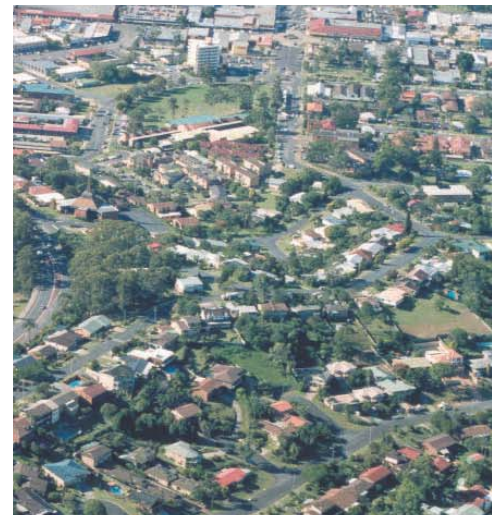
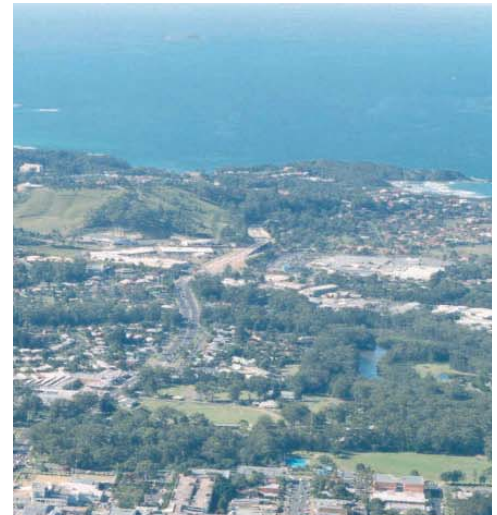
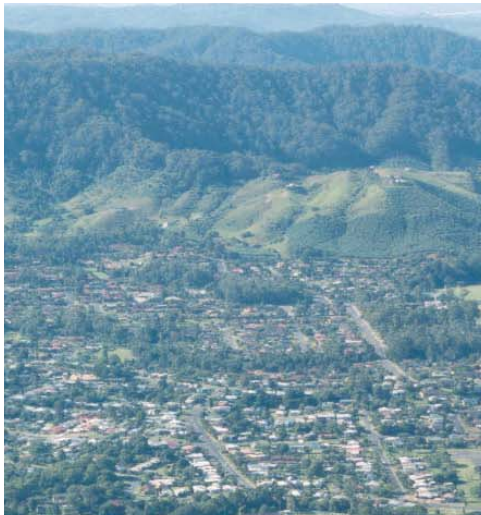




Coffs Harbour Highway Planning

Southern and Northern Sections

COMMUNITY UPDATE 4
FEBRUARY 2004



Coffs Harbour Highway Planning

This community update presents the current status of the development of the Coffs Harbour Highway Planning Strategy. It describes highway options in the southern (Coffs Harbour) section and identifies new and revised options in the northern section near Woolgoolga. The update identifies those options that merit further investigation. The short-listed options for both sections are on display for community comment from Monday 23 February to Friday 19 March 2004.

Background

Preparation of the Strategy is being funded by the NSW Government as part of its \$1.6 billion commitment to the 10-year Pacific Highway Upgrading Program, which commenced in 1996.

The principal objectives of the program are to:

- Significantly reduce road accidents and injuries.
- Reduce travel times and freight costs.
- Have a community satisfied with the physical development of the route.
- Have a route that supports economic development.
- Manage the upgrading of the route in accordance with Ecologically Sustainable Development (ESD) principles.
- Maximise effectiveness of expenditure.

The Strategy is being developed to address the need to upgrade the Pacific Highway between Sapphire and Woolgoolga, while planning for future traffic needs within the Coffs Harbour urban area.

Purpose of community update

The purpose of this community update and the accompanying technical papers is to provide information on the Coffs Harbour Highway Planning Strategy and feasible highway options identified in both the southern (Coffs Harbour) and the northern (Sapphire to Woolgoolga) sections of the strategy area. The update also invites community comment on these feasible options.

Coffs Harbour City Council's preferred corridor

On 29 October 2003, Coffs Harbour City Council adopted its preferred corridor for a bypass of Coffs Harbour and Woolgoolga. Council wrote to the NSW Minister for Roads, Carl Scully, requesting that the Roads and Traffic Authority (RTA) accept this option as the preferred corridor option and refine a route within this corridor.

Council's preferred corridor is located within the Bucca Valley and the coastal range to the west of Coffs Harbour and Woolgoolga. The corridor crosses the Sherwood Nature Reserve west of Woolgoolga and includes the Orara East, Lower Bucca and Wedding Bells State Forests. Figures 1 and 2 (on pages 4 and 5) show the corridor and the major land use and topographical constraints.

The boundary of the Coffs Harbour local government area is the northern limit of the corridor identified by Council. Consideration of a route within Council's preferred corridor would also require consideration of a connection back to the Pacific Highway through the Pristine Waters local government area.

The RTA has agreed to assess the feasibility of options within Council's preferred corridor in terms of their functional, environmental and socio-economic impacts. Public input into this assessment is invited (see back page for details). When completed, the assessment report will be placed on display.

Southern (Coffs Harbour) section

The following work has been undertaken for the southern (Coffs Harbour) section of the Strategy:

- The development of a concept for an urban motorway along the existing highway corridor.
- A review of the community-generated western bypass option known as the Coastal Ridge Way.
- The development of two feasible route options generally within the Inner Bypass corridor.

Figures 1 and 2 show the location of these proposals and the major land use and topographical constraints. Figure 5 shows profiles of the proposals between Englands Road and Arrawarra.

The options were developed to a level that was sufficient to establish their broad feasibility in terms of transport function, socio-economic implications and environmental consequences. The options are described below.

Existing highway corridor

The concept for an upgrade along the existing highway through Coffs Harbour is based on contemporary urban motorway schemes. It was developed to provide a high standard dual carriageway with grade-separated interchanges (flyovers or underpasses) at key locations for access to and from the highway as well as for local east-west traffic movements.

Key features of an upgrade of the existing highway between Englands Road and Sapphire are:

- Total length – 11.4 km
- One tunnel – length 550 m (Macauleys Headland)
- Preliminary estimated cost (\$2003) – \$690M (\$60M / km)
- Construction duration – 6 to 7 years
- Ability to stage construction – very good
- Economic viability – marginal. Benefit Cost Ratio (BCR) approx. 0.9*
- Predicted 2021 daily traffic volumes (total / heavy vehicles):
North of Bray Street – 49,900 / 4,850
- Socio-economic outcomes:
 - Effect on community cohesion – High adverse
 - Amenity effects – High adverse
 - Visual impact – High adverse
 - Impact on local traffic – Moderate adverse
 - Urban property impacts – High adverse
- Biophysical impacts – minimal

*Benefit Cost Ratio (BCR) – present value of road user benefits divided by present value of costs.

