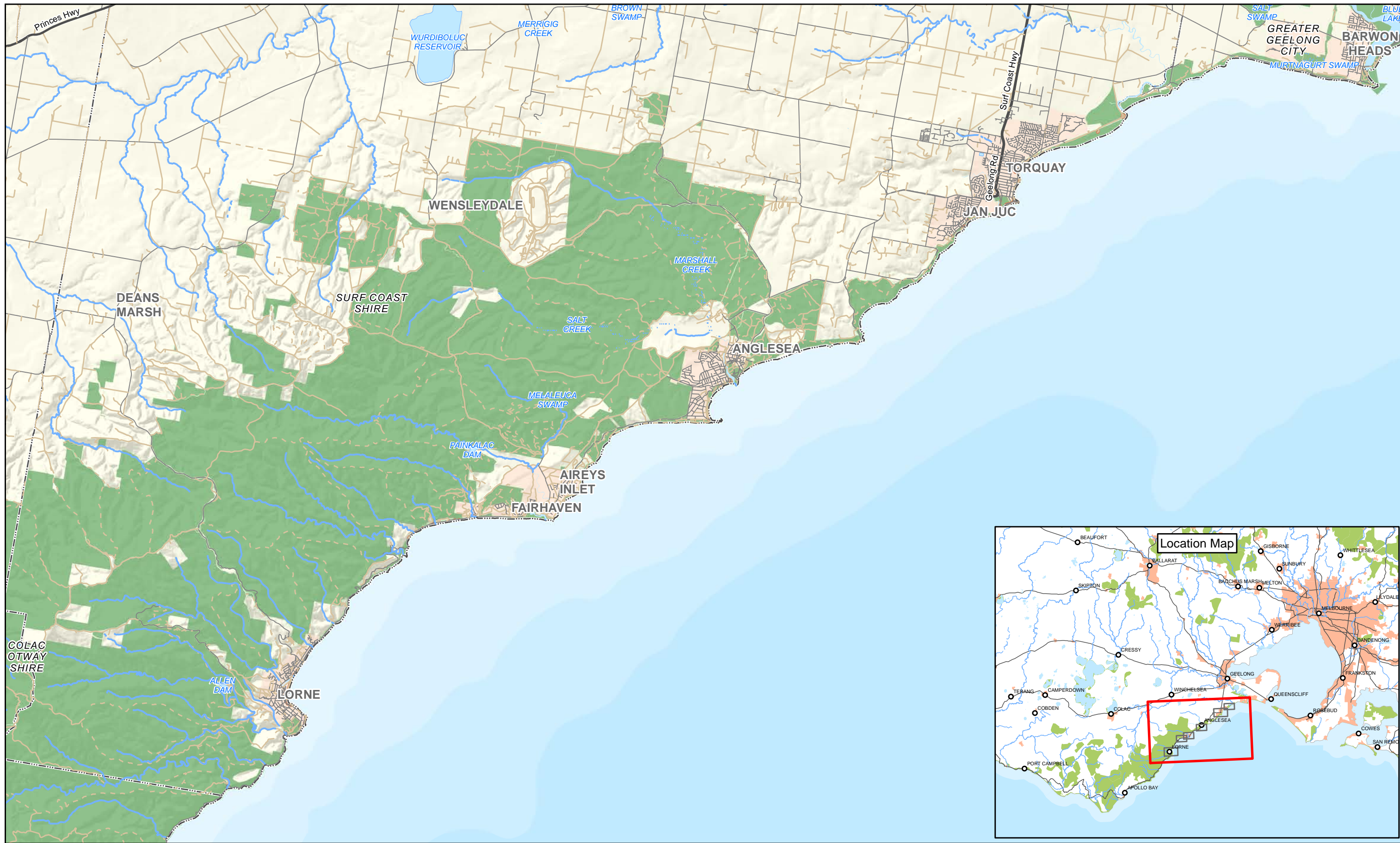
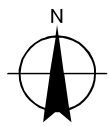


Appendices

Appendix A – Maps and GORCC car park database



Scale: 1:150,000 Paper Size A3
 0 7001,400 2,800 4,200 5,600
 Metres
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



- LEGEND**
- Car Parks
 - Highway
 - Sealed road (arterial and local)
 - Unsealed road
 - Track and bike path
 - Lake
 - Water course
 - Swamp
 - River
 - LGA outline
 - Parks
 - Township boundary



Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

Job Number | 31-29840
 Revision | A
 Date | 30 Jan 2013

Overview Map

Figure 1

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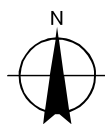
Data source: Data Custodian, Data Set Name/Title, Version/Date. Created by: splaird

180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com



Scale: 1:15,000 Paper Size A3
 0 70 140 280 420 560
 Metres

Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



LEGEND

- Car Parks
- Sealed road (arterial and local)
- Unsealed road
- Track and bike path
- Water course
- River
- River
- Stream
- Channel / drain
- Connector
- LGA outline
- Parks
- Township boundary

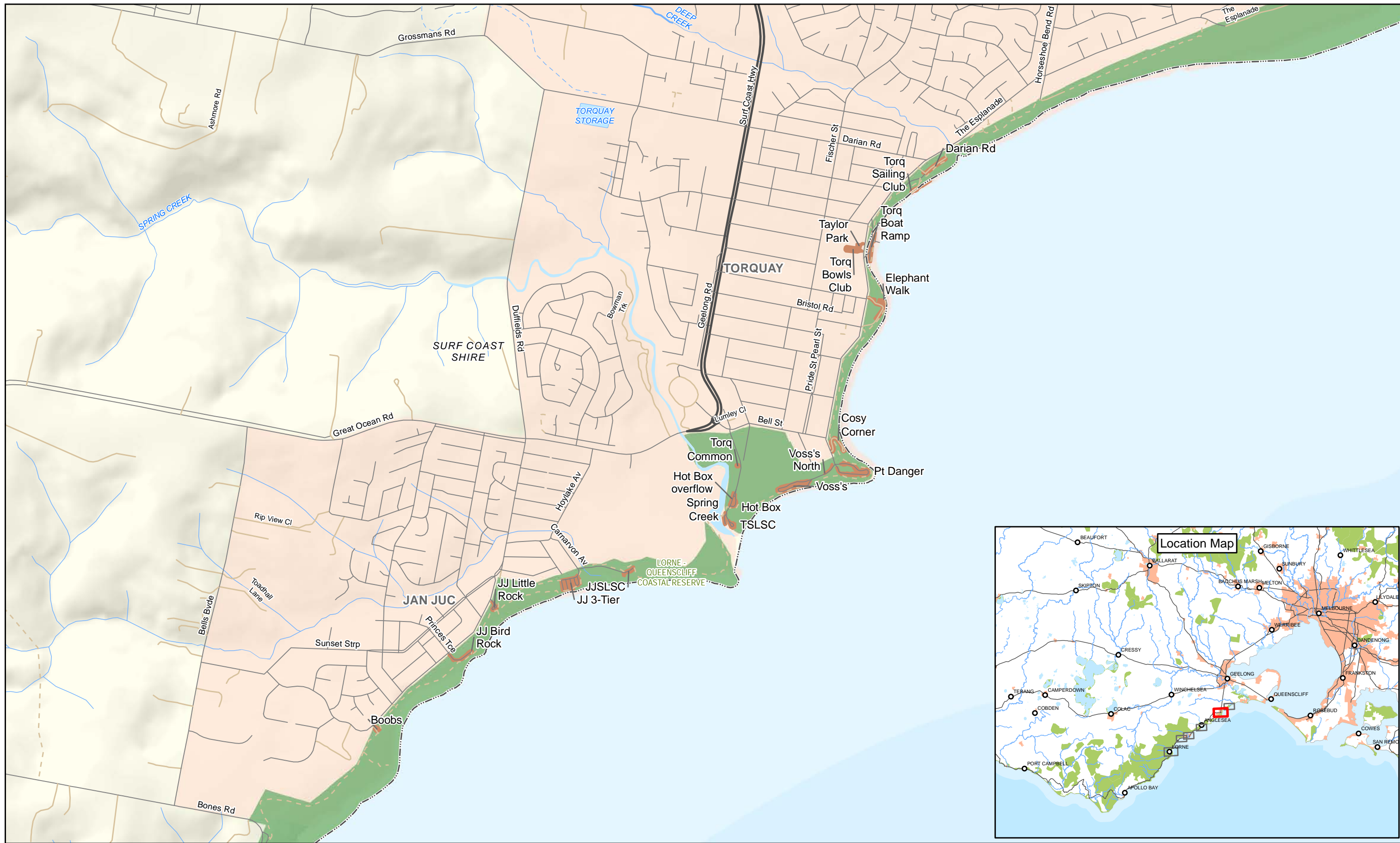


Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

Job Number | 31-29840
 Revision | A
 Date | 30 Jan 2013

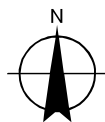
Point Impossible

Figure 1



Scale: 1:20,000 Paper Size A3
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 Metres

Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



LEGEND

- Car Parks
- Highway
- Sealed road (arterial and local)
- Unsealed road
- Track and bike path
- Lake
- Water course
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- Connector
- LGA outline
- Parks
- Township boundary



Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

Job Number | 31-29840
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 Date | 30 Jan 2013

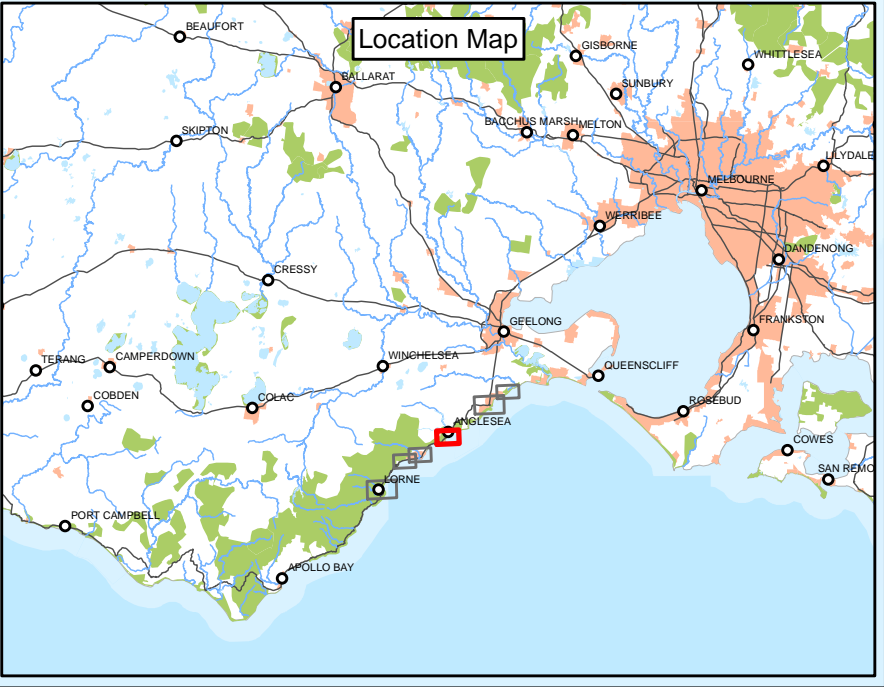
Torquay/Jan Juc

Figure 1

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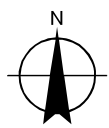
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Data source: Data Custodian, Data Set Name/Title, Version/Date. Created by: splaird



Scale: 1:15,000 Paper Size A3
 0 70 140 280 420 560
 Metres

Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



LEGEND

- Car Parks
- Sealed road (arterial and local)
- Unsealed road
- Track and bike path
- Water course
- River
- Stream
- Connector
- LGA outline
- Parks
- Township boundary

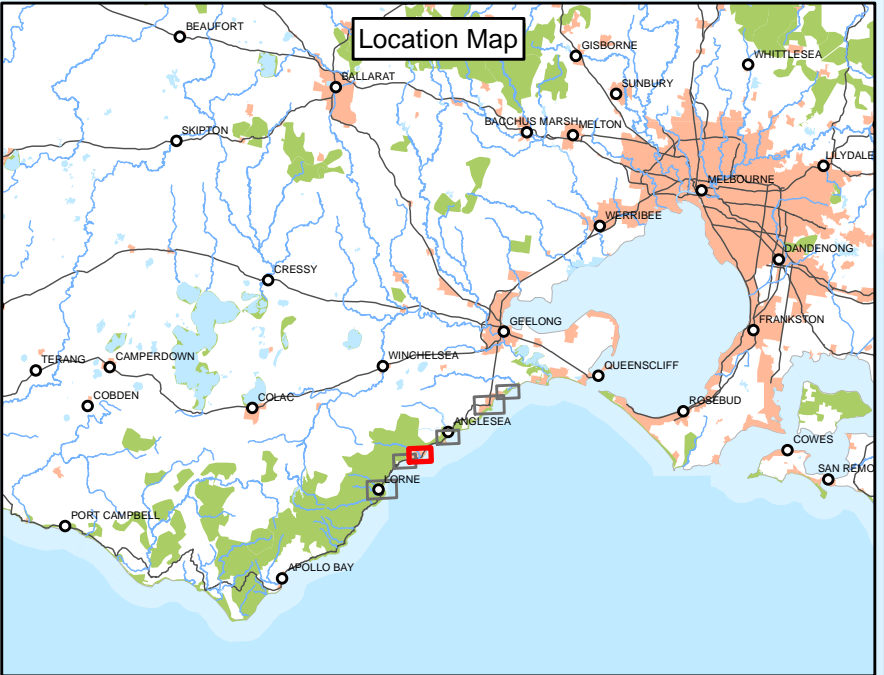


Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

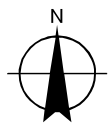
Job Number | 31-29840
 Revision | A
 Date | 30 Jan 2013

Anglesea

Figure 1



Scale: 1:15,000 Paper Size A3
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 Metres
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



- LEGEND**
- Car Parks
 - Sealed road (arterial and local)
 - Unsealed road
 - Track and bike path
 - Water course
 - River
 - River
 - Stream
 - Connector
 - LGA outline
 - Parks
 - Township boundary

