

and where practicable, to replan the area so future land use can be compatible with a major highway. There are opportunities within this release area to consider uses other than the predominant urban residential land use currently envisaged which could be of major benefit to the community.

Details of the lengths of road and the land uses through which they pass are provided in Table 5.1. Land use in the location above tunnels is not included.

Table 5.1 Land Use traversed by CRW

Land use	Length traversed by CRW (km)
Rural Agricultural	8.784
Rural State Forest	5.347
Residential	0.561
Industrial	0.613
Railway	0.057
Road	0.643
Open Space Recreation	0.351
Environmental Protection	2.842
<i>Length of surface route</i>	<i>19.198</i>

5.2 Land Use, Property & Business

5.2.1 Rural Land Use, Property and Business

The effects of the CRW proposal on land use and property is influenced by its relative isolation from the more densely developed coastal areas of Coffs Harbour. Aside from the North Boambee area, clearly the most significant land impact is effect on forestry holdings which are used for both timber operations and nature conservation.

The southern section of the route between Englands Road and Coramba Road traverses a combination of land use including urban development, banana plantations, other cultivated land and State Forest (refer Figure 5.2). To the north of Coramba Road, the area traversed by the route includes mainly State Forest and limited rural grazing land. Due to the rugged topography a relatively wide corridor would need to be acquired for construction of the CRW. The route would require the acquisition of up to 78 private lots. The indicative land use for these lots is shown in the Agricultural Report (Appendix E).

The areas of privately owned banana plantations and cultivated land that would be directly taken by CRW, and those within 300m either side are shown in Table 5.2.

Table 5.2 Agricultural Land Take

Agricultural land	Source	Class	Area (ha)
Direct land take			
Current banana land	Aerial photo		7.5
Banana land classification	Dept of Agriculture	B1	2.8
	Dept of Agriculture	B2	8.3
Other cultivation classification	Dept of Agriculture	V2	37.3
<i>Total</i>		<i>B1,B2,V2</i>	<i>48.4</i>
Agricultural land within 300m			
Current banana land	Aerial photo		59.1
Banana land classification	Dept of Agriculture	B1	26.3
	Dept of Agriculture	B2	57.0
Other cultivation classification	Dept of Agriculture	V2	390.5
<i>Total</i>		<i>B1,B2,V2</i>	<i>473.8</i>

Areas of land in the State Forest that are used for eco-tourism, heritage tours and recreational forestry tracks would also be impacted by the CRW proposal.

5.2.2 Urban Land Use, Property and Business

Substantial research has been undertaken into the effects of the highway upgrade proposals on business activity. The indirect impacts which can occur include; diversion of traffic and reduction in passing trade and loss of exposure, which can result in a decrease in trading and consequent economic loss. It is assumed that most commercial premises along and near the existing highway rely to some extent on passing trade. Construction of a bypass like CRW has the potential to improve business accessibility for premises along the Pacific Highway through reduced congestion, but it would also result in some loss of business customers diverted to the new route. The businesses most likely to be affected are those that cater primarily to those highway users that stop for a break in travel mainly to eat and refuel. For businesses that cater to highway users that stay for a longer period (eg overnight), the impact is likely to be minor.

Coffs Harbour is a destination for tourism and it is a significant sector in the local and regional economy. The primary mode of tourist travel to Coffs Harbour is by private vehicle and with the high standard connections to the City from the CRW (and the general enhancements to the overall Pacific Highway) it is likely that any adverse impact on tourism attributable to the CRW would be minor. If CRW was able to attract heavy vehicle through traffic there would be amenity advantages (eg reduced night time traffic noise that would benefit many tourist destinations along the existing highway route. As previously noted, the introduction of a new route into the natural landscape would have a negative impact on eco-tourism ventures that operate in the area.

5.3 Traffic Noise

A traffic noise assessment for the CRW has been prepared by specialist acoustic engineers, Wilkinson Murray. The assessment, which is presented in Appendix F, identified that the key advantage of the CRW is the small number of existing residences that would be affected by traffic noise due to the separation of the route from urban areas and the intervening topography. The ultimately adopted land use plan for the North Boambee area would strongly influence potential noise effects in the future. The northern end near Bucca Road would affect few receivers, and it is considered unlikely this would change substantially in the future following planned land releases in the Moonee DCP area.

In the vicinity of Coramba Road and for the North Boambee urban release area, mitigation measures including noise attenuation features may need to be incorporated in the design of the CRW so as to achieve noise goals.