Details of the proposal are in the Strategy Report and accompanying working papers (see back page for details).

The upgrade of the existing highway through Coffs Harbour to an urban motorway does not merit further consideration due to its socio-economic impacts on the Coffs Harbour urban area.

Coastal Ridge Way proposal

The Coastal Ridge Way would involve the construction of approximately 38 km of new dual carriageway through very rugged terrain to the west of Coffs Harbour. It would cross along the coastal range between the Coffs Harbour basin and the Orara Valley, then head north-east adjacent to the Ulidarra National Park through the State Forest and Bucca Valley to connect to Option A of the Sapphire to Woolgoolga section and rejoin the existing highway at Arrawarra.

Key features of the Coastal Ridge Way proposal are:

- Length:
 - Englands Road to Bucca Road – 21.6 km
 - Bucca Road to Arrawarra Creek – 16.9 km
- Five tunnels – total length 2,380 m
- Preliminary estimated cost (\$2003):
 - Englands Road to Bucca Road – \$860M (\$40M / km)
 - Bucca Road to Arrawarra Creek – \$305M (\$18M / km)
- Construction duration:
 - Englands Road to Bucca Road – 6 to 7 years
 - Bucca Road to Arrawarra Creek – 3 to 4 years
- Ability to stage construction – limited
- Economic viability – very poor. BCR < 0.1
- Predicted 2021 daily traffic volumes (total / heavy vehicles):
 - Coastal Ridge Way (southern end) – 9,200 / 1,500
 - with existing highway (north of Bray Street) – 41,300 / 3,400
- Socio-economic outcomes:
 - Effect on community cohesion – Low adverse
 - Amenity effects – Moderate adverse
 - Visual impact – Moderate adverse
 - Impact on local traffic – Low beneficial
 - Urban property impacts – Low beneficial
 - Area of bananas removed – 8 ha
- Biophysical outcomes:
 - Native vegetation removed:
 - High conservation status – 64 ha
 - Low conservation status – 20 ha
 - Primary koala habitat removed – 50 ha

Also, the Coastal Ridge Way would require 4 ha of ecologically important Forestry Management Zones to be revoked and Option A would require 7 ha of the Sherwood Nature Reserve to be revoked (refer Figure 1). These revocations would usually require both the concurrence of the Minister for the Environment and an Act of Parliament.

Further details on the Coastal Ridge Way proposal can be found in the Review of the Coastal Ridge Way Proposal report (see back page for details).

Investigations have shown that the Coastal Ridge Way proposal has major environmental (biophysical) impacts, poor functional performance, high cost and provides poor value for money. A decision regarding the proposal will be made following the assessment of the feasibility of options within Council's preferred corridor.

Inner Bypass corridor

Following community consultation and further studies, route options have been identified for the Inner Bypass corridor shown in the March 2002 community update.

Two options have been identified for both the Englands Road to Coramba Road section and the Coramba Road to Korora Hill section of the corridor (refer Figures 3A and 3B on pages 6 and 7). These options are interchangeable and combine to give four inner bypass variations. One of the sub-options would require a tunnel under

Roberts Hill ridge. Short tunnels could also be used between Coramba Road and Korora Hill to eliminate deep cuttings and minimise the 'footprint' of the roadway.

The southern and northern options are:

- Inner South 1 (IS1): This option deviates from the existing highway south of Englands Road, crosses North Boambee Road approximately 300 m west of Bishop Druitt College to continue north toward the low saddle in the Roberts Hill ridge 100 m west of Buchanans Road before proceeding to Coramba Road.
- Inner South 2 (IS2): Initially the same as Inner South 1 but deviates to the west, south of North Boambee Road, and tracks to Roberts Hill ridge about 800 m west of the other route. Due to the higher terrain, a 560 m long tunnel would be required under Roberts Hill ridge.
- Inner North 1 (IN1): From Coramba Road this alignment veers north-east, crossing Spagnolos Road and Shephards Lane before heading east to Mackays Road, following close and parallel to the railway line for about 1.6 km. From this point it deviates to pass through the valley between Sealy Lookout and Gatelys Road before traversing the West Korora basin to rejoin the existing highway at Korora Hill.
- Inner North 2 (IN2): This more westerly alignment crosses Shephards Lane at its western extremity. The route passes through and then to the north of a major ridgeline near the end of Shephards Lane and traverses a relatively isolated valley to rejoin Inner North 1 opposite the western end of Gatelys Road.

Key features of the Inner Bypass between Englands Road and Sapphire are:

- Total length – 12 km to 12.6 km
- Up to three tunnels – length up to 1,315 m
- Preliminary estimated cost (\$2003) – \$280M to \$425M (\$23-34M / km)
- Construction duration – 4 to 5 years
- Ability to stage construction – good
- Economic viability – marginal. BCR 0.7 to 1.0
- Predicted 2021 daily traffic volumes (total / heavy vehicles):
 - Inner Bypass (southern end) – 16,900 / 2,100
 - with existing highway (north of Bray Street) – 35,300 / 2,900
- Socio-economic outcomes:
 - Effect on community cohesion – Low adverse
 - Amenity effects – Moderate to high adverse
 - Visual impact – Moderate to high
 - Impact on local traffic – High beneficial
 - Urban property impacts – Low beneficial
 - Area of bananas removed – 32 to 48 ha
- Biophysical outcomes:
 - Native vegetation removed:
 - High conservation status – 6 ha
 - Low conservation status – 2 ha
 - Primary koala habitat removed – 7 to 8 ha

A more detailed description of the route options within the corridor and their potential benefits and impacts can be found in the Strategy Report (see back page for details).

Of the strategies assessed to date (existing highway corridor, Coastal Ridge Way proposal and Inner Bypass corridor), the strategy preferred by the RTA and Department of Infrastructure, Planning and Natural Resources (DIPNR) for Coffs Harbour is a bypass located generally within the Inner Corridor. Options for this bypass are on display for community comment (see back page for details of display locations). The preference for the Inner Bypass will be reviewed following the assessment of the feasibility of options within Council's preferred corridor.

