

CONFIDENTIAL

ARLIE BEACH ACCESS & MOVEMENT PLAN

WHITSUNDAY REGIONAL COUNCIL | 16.09.2014



AGENDA

- update on program
- key strategic directions from local plan
- purpose of the study
- methodology & key outcomes
- existing conditions mapping
- access & movement plan option one
- access & movement plan option two
- recommendations

DRAFT LOCAL PLAN: KEY STRATEGIC DIRECTIONS

TRANSPORT AND INFRASTRUCTURE

Movement networks will be **integrated** and connect key precincts through a coordinated, legible and safe network for road users, considering strategic functionality for pedestrians, cyclists, public transport, service vehicles, and private vehicles.

Development will contribute to the consolidation of the Bicentennial Walkway, providing **clearly legible**, safe connections through all areas.

Public transport will provide **easy access** to key precincts, specifically investigating the potential for dedicated servicing of Abell Point, Waterson Way, Airlie Hill and the Port of Airlie.

Development and growth occurs in accordance with trunk services **capacity** and upgrades.

HAZARDS AND SAFETY

Airlie Beach is recognised as a **safe and legible** community that is attentive to visitor safety and sense of well-being.

Development in Airlie Beach will be conscientious of flooding and storm surge inundation, and other **climatic risks** that may impact people and property.

ACCESS & MOVEMENT STUDY

PURPOSE OF THE STUDY

Review the existing access, movement & signage conditions at Airlie Beach.

Identify key public safety, accessibility and legibility concerns for residents and visitors.

Address on-going conflicts with changing locations for bus and taxis during main street upgrade.

Address perceived car parking shortage vs use of highly-valuable foreshore area for surface car parking.

Address the future demand & increase of pedestrian & vehicular traffic to/from Port of Airlie & future Waterson Way developments.

Address multi-modal requirements of Main Street.

METHODOLOGY

Site visits

Whitsunday Council supplied data & base plans

Consultation with council engineer

Review of existing reports (JLL, TTM)

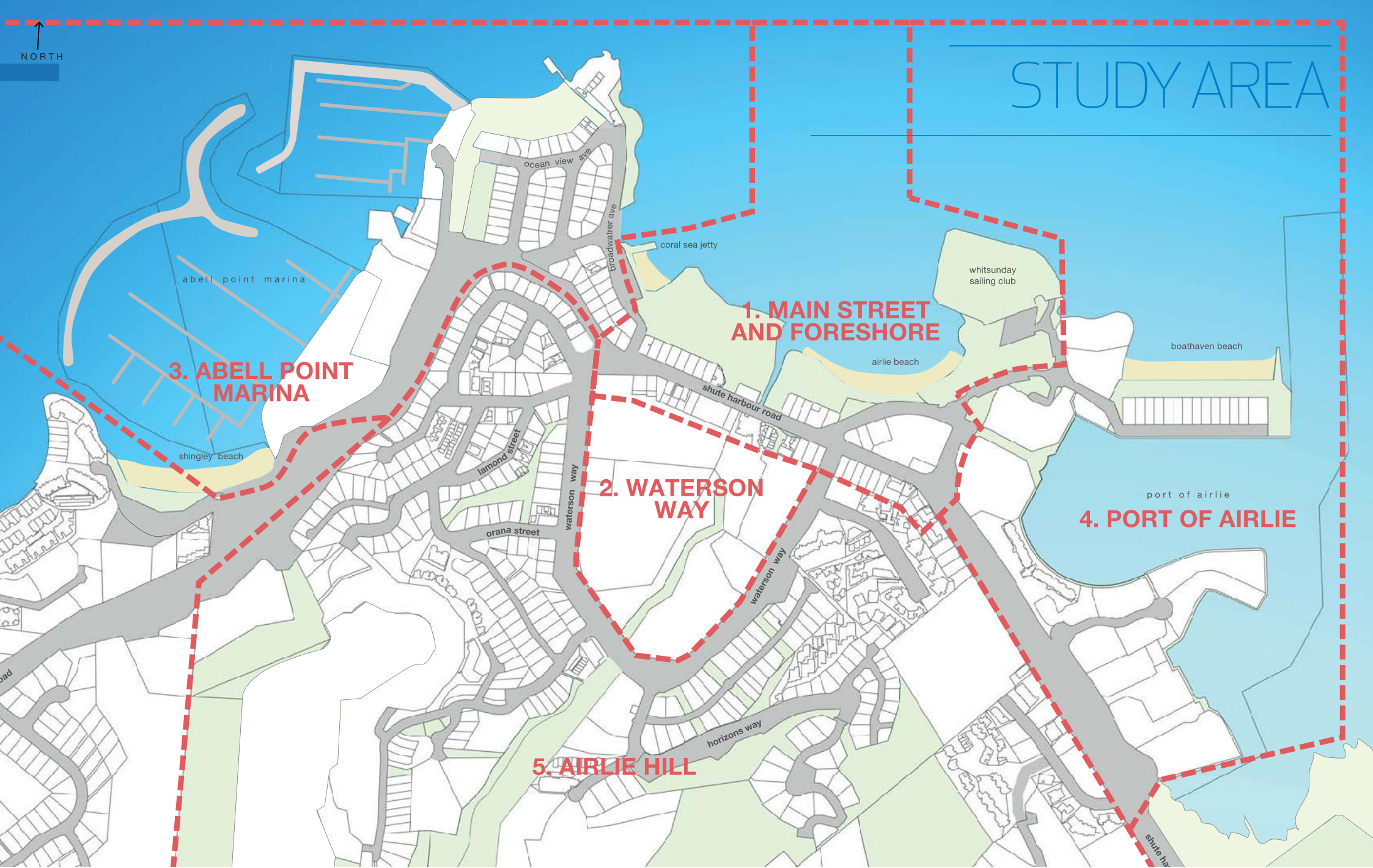
Discussions with council stakeholders

Mapping of existing conditions

List of recommendations



STUDY AREA



MOVEMENT CHARACTER ZONES

SHUTE HARBOUR ROAD EAST & WEST

High speed traffic through-route
60/50km hour speed limit, 2-lane vehicular traffic
Partial bicycle lanes near Main Street East roundabout
35 - 40m road reserve width

MAIN STREET

Main retail & entertainment destination street.
Vehicle through-route & destination traffic, bus, loading, pedestrian & cycle use.
30 km/hour speed limit

MAIN STREET EAST

Extension of Main Street retail & commercial street bisected by Waterson Way intersection.
50 km/hour speed limit with 20km/hour at intersection with Waterson Way.

COCONUT GROVE

50 km/hour speed limit through-route to Shute Harbour Road
Partial bicycle lanes
Wide road reserve width 24 - 35m

WATERSON WAY EAST & WEST

50 km/hour speed limit local traffic & alternative through-route for trucks
wide road reserve width 35 - 40m
Waterson Way East road upgrade complete with linemarking & pedestrian pathway.