The CRW would provide some benefit to residents along the existing highway, however, the main issue for the CRW is the introduction of traffic noise into the rural environment. This may effect numerous isolated rural residences which are currently exposed to little or no traffic noise and would increase the total number of residences exposed.

5.4 Non-Indigenous Heritage

The desk-top assessment of non-indigenous heritage issues of relevance to the CRW option was conducted in conjunction with the assessment for the Inner Bypass and Existing Highway corridors (Connell Wagner, 2004a). This section summarises the findings of that assessment in relation to the CRW.

A search of the following registers was undertaken to identify any registered sites of non-indigenous heritage significance in the vicinity of the route:

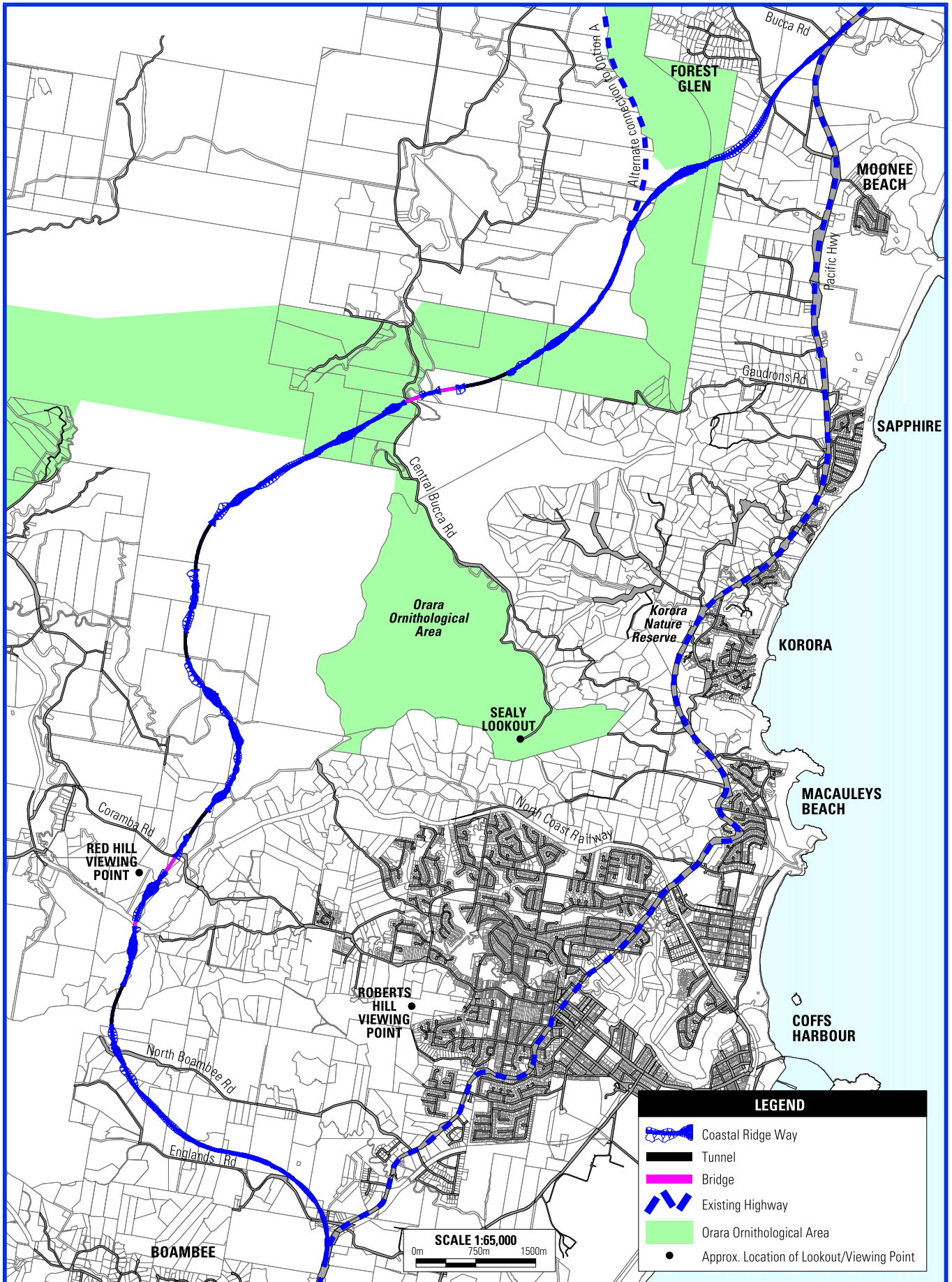
- NSW State Heritage Inventory
- National Trust of Australia (NSW)
- RTA Conservation and Heritage Register
- Coffs Harbour LEP
- North Coast REP
- Register of the National Estate (AHC)

In addition to the sites listed in the urban area of Coffs Harbour (refer Connell Wagner 2004a), the only heritage sites or registered places listed in the vicinity of the CRW lie further to the west and north-west at Coramba, Karangi and Orara.