Figure 1: Land use constraints

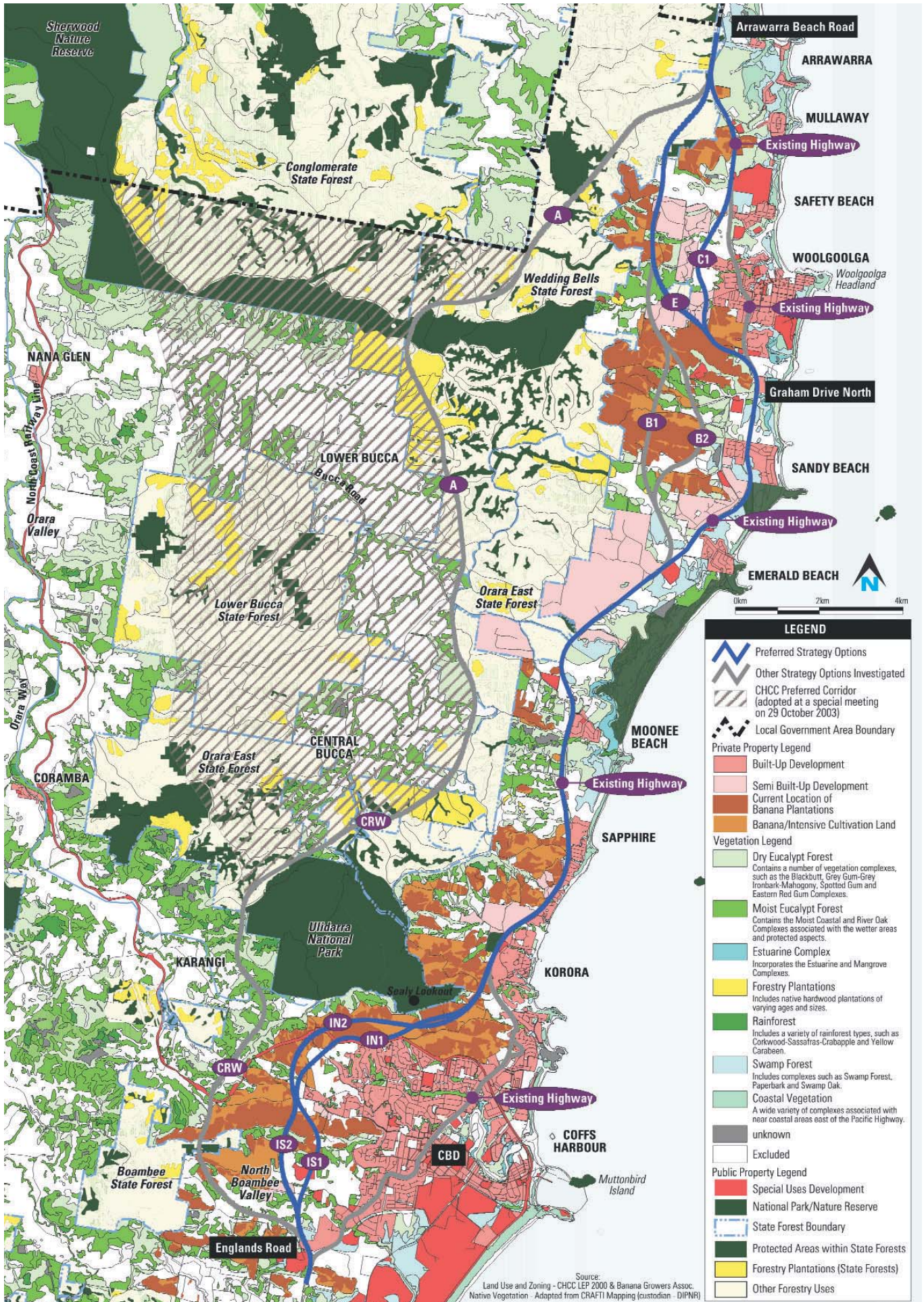


Figure 2: Terrain map

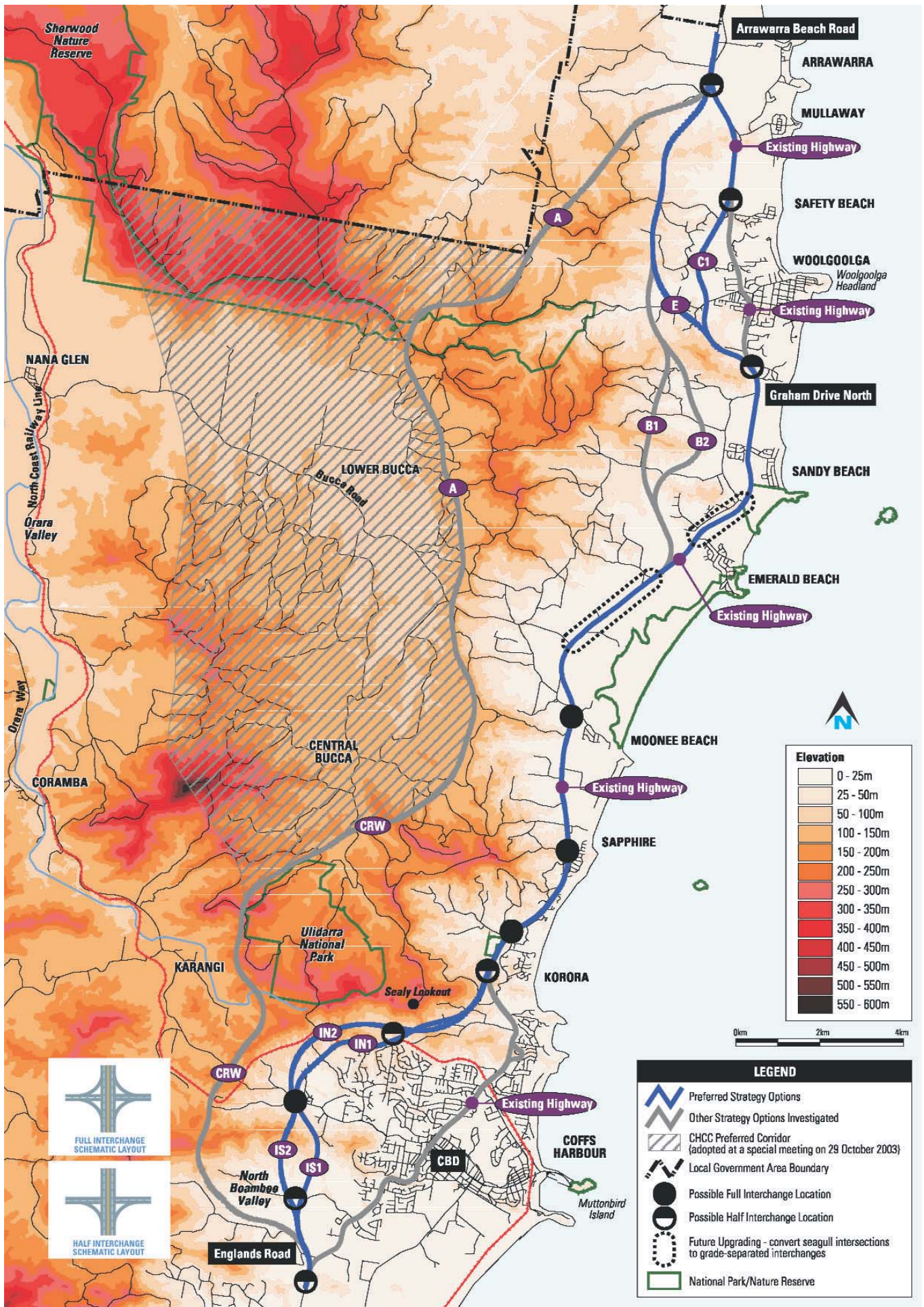