AIRLIE ESPLANADE & BROADWATER AVENUE

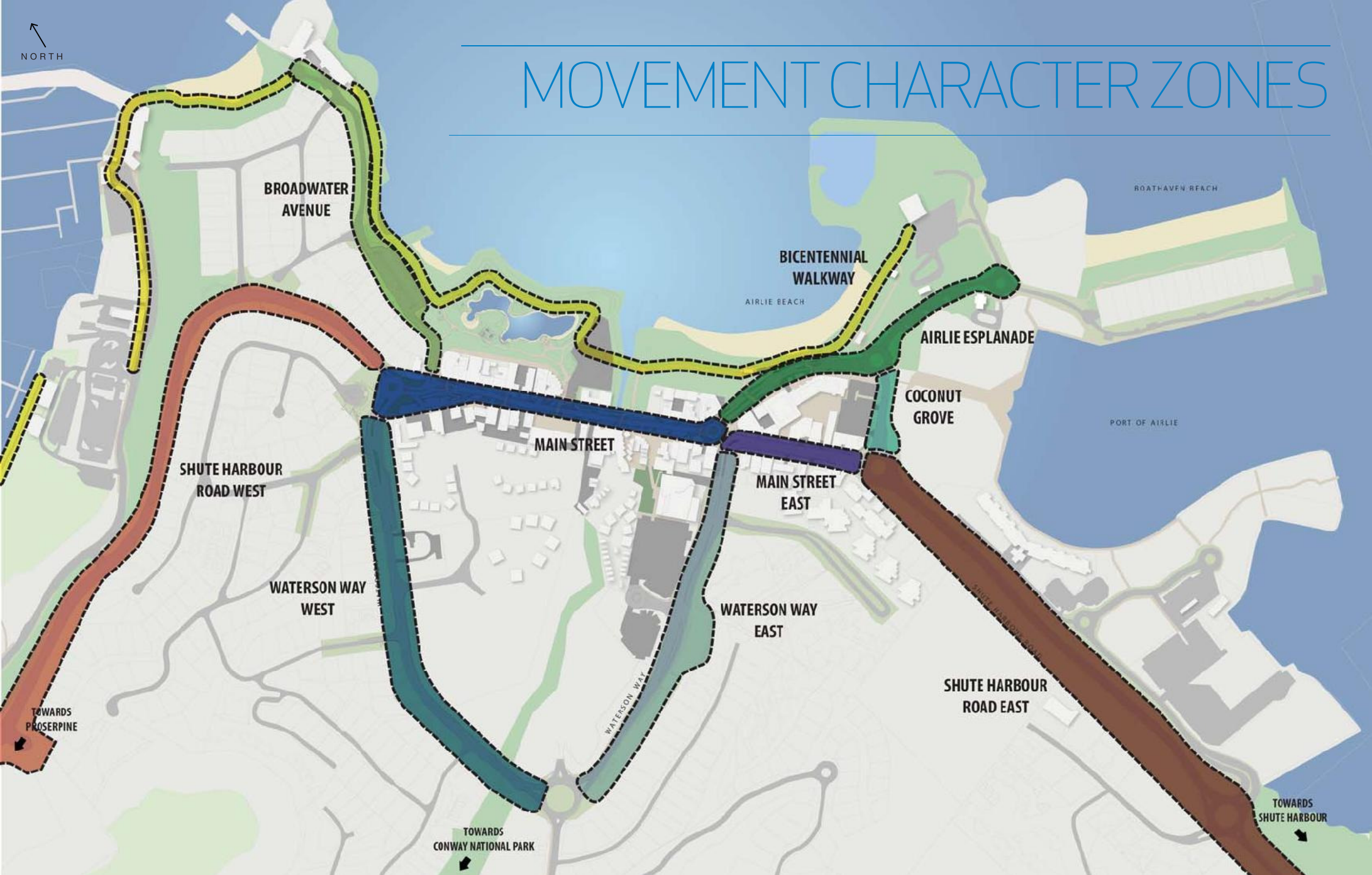
50km/hour local & destination traffic

BICENTENNIAL WALKWAY

Shared pedestrian & cyclist pathway



MOVEMENT CHARACTER ZONES



SAFETY & CONSTRAINTS

Existing drain provides significant barrier to pedestrian / cycle movement across Shute Harbour Road East.

Significant slope provides barriers to pedestrian / cycle movement between Main Street, Abell Point Marina & Waterson Way.

Blank edges to built form creates passive surveillance concerns in Main Street environment.

Airlie Creek culverts present possible pedestrian safety issue on Main Street.

Confusion between vehicles & pedestrians over right-of-way at crossing points on Main Street.

Bus stops on Shute Harbour Road isolated & difficult to reach for pedestrians.

Regular pedestrian movement across 'blind' intersection on Main Street East.

Low percentage of pathways provide shade cover.





SAFETY & CONSTRAINTS



-  Physical barrier (drain / wall)
-  High speed predominantly vehicle-traffic zone with limited opportunities for pedestrian crossings
-  Main Street modal conflicts (loading, vehicles, taxis, pedestrians, cyclists, local bus) Vehicle priority over pedestrian
-  Pedestrian permeability issues across roads, intersections, roundabouts and physical barriers



LOCAL BUS & TAXI

LOCAL BUS & TAXI

Regular local bus services run by Whitsunday Transit.

Current Main Street bus stops at Airlie Central & X-Base.

Bus stops are not adjacent for inbound/outbound on Main Street & require bus services to run down Main Street.

Bus stop infrastructure (shelters) & linemarking on Main Street East & old transit terminal in Lions Park currently not in use / used for informal car parking.

Taxi rank located on Main Street East.

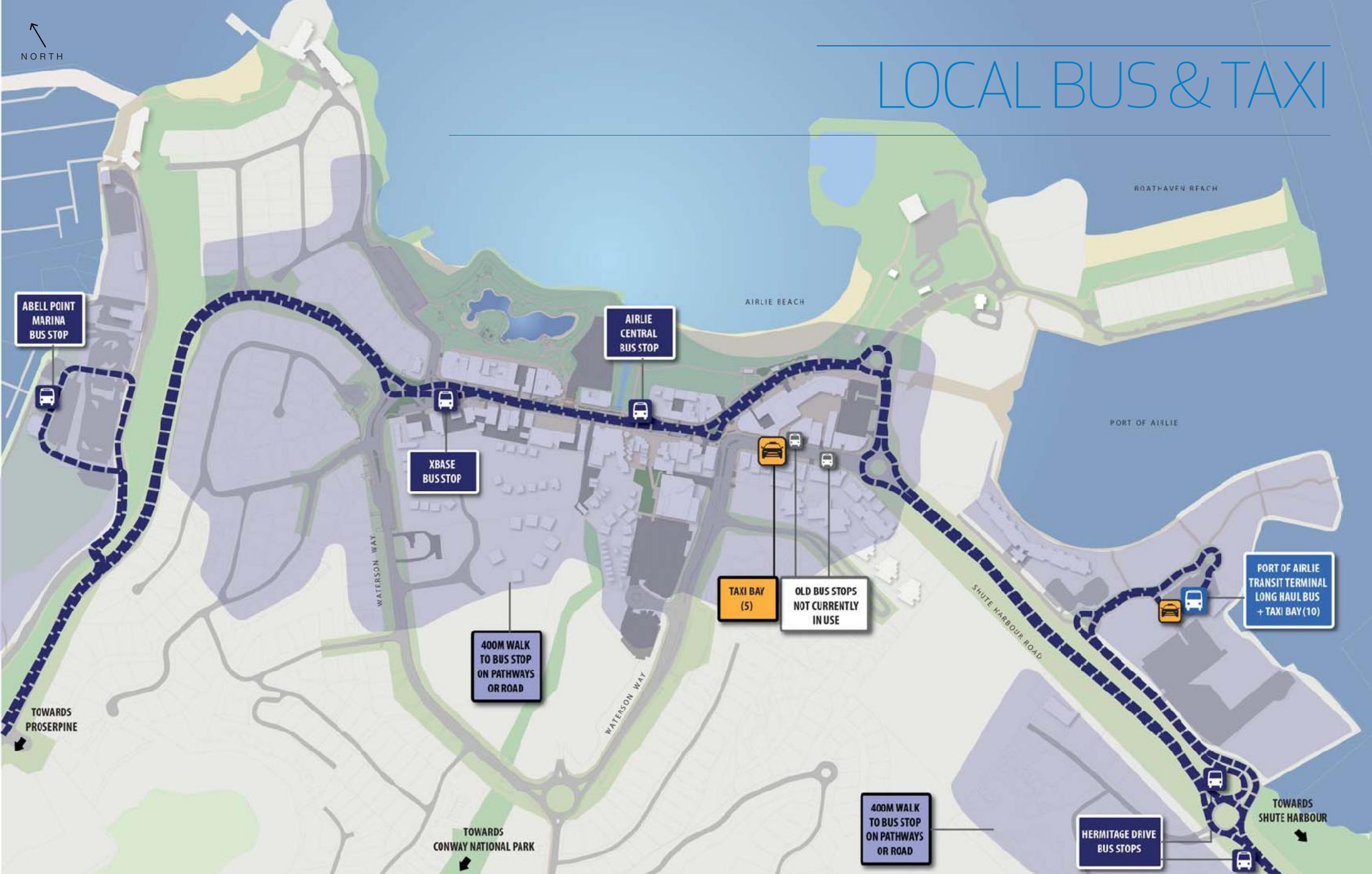
Hermitage Drive bus stops fairly isolated for pedestrians crossing Shute Harbour Road or coming from Port of Airlie due to physical barrier (drain).