The CRW passes through the Orara Ornithological Area (refer Figure 5.3), which is listed as an indicative place by the Australian Heritage Commission. This area is approximately 5,755ha in size and is located approximately 5km north-west of Coffs Harbour adjacent to Bruxner Park Road. The area is not yet registered in the National Estate but is currently being assessed. The nominated area is moist hardwood forest supporting a very high bird diversity.

Information and data on the historical background of the study area was identified through a literature review and through contact with the Coffs Harbour Historical Society (Connell Wagner, 2004a). Other literature sources reviewed included the Coffs Harbour Coastal Landscape Heritage Study (Coffs Harbour City Council 1995) in which a community values assessment process identified fourteen places of landscape heritage value sufficient to warrant inclusion in the Register of the National Estate. Those in the vicinity of the CRW include Sealy Lookout and all lookouts giving views of Coffs Harbour and it's setting. The CRW is likely to be visible from the Red Hill viewing point, which lies within 250m of the CRW (refer Figure 5.3). To date, the recommendations from this study have no statutory heritage implications. Consideration of the likely impact of the CRW on relevant lookouts have been considered in the preliminary visual impact assessment (Hassell, 2004).

For the majority of its length the CRW traverses largely undeveloped forest lands and with the exception of the Orara Ornithological area, no listed items of non-indigenous archaeological heritage significance are likely to be directly or indirectly affected by the option.



COFFS HARBOUR HIGHWAY PLANNING
COFFS HARBOUR SECTION
REVIEW OF COASTAL RIDGE WAY



FIGURE 5.3
NON INDIGENOUS HERITAGE

It is possible that previously unidentified sites of non-indigenous heritage significance could exist in the study area in the form of relics associated with past rural land use. Under the provisions of the NSW *Heritage Act 1977*, items which are related to the settlement of NSW which are greater than 50 years of age are defined as relics and a permit is required from the Heritage Office before disturbance of such items can take place.

5.5 Indigenous Heritage

A preliminary overview of Aboriginal heritage values undertaken by Jacqui Collins did not identify any permanent constraints to the CRW. Nonetheless, parts of the route and especially intact ridge crests and the banks of Karangi and Bucca Bucca Creeks, have a high level of potential archaeological sensitivity and may contain sites of sufficient social and scientific significance to warrant either changes to the final alignment or development of specific construction methods.