Figure 3A: Inner Bypass (Englands Road to Coramba Road)

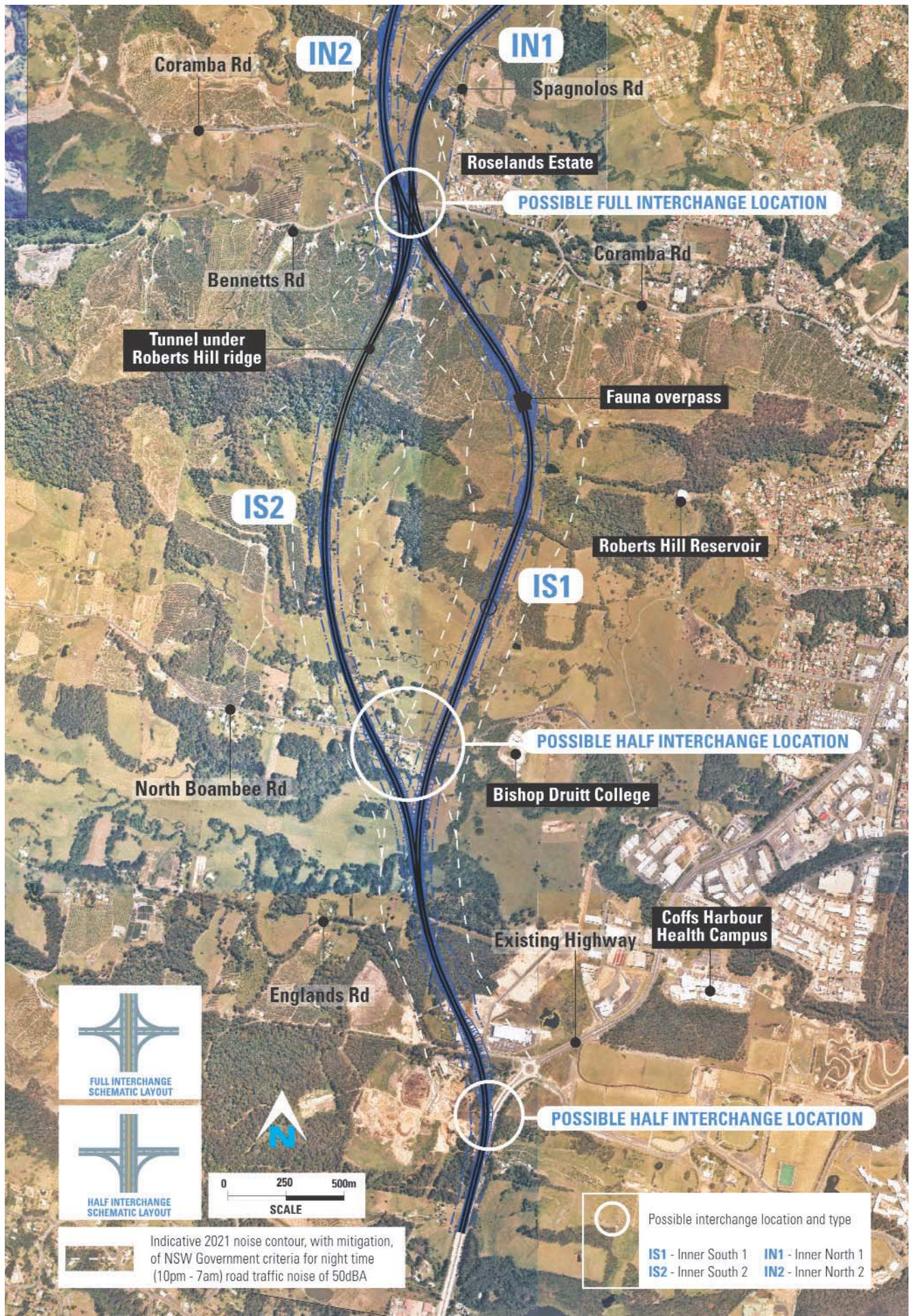
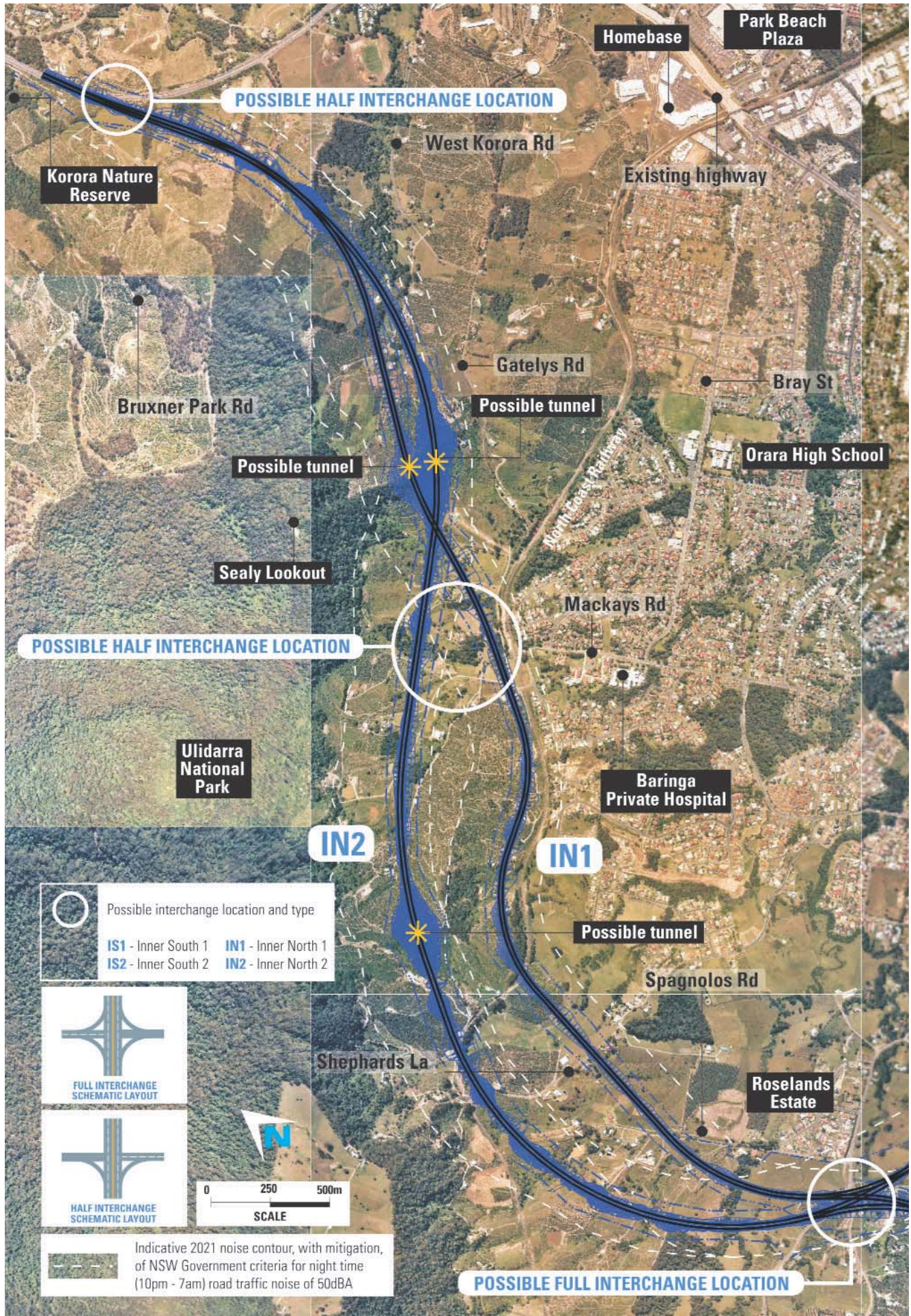