Poor walkability coverage for Port of Airlie and permanent residential areas off Waterson Way and Airlie Hill to current bus stops.





LOCAL BUS & TAXI





RECOMMENDATIONS LOCAL BUS & TAXI

LOCAL BUS & TAXI OPTION ONE

LOCAL BUS ROUTE OPTION ONE : **ON-MAIN STREET** :

1. Utilise existing XBase bus stop & establish new Hogs Breath bus stop on opposite side of Main Street.

REQUIREMENTS: Remove 6 car parking spaces & remove landscaping area. New road curbing and new signage required.

2. Establish two new bus stops on Coconut Grove to help facilitate activation and provide better pedestrian connectivity to Port of Airlie.

REQUIREMENTS: New pavement construction & linemarking. New shelters & signage required.

3. Utilise Airlie Central for taxi rank (night) and shuttle bus (day).

REQUIREMENTS: New signage required.

4. Convert old bus stops & taxi bays to car parking & loading zones on Main Street East.

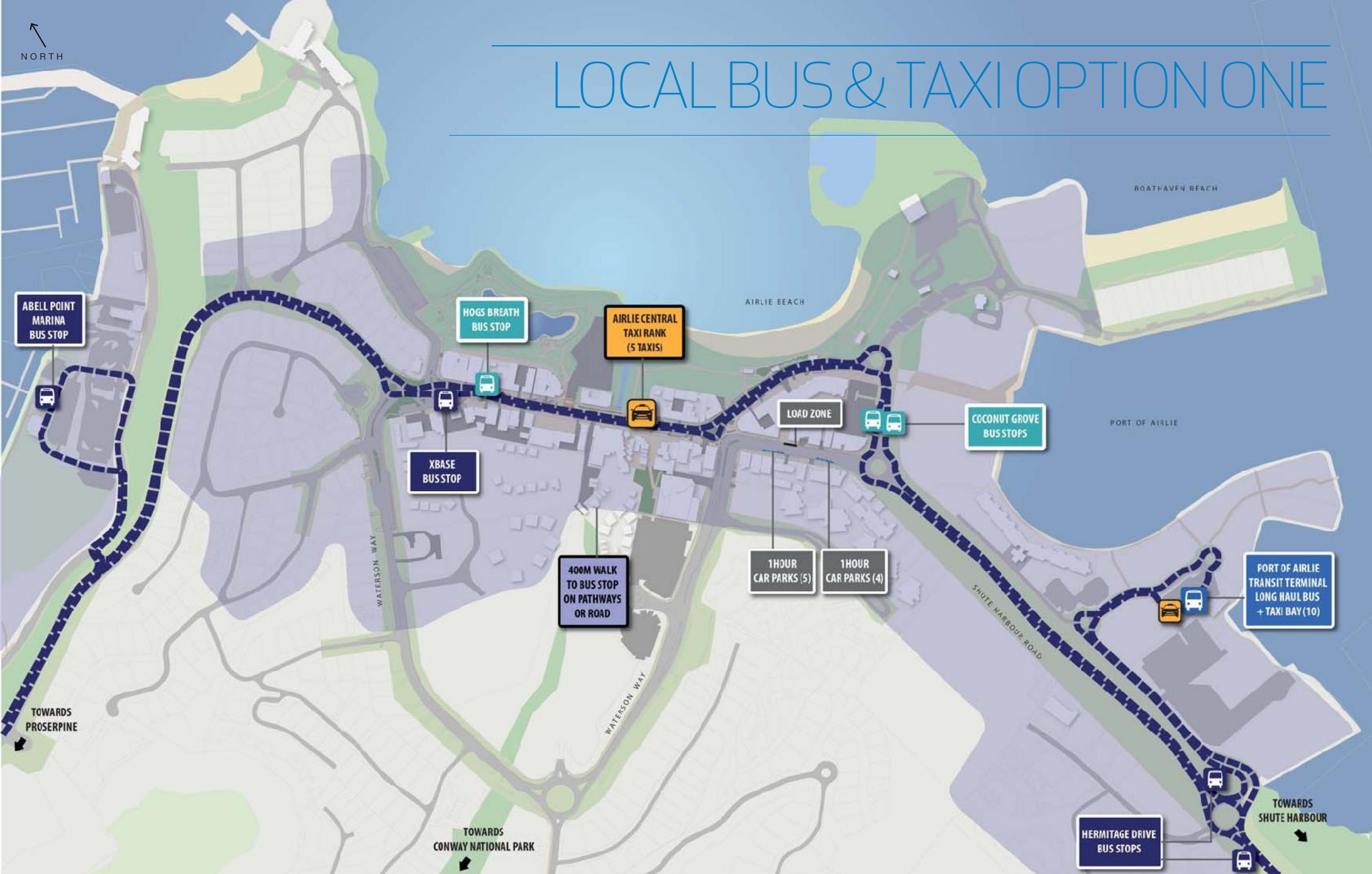
REQUIREMENTS: New linemarking & signage required.

5. Utilise transit centre at Port of Airlie as local bus stop for regular timetable.

REQUIREMENTS: New linemarking & signage required. Investigate suitability / impacts on site.



LOCAL BUS & TAXI OPTION ONE



LOCAL BUS & TAXI OPTION TWO

LOCAL BUS ROUTE OPTION TWO : **OFF-MAIN STREET** :

1. Reinstate Main Street East bus stops, improving activation of street & utilising existing linemarking & shelters.

REQUIREMENTS: New signage required.
Improved pedestrian shelters required.

2. New bus stop locations on Waterson Way provide high level of pedestrian walkability cover to Airlie Hill and reduce traffic demands on Main Street by relocating regular services to Waterson Way.

REQUIREMENTS: New linemarking, signage, shelters & possible widened pavement required on Waterson Way (including up to 32 car parking spaces to be relocated).

3. Utilise Airlie Central for taxi rank (night) and shuttle bus (day).

REQUIREMENTS: New signage required.

