

5. Approach to route selection and community involvement

5.1 Study area established

The identification of a preferred route for the Pacific Highway between Iluka Road and Woodburn, as for all Pacific Highway upgrade projects, is a key element in State and national transport strategy.

Road corridor options for the Iluka Road to Woodburn project are limited to an upgrade of the existing highway alignment along the study area corridor, to either the east or west of the existing alignment. Therefore, this project focuses upon duplicating the existing highway to create a second carriageway, with improvements to the existing alignment in order to make it safer. It was identified early on by the RTA that duplication of the existing carriageway or full reconstruction near the existing alignment would be less intrusive to the environment and communities not adjacent to the existing road. The study area was limited to approximately 1 km either side of the current Pacific Highway. The route selection process has comprised of the key stages as detailed below and indicated in **Figure 5.1**.

5.2 Review and familiarisation with the study area

The route investigation commenced with collection and review of available information (including photographic resources) about the study area and site visits, in order for the project team to become familiar with the locality. This phase of the project also included making initial contact with local residents and businesses, and preliminary investigations of local geography, topography, climate, demographics and land use. This phase of the project was critical in establishing an understanding of the study area and establishing the information database on which further studies and investigations could build. Relevant reports were obtained that have been compiled to aid land policy or management in the study area. These included the master plans of the two councils administering all the land affected by the project.

5.3 Investigate strategic options

5.3.1 Examination of the existing highway corridor

The RTA's brief required the study team to investigate opportunities to upgrade the highway through duplication of the existing lanes where feasible. Therefore, a key component of the route selection process has been examination of the existing highway corridor to assess its condition in terms of horizontal and vertical alignment, existing bridges and drainage structures, and pavement condition.

Through this assessment, the study team has identified those sections of the existing highway that could meet or do not meet the RTA's highway design standards. This has provided some direction for the road design, by indicating where the existing highway can be used for the duplication, and where it will be necessary to construct a new section or sections of four-lane highway. Further, in assessing the condition of pavements, embankments, cuttings, bridges and other structures, this assessment provides valuable input to the estimation of project costs.

5.3.2 Options outside the study area

During the concept design development process and in response to questions from the community, the study team considered the feasibility of investigating possible highway upgrade options outside the study area as depicted in **Figure C**. Early in the process, it was decided that route selection would not extend outside the study area, for the following reasons:

- With the exception of short sections having sub-standard alignment, the existing Pacific Highway generally follows a route that is capable of being upgraded and/or duplicated to satisfy the RTA's minimum requirements for travel speeds, sight distance and flood immunity without significant impact on private land or State Forest.

- Alternative routes outside the study area would achieve little in terms of travel time saving or other benefits, and would incur very high property acquisition costs.
- An alternative route outside the study area is likely to have a significant impact on the biophysical environment.
- Alternative routes outside the study area are not likely to exhibit any substantial biophysical, socio-economic or engineering advantages when compared with possible routes inside the study area, which utilise the existing highway route where possible.

5.3.3 Why no route options?

As discussed above, the route selection process has focussed on a proposed route within the study area. As the work has progressed, it has become evident that the upgrading and/or duplication of the highway can feasibly be achieved through the utilisation of substantial proportions of the existing road, and building two new lanes on either the east or west side. In many locations, the existing road corridor has ample width to accommodate the second carriageway, side by side with the existing highway, within existing RTA road property boundaries.

By keeping to a potential route alignment that maximises the use of the existing road corridor, the proposed highway upgrade could be achieved with minimal impact on private property and the environment, and at considerable cost saving when compared with a new route.