Figure 3B: Inner Bypass (Coramba Road to existing highway at Korora)



Northern (Sapphire to Woolgoolga) section – revised route locations

Community Update No. 3, released in December 2002, identified five route options for upgrading the Pacific Highway between Sapphire and Woolgoolga – Options A, B1, B2, C and D. A Value Management study held in April 2003 reviewed and evaluated the options using a 'triple bottom line' assessment that included functional, environmental and socio-economic performance.

The table below presents the assessed rankings of the route options against the performance categories together with the cost estimates and benefit cost ratios (BCR).

RANK	CATEGORY				
	Functional	Environmental	Socio-Economic	Preliminary estimated cost (\$M) (\$2003)	BCR
1	C	D	A	C (\$240)	D (2.1)
2	D, B1, B2	C	C, D	D (\$260)	C (2.0)
3		B1, B2		B2 (\$270)	B2 (1.9)
4			B1, B2	B1 (\$285)	B1 (1.7)
5	A	A		A (\$375)	A (1.1)

The study findings and subsequent investigations led to the following conclusions:

- Option A is not favoured due to its severe environmental (biophysical) and Aboriginal heritage impacts, poor functional performance, high cost and poor value for money.
- Options B1 and B2 do not merit further consideration due to the need to protect valuable agricultural land at this locality.
- Option D (upgrade of the existing highway through Woolgoolga) is not an acceptable option due to its social and economic impacts on the township of Woolgoolga.

New route options

In response to a request from Coffs Harbour City Council following the route options display, the RTA has developed a modified Option C (Option C1) and an additional option that uses parts of the initial Options B and C (Option E). These new options are now on display for public comment.

The new options are described below and shown in Figure 4 on page 9:

- Option C1 is a modification of the initial Option C. At its southern end C1 detours around and to the west of the South Woolgoolga

Urban Investigation Area and traverses the western side of the dam near Woolgoolga Creek Road, before rejoining the initial Option C alignment near Woolgoolga Creek. At a point just north of Woolgoolga Reservoir, Option C1 takes a north-easterly route along the eastern boundary of the Country Club Estate and rejoins the Pacific Highway north of Safety Beach Drive. A grade-separated interchange is proposed at Bark Hut Road instead of Safety Beach Drive.

- Option E was developed to reduce impacts on zoned and potential urban / residential lands in west and south Woolgoolga and also on banana growing properties to the west of Sandy Beach. Option E leaves the Pacific Highway at the same location as C1, but veers off in a north west direction to closely follow the Option B alignment to the west of Woolgoolga. Option E rejoins the existing highway just south of Arrawarra Creek.

Further details of these new options can be found in the Sapphire to Woolgoolga Supplementary Options Report (see back page for details). Their main features are outlined in the table below.

FEATURE	OPTION C1	OPTION E
Total length from Sapphire to Arrawarra Creek	23.5 km	24 km
Bypass length from Hearn's Lake Road to Pacific Highway north of Woolgoolga	6.5 km	9.9 km
Preliminary estimated cost (\$2003)	\$250 million	\$265 million
Construction duration	3 to 4 years	3 to 4 years
Ability to stage construction	Good	Good
Economic viability	Good (BCR = 2.0)	Good (BCR = 1.8)
2021 Daily traffic volumes (total / heavy vehicles):		
■ Bypass section	16,542 / 1,972	14,109 / 1,972
■ Existing highway north of Graham Drive (North)	10,251 / 329	12,684 / 329
Socio-economic outcomes:		
■ Effect on community cohesion	Moderate adverse	Low beneficial
■ Amenity effects	Moderate to high adverse	Moderate adverse
■ Visual impact	Low adverse	Moderate adverse
■ Impact on local traffic	High beneficial	Moderate beneficial
■ Urban property impacts	Divides West Woolgoolga Draft DCP area	No impact on existing urban properties
■ Area of bananas removed	5 ha	12 ha
Biophysical outcomes:		
■ Native vegetation removed:		
High conservation status	1.6 ha	7.6 ha
Low conservation status	5.7 ha	23.2 ha
■ Primary koala habitat removed	6.3 ha	12.9 ha