4. Convert XBase bus stop & existing taxi rank on Main Street East to public car parking (additional 11 spaces).

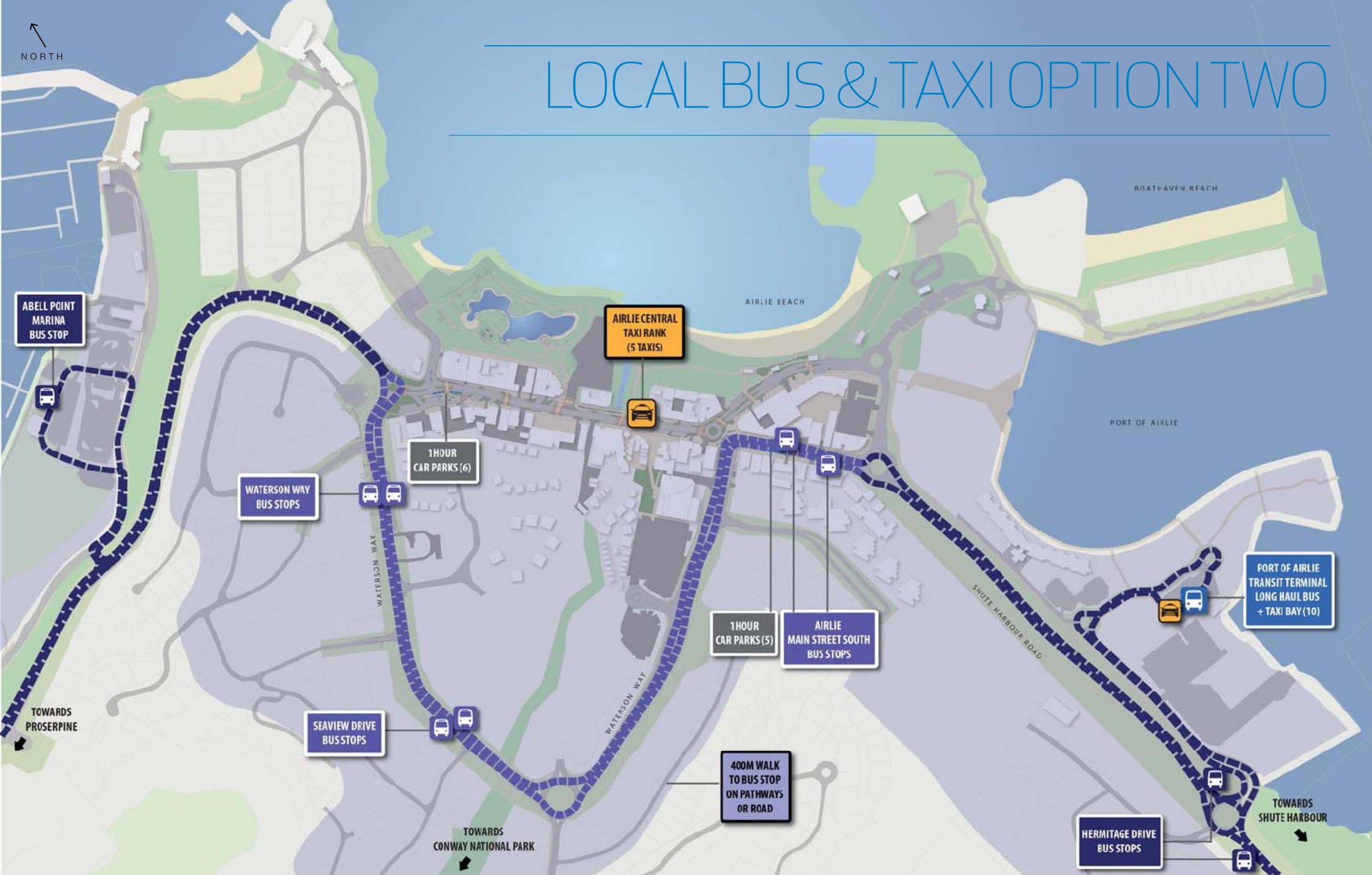
REQUIREMENTS: New linemarking & signage required.

5. Utilise transit centre at Port of Airlie as local bus stop for regular timetable.

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LOCAL BUS & TAXI OPTION TWO





PEDESTRIAN & CYCLE

PEDESTRIAN & CYCLE

Bicentennial Walkway has shared bicycle & pedestrian movement & provides a significant foreshore recreation opportunity. However the continuous pedestrian-right-of-way is separated in sections by car parks at Abell Point Marina, Coral Sea Resort, Airlie Lagoon and the Whitsunday Sailing Club.

Limited sections of pathways provide weather protection.

Main street pedestrian crossing points are vehicle-right-of-way. No dedicated pedestrian crossings are provided within the Main Street environment.

Woolworths provides a covered pedestrian link through the car park.

Two pedestrian-only arcades provide weather protection leading from Main Street to the foreshore, however are poorly signed.

Major physical barriers restrict pedestrian and cycle access to Port of Airlie and Abell Point Marina.

Limited pathway connections provided on Waterson Way West.

Pedestrian road crossings observed on Coconut Grove and Main Street East where no pedestrian pathway or refuge is provided.

Limited on-road dedicated cycle lanes provided.





PEDESTRIAN & CYCLE





RECOMMENDATIONS PEDESTRIAN & CYCLE

1. Create a Healthy Communities Recreation Trail that connects Airlie Foreshore to Airlie Hill and links Port of Airlie to Abell Point Marina.

REQUIREMENTS:

- Incorporate fragmented existing pathway networks into consolidated network linking to Bicentennial Walkway.
- Create a new boardwalk along the lagoon frontage to encourage retail and dining to provide alfresco opportunities & activation.
- Improve connections through car parks and across busy intersections through pedestrian-right-of-way linemarking.
- Improve the permeability and pedestrian safety on Main Street East and Coconut Grove through pedestrian-right-of-way linemarking.
- Improve wayfinding signage.

2. Improve permeability of Airlie Hill.

REQUIREMENTS:

- Include footpaths on Waterson Way West.
- Include a pedestrian pathway along Airlie Creek providing a direct pedestrian link from Main Street to Airlie Hill.

3. Improve on-road bicycle safety.

REQUIREMENTS: Provide dedicated bicycle lanes on Waterson Way & Shute Harbour Road.

4. All new developments or refurbishments of tenancies on Main Street and Port of Airlie where addressing street frontages or major pedestrian corridors are to include awnings over the sidewalk to assist with sun/rain cover.