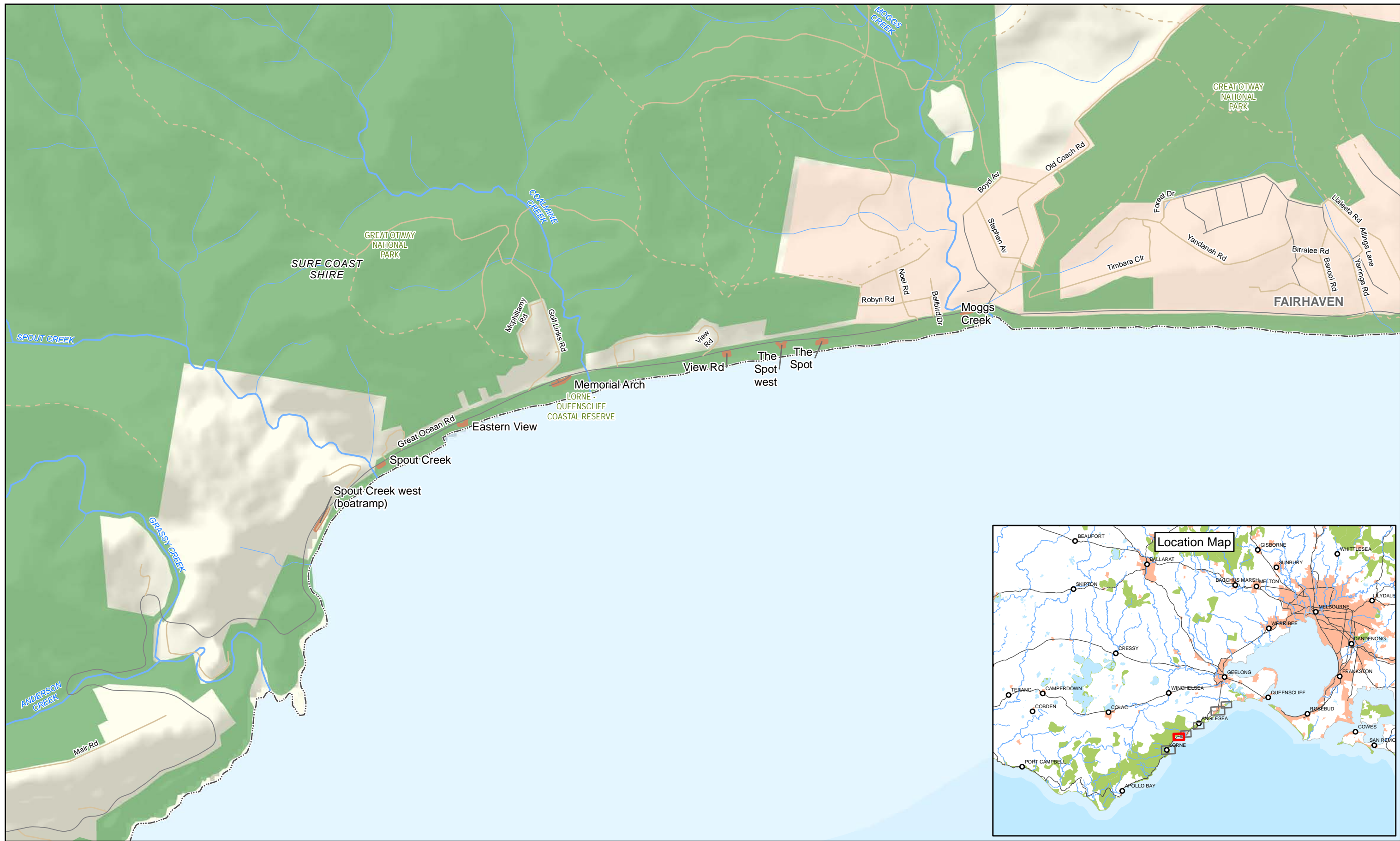


Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

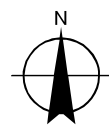
Job Number | 31-29840
 Revision | A
 Date | 30 Jan 2013

Aireys Inlet

Figure 1



Scale: 1:15,000 Paper Size A3
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 Metres
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



- LEGEND**
- Car Parks
 - Sealed road (arterial and local)
 - Unsealed road
 - Track and bike path
 - River
 - Stream
 - LGA outline
 - Parks
 - Township boundary

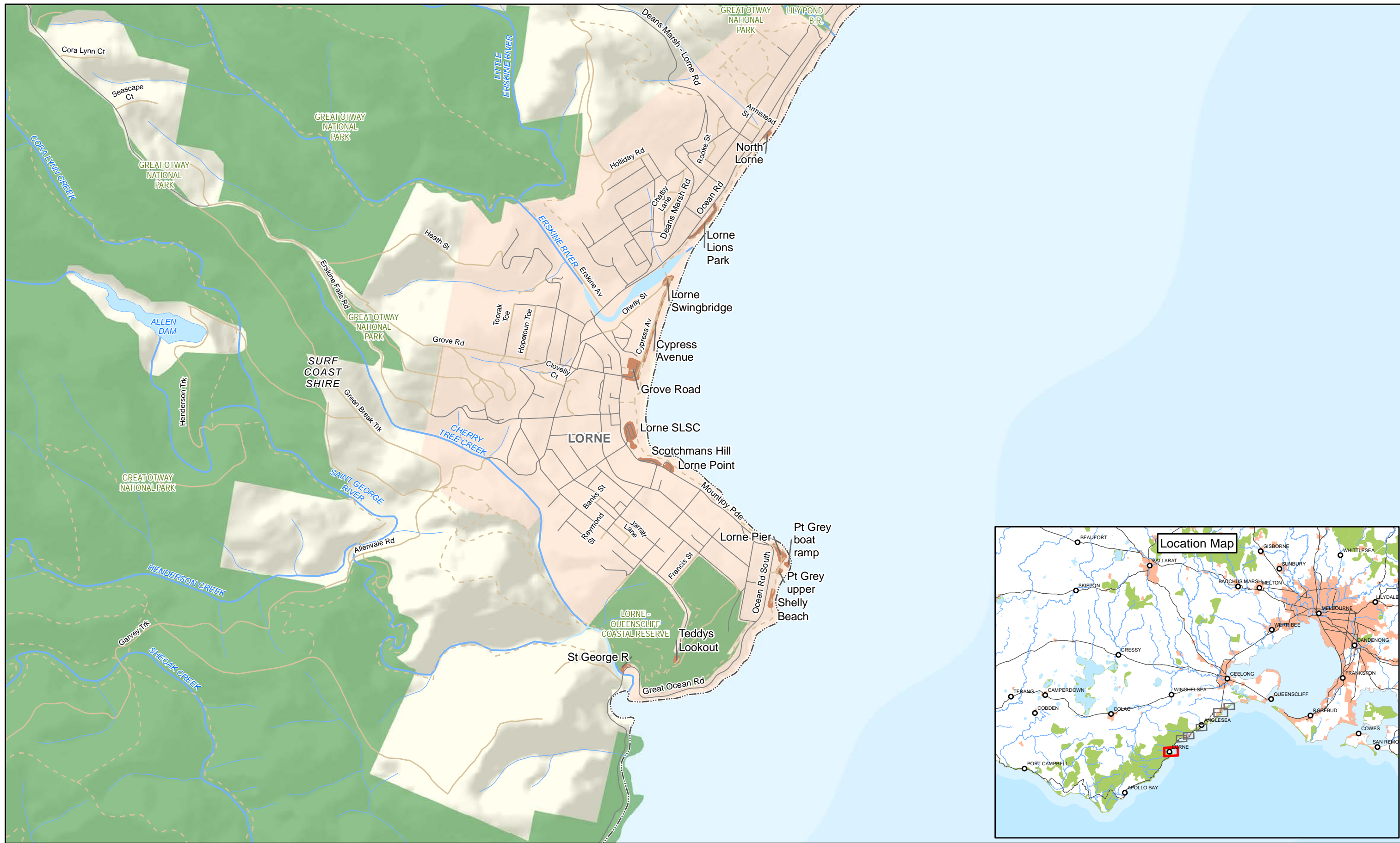


Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

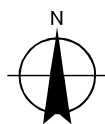
Job Number | 31-29840
 Revision | A
 Date | 30 Jan 2013

Eastern View

Figure 1



Scale: 1:20,000 Paper Size A3
 0 95 190 380 570 760
 Metres
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 54



- LEGEND**
- Car Parks
 - Sealed road (arterial and local)
 - Unsealed road
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 - River
 - Stream
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 - Parks
 - Township boundary



Great Ocean Road Coast Committee
 Great Ocean Road Car Parking
 Strategic Framework