Figure 4: Woolgoolga Bypass options C1 and E

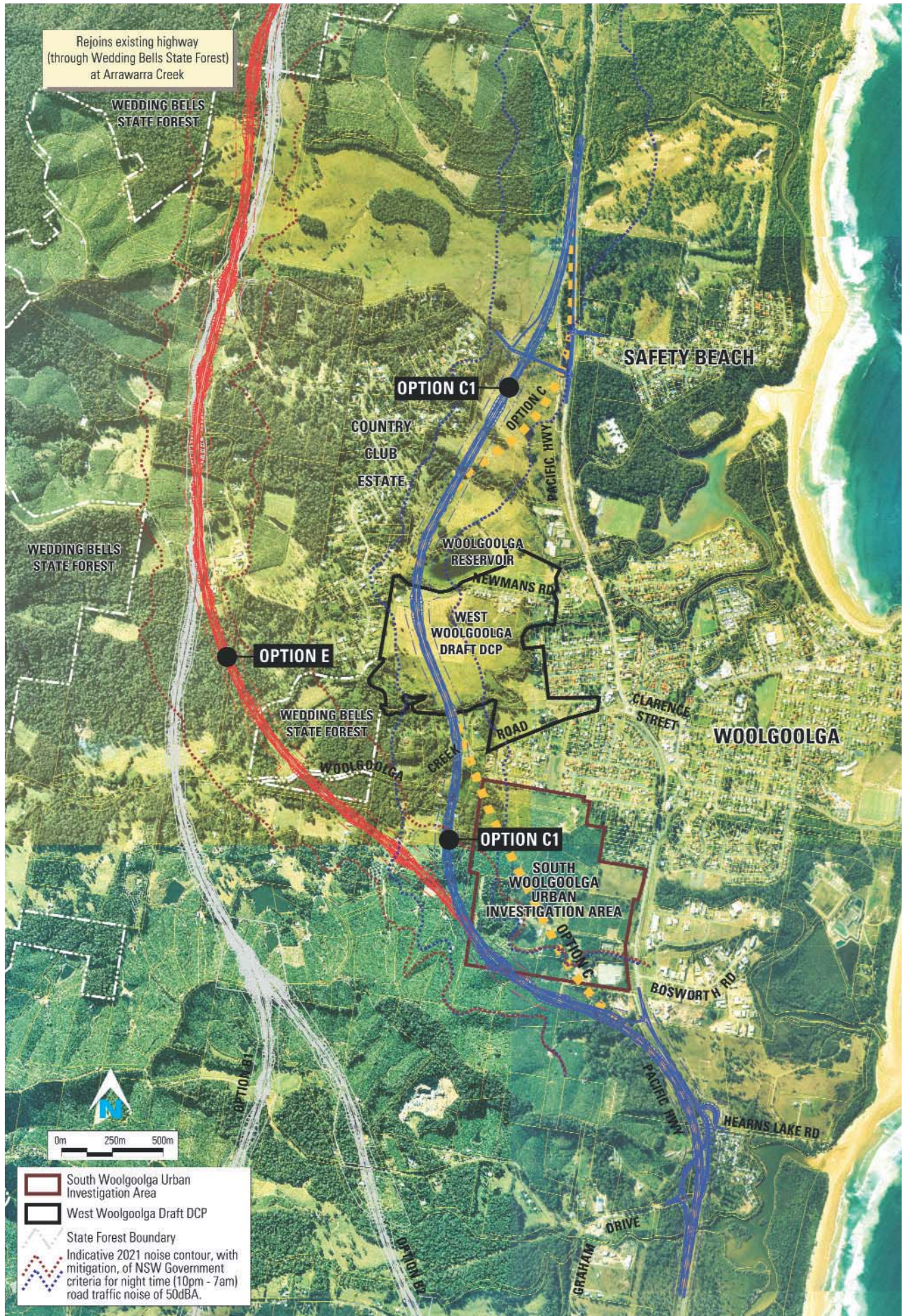
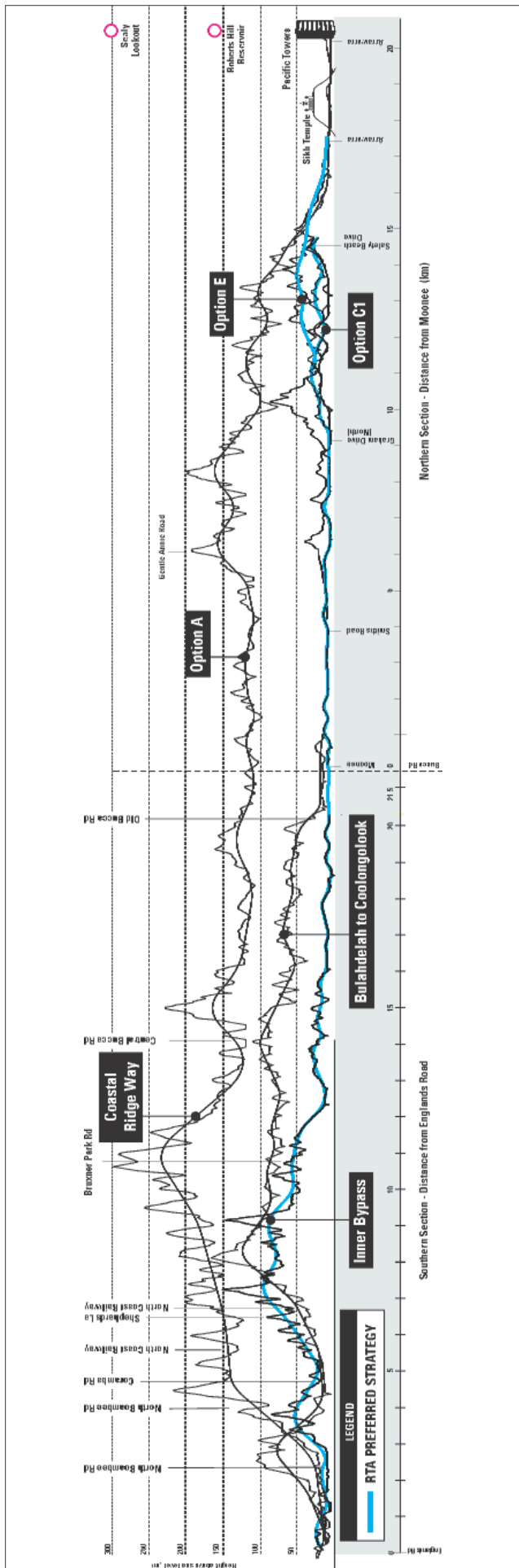


Figure 5: Longitudinal sections (profiles)



Sapphire to South Woolgoolga

The Inner Bypass of Coffs Harbour and either Option C1 or E at Woolgoolga will necessarily include the upgrading of the existing highway from Sapphire to South Woolgoolga to dual carriageway standard.