PEDESTRIAN & CYCLE



Broadwater Avenue
Car Park
Regulated Pay & Display **P**

Parking Fees

0 - 2 Hours	\$2.00
2 - 4 Hours	\$4.00
4 - 12 Hours	\$6.00
12 - 24 Hours	\$8.00

 **NO CAMPING**

 Whitsunday
Regional Council

PUBLIC CAR PARKING

PUBLIC CAR PARKING

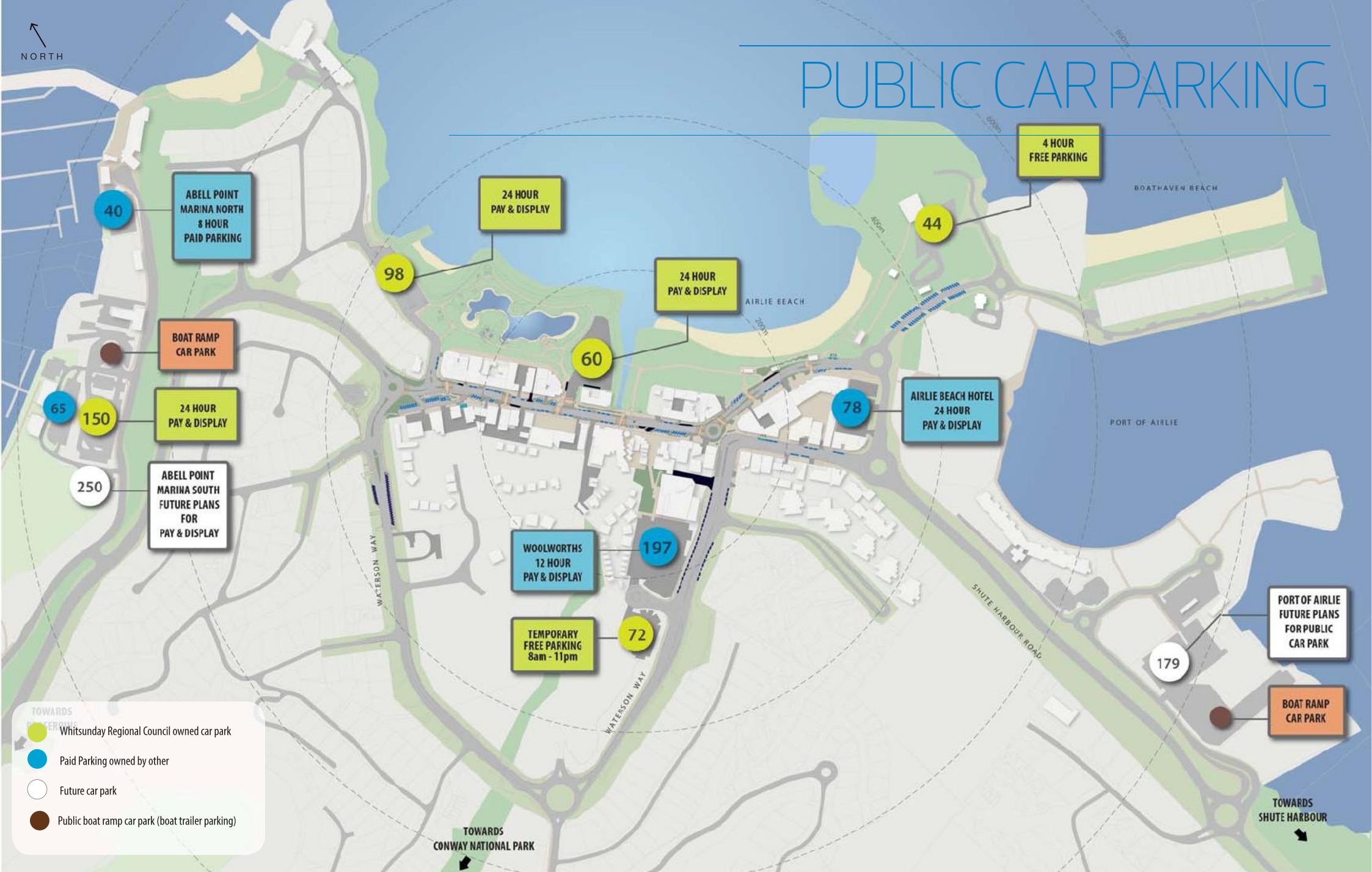
Within 500m walk of Airlie Central Main Street :

- 433 pay & display car parks (12-24 hours)
- additional 72 temporary free car parks
- 44 free for 4 hour car parks
- 100 on-street free for 1 hour car parks
- 6 on-street disabled car parks
- 8 free for 15 minute car parks
- 120 no-limit car parks (off main-street)
- 179 future car parks at Port of Airlie
- 255 car parks at Abell Point Marina +
- additional future 250 car parks at Abell Point Marina





PUBLIC CAR PARKING



TOWARDS CONWAY NATIONAL PARK

- Whitsunday Regional Council owned car park
- Paid Parking owned by other
- Future car park
- Public boat ramp car park (boat trailer parking)





RECOMMENDATIONS PUBLIC CAR PARKING

PUBLIC CAR PARKING

1. Utilise old transit terminal in Lions Park for dedicated public car parking.

REQUIREMENTS: New signage & linemarking.

2. Investigate highest and best outcome for Airlie Lagoon public car park.

REQUIREMENTS: Conduct study into cost of providing this car park as a basement structure with public parkland above; alternatively conduct study into activation uses at fringe of car park.

3. Utilise existing road reserve width on Waterson Way for on-street car parking.

REQUIREMENTS: New pavement, linemarking, street trees and landscaping required.

4. Future development on Whitsunday Regional Council site must incorporate public car parking component to replace temporary car park in this location.

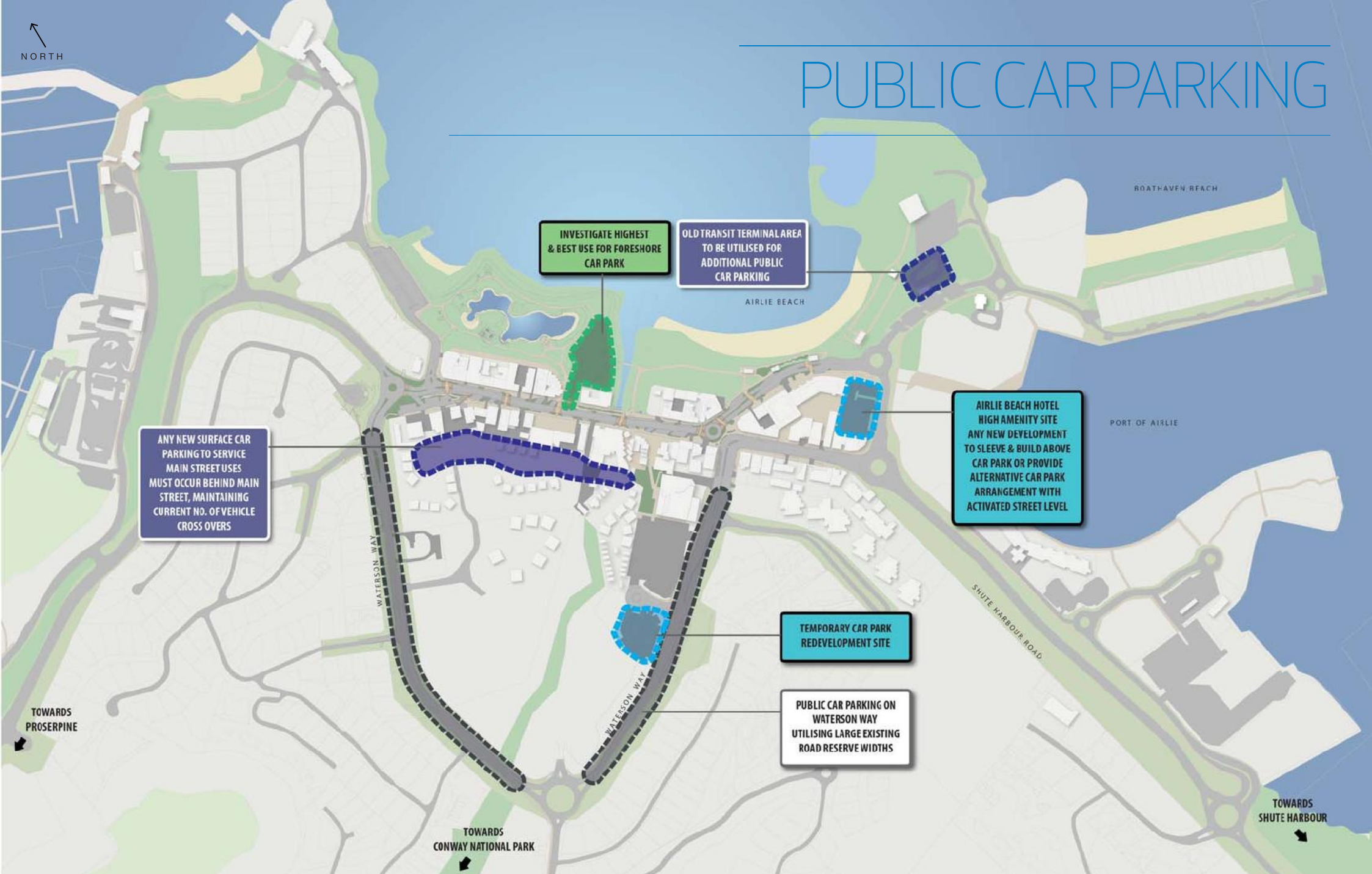
REQUIREMENTS: New development plans must include provision for public car parking on-site.

