYLINE congesta	Clumping Cordyline						
CORDYLINE petiolaris	Broad Leafed Palm Lily						
DORYANTHES palmeri	Gymea Lily						
EREMOPHYLLA sp.	Emu Bush						
GREVILLEA Peaches and Cream	Peaches And Cream						
HYMENOSPORUM flavum Gold Nugget	Gold Nuggets						
LEPIDOZAMIA perofskyanus	Burrawang						
MELALEUCA linarifolia Little Red	Snow In Summer						
MELALEUCA thymifolia	White Lace						
MELASTOMA affine	Blue Tongue						
METROSIDEROS excelsa	Nz Christmas Tree						
METROSIDEROS vitiensis Fiji Fire	Fiji Fire						
OZOTHAMNUS diomifolius	Rice Flower						
PHILOTHECA Small Leaf Form	Small Leaf Form						
PITTOSPORUM tobira Miss Muffet	Miss Muffet						
SYZYGIVM Pink Cascade	Pink Cascade Lilly Pilly						
TETRATHECA thymifolia	Black-Eyed Susan						
WESTRINGIA fruticosa	Coastal Rosmary						
WESTRINGIA fruticosa Zena	Coastal Rosemary						
XANTHORRHOEA glauca subs. glauca	Grass Tree						

Disclaimer: This palette encourages the use of species that retain and enhance Byron’s specific character. This list may be expanded upon during detailed design. This list should be periodically reviewed and amended as species are trialled.



AUSTROMYRTUS dulcis



ALOCASIA brisbanensis



ASPLENIUM australasicum



BANKSIA Coastal Cushions



BANKSIA collina Little Eric



CORDYLINE petiolaris



DORYANTHES palmeri



MELALEUCA thymifolia



OZOTHAMNUS diomifolius



PITTOSPORUM tobira Miss Muffet



SYZYGIVM Pink Cascade



WESTRINGIA fruticosa

DRAFT