The investigations completed to date indicate that the section from Sapphire to Moonee would have the highest priority for duplication. This section presently provides the lowest level of service for road users and substantial urban development is planned along the highway corridor and in the Moonee area.

Further information in regard to the development and display of a concept design for this section is included in 'What happens next' on page 11.

Longitudinal sections (profiles) and artist's impressions

Figure 5 shows longitudinal sections (profiles) along each of the highway route options from England Road to Arrawarra. The profile of the Bulahdelah to Coolongolook upgrade has also been included as a comparison for readers who are familiar with that project. The profiles illustrate how each option compares in terms of height above sea level, depths of cuttings and heights of embankments and gradient (steepness). Some prominent local landmarks are also shown for comparison purposes. Features of the sections for each option are summarised in the following table.

	Coffs Harbour Highway Planning Strategy					Bulahdelah to Coolongolook project
	Southern (Coffs Harbour) Section		Northern (Sapphire to Woolgoolga) Section			
	Coastal Ridge Way	Inner Bypass	Option A	Option C1	Option E	
Highest point above sea level	242 m	97 m	170 m	46 m	51 m	125 m
Highest embankment						
– no viaducts	48 m	23 m	35 m	8 m	13 m	25 m
– with viaducts	30 m	NA	25 m	NA	NA	NA
Deepest cutting						
– no tunnels	81 m	60 m	35 m	24 m	23 m	42 m
– with tunnels	45 m	29 m	NA	NA	NA	NA
Maximum grade	6.0%	6.0%	5.2%	4.4%	4.4%	6.0%
Longest uphill section	11 km	2 km	4 km	2 km	2 km	4 km

NA Not Applicable

Artist's impressions have been included in the displays (see back page for details) to indicate the visibility of options within the Inner Bypass corridor of Coffs Harbour from two important viewing points – Muttonbird Island and Sealy Lookout. A perspective of Option C1 in the northern section, as viewed from Woolgoolga headland, is also included in the displays. Option E is not visible from that viewing location.

Transport of dangerous goods

Among the heavy freight vehicles that routinely use the existing highway are those transporting assorted dangerous goods. A survey in September 2003 indicated that approximately 80 such movements are likely on a peak day, with petroleum and LPG the main products. Preliminary assessment has found that improving the standard of the road would substantially reduce the likelihood of an incident involving a vehicle carrying dangerous goods. The assessment also found that the likelihood of such an incident on the existing highway would be reduced due to the diversion of a significant proportion of vehicles carrying dangerous goods onto the new bypasses.

What happens next

The short-listed options are on display from Monday 23 February 2004 to Friday 19 March 2004. Community comment on the short-listed options from this display will be considered as part of the process of selecting a preferred option for both sections.

The feasibility of options within Council's preferred corridor will be assessed and a report on the assessment will be placed on display when completed.

A Value Management Study will then be held to assist selection of the preferred option for both the southern (Coffs Harbour) and northern (Sapphire to Woolgoolga) sections. The Value Management Study will include a workshop with technical and non-technical representatives from a range of government, Council and community interests. The recommendations arising from the study will be considered as part of the subsequent evaluation of options.

The draft Preferred Options Report will document the evaluation of options and present the preferred options for the northern and southern sections. A decision on the preferred options is expected to be announced by mid 2004.

After the preferred option for the southern (Coffs Harbour) section of the strategy is identified, planning action will be taken to reserve the required corridor.

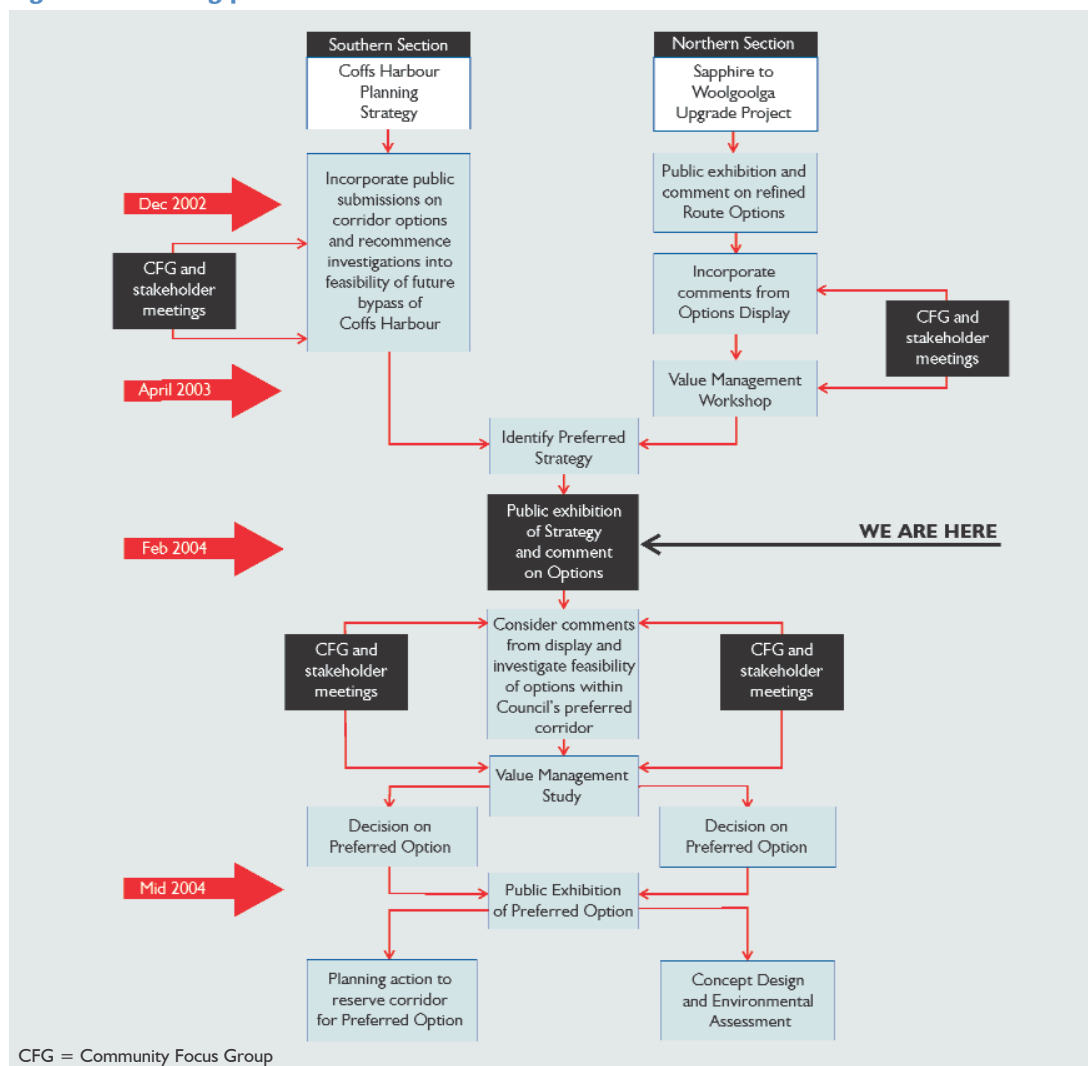
Following the identification of the preferred option for the Sapphire to Woolgoolga section of the Strategy, a concept design will be progressed and a range of key highway planning matters will be addressed in more detail. This will include closer attention to the location and configuration of interchanges and intersections along the route, the need for service roads to cater for local access and the type and location of noise mitigation measures. Another important activity will be further application of urban design principles to integrate the upgraded highway into the landscape of the area. The concept design will be placed on display for public comment.