5. Future re-development of Airlie Beach Hotel car park on Coconut Grove must propose to retain and sleeve existing car parking or propose alternative car parking arrangement to maximise the activation and surveillance of Coconut Grove for pedestrians.

REQUIREMENTS: New development plans must illustrate sleeved-development scenario, sub-basement or structured car-park component with provision for public car parking on-site.



PUBLIC CAR PARKING



ANY NEW SURFACE CAR PARKING TO SERVICE MAIN STREET USES MUST OCCUR BEHIND MAIN STREET, MAINTAINING CURRENT NO. OF VEHICLE CROSS OVERS

INVESTIGATE HIGHEST & BEST USE FOR FORESHORE CAR PARK

OLD TRANSIT TERMINAL AREA TO BE UTILISED FOR ADDITIONAL PUBLIC CAR PARKING

AIRLIE BEACH HOTEL HIGH AMENITY SITE ANY NEW DEVELOPMENT TO SLEEVE & BUILD ABOVE CAR PARK OR PROVIDE ALTERNATIVE CAR PARK ARRANGEMENT WITH ACTIVATED STREET LEVEL

TEMPORARY CAR PARK REDEVELOPMENT SITE

PUBLIC CAR PARKING ON WATERSON WAY UTILISING LARGE EXISTING ROAD RESERVE WIDTHS



SIGNAGE & WAYFINDING

WAYFINDING SIGNAGE

There was no observable centrally-located wayfinding signage map that clearly showed the Airlie Beach extents and major destinations, or walkable routes and distance between destinations.

Port of Airlie and Abell Point Marina both had a series of branded wayfinding signs located along the major pedestrian thoroughfares.

Airlie lagoon is signed at both car parking entrances.

The transit terminal at Port of Airlie is signed on Coconut Grove, however the sign is not easily readable.

Pavement marking has been utilised as a wayfinding device near Boathaven Beach.

Wayfinding signage is predominantly language / text based rather than utilising symbols or maps.

Visual entry statements are utilised as pedestrian arrival experiences at the start of Airlie Creek track and Beach Walk at Airlie Central.

Airlie Central bus stop is visible due to prominent pedestrian shelter and sign, however no shelter or signs are provided at the XBase bus stop.



PEDESTRIAN, CYCLE & TRAFFIC SIGNAGE

Right-of-way signage for pedestrians & cyclists throughout Airlie Beach is a combination of:

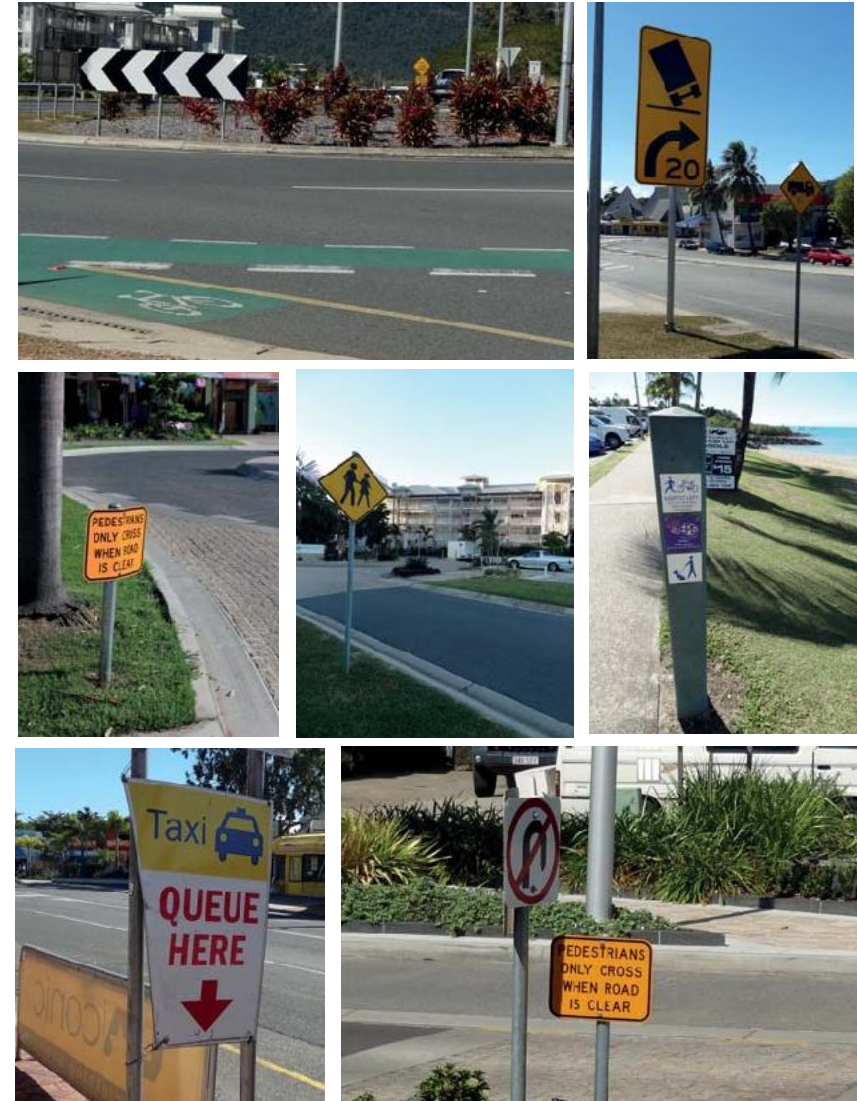
- language/text based signs
- symbol based signs
- linemarking and pavement marking
- pavement surface treatments and threshold treatments
- barriers and physical structures

Main Street pedestrian crossing points are constructed to appear to be pedestrian-priority, however they are signed vehicle-right-of-way.

Linemarking is utilised on Coconut Grove to indicate the preferred pedestrian crossing location. A white sign indicates that vehicles have right-of-way.

On-road bicycle lane marking occurs around the Main Street East roundabout, however this lane marking does not continue along Coconut Grove or Shute Harbour Road, creating potential cycle conflict with wayfinding and right-of-way.

Bicentennial Walkway is a shared zone between cyclists and pedestrians. This is signed via small symbols that are not clearly visible.



SIGNAGE & WAYFINDING





THE BOATHOUSE

- ACCESS TO** →
- **RECEPTION**
 - **SHOPS - CAFES**
 - **BOARDWALK**
 - **MARINA**
 - **FERRY TERMINAL**

RECOMMENDATIONS
SIGNAGE & WAYFINDING

WAYFINDING SIGNAGE

1. Provide centrally-located wayfinding signage in the form of a location map that helps promote to visitors the location of and access to facilities, trails, activities and transport.

REQUIREMENTS: New signage.

2. Improve visibility of bus stops.

REQUIREMENTS: New shelter structures and/or signage.

3. Change priority of pedestrian crossing points on Main Street to reflect “pedestrian-priority” rather than vehicle priority.

REQUIREMENTS: Refer to street signs / pedestrian signs.

4. Investigate adopting a universal signage language that utilises symbols for wayfinding and points of interest.

5. Investigate opportunities to build / reflect the Airlie Brand through a consistent and innovative signage language.

6. Threshold treatments to be consistently applied at vehicular entrance to the Main Street for Coconut Grove and Main Street East.

PEDESTRIAN & CYCLE SIGNAGE

1. “Pedestrian Ahead” signage to be installed before pedestrian crossings, in-line with MUTCD guidelines.