Job Number | 31-29840
 Revision | A
 Date | 30 Jan 2013

Lorne

Figure 1

| Region | Beach | Pavement | Linemarked spaces | Showers | Toilets | BBQ | Patrolled | Steps | Occupied spaces | Spaces available | Existing peak demand | Existing tier | Aspirational tier |
|----------|--------------------------------|----------------|-------------------|---------|---------|-----|-----------|-------|-----------------|------------------|----------------------|---------------|-------------------|
| Torquay | Pt Impossible | Gravel | N | N | Y/D* | N | N | Y | 0 | 20 | 0% | 3 | 3 |
| Torquay | Nude Beach | Gravel | N | N | Y | N | N | Y | 47 | 86 | 55% | 3 | 3 |
| Torquay | Darian Rd | Gravel | N | Y | Y | N | N | Y | 67 | 89 | 76% | 2 | 1 |
| Torquay | Torquay Sailing Club | Gravel | N | N | N | N | N | N | 0 | 20 | 0% | 3 | 3 |
| Torquay | Elephant Walk | Gravel | N | N | Y | Y | N | N | 58 | 115 | 51% | 2 | 1 |
| Torquay | Cosy Corner | Sealed/ Gravel | Y | Y | Y | Y | Y | Y | 59 | 71 | 83% | 1 | 1 |
| Torquay | Pt Danger | Sealed | Y | N | N | N | Y | Y | 130 | 95 | 137% | 1 | 1 |
| Torquay | Voss's North | Sealed | Y | N | Y | N | Y | Y | 13 | 13 | 100% | 1 | 1 |
| Torquay | Voss's | Sealed | Y | Y | Y | N | Y | Y | 120 | 114 | 105% | 1 | 1 |
| Torquay | Torquay Surf Life Saving Club | Sealed | Y | N | N | N | Y | Y | 23 | 26 | 88% | 2 | 2 |
| Torquay | Hotbox | Sealed | Y | Y | Y/D* | Y | Y | Y | 20 | 22 | 91% | 2 | 2 |
| Torquay | Jan Juc Surf Life Saving Club | Sealed | Y | N | N | N | Y | Y | 36 | 27 | 133% | 2 | 2 |
| Torquay | Jan Juc 3 - tier | Sealed | Y | Y | Y | N | Y | Y | 112 | 136 | 82% | 2 | 1 |
| Torquay | Jan Juc Little Rock | Sealed | Y | N | N | N | N | Y | 21 | 20 | 105% | 3 | 3 |
| Torquay | Jan Juc Bird Rock | Sealed | N | N | Y | N | N | N | 7 | 54 | 13% | 2 | 2 |
| Torquay | Boobs | Gravel | N | N | N | N | N | Y | 6 | 24 | 25% | 3 | 3 |
| Torquay | Torquay Common | Gravel | N | N | Y | Y | Y | N | 10 | 15 | 67% | 3 | 3 |
| Torquay | Taylor Park | Gravel | N | N | N | Y | N | N | 0 | 16 | 0% | 3 | 3 |
| Torquay | Torquay Bowls Club | Gravel | N | Y | Y/D* | N | N | Y | 0 | 10 | 0% | 2 | 2 |
| Torquay | Torquay Boat Ramp | Gravel | N | Y | Y | N | N | Y | 42 | 99 | 43% | 2 | 2 |
| Torquay | Spring Creek | Sealed | Y | N | N | N | Y | Y | 30 | 25 | 120% | 2 | 2 |
| Anglesea | Four Kings | Sealed | N | Y | Y | Y | Y | Y | 89 | 233 | 38% | 2 | 1 |
| Anglesea | Anglesea Surf Life Saving Club | Gravel | N | Y | Y | N | Y | Y | 35 | 43 | 82% | 2 | 2 |
| Anglesea | Roadknight boat ramp | Gravel | N | N | N | N | Y | Y | 3 | 46 | 6% | 3 | 2 |
| Anglesea | Roadknight Kiosk | Gravel | N | Y | Y | Y | Y | Y | 23 | 36 | 64% | 2 | 2 |

| Region | Beach | Pavement | Linemarked spaces | Showers | Toilets | BBQ | Patrolled | Steps | Occupied spaces | Spaces available | Existing peak demand | Existing tier | Aspirational tier |
|--------------|-----------------------------|----------------|-------------------|---------|---------|-----|-----------|-------|-----------------|------------------|----------------------|---------------|-------------------|
| Anglesea | Roadknight Main | Gravel | N | N | N | N | Y | Y | 31 | 106 | 29% | 2 | 2 |
| Anglesea | 12th Ave | Gravel | N | N | N | N | N | Y | 0 | 5 | 0% | 4 | 4 |
| Aireys Inlet | Beach Road Al | Gravel | N | N | N | N | N | N | 0 | 4 | 0% | 4 | 4 |
| Aireys Inlet | Step Beach | Gravel | N | N | N | N | N | Y | 31 | 22 | 138% | 3 | 3 |
| Aireys Inlet | Moggs Creek | Gravel | N | N | N | N | N | Y | 13 | 16 | 81% | 4 | 4 |
| Aireys Inlet | The Spot | Sealed | N | N | N | N | N | Y | 12 | 22 | 56% | 4 | 4 |
| Aireys Inlet | The Spot West | Sealed | N | N | N | N | N | Y | 6 | 8 | 75% | 4 | 4 |
| Aireys Inlet | View Rd | Sealed | N | N | N | N | N | Y | 5 | 15 | 33% | 4 | 4 |
| Aireys Inlet | Memorial Arch | Sealed | N | N | N | N | N | Y | 1 | 28 | 4% | 4 | 4 |
| Aireys Inlet | Eastern View | Gravel | N | N | N | N | N | Y | 5 | 13 | 38% | 4 | 4 |
| Aireys Inlet | Spout Creek | Sealed | N | N | N | N | N | Y | 9 | 12 | 76% | 4 | 4 |
| Aireys Inlet | Spout Creek West | Sealed | N | N | N | N | N | Y | 11 | 30 | 36% | 4 | 4 |
| Lorne | North Lorne | Sealed | N | N | N | N | N | Y | 4 | 3 | 133% | 4 | 4 |
| Lorne | North Lorne Lions BBQ area | Sealed | N | Y | Y/D* | Y | N | Y | 20 | 34 | 59% | 3 | 3 |
| Lorne | Lorne Swing bridge | Gravel | N | N | N | N | Y | Y | 12 | 12 | 100% | 3 | 3 |
| Lorne | Cypress Avenue | Gravel | N | N | Y/D* | Y | Y | Y | 1 | 51 | 2% | 3 | 2 |
| Lorne | Lorne Surf Life Saving Club | Sealed | Y | Y | Y | Y | Y | Y | 135 | 116 | 116% | 1 | 1 |
| Lorne | Scotchmans Hill | Sealed | Y | N | Y/D* | Y | Y | Y | 22 | 22 | 100% | 2 | 2 |
| Lorne | Lorne Point | Sealed | Y | N | N | N | Y | Y | 0 | 22 | 0% | 2 | 2 |
| Lorne | Lorne Pier | Sealed/ Gravel | N | N | N | N | N | N | 40 | 23 | 174% | 2 | 2 |
| Lorne | Shelly Beach | Gravel | N | N | N | N | N | Y | 2 | 33 | 6% | 3 | 3 |
| Lorne | Grove Road | Gravel | N | Y | Y | Y | Y | Y | 81 | 123 | 66% | 2 | 1 |
| Lorne | Point Grey Boat Ramp | Gravel | N | N | N | N | N | Y | 12 | 15 | 80% | 3 | 3 |
| Lorne | Point Grey Upper | Gravel | N | N | Y | Y | N | Y | 7 | 13 | 53% | 3 | 3 |
| Lorne | Teddys Lookout | Sealed | N | N | N | N | N | N | 8 | 20 | 40% | 4 | 4 |
| Lorne | St George Rd | Gravel | N | N | N | N | N | N | 0 | 11 | 0% | 4 | 4 |

* Y/D = Yes, with disabled facilities

Appendix B – Further information on other relevant strategies

GHD has undertaken a desktop review of existing background information for this project. The purpose of this review was to investigate approaches to car parking issues in other locations as well as to build an understanding of the existing issues, constraints and opportunities in the study area itself. The review focused on the following:

- Relevant Australian car parking strategies;
- Surf Coast Shire car parking strategies;
- International examples of car parking best practice; and
- GORCC strategies and master plans.

Review of Australian car parking strategies

Gold Coast City Parking Strategy

In 2004, Gold Coast Council undertook a study to develop a region wide parking strategy to assist in future planning decisions. The Gold Coast City Parking Strategy was a comprehensive review of parking both in public and private parking facilities. The purpose of the study was to:

- Determine the desired number of car parking spaces;
- Rationalise parking in high demand areas to ensure supply meets demand;
- Encourage high turnover of spaces in high demand areas;
- Reduce illegal parking; and
- Encourage the use of public transport.