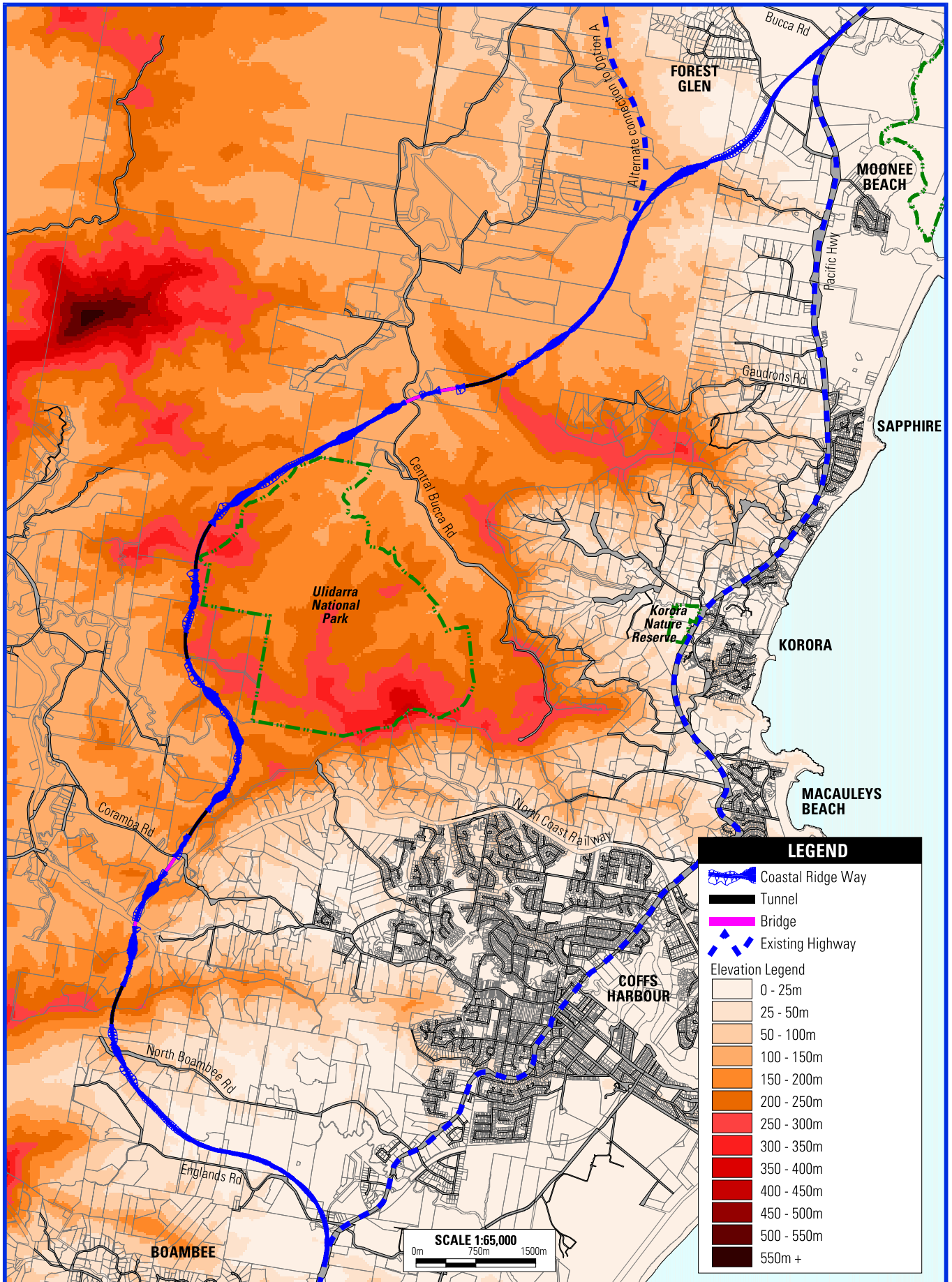
A search of the DEC Aboriginal Heritage Information Management System (AHIMS) revealed no registered sites on or close to the CRW alignment, although an unregistered scatter of two stone artefacts has been reported on a lower hillslope traversed towards its southern end (Godwin 1982:17). There have also been reports of unregistered artefact finds on or near the CRW at Red Hill and Settles Road. Several hundred Aboriginal historic sites/places covering a wide range of associations have been recently documented during oral investigations sponsored by DEC (Goulding 2001). Exact locations and details of the nature of their attachments are not presently known, but small scale mapping provided by Goulding (2001:Figure 3) indicates the closest of these sites to be situated at least a kilometre from the CRW alignment.

To investigate whether the integrity of any sites/places of particular spiritual, ceremonial or otherwise high cultural value would be likely to be threatened by development of the CRW, consultation was undertaken with Coffs Harbour and District Local Aboriginal Land Council Co-ordinator Dave Kennedy, Gumbaingirr Elders Ken Craig and Larry Kelly, Garby Elder Ian Brown, and Dee Murphy, Ricky Cain and Richard Preece of the Jalumbo Cultural Heritage Unit, Yarrawarra Aboriginal Corporation. None of these informants were aware of any significant sites/places on or near the CRW route with the exception of the northern end in the vicinity with the connection with the Pacific Highway. Here the route would pass in close proximity to the Yellow Waterholes and associated reed swamp. A 250m buffer has been provided around this site, and the route alignment has been designed to traverse outside this buffer area. This natural sacred site continues to be of high traditional and contemporary significance to Gumbaingirr women.

The overriding concern expressed by the above informants is their understanding that the CRW proposal is contingent upon selection of Option A in the northern section of the strategy area. They remain strongly opposed to that option.