REQUIREMENTS: MUTCD reference W6-1(B)

2. All existing pedestrian crossing points that are currently signed “Pedestrians only cross when road is clear” or “Pedestrians give way to traffic” are to be removed and replaced with “Pedestrian Crossing” signage.

REQUIREMENTS: MUTCD guidelines for pedestrian crossing signage & linemarking

3. Line-marking is required where there are inconsistencies for cyclist lanes or cyclist pathways.

REQUIREMENTS: MUTCD guidelines.

4. All pedestrian signage to be consistent in G-Series format.

REQUIREMENTS: MUTCD guidelines G5-7, G5-8

PUBLIC REALM IMPROVEMENTS

1. Improve key public realm environment in highly-visible “landmark” location.

REQUIREMENTS:

- Structural infill and landscape treatment to screen culdesac retaining wall at highly-prominent Main Street western-end.
- Landscaping treatment to screen facilities block as viewed from Coconut Grove entry.
- Facade treatment to improve blank walls in key pedestrian environment on Main Street East.

1. Loading zones to be delineated by the use of “Loading Zone” signage.

REQUIREMENTS: MUTCD reference R5-23

2. Taxi Zones to be delineated by the use of “Taxi Zone” signage.

REQUIREMENTS: MUTCD reference R5-21

3. Bus Zones to be delineated by the use of “Bus Zone” signage.

REQUIREMENTS: MUTCD reference R5-20

4. Speed limit along Main Street to be 30km/hour, and Main Street zone to be extended to include Coconut Grove.

REQUIREMENTS: MUTCD reference R4-10 & R4-11 signage to be installed at entrance & exit of Main Street.