As with other projects proceeding under the Pacific Highway Upgrading Program, an environmental impact assessment (EIA) would be prepared before seeking planning approval to construct the project. The EIA would provide information on the likely ecological and social consequences of any route selected as the preferred option.

Under the *Environmental Planning and Assessment Act 1979*, an EIA is required to demonstrate that feasible alternative options have been investigated and that the preferred option best meets the project objectives.

The flow chart (Figure 6) illustrates the Coffs Harbour highway planning process.

Figure 6: Planning process





Coffs Harbour Highway Planning

Southern and Northern Sections

COMMUNITY UPDATE 4
FEBRUARY 2004

Have your say

This form provides an opportunity for you to comment on the short-listed highway options that have been developed for the Pacific Highway between Englands Road and Arrawarra. These options are described in this brochure to obtain community input into the assessment of the preferred option. If you wish to comment, please fill in this form and return it by mail to:

Coffs Harbour Highway Planning Strategy
Reply Paid 478
COFFS HARBOUR NSW 2450
or Fax to: (02) 6652 7088

Comment forms should be received by 19 March 2004

As part of the route selection process, the short-listed options will be subject to further comparison of all relevant engineering, economic, environmental and social issues. For each of the short-listed options, what are the specific impacts and benefits that are of interest to you and why?

Coffs Harbour bypass options

Inner South 1

Inner South 2

Inner North 1

Inner North 2

Woolgoolga bypass options

Option C1

Four horizontal lines for notes under Option C1.

Option E

Four horizontal lines for notes under Option E.

Existing highway upgrade – Sapphire to South Woolgoolga

Four horizontal lines for notes under Existing highway upgrade.

Council's preferred corridor

Four horizontal lines for notes under Council's preferred corridor.

Please list any changes or improvements you may have for any of the above short-listed options.

Four horizontal lines for notes on changes or improvements.

Please fill out your contact details below.

(Mr/Mrs/Ms): _____ Surname: _____

First Name: _____ E-mail: _____

Address: _____

Phone: _____ (work) _____ (home)

All information in representations received may be published in subsequent assessment documents. Where the supplier indicates at the time of supply of information that it should be kept confidential, the RTA will attempt to keep it confidential but there may be legislative or legal justification for the release of the information, for example under the Freedom of Information Act 1989 or under subpoena or statutory instrument.

Have your say

The short-listed highway options are on display from Monday 23 February to Friday 19 March 2004 at the locations shown below. The displays provide large-scale maps for both the southern and northern sections showing greater detail, including: existing property boundaries, key road and place names and additional information on the environmental and social constraints that guided development of the route options.

Project displays

Coffs Harbour

- Palms Shopping Centre – upstairs opposite Big W (Mon-Fri 8.30am-5.30pm, Sat 8.30am-4pm)
- RTA Motor Registry, 34 Gordon Street (Mon-Fri 8.30am-5pm, Sat 9am-12.30pm)

Woolgoolga

- Public Library, Ganderton Street (Mon-Fri 9.30am-5pm, Sat 9.30am-noon)

Toormina

- Public Library, 46 Minorie Drive (Mon-Fri 9.30am-5pm, Sat 9.30am-noon)

Sapphire

- Sapphire Service Station, Pacific Highway, Sapphire (6.30am-10pm, seven days)

Corindi Beach

- Yarrowarra Cultural Centre, 170 Red Rock Road (Mon-Fri 9am-4pm)

Grafton

- RTA Pacific Highway Office, 21 Prince Street (Mon-Fri 8.30am-4.30pm)

Lower Bucca

- Lower Bucca Community Centre, Bucca Road (Mon-Fri 9am-6pm)

Staffed displays

- Shop 44B, Moonee Street, Coffs Harbour (Monday 23 and Tuesday 24 February 2004, 9am-6pm)
- Lower Bucca Community Centre, Bucca Road, Lower Bucca (Wednesday 25 February 2004, 4pm-8pm)
- Woolgoolga Public Library Meeting Room, Ganderton Street (Thursday 26 and Friday 27 February 2004, 9am-6pm)

The staffed displays will provide the opportunity for people to ask questions and discuss the route options in more detail with project team representatives.

How to comment

You are invited to comment by completing the enclosed form so that your views can be included as part of the options evaluation process.

If you made a submission during an earlier stage of the planning process, the issues raised in that submission will also be considered during the current stage of the study.

Please return your comment form to:

Coffs Harbour Highway Planning Strategy
Reply Paid 478,
COFFS HARBOUR NSW 2450
(by 19 March 2004)

Copies of the comment forms are available on the RTA website at www.rta.nsw.gov.au/pacific

Detailed reports available

A Strategy Report, Report on the Review of the Coastal Ridge Way Proposal and a Sapphire to Woolgoolga Supplementary Options Report have been produced. They outline in more detail how the options were identified, the major planning constraints and potential impacts of each option. The reports are available on the project website and at the following display locations:

- Palms Shopping Centre, Coffs Harbour – upstairs opposite Big W.
- RTA Motor Registry, Coffs Harbour.
- Woolgoolga Public Library.
- RTA Pacific Highway Office, Grafton.

The Strategy Report refers to a series of technical working papers that address the social, environmental, economic and engineering aspects of the existing highway upgrade and the inner bypass proposals for the southern (Coffs Harbour) section of the strategy area. The working papers are available on the project website or by phoning the Project Information Line.



For further enquiries:



www.rta.nsw.gov.au/pacific



1800 63 63 63 (freecall)



FOR FURTHER INFORMATION WRITE TO:
Coffs Harbour Highway Planning Strategy
Reply Paid 478,
COFFS HARBOUR NSW 2450