The following section describes the methodology, some of the issues encountered and the strategies employed in the management plan:

Projected growth

The existing and future demand for parking spaces in the Gold Coast was unknown at the time. Projected growth of parking demand was forecast for each region based on an estimate of growth in floor space of retail, commercial and industrial land uses. This was then compared to the existing parking capacity of each region and a surplus or deficit of parking spaces was estimated based on the projected growth. The forecast demand assumed that no parking management practices were to be employed over that time period.

Building new car parks was considered cost prohibitive due to space or budgetary constraints, so management strategies were required to mitigate demand. After establishing the future shortfall of capacity, it was then determined where parking management strategies needed to be employed.

Short and long term parking strategy

A duration-of-stay study was conducted for each region and compared to the actual supply of parking. This was carried out because it was not known whether the supplied parking time limits matched up with the actual observed parking durations.

The survey found that there was a larger demand for short term parking than long term parking. The report recommended that the proportion of short term spaces in high demand centres within 250 m of the activity core be increased, and that other time limits be reviewed to ensure an

appropriate supply of 30 minute, 1 hour and 2 hour spaces. Additionally it was recommended that the operating period of regulated parking zones be increased.

Long term recommendations included moving long term parking further away from activity cores, price parking inversely to discourage long term usage and to let the supply be gradually reduced as public transport improvements are introduced.

Off-street car parks

A major issue identified with off-street car parks was that they were perceived as being unsafe. A remedial strategy suggested was the development and implementation of a “Safe City Car Parks” program in association with Queensland Police. An upgrade of the car parks was also recommended, along with the development of a maintenance program.

Directional signage

It was found that a lack of knowledge of off-street parking led to lower utilisation. It was recommended that the use of directional and informational signage would help mitigate this issue. Simple solutions such as signs at entry points or more complex solutions such as parking guidance systems could be introduced.

Parking management system strategy

It was identified that parking facilities were inefficiently run and used. Investigation into the parking management system analysed the level of enforcement of time limits and the possibility of introducing metered parking into some areas. The use of either metered bays or enforced parking limits were determined by analysing occupancy levels and levels of over-staying.

Parking pricing strategy

A major issue identified was the cost of parking. Parking was priced very cheaply and did not cover the costs of maintaining and regulating the parking facilities. The cost of parking was investigated by initially comparing current prices to other cities in Australia. A pricing scheme was developed based on occupancy, land values, commercial parking and market prices.

The following strategies were suggested for beachside parking:

- Ensure the price of parking encourages appropriate and efficient use of car parking space by tiering prices by convenience;
- Review the price of parking every two years. Tie parking prices to land values; and
- Encourage public transport usage by charging more for longer stays.

Beachside parking strategy

Beachside parking was considered separately due to its unique seasonal usage and demand patterns. The issues identified with beach parking were:

- Parking demand outstrips supply;
- Land is restricted, making expansion of car parks impractical or cost prohibitive;
- Beach users often need to carry large equipment, making alternative transport methods unsuitable for all people;
- Aesthetics of an area limits the extent to which a car park can be expanded;
- Parking must be provided for recreational groups (anglers, campervans and trailers); and
- Parking must be provided for bus tour groups.

Some of the strategies suggested to address the identified issues include:

- Investigate the opportunity to provide a peak season beach shuttle bus which services temporary park-and-ride locations;
- Provide clear locations for parking in order to reduce illegal parking on verges and footpaths;
- Increase enforcement of illegal and unsafe parking in the area, particularly during summer weekends;
- Prioritise efficient use of parking spaces rather than increase supply. Parking is often regarded as eroding the environmental and aesthetic values of the area, and the preference is for no construction of new parking facilities;
- Provide drop off zones close to beach entry points; and
- Provide regulated parking time limits to discourage employee parking where beach parking is in close proximity to commercial zones.

Spill-over issues

The report acknowledges that changing the parking supply may have spill-over effects in that drivers may park on adjoining residential streets within walking distance to key locations. It was suggested that residential streets surrounding activity centres, beach and recreational areas be monitored to assess whether a residential parking scheme is necessary.

Enforcement strategy

An appropriate level of enforcement was required to ensure that the desired outcomes of the parking strategy were met. Enforcement of parking restrictions encourages compliance which in turn allows a parking area to operate efficiently.

However, the cost of constant enforcement is cost prohibitive, thus a strategy that involved different levels of enforcement was designed. Locations where the parking supply needed to be managed more efficiently due to the current demands required a higher level of enforcement. Therefore an analysis of all the parking areas was undertaken, in which each area was categorised according to the level of enforcement required. This allowed for an efficient allocation of resources.

Education strategy

Changes arising from parking management strategies may be seen unfavourably by the public if they are not made aware of why the changes are being made. Part of the parking management plan included clearly communicating changes, explaining why they were made, the process undertaken and benefits that will flow from them. Potential education strategies recommended included:

- A marketing and education program to assist with the implementation of the parking management strategy; and
- Development of a travel demand management community education program to encourage behavioural change.

Marketing strategy

As the parking management plan recommended increasing both the amount of paid parking and the cost of parking, there was the potential for a real or perceived impact on residents and local businesses. A number of marketing strategies were suggested:

- Allow residents free parking in paid parking areas;

- Issue tokens to local residents;
- Initiate redemption programs for paid parking; and
- Reimburse parking costs for spending in a shopping centre.

Nelson Bay Foreshore Plan of Management

In 2002, Port Stephens Council, Council's Car Parking Study Group and members of the community sought to develop a framework to guide the reform of parking along the Nelson Bay foreshore. Port Stephens is a key tourist location, with over 20,000 visitors to the foreshore during peak periods and an estimated 80% of visitors arrive by car. The parking strategy was a response to the perceived under supply of parking during peak periods.

The following issues were found during the investigation:

- Parking demand exceeds supply during peak periods. This results in spill-over parking into the CBD, reducing parking for retail customers;
- A high proportion of vehicles park at the foreshore for long periods due to use by employees, boat customers, retail shopping and dining;
- Vehicles repeatedly slow down to find a parking space, which affects through traffic along the main road;
- Infrastructure along the main road does not allow for immediate installation of parking meters without upgrades to the road and footpath; and
- Parking restrictions are not enforced to a sufficient level.

The framework proposed three options:

- Option A was a status quo situation in which the parking along the foreshore remained unrestricted. This option was considered unsustainable due to the predicted growth;
- Option B proposed to implement free time-restricted parking to discourage long term use. Parking restrictions of four hours would be placed on all on and off street parking to cater for boat users and cruise passengers, while discouraging use by employees and other long term users; and
- Option C proposed to implement fee based parking for all on and off street parking near the foreshore. The main road and footpath would have to be upgraded to accommodate the required parking meters, but this work would also provide an additional 50 car parking spaces.

Option C was the recommended option as revenues from the parking would be able to be used to provide for the future parking needs of the area. It was also noted that adequate parking enforcement is required for any adopted parking strategies to be successful.

Colac and Apollo Bay Parking Study

In 2011, Colac Otway Shire undertook a car parking strategy for Colac and Apollo Bay's commercial areas. Colac and Apollo Bay experience large fluctuations in parking demand between the peak and off peak seasons, which is similar to conditions experienced at beaches along the Great Ocean Road.

The following issues were identified at either Colac or Apollo Bay:

- A lack of defined long term parking has resulted in misuse of short term parking and parking in residential areas;
- There are spill-over issues from health, industrial and retail areas into residential areas;
- Disabled parking bays are underutilised;
- There is an oversupply of parking in some areas;
- There is a lack of way finding guidance to and from parking areas;
- There is a conflict between providing adequate parking and facilitating and encouraging use of alternative transport modes;
- Searching for parking spaces causes congestion and possible safety issues;
- Parking demand exceeds supply at the most popular locations in Apollo Bay; and

The following recommendations were made to address the identified issues:

Off-street parking

- Increase the number of medium and long term off-street parking spaces; and
- Encourage the development of additional parking facilities at existing developments to prevent overspill.