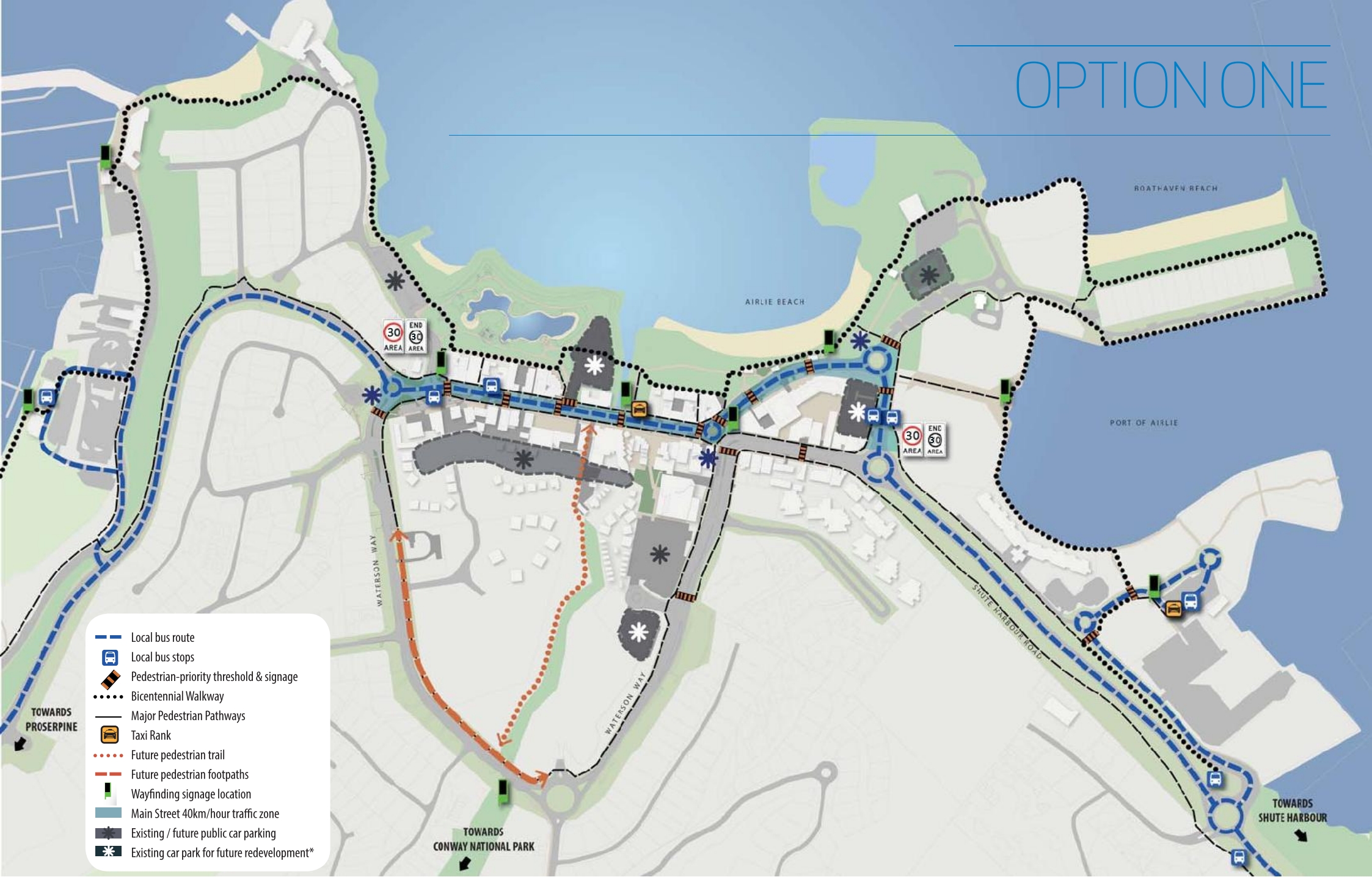
SIGNAGE & WAYFINDING



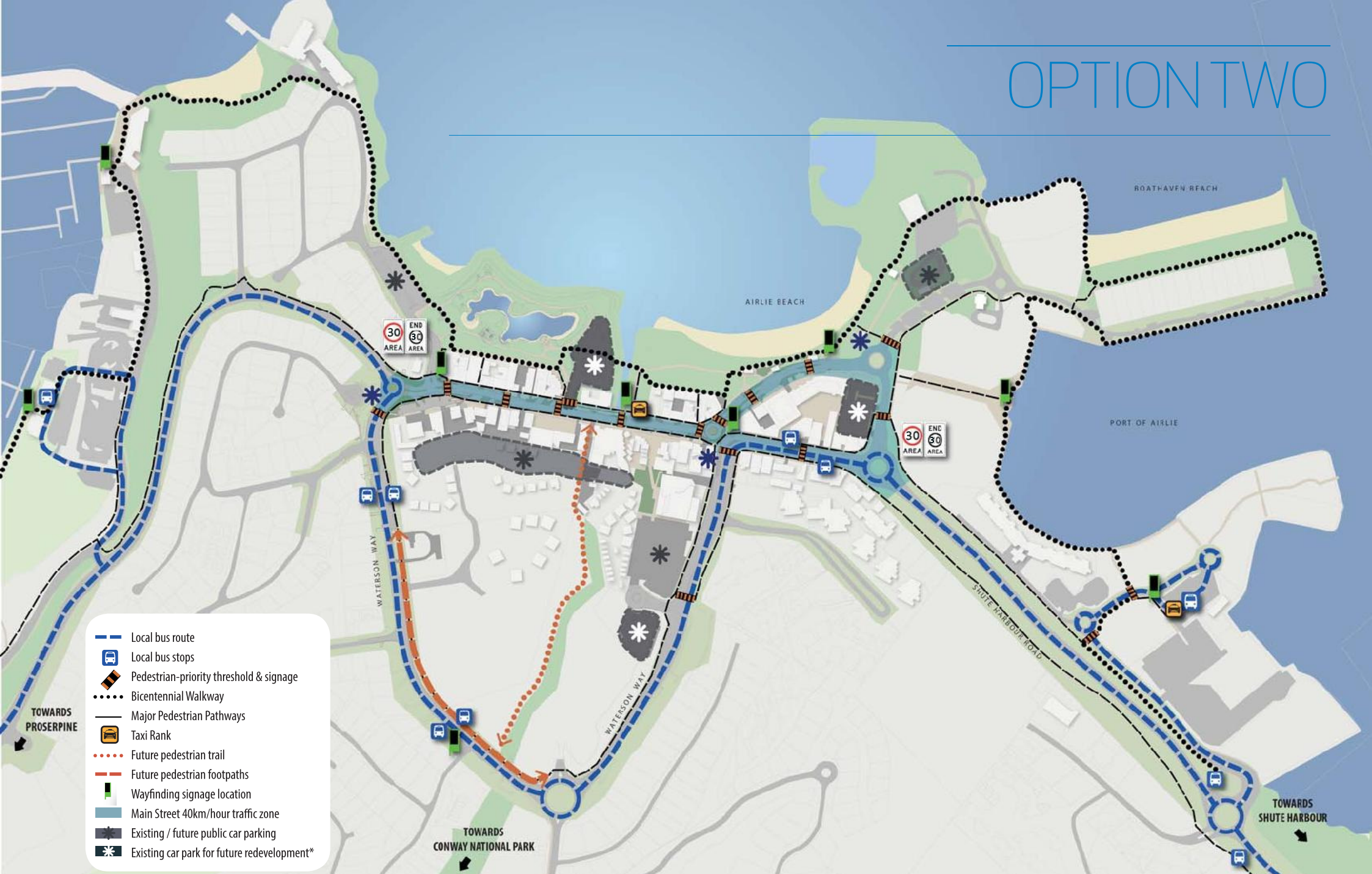


ACCESS & TRANSPORT PLAN OPTION ONE & TWO

OPTION ONE



OPTION TWO



RECOMMENDATIONS SUMMARY

	RECOMMENDATIONS	REQUIREMENTS / ACTIONS
BUS & TAXI OPTION ONE		
1	Utilise existing XBase bus stop & establish new Hogs Breath bus stop on opposite side of Main Street.	Remove 6 car parking spaces & remove landscaping area. New road curbing and new signage required.
2	Establish two new bus stops on Coconut Grove to help facilitate activation and provide better pedestrian connectivity to Port of Airlie.	New pavement construction & linemarking. New shelters & signage required.
3	Utilise Airlie Central for taxi rank (night) and shuttle bus (day).	New signage required.
4	Convert old bus stops & taxi bays to car parking & loading zones on Main Street East.	New linemarking & signage required.
5	Utilise transit centre at Port of Airlie as local bus stop for regular timetable.	New linemarking & signage required. Investigate suitability / impacts on site.
BUS & TAXI OPTION TWO		
6	Reinstate Main Street East bus stops, improving activation of street & utilising existing linemarking & shelters.	New signage required. Improved pedestrian shelters required.
7	New bus stop locations on Waterson Way provide high level of pedestrian walkability cover to Airlie Hill and reduce traffic demands on Main Street by relocating regular services to Waterson Way.	New linemarking, signage, shelters & possible widened pavement required on Waterson Way (including up to 32 car parking spaces to be relocated).
8	Utilise Airlie Central for taxi rank (night) and shuttle bus (day).	New signage required.
9	Convert XBase bus stop & existing taxi rank on Main Street East to public car parking (additional 11 spaces).	New linemarking & signage required.
10	Utilise transit centre at Port of Airlie as local bus stop for regular timetable.	New linemarking & signage required. Investigate suitability / impacts on site.
PEDESTRIAN & CYCLE		
11	Create a Healthy Communities Recreation Trail that connects Airlie Foreshore to Airlie Hill and links Port of Airlie to Abell Point Marina.	Incorporate fragmented existing pathway networks into consolidated network linking to Bicentennial Walkway. Create a new boardwalk along the lagoon frontage to encourage retail and dining to provide alfresco opportunities & activation. Improve connections through car parks and across busy intersections through pedestrian-right-of-way linemarking. Improve the permeability and pedestrian safety on Main Street East and Coconut Grove through pedestrian-right-of-way linemarking. Improve wayfinding signage.
12	Improve permeability of Airlie Hill.	Include footpaths on Waterson Way West. Include a pedestrian pathway along Airlie Creek providing a direct pedestrian link from Main Street to Airlie Hill.
13	Improve on-road bicycle safety.	Provide dedicated bicycle lanes on Waterson Way & Shute Harbour Road.
14	All new developments or refurbishments of tenancies on Main Street and Port of Airlie where addressing street frontages or major pedestrian corridors are to include awnings over the sidewalk to assist with sun/rain cover.	New developments to include awnings over sidewalks in locations where the building addresses the street.
PUBLIC CAR PARKING		
15	Utilise old transit terminal in Lions Park for dedicated public car parking.	New signage & linemarking.
16	Investigate highest and best outcome for Airlie Lagoon public car park.	Conduct study into cost of providing this car park as a basement structure with public parkland above; alternatively conduct study into activation uses at fringe of car park.
17	Utilise existing road reserve width on Waterson Way for on-street car parking.	New pavement, linemarking, street trees and landscaping required.
18	Future development on Whitsunday Regional Council site must incorporate public car parking component to replace temporary car park in this location.	New development plans must include provision for public car parking on-site.
19	Future re-development of Airlie Beach Hotel car park on Coconut Grove must propose to retain and sleeve existing car parking or propose alternative car parking arrangement to maximise the activation and surveillance of Coconut Grove for pedestrians.	New development plans must illustrate sleeved-development scenario, sub-basement or structured car-park component with provision for public car parking on-site.

RECOMMENDATIONS SUMMARY

SIGNAGE & WAYFINDING		
20	Provide centrally-located wayfinding signage in the form of a location map that helps promote to visitors the location of and access to facilities, trails, activities and transport.	New signage.
21	Improve visibility of bus stops.	New shelter structures and/or signage.
22	Change priority of pedestrian crossing points on Main Street to reflect “pedestrian-priority” rather than vehicle priority.	Refer to street signs / pedestrian signs.
23	Investigate adopting a universal signage language that utilises symbols for wayfinding and points of interest.	
24	Investigate opportunities to build / reflect the Airlie Brand through a consistent and innovative signage language.	
25	Threshold treatments to be consistently applied at vehicular entrance to the Main Street for Coconut Grove and Main Street East.	Pavement & threshold treatments required.
26	“Pedestrian Ahead” signage to be installed before pedestrian crossings, in-line with MUTCD guidelines.	MUTCD reference W6-1(B)
27	All existing pedestrian crossing points that are currently signed “Pedestrians only cross when road is clear” or “Pedestrians give way to traffic” are to be removed and replaced with “Pedestrian Crossing” signage.	MUTCD guidelines for pedestrian crossing signage & linemarking
28	Line-marking is required where there are inconsistencies for cyclist lanes or cyclist pathways.	MUTCD guidelines for pedestrian crossing signage & linemarking
29	All pedestrian signage to be consistent in G-Series format.	MUTCD guidelines G5-7, G5-8
30	Improve key public realm environment in highly-visible “landmark” location.	Structural infill and landscape treatment to screen culdesac retaining wall at highly-prominent Main Street western-end.
		Landscaping treatment to screen facilities block as viewed from Coconut Grove entry.
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32	Taxi Zones to be delineated by the use of “Taxi Zone” signage.	MUTCD reference R5-21
33	Bus Zones to be delineated by the use of “Bus Zone” signage.	MUTCD reference R5-20
34	Speed limit along Main Street to be 30km/hour.	MUTCD reference R4-10 & R4-11 signage to be installed at entrance & exit of Main Street.