5.3.4 Class A and Class M

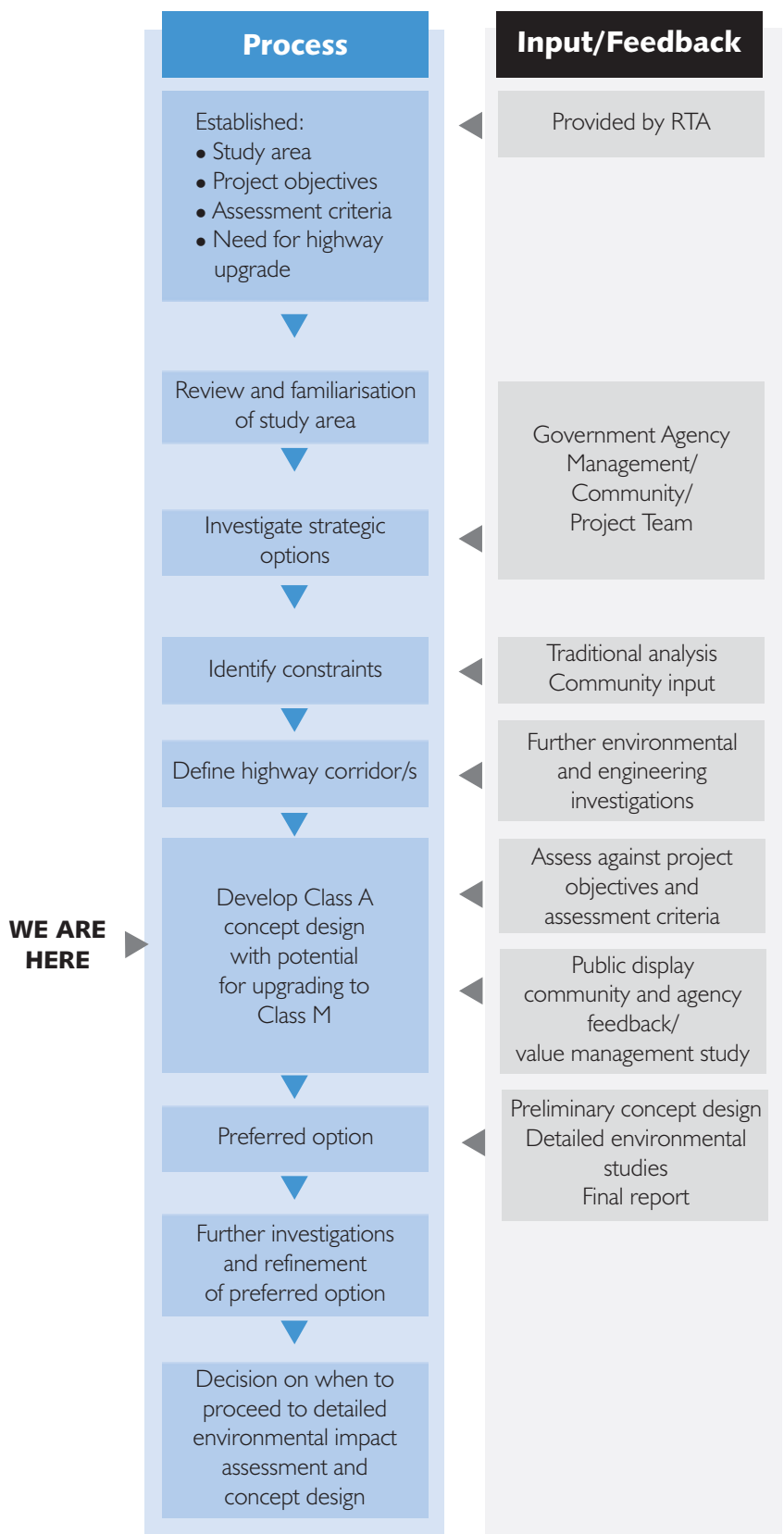
The RTA's brief for the Iluka Road to Woodburn Pacific Highway upgrade specified the requirement to prepare a concept design for a Class A road that is capable of being upgraded in the future to a Class M road.