5.6 Urban Design and Visual Issues

Hassell Pty Ltd have conducted an urban design and landscape assessment for the CRW corridor and it is included in Appendix G. The construction of the CRW, which traverses rugged forest and rural land for the most part (see Figure 5.1), would create major landscape changes along the proposed road corridor. Visual impacts would arise due to the introduction of large cuttings, embankments and bridge structures (refer Figure 5.4). The introduction of these features within the forested upper ranges and valleys would have a high impact on visual quality and this would be difficult to effectively mitigate. Despite the significant impact on the landscape resources, the overall visual impact of the CRW is considered to be Low, due to the low population numbers in and near the corridor and hence the low sensitivity.



COFFS HARBOUR HIGHWAY PLANNING
COFFS HARBOUR SECTION
REVIEW OF COASTAL RIDGE WAY



FIGURE 5.4
GROUND ELEVATION MAP

Road user impacts in terms of the quality of the adjacent visual environment, topography and opportunities for potential views were also assessed and found to be at a Medium impact level, with views and connectivity with the surrounding landscape maintained.

5.7 Amenity and Accessibility

Amenity effects associated with the construction and operation of a new or upgraded highway can be assessed mainly by consideration, either singularly or in combination, of visual impact and changes in the noise environment and air quality. This is certainly the case for the CRW proposal with the main amenity issues being the introduction of new urban infrastructure into a predominantly natural and rural environment and the associated traffic emissions. These individual impacts are addressed elsewhere in this section of the report.

The small number of residents within and near the CRW corridor have typically chosen that area to live because of the quiet rural setting and high amenity values. Consequently, they would be particularly sensitive to highway development and disturbance and for them, the amenity affects would be significant. Similarly, the CRW would also cause a substantial intrusion and amenity loss for transient / occasional users of forest recreational areas (eg. bushwalkers) and these activities and events may need to be relocated.

However, in view of the fact that the CRW alignment is generally well removed from large population numbers, the overall amenity affects would be regarded as Low.

Changes to highway access including the creation of alternative linkages for regularly used travel paths can result in social impacts for a local community as they change their movement patterns. The CRW proposal does provide a very definite bypass deviation around the main urban areas of Coffs Harbour for through traffic. With continued population growth in the area over time, there will be a need for capacity and safety improvements along the present highway to cater for local traffic. The community has also expressed concerns regarding the potential poor attraction of the CRW for heavy vehicles due to the long steep gradients (refer Section 3.2) and the possibility of continued use of the existing highway by such vehicles, excluding those servicing the City.

5.8 Community Attitudes

Pramax Communications has been monitoring community involvement in the Strategy including assessment of stakeholder feedback to the project team. Since the launch of the Strategy in September 2001, there has been extensive interaction and involvement by a wide range of community groups and individuals through regular information releases, public notices, freecall consultations and media coverage. There have also been regular meetings of a Community Focus Group (CFG) for this section of the strategy area that was formed in November 2001, with members representing a wide range of interests within the community.

The CRW proposal (and the earlier 'People's Choice' proposal) was developed by members of the community due to concerns regarding perceived adverse impacts associated with other highway options (eg. noise, air quality, visual, road safety, community severance, property, environmental and social effects). In early 2003, CFG members identified various socio-economic issues they considered most important in terms of planning for a bypass or upgrade of the existing highway. A summary of the key issues identified for the CRW is provided in Appendix H and they include:

- Impact on the natural environment and eco-tourism
- Visual scarring
- Heavy vehicles continuing to use the Pacific Highway

- Agricultural impact based on land take and encroachment onto consolidated banana growing areas

5.9 Community Cohesion / Interaction

Construction and operation of a major new road has the potential to create physical and psychological barriers for neighbourhoods either by dividing contiguous groups or forming barriers between communities and local facilities and services.

A key motivation of community members in advocating the CRW proposal was that a large proportion of the route traverses predominantly agricultural land and State Forest. As such, it causes very limited disruption in terms of existing community structures and the patterns of interaction.

While it is acknowledged that some small pockets of relatively isolated rural residential holdings could be severed by the CRW proposal, the general impact on existing communities would be negligible. This is because of the distance of CRW from established communities, the low number of properties it affects and because all key access roads crossed by CRW (eg. Coramba Road, North Boambee Road) would be retained. This conclusion assumes that for the southern end of the corridor, the land release plans for the North Boambee area would be revised by CHCC so as to avoid the creation of a physical and psychological barriers for future communities in that location.

Although the CRW could remove through traffic from the city, the existing highway would still serve as a major thoroughfare and the CRW therefore would not provide any notable benefits to residents within the city such as new access options nor changed movement patterns between communities.