On-street parking

- Provide appropriate short term parking restrictions at locations of high demand; and
- Monitor the utilisation of parking spaces and alter restrictions where necessary. Where utilisation is found to be above 85%, investigate measures to further manage parking demand.

Residential parking

- Investigate the need to introduce short term parking restrictions on residential streets where overspill parking occurs; and
- Investigate a resident parking scheme and permit system.

Disabled parking

- Continue to engage with the community and listen to the parking needs of mobility impaired drivers; and
- Undertake a review of the accessibility of on-street disabled parking spaces.

Tour coach and car trailer parking

- Investigate the potential to introduce a passenger drop off zone for tour coaches; and
- Install directional signage to parking facilities that provide coach and car trailer parking.

Directional signage

- Install directional signage to existing car parks containing over 50 parking spaces that provide long term parking; and
- Install directional signage to parking facilities for coaches and car trailers.

Enforcement

- Monitor resources to ensure an appropriate level of enforcement is maintained; and
- Review the level of fines for parking infringements to ensure that fines are a sufficient deterrent.

Parking supply

- Reconfigure parallel parking bays to angle parking bays where there is a shortfall in parking and sufficient room to do so; and
- Promote existing Council off-street car parks.

Beach parking

The investigation found that parking on the Great Ocean Road is currently occupied by a wide range of different users ranging from short term users to long term users. At the time of the report, there was sufficient capacity to cater for all users during peak seasons. However it was suggested that car parking should be managed in the future to cater to the needs of short term users.

Long term parking users would be encouraged to use off-site parking further away from the beach. It was acknowledged that beach users may have to carry bulky and heavy items, and a possible solution to cater for the loss of long term parking near the beach would be to introduce a drop off zone. Once bulky items are dropped off, vehicle drivers would be advised to find parking away from the beach that matched their duration of stay. A five-minute parking restriction on the drop off parking bays was recommended.

Surf Coast Shire strategies

Torquay Town Centre Car Parking Strategy

The Torquay Town Centre Car Parking Strategy was established to maximise the use of parking spaces within the Town Centre, to cater for parking demands during the peak season in the future and to ensure that the parking supply rates for future developments are adequate. It was used to inform the Surf Coast Planning Scheme.

It was found that there was adequate supply of parking during peak periods. However changing parking patterns since the last conducted survey saw increased usage of spaces in certain areas, necessitating the implementation of parking strategies.

Time restrictions

A 2002 survey found that one car park was 85% full by 9:00 am during a non-peak period. Most of the occupation was due to local workers using the car park, thus the need for time restrictions was considered necessary. It was recommended that short term parking of two hours be signed temporarily during the peak periods (as there is underutilised parking nearby during the off-peak period), encouraging staff to park further away during high demand periods.

Parking pricing strategy

An earlier study investigated the feasibility of introducing paid parking into the Torquay Town Centre. It was recommended that paid parking be applied during the peak period (1 December to 30 April) due to the high demand during this period and the underutilisation of parking in off-peak periods. The study acknowledged the challenges of implementing such a policy measure, with the following issues needing to be addressed:

- Implementing a paid parking scheme where a large portion of parking is privately owned (e.g. supermarket parking);
- Whether paid parking reduces demand for parking by use of alternative means; and
- The effect paid parking has on the Council's retail strategy of attracting a greater share of the region's retail spending.

Enforcement

It was found that compliance with parking restrictions was directly related to the level of enforcement. At the time of the study, enforcement was carried out part time by local laws officers, for whom parking enforcement was not a high priority. It was suggested that increasing resources to enforcement during peak periods would lead to more effective management of parking.

Signage

Signage is an important element in directing vehicles to park in underutilised areas. The report highlights the need for clear and consistent signage throughout the town centre to direct vehicles to parking areas.

Monitoring

It was recommended that regular monitoring of parking utilisation be undertaken to ensure that parking management strategies such as parking restrictions can be adjusted according to changing demand. The report suggested monitoring every three years; two times during a given year to capture peak and off-peak conditions.

Surf Coast Shire Council – Coastal Town Centres Parking Study

A car parking strategy was developed for the townships of Lorne, Anglesea and Torquay. Demand for car parking in these locations is high particularly during the summer months (December until Easter).

The study has focused on car parking in the following areas:

- Gilbert Street, Torquay;
- Bell Street, Torquay;
- Great Ocean Road/Walker Street, Anglesea; and
- Mountjoy Parade and Foreshore, Lorne.

Parking supply

- Parking surveys indicated there is sufficient parking in the Torquay and Anglesea town centres to cater for demands in the peak periods;
- In Anglesea signage should be implemented to direct heavy vehicles and trailers to park in appropriate areas;
- There are limited opportunities to increase the parking supply in the Lorne town centre due to sensitivities of the area;
- Provision of parking for employees is an issue particularly if parking fees are introduced along the foreshore and enforcement is increased in the town centre. During the peak periods employees should be directed to park in Stribling Reserve; and
- A permit scheme is recommended to be introduced in various residential streets immediately outside the core area of Lorne town centre.

Parking management recommendations

Parking management recommendations include:

- Time limit adjustments to reflect observed behaviours;
- Introduction of pay parking scheme (ticket, meters) during major activity periods between December and April each year;
- Improvement of enforcement activities, particularly during December to April periods;
- Introduction of Permit Schemes for residents;
- Introduction of remote parking areas with shuttle services to access key areas in town and specific “branding” of these services;
- Encourage use of sustainable modes of travel (bicycle, walking, bus) for short trips where possible to reduce use of private motorised travel to access shops, beach, other areas of entertainment; and
- Increase parking supply where needed.

Time limit adjustments

- Torquay – Parking surveys indicate a number of opportunities exist to reduce parking limits in the town centre. Short term (e.g. ¼ and ½ hour), and special use (e.g. disabled and loading zones) spaces however should remain unchanged. Additionally in the outer areas all parking spaces should have a time restriction of at least 2 hour parking.

- Anglesea – Parking surveys indicate that time limits within the shopping areas should be reduced to 1 hour and employee parking should be relocated to the bowling club parking area. Short term (e.g. ¼ and ½ hour), and special use (e.g. disabled and loading zones) spaces however should remain unchanged.
- Lorne – Parking surveys indicate that parking on Mountjoy Parade, Grove Road, William Street and Bay Street should be reduced to 1 hour parking. Additionally, introduce parking fees within the foreshore area to deter staff from parking in these areas. Short term (e.g. ¼ and ½ hour), and special use (e.g. disabled and loading zones) spaces however should remain unchanged.

Paid parking opportunities

Paid parking could be considered to be introduced at the following locations:

- Torquay Core – All on street parking spaces and the supermarket car park between Boston Road and Gilbert Street;
- Torquay Outer – Walker Street, Cliff Street and Bristol Road off street car park;
- Anglesea Core – Car parking area situated between the Great Ocean Road and retail strip;
- Anglesea Outer – Hotel car park, however there are issues associated with this;
- Lorne Core – All on street parking along:
 - Mountjoy Parade between Otway Street and Bay Street;
 - Bay Street between Smith Street and Mountjoy Parade;
 - William Street between Smith Street and Mountjoy Parade; and
 - Grove Street between Smith Street and Mountjoy Parade.

Remote parking opportunities

- Torquay:
 - Angled parking along the north section of Zeally Bay Road; and
 - Provision of a shuttle service to provide access around Torquay.
- Lorne:
 - Consider remote parking areas at the “Quarry” or “Slaughterhouse”. These sites will need further analysis for suitability.

Torquay Town Centre Parking and Access Strategy 2011-2016

The Torquay Town Centre Parking and Access Strategy 2011-16 aims to *establish a clear and integrated framework for car parking provisions, access and movement in the town centre that takes into account projected growth patterns*. Development of the strategy has been based on car parking surveys completed in January and May 2010 and the Torquay Town Centre Car Parking Strategy 2020 (completed in 2006).