Class A refers to an arterial style four-lane divided highway (dual carriageway) that incorporates some limited direct access on and off the highway to local roads and private property. This may include intersections where right turn movements are permissible through the provision of deceleration lanes, merging lanes and vehicle refuge zones between the two opposing traffic streams. Under a Class A scenario, local traffic and through traffic would continue to share the highway.

Class M refers to a motorway-standard road, where access is restricted to grade-separated (flyover-type) interchanges, and there is no direct access on or off the highway to local roads or private property. If warranted by future traffic growth, the Class M upgrade may include widening to six lanes (three in each direction). Under a Class M scenario, local traffic would be diverted to a parallel service road, normally having two lanes and with a posted speed limit less than 100 km/h.

The proposed upgrade of the Pacific Highway between Iluka Road and Woodburn is being approached as a Class A upgrade. However, in carrying out the investigations for the project, the study team has also considered how the proposed concept design might be upgraded to Class M, and what this would entail in terms of the wider road footprint and associated property impacts.

It is not possible to anticipate when the Iluka Road to Woodburn section of the Pacific Highway might be upgraded to Class M. At the present time, there is no proposal to implement a Class M strategy for this section of the highway. However, planning is important at this stage of the project so that in the event of a possible future Class M upgrade it can be achieved with minimal disruption to highway operation. The planning and design for the Class A concept seeks to minimise the need for further reconstruction of large sections of new highway, should the Class M strategy be implemented. The Class M strategy could therefore be implemented without major environmental impact and without further disruption or uncertainty for private landowners.



The Class M strategy includes a possible grade-separated interchange at New Italy, when warranted. An interchange at New Italy would further improve safety at this location, and would also help to support and promote the cultural heritage values and economic viability of the New Italy Museum complex. Interchanges are also proposed south of Tuckombil Canal and at Iluka Road (as part of the Woodburn to Ballina and Wells Crossing to Iluka Road projects, respectively). To complement the grade separated interchanges, the Class M strategy would require construction of a 33 km parallel local service road to provide access to communities along the route. The possible Class M concept layout is described in further detail in **section 6.5** of this report.

5.4 Identify constraints

The selection of a possible route corridor has been limited due to the physical constraints of the study area. These principally are:

- The locations of residences in proximity to the existing highway.
- Vast areas of State Forest and National Park on either side of the existing Pacific Highway.
- Extensive SEPP 14 wetland between the existing road and coast.
- The Richmond River floodplain, which covers the northern half of the study area.
- Undulating hills on the western side of the existing Pacific Highway at the southern end, and on the eastern side at the northern end.

5.5 Define preferred highway corridor

There are no large communities along the existing route that would normally prompt a consideration of a by-pass or alternate route. The existing road corridor for much of its length will accommodate a second carriageway either to the east or west of the existing and enable the provision of a service road under a Class M arrangement.

Duplication of the existing highway would require strip land acquisition from approximately 36 individual properties adjacent to the existing highway. These properties have a number of land uses that range from pasture, farming or State Forest to homesteads or houses on large blocks. It is considered that acquisition of narrow strips of land is preferable to major property severance, which is often a consequence of development of a new highway route.

5.6 Develop concept design

The proposed concept design has been developed over a 12-month period with input from the Community, numerous technical reports and investigations. The full approach to development of the concept design is described in Chapter 6.

5.7 Approach to community involvement

The approach to consultation has been to actively involve the community in each phase of the project. A Community Involvement Plan was developed and implemented based on the principles of transparency, inclusiveness and responsibility. The following specific objectives were developed to guide the consultation strategies and mechanisms:

- Ensure all stakeholders have the opportunity to participate equitably in the study process;
- Develop a better understanding of community views to assist the RTA to make informed decisions;
- Develop trust between the RTA and the community;
- Maintain transparency in all processes and decision-making;
- Communicate information to all stakeholders; and
- Provide mechanisms for stakeholder views to be incorporated into the project development process.

