

2. Strategy Area Characteristics

2.1 Overview

2.1.1 Geographical context

The topography of the study area is varied with dramatic and contrasting landform types – including the coastal strip in the east, the coastal range and the inland valleys of the Orara River and its tributaries to the west. This contrasting topography results in a unique landscape where the Great Dividing Range meets the sea. The area is a contrast of the ocean, rugged coastline, protected beaches, long narrow coastal plains, waterways, steep vegetated mountains and inland river valleys. It includes 51km of coastline with significant areas of State Forest, National Parks and areas of high conservation value.

The strategy study area has many scenic qualities of regional significance and of local value. The coastal range is particularly significant as the “green backdrop” to the ocean and urban settlement along the coastal plain.

The land is also in a long-term erosion process and contains some very steep slopes. Potential impacts on water quality would be rapid due to the high rainfall and the relatively small size of the coastal creek catchments.

Like much of the Coffs Harbour coastal environment, the strategy area contains areas with significant natural attributes. These attributes are well recognised and have been extensively researched and documented.

2.1.2 Key constraints

A constraints analysis was carried out at both the corridor and route identification stage of developing bypass options. The preliminary analysis relied on a range of data sources mainly from government agencies and CHCC as well as local knowledge provided by the community. Using aerial photography and two metre interval ground contouring (photogrammetry) a range of constraints was identified. These included:

- current and proposed urban and rural residential development
- existing agricultural land use – including banana lands and forestry activities
- watercourses and wetland areas
- areas of ecological sensitivity
- items / locations of indigenous and non-indigenous heritage significance
- topographical / terrain aspects

A more detailed constraints analysis involving the integration of the diverse planning and technical investigations was undertaken to identify potentially feasible route options within the corridors. These investigations focused on identifying constraints such as topographical features, current and future land use, residential areas, flora and fauna features, agricultural production and existing infrastructure such as schools, roads and railways.

Constraints mapping was developed to provide input to the ongoing concept development. The range of constraints is presented in Figures 2.1 to 2.7 and include:

- ground elevation map
- land use (including banana lands and intensive cultivation) and zoning
- agricultural and forestry land classification
- native vegetation communities

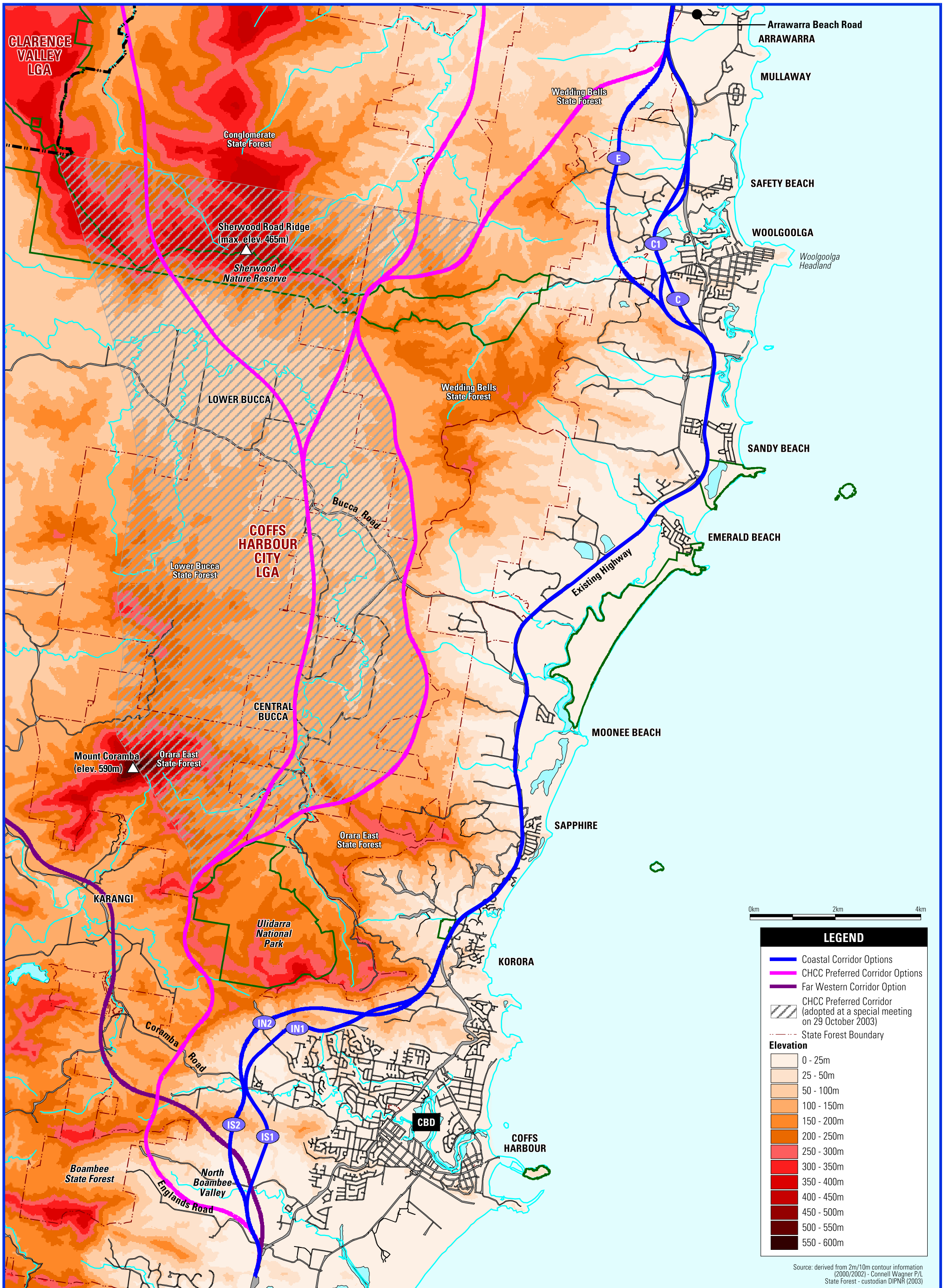


FIGURE 2.1
GROUND ELEVATION MAP

Source: derived from 2m/10m contour information (2000/2002) - Connell Wagner P/L State Forest - custodian DIPNR (2003)