The car parking surveys counted a total of 1,054 car parking spaces in the town centre where 931 were public spaces and 123 were private spaces (often located at the rear of commercial properties). The car parking survey found that in January the peak demand for the spaces was 83% while during May the peak demand for all spaces was 69%.

Key elements of the strategy include:

- Public car parking shall be maximised by providing pools of shared parking in the following locations and manner:
 - The Esplanade: construction of 60° angled parking on the east (foreshore) side;
 - Cliff Street: Construction of angled parking on the east side; and
 - 7A and 7B Walker Street: purchase of land by Council and construction of parking.
- Commence negotiations with GORCC to provide angled car parking on the foreshore side of The Esplanade between Zeally Bay Road and Gilbert Street;
- Conduct parking surveys every three to five years on two occasions in the year to assess differences in peak and non-peak demand in mid-January and mid-July;
- Review the strategy every five years to understand and plan for the constant changes that occur within the town centre;
- Periodically monitor parking restrictions and taxi, loading, bus/coach and disabled parking as a mechanism to establish if any changes should be made;
- In consultation with tour operators, investigate the potential to provide parking for buses/tour coaches on The Esplanade and identify appropriate locations for the parking of tourist vehicles (caravans, trailers, motor homes)
- Promote opportunities for walking and cycling;
- Promote the use of public transport as a means to access the town centre; and
- Paid parking to regulate parking demand is not warranted at this stage given the current supply is satisfactory to meet the 85th percentile event.

Surf Coast Shire Long Vehicle Strategy, 2014

This study was completed in 2014 with the aim of managing the parking and movement of tourism buses, coaches and long vehicles throughout the shire. The strategy set the following objectives:

8. Encourage and promote Surf Coast Shire and its townships as tourist attractions.
9. Facilitate the safe and efficient parking and movement of long vehicles throughout the study area.
10. Maintain the appeal of the region for tourists, local residents and local businesses.

The study conducted two rounds of consultation: the first with long vehicle drivers; and the second with local residents, businesses and community groups.

The consultation identified a number of issues. For the drivers and tour bus operators these issues almost exclusively involved a lack of parking for long vehicles. Residents and businesses are also concerned about the lack of long vehicle parking, but this is more related to the fact that when tour buses cannot park they move on and tourists do not spend money in local businesses.

Almost all actions in the strategy recommend increasing the number of long vehicle parking spaces. Some of the locations recommended are on land operated by GORCC, which conflicts with one of this study's objectives, which is to limit impact on the beach environment and avoid building new parking space.

Surf Coast Shire Visitor Insights 2014

Surf Coast Shire publishes annual statistics on visitor numbers and activities. Some key findings from the 2014 document (which contains data from 2013) which are relevant to this study are set out below.

- Visitors to Surf Coast Shire inject over \$600 million into the economy.
- Both Torquay and Lorne are within the top 10 regional destinations in Victoria by overnight visitor numbers.
- Nearly 80% of overnight visitors come to the shire for holiday and leisure purposes.
- Of that 80%, 60% come from Melbourne.
- The most popular activity for overnight visitors while in the shire is going to the beach, with 545,000 people doing so in 2013.
- For domestic day trips (i.e. not overnight stays), 65% come from Melbourne.
- Again, the main activity undertaken by day trippers is visiting the beach, with 506,000 people doing so in 2013.

GORCC strategies and master plans

Anglesea Coastal Action Plan

The Anglesea Coastal Action Plan was developed in 1999 and provides strategic direction for future management and development of the area. The plan is for the coastal area between Red Rock (north of Anglesea) to Urquhart (south west of Anglesea). The study area for the plan also includes the Anglesea River and town centre, Coogoorah Park, the Great Ocean Road, the foreshore reserve, the Anglesea Lookout Reserve and the Eumeralla Scout Camp. The plan sets out a range for actions which provide direction for bodies involved in managing the coastline in the study area.

Key issues

Key issues identified include:

- Coastal infrastructure provision;
- The Great Ocean Road;
- Protection of significant environmental and cultural features;
- Protection of lifestyle for residents and visitors; and
- Public Safety.

The action plan vision

Anglesea will be attractive for both residents and visitors through the appropriate use and management of its significant recreational, environmental and cultural values. Anglesea will be renowned for its scenery and rich natural qualities for people to enjoy without harm to either themselves or the environment.

Table 5.1 summarises the key issues relating to car parking that were identified during the project.

Table 5.1 Site-specific issues related to car parking in the study area

| Location | Key Issues |
|---|--|
| Main Beach | <ul style="list-style-type: none"> • Vehicle access from the main beach to the Great Ocean Road is hazardous due to poor sight lines. • Pedestrian access to the beach from the west (from Soapy Rock and Middle Beach) is difficult. • The existing Anglesea Surf Life Saving Club car parks are difficult to access and appear inadequate in size. • The main car park is in poor condition and has poor access to the main beach. |
| Surf Life Saving Club to Motor Yacht Club | <ul style="list-style-type: none"> • Visitor facilities in this zone are in short supply or do not exist. These include adequate car parking, interpretive and directional signage. • There can be significant amounts of traffic along Melba Parade during peak periods, leading to congestion in Anglesea. |
| Motor Yacht Club to Point Roadknight | <ul style="list-style-type: none"> • The condition of the Point Roadknight car park is poor and is prone to flooding during winter. • The existing car park adjacent to the Anglesea Motor Yacht Club is poorly configured for trailer parking and turning. |
| Point Roadknight to O'Donohue Road | <ul style="list-style-type: none"> • There are a number of existing access points between Melba Parade and the beach, south of Point Roadknight. These provide public access over fragile dune areas, to a beach which is not considered suitable for swimming. Appropriate signage/information is therefore an issue. • Car parks along this stretch of foreshore are limited, and are in relatively poor condition. |
| O'Donohue Road to Urquhart Bluff | <ul style="list-style-type: none"> • Increasing visitation to the Surf Coast creates additional vehicle movements on the Great Ocean Road. This increases pressure for beach access from the GOR. • Peak demand days often result in an under-supply of car parking. The provision of additional parking, however, needs to be balanced with the carrying capacity of the coast. |
| Urquhart Bluff | <ul style="list-style-type: none"> • There is inadequate car parking compared to existing and anticipated demand, and inadequate visitor amenity. |

Anglesea Riverbank Master Plan

The Anglesea Riverbank Master plan was completed in 2006. The key aims of the project were to:

- Develop a comprehensive master plan for the Anglesea Riverbank Precinct, that captures the 'Anglesea' experience from the river mouth to the Great Ocean Road Bridge;
- Provide for future growth in patronage of the Precinct; and
- Address the interaction of the Anglesea Riverbank Precinct with nearby shopping precincts.

The master plan identifies a number of key actions (known and key elements of the master plan) to be undertaken to improve the Anglesea Riverbank precinct. The plan focuses on various aspects including upgrades to car parking and pedestrian access within the precinct.

Key elements of the master plan related to car parking include:

- Upgrade all gravel car parks, maintaining existing number of parking spaces within the riverbank area;
- Provide bike racks at all car parks and major destination to:
 - Address traffic congestion;
 - Alleviate pressure on parking facilities in peak seasons;
 - Reduce dependency on vehicles; and
 - Contribute to improved community health and wellbeing.
- Upgrade the central car park in accordance with best practice urban stormwater design principals. Remove the second entrance to the central car park to allow the roadside parking strip to be widened;
- Provide road-side bus, caravan and trailer parking extending from the Moonah canopy to the Four Kings car park entrance. Extend the existing Moonah canopy to frame parking area; and
- Upgrade overflow-parking area by defining parking bays and implementing planting to reduce the gravel expanse and improve the visual amenity.