The key activities undertaken which were designed to keep stakeholders informed and able to provide input into the project, consisted of:

Information -

- Preparing and distributing information about the investigation and assessment process via information releases including updates, display advertising and via a project specific Internet site. This activity commenced in November 2004, with information updated regularly throughout the route investigation and concept design phases.

Community Information Sessions (CIS) -

- Open, structured community forum sessions providing a range of opportunities for exchange of information, where study team members provide information and answer questions. The CISs included presentations, display material and community input. There have been two to date, in December 2004 and March 2005.

Feedback -

- Providing stakeholders with a range of means to obtain information or make submissions, such as a telephone information line with direct contact to the RTA Project Manager and the project Community Liaison Co-ordinator, project website and email address, and project mail address. These have also been available since November 2004.

At the first CIS meeting, nominations were invited from the community for the formation of a community liaison group (CLG), a small representative group of local residents that would meet regularly throughout the project to discuss community issues, and act as a conduit for information flows between the community and the study team.

The response to the call for CLG nominations was not representative of the study area's overall population. Six nominations only were received, all of which were from residents living between New Italy and Woodburn. Although the study team sought to generate nominations from residents of the southern half of the study area (in particular from the Serendipity community and the Mororo sugar cane farmers), none was forthcoming.

It was considered that all interested community members could be directly engaged through the continuation of the CISs. As such a CLG was not formed for this project. It was considered that the CLG's aims could be achieved equally well through the open CIS forums, which to date have attracted a broad cross section of the local community, in numbers that remain manageable and productive. The CIS, being an open forum, is non-exclusive and does not require that delegates make a long-term commitment to membership of a smaller group.

Two CISs have been held to date, the first (December 14 2004, at Woodburn) to introduce the community to the project and the second (8 March 2005, at New Italy) to discuss route option planning. Further CISs will be held at strategic stages during the project planning, design and approval process.

The process for community involvement allows for a range of feedback mechanisms and provides an opportunity for community input to each major stage of the project.

5.7.1 Government and other stakeholder involvement

The relevant Commonwealth, State and local government agency representatives, utility providers, regional and local interest groups and other stakeholders were identified and consulted at project commencement and at various stages during the investigation.

The government agency representatives and other stakeholders were invited to attend a PFM on 14 December 2004. The PFM was attended by representatives from:

- Department of Infrastructure, Planning and Natural Resources (DIPNR) (including representatives of both the newly established Department of Planning (DoP) and Department of Natural Resources (DNR));
- Department of Environment and Conservation (DEC);
- Department of Primary Industries (DPI);
- Richmond Valley Council;
- Clarence Valley Council; and
- National Roads and Motoring Association (NRMA).

Government agencies and other stakeholders that were invited to the PFM, but did not attend included:

- Department of Transport and Regional Services;
- Department of State and Regional Development;
- Ministry of Transport;
- Grafton Rural Lands Protection Board;
- Casino Rural Lands Protection Board; and
- Tweed Lismore Rural Lands Protection Board.

Further consultation will continue with other stakeholder and government agencies as project planning progresses. Value engineering will be undertaken prior to the project approval stage. A value engineering workshop involving key members of the study team will be conducted to provide a critical evaluation of the proposed concept design. In this regard, the value engineering stage represents an important phase of refining the concept design.

The value engineering study will incorporate a risk management workshop, the aim of which is to optimise the project design and provide a risk assessment of the route concept.

5.7.2 Community and stakeholder input to route development

The input provided by community members in the study area has been invaluable for providing local information on key constraints. Such input has included information on:

- Access along the highway and from feeder roads for business, emergency services, school buses and residents;
- The access needs of residents within the study area, including school bus routes, pick-up and set-down locations, and turning requirements;
- The local economy and local socio-economic influences;
- Flooding within the study area;
- The cultural and social importance of the New Italy Museum Complex and rest area; and
- Biophysical features of the study area, including local flora and fauna.

All community contact and submissions (through the 1800 telephone information line, email, fax, and other correspondence) have been and will continue to be recorded and responded to on an ongoing basis.

Other stakeholders, including government agencies, have provided useful information from the beginning of the project investigation and liaison will continue as appropriate. The information provided by these stakeholders includes:

- specific planning assistance, bore searches, soil landscape maps provided by DIPNR;
- threatened fish species lists and fish habitat mapping DPI (NSW Fisheries);
- heritage information and geographic information systems (GIS) mapping of agricultural lands from DPI (NSW Agriculture);
- National Park information, Aboriginal heritage data and flora and fauna data including threatened species from DEC;
- local utilities mapping and flood information from Clarence Valley Council;
- strategic plan for Woodburn and rural areas from Richmond Valley Council; and
- specific information on sugar cane farms from the Cane Growers Association.

Discussions have begun and a meeting has been held with DPI to discuss State Forest access onto the highway. The DPI (NSW Forests) requires maintenance of direct access into the Mororo, Devils Pulpit, Tabbimoble and Doubleduke State Forests, and this has been considered in route option planning and design. At the time of preparing this report, State Forest access raises no significant issues or constraints to highway planning adjacent to these areas of forestry estate.

5.7.3 Community issues, community values

The following is a summary of the issues identified to date and communicated to the project team by the community:

- Physical impacts on private property, and impacts on property values;
- Access to and from private property, access onto the highway, and accessibility to Woodburn and other centres of population;
- Safety, conflict between local and through traffic, school bus safety and impacts of increasing truck traffic;
- Provision and location of intersections and highway interchanges;
- Impacts of the project on New Italy museum, café and driver reviver;
- Road noise and noise mitigation;
- Flooding and flood mitigation;
- Environmental impacts and biodiversity conservation; and
- Impacts on land use (eg. agriculture).

5.7.4 Project issues

A wide range of technical, social, economic and biophysical issues influence the process of route selection. These issues, identified through the stakeholder consultation process and through project familiarisation, have been grouped into the following broad categories:

- Social issues;
- Statutory and strategic planning considerations;
- Land use and zoning issues;
- Heritage;
- Urban design, landscape and visual considerations;
- Ecology and biodiversity;
- Flooding and drainage;
- Noise;
- Climate and air quality;
- Geotechnical considerations;
- Traffic and road safety;
- Engineering considerations; and
- Project costs and value for money.

5.7.5 Identification and investigation of key biophysical, socio-economic and engineering issues, risks and constraints

During the project familiarisation phase, the study team commenced the detailed bio-physical, socio-economic, engineering and technical investigations required as key inputs to the route selection and development process. These investigations have included:

- Ecological study and field survey (flora and fauna);
- Preliminary geotechnical investigation;
- Water quality sampling and analysis;
- Indigenous and European cultural heritage and archaeological assessment and field survey;
- Property and land use assessment;
- Statutory planning and zoning investigations;
- Urban design and landscaping;
- Traffic and transport study;
- Utilities and services investigation;
- Hydrological and hydraulic study (ongoing);
- Detailed survey (ongoing); and
- Acoustic study.

5.7.6 Analysis of local access needs and patterns

From site investigations and discussions with the community and stakeholders, it has emerged that access is one of the major project issues to be addressed. The proposed highway upgrade must ensure that private properties, State Forests, National Parks and nature reserves retain suitable access to and from the highway, without compromising road safety or highway operation.

A large number of properties front the Pacific Highway between Iluka Road and Woodburn, most of which have a single driveway entrance from the highway. Others are accessed via secondary or minor rural roads. A number of the existing private access points are in unsafe locations, or do not have sufficient acceleration/deceleration facilities outside the main traffic lane. Very few are located so as to allow safe right turn movements in or out.

A key stage in the planning process therefore has been an assessment of access needs for all private and public properties, and development of a strategy to ensure that access needs are safely met without compromising other important highway design standards.