Key elements related to pedestrian issues include:

- Construct pedestrian boardwalks to either side of the bridge;
- Provide a pedestrian route connecting the bridge and the shopping centre via a boardwalk through the bush area; and
- Implement a pedestrian connection to the residential areas to the east of the riverbank. Track alignment to be assessed on site prior to construction to avoid impact on significant vegetation by utilising existing track clearing and new clearings resulting from weed removal.

Lorne Central Foreshore – Master Plan Report

The Lorne Central Foreshore master plan was developed to integrate with the key elements of the Lorne Coastal Action Plan and the Mountjoy Parade Streetscape redevelopment. The key aim of the master plan is to create an attractive open space that encourages pedestrian use and provides a focus on community activities.

Existing car parking (November 2000)

There are currently 3 car parking areas, namely:

- Central Foreshore Car Park (approximately 200 spaces);
- Northern Foreshore Car Park; and
- Car parking at the southern end of the foreshore near the surf lifesaving club.

Car parking proposed changes

- Remove Central Gravel Car Park and relocate parking to the northern and southern ends of the foreshore;
- A total of 315 car parking spaces to be provided in the northern and southern car parks;
- Key features of the northern car park:
 - Dual two way entry from Mountjoy Parade;
 - 200 car parking spaces;
 - Reduced density of car parking adjacent to Visitor Information Centre;
 - Dedicated and lowered area for large bus parking that doesn't impact views from the street or general car parking traffic;
 - Integrated pedestrian access pathways throughout the car park for safety; and
 - Free vehicle circulation patterns between parking cells and gently graded entry roads.
- Key features of the southern car park:
 - 114 car parking spaces;
 - Mini bus parking for approximately 6 vehicles to the western side of entry road;
 - Access from Mountjoy Parade via the Bay Street roundabout; and
 - Integration of car park into the site, minimising the footprint on the foreshore.

Split Point Lighthouse Precinct

The Split Point Lighthouse Precinct Master plan was a joint Great Ocean Road Coast Committee and Surf Coast Shire project completed in 2008.

The Split Point Precinct is in Aireys Inlet and is a key visitor destination particularly in summer. The master plan area is bounded by Step Beach and Painkalac Creek mouth on the coast and by Inlet Crescent (South and North) on the Great Ocean Road. The area can become overcrowded which at times can impact the attractiveness of the area. The master plan aims to *'meet the needs of tourists, local visitors, local authorities, businesses and residents without jeopardising the unique sense of place and natural values of the precinct. In particular the master plan aims to preserve the unspoilt, natural, pedestrian-friendly character of the precinct by protecting natural, cultural and landscape values and minimising visitor impacts.'*

The master plan addresses a number of key issues and objectives which include:

- Vehicle access, circulation and parking;
- Pedestrian access; and
- Signage.

Vehicle access, circulation and parking

The issues around access, traffic and parking include:

- The lighthouse acts as a beacon to tourists driving on the Great Ocean Road, drawing them into the precinct;
- The precinct's roads are all residential streets, so at busy times, tourist traffic diminishes the precinct's residential amenity;
- The precinct has a limited parking capacity and cannot meet demand at peak times; Increasing parking capacity to meet peak demand would have unacceptable impacts;
- Drivers pushing into vegetation and onto verges to park, cause environmental and aesthetic impacts as well as exacerbating traffic congestion;
- The precinct's unsealed roads are not well suited to high vehicle numbers and large vehicles, however residents value their aesthetic qualities;
- Because all of the precinct's roads are open residential streets there is limited potential to regulate the amount of tourist traffic using them, or to keep visitors from driving until they are as close as possible to the lighthouse;
- The precinct's roads are also used by pedestrians, so pedestrians are inconvenienced and endangered at busy times;
- The Step Beach car park is the primary car park for lighthouse visitors as well as surfers, Marine Sanctuary visitors, sightseers and walkers; It provides good access to the lighthouse for people with limited mobility;
- The Step Beach and skate park car parks have developed ad hoc, not by design, and are functionally and aesthetically substandard; and
- Vehicle speeds can seem excessive to pedestrians who share the roads with vehicles;

The vehicle access, traffic and parking objectives include:

- Reduce negative impacts from vehicle traffic across the precinct in the long and short term;
- Provide clear direction to tourists about access and parking, to minimise traffic problems associated with visitors searching for parking spaces;
- Provide designated parking spaces for long vehicles, concentrating long vehicle parking in areas where their impacts will be minimised;
- Provide enough parking capacity for busy days but not peak days, accepting that for approximately ten days per year the demand for parking spaces in the precinct will exceed supply;
- Encourage low vehicle speeds and shared use of roads, principally through design rather than signs;
- Limit the impacts of large vehicles (particularly large buses) on the precinct while maintaining access for large service and emergency vehicles;
- Reflect the findings and outcomes of the Morgan Report (2004), Citizens Jury (2007), SPLTPAC (2000) and other processes dealing with roads, traffic, traffic calming and parking; and
- Undertake additional traffic monitoring and analysis as required to track progress against the above objectives.

Pedestrian access

The key pedestrian access objectives include:

- Use the quality of paths and the quality of experiences they provide to encourage visitors to access the precinct on foot;
- Wherever practicable, provide access for people with disabilities;
- Improve accessibility and decrease environmental impacts by hardening steep and high-use paths, improving drainage and path definition and improving path maintenance;
- Provide links to existing and proposed paths on surrounding land; and
- Provide clear directional signs for pedestrians;

Signs

The signs within the precinct and along the Great Ocean Road vary in style and standard; however, GORCC has a sign system that is applied along their reserves. These signs include vehicle and pedestrian directional signs.

The signing objectives include:

- Minimise negative impacts from signs throughout the precinct;
- Use consistent, high sign standards;
- Use sign planning as a strategic approach to signing, rather than adding signs to the precinct ad hoc;
- Provide visitor information at the skatepark parking area, particularly to encourage use of the Lighthouse Heritage Trail. Consider replacing some of the current commercially oriented information with information about recreation opportunities, or redevelop the shelter to allow both themes to be covered; and
- Ensure parking areas are effectively signed, to help visitors find a park and explore the precinct on foot;

Master plan

The Aireys Inlet Lighthouse Precinct Master plan set out a vision related to access, parking, environmental, recreation and signage. The vision in relation to access, parking and sign is:

The precinct will continue to be vehicle accessible but the negative impacts of vehicles will be minimised. Roads and parking areas will be well defined to minimise degradation of roadside areas and preserve aesthetic and social values. Well-designed parking areas and high quality paths will encourage visitors to park and walk.

Parking capacity will be limited, so visitors at peak times may have to park further from the main attractions, or come back another time. The design characteristics of the roads and verges will encourage slow speeds.

Signs will help visitors access and experience the precinct, but sign numbers will be minimised. Signs will meet consistent, high standards, using colours and materials that suit the coastal context.

Key proposals in the master plan include:

- Surf Coast Shire to undertake a traffic study which will include preparation of traffic management plans consistent with the master plan's vehicle access, traffic and parking objectives. Through this study impacts of traffic volumes and speeds will be identified.
- Step Beach car park to be upgraded to improve efficiency. The car park will be developed to be a one-way loop providing angle parking for 25 cars and one long vehicle parking bay. The entrance of the car park will be repositioned to direct visitors before the lighthouse and therefore reduce vehicles on Federal Street. As part of this the intersection of Federal Street and Lighthouse Road will be modified to discourage traffic from entering Federal Street.
- Federal Street to be redeveloped to emphasise pedestrian right-of-way.
- Skate park car park to be expanded to improve functionality and act as a pedestrian hub. The upgrades will allow for long vehicle parking (5-6 spaces) along the Great Ocean Road and car spaces (24 spaces) adjacent to the picnic area. The area is to be developed to encourage visitors to park close to the Great Ocean Road and see the area on foot.
- Inlet Crescent – modify parking area in front of the main beach and estuary access path to provide right angle car parking bays and move the bays away from the estuary and midden. The parallel parking along the rest of the estuary frontage (towards the skate park) will be maintained however bus parking is to be prohibited.

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