

Ella Bay Integrated Resort Proposal



Supplementary Environmental Impact Statement

Submission Response: 1.4 Road and Transport



1.4 Road and Transport

1.4.1 Introduction

The Proponent has responded to various issues raised by submissions received in response to the Ella Bay Integrated Resort EIS. The Proponent Response is framed by the original objectives and philosophy of the Ella Bay Proposal as set out in the EIS Executive Summary.

Specific submission concerns have been collated into the following key areas for this section:

- *Access Road Options;*
- *Flora and Fauna;*
- *Visual Amenity; and*
- *Additional Issues.*

The Proponent's response to submissions should also be read in conjunction with Environment North's Report *Access Road Strategy* (refer to Volume 4, Appendix A.2.6).

In devising a revised *Access Road Strategy*, the concerns of submitters and key stakeholders were taken into consideration to ensure that impacts on the natural and social environments were minimised. Most of the submissions that addressed the access road were from members of the Flying Fish Point community. The revised *Access Road Strategy* takes into account potentially competing needs of the community at Flying Fish Point and the Coconuts and the natural environment.

After further examination of the entry road options and alternatives, it was felt that the best option (which was determined from a multi criteria analysis of all road options) will be to upgrade the existing Ella Bay Road and create a Flying Fish Point bypass. The bypass now includes a tunnel which mitigates some of the environmental concerns.

In response to a number of submissions regarding flora and fauna, Biodiversity Assessment and Management (BAAM) Pty Ltd, a consultancy with expert knowledge of ecosystems, were again engaged to further assess possible impacts on terrestrial flora and fauna along the entry road alignment into Ella Bay (the BAAM Pty Ltd report is included into a wider *Access Road Strategy* provided in Volume 4, Appendix A.2.6).

The Proponent commissioned further investigations into road and verge treatment measures to assess and mitigate environmental impacts of potential road options, which was undertaken by Environmental North Pty Ltd, specialists in environmental road design (the Environmental North report is provided in Volume 4, Appendix A.2.6).

In conjunction with Environment North, specialist road engineering advice has been received from the ETS Group, a multi-disciplined organisation of project managers, architects, structural engineers, civil engineers and environmental engineers (full drawings from ETS Group are provided in the Drawing Folder, Volume 3.2).

1.4.2 Submitter Issue: Access Road Options

1.4.2.1 Flying Fish Point Bypass

Investigate other route options not considered in the Environmental Impact Statement (EIS). There has been interest expressed in the option of a bypass road to the west of Flying Fish Point. More detail is required to enable adequate assessment of this option.

EIS reference: Volume 2, Section 2.2.4.2.2

Submitter reference: 3/52

W & J Eric (3), A Nurzinski (8), Johnstone Shire Council (48), Environmental Protection Agency (45)

Proponent Response

Further investigation has been undertaken into the Flying Fish Point bypass option and a detailed *Access Road Strategy* has been prepared.

A refined Option 2 (from the Ella Bay EIS) will provide a balance between a number of social and environmental issues. The *Access Road Strategy* now recommends a modification to the EIS.

Recommended Option

The key benefits of this refined EIS Option 2 include:

- the creation of an alternative to having a road traversing through wetlands;
- that better connectivity is maintained through incorporation of a tunnel;
- the closure of Ella Bay road at the point where it meets Flying Fish Point (bicycles, pedestrians, emergency vehicles excepted). This will mean that there will be no through vehicle access from Flying Fish Point to Ella Bay;
- improved safety (especially for Flying Fish residents);
- the reduction of travel times;
- lower road gradients due to the incorporation of the tunnel (this also serves to improve safety);
- reduced embankments due to incorporation of the tunnel resulting in less clearing and improved visual impact;
- green verge treatment and retaining walls that reduce vegetation clearing; and
- minimal vegetation loss is offset.

For further information refer to Environment North *Access Road Strategy* (Volume 4, Appendix A.2.6).

1.4.2.2 Road Option One

Access to the subject site through Flying Fish Point will impact on the residential amenity of Flying Fish Point, and the Coconuts, its lifestyle, safety of children, noise, dust and pollution, congestion and local wildlife. It is recommended that appropriate and comprehensive analysis be conducted into the potential and likely impacts of the road upgrade upon existing local residents.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 19/52

A & J O'Sullivan (1), D & M Lowe (2), W & J Eric (3), C Randell (4), S McClusky (5), J Dall (6), R & J Croft (7), A Nurzinski (8), V Holden (10), M Hooker (15), K Patrick (16), K & A White (18), U Holzrichter (19), Petition 1 (37) (166 signatures), Petition 2 (38)(32 signatures), Department of Education Training and Arts (39), Johnstone Shire Council (48), Wet Tropics Management Authority (50), Department of Communities (52)

Proponent Response

The Proponent acknowledges the issues raised in these submissions. In an attempt to balance both social and environmental concerns, the Proponent has developed a road option that:

- protects the lifestyle of Flying Fish Point and the Coconuts;
- takes into account the safety of children;
- reduces the impact of noise, dust and pollution to a minimum;
- solves the issue of congestion at Flying Fish Point; and
- looks after the interests of local wildlife.

Environment North prepared a multi-criteria analysis of all road options, and developed an improved and refined *Access Road Strategy*. The recommended access bypasses the Flying Fish Point community.

Environment North found that after further analysis had been undertaken, the EIS Option 2 (with refinements) is considered to be the preferred route as it will have minimal impact on the Flying Fish Point community, while also ensuring minimal impact on the sensitive natural environment. Please refer to Environment North's *Access Road Strategy* (Volume 4, Appendix A.2.6).

1.4.2.3 Road Option Two

This option would adversely impact on 'of concern' and endangered regional ecosystems that provide recognised cassowary habitat, as well as wetlands described as Areas of State Significance in the *Wet Tropical Coast Regional Coastal Management Plan 2003*, and is therefore not supported by the Environmental Protection Agency.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 1/52

Environmental Protection Agency (45)

Proponent Response

The EIS road option, 'Option 2' has been refined and will no longer traverse any wetlands (see figure 1.4.1). The cut and cover tunnel will form a revegetated corridor allowing for habitat connectivity.

A detailed *Fencing and Funneling Strategy* has been proposed to mitigate the potential of fauna road fatalities. The tunnel will help reduce the gradients of the road resulting in smaller embankment sizes and less associated clearing. The incorporation of green banks and retaining structures will help reduce environmental impacts including vegetation loss.

The Department of Natural Resources and Water advised that, 'the proposed route traverses an existing reserve (environmental purposes) and an area of Unallocated State Land (USL). The Proponent will need to apply to NRW for a road opening permit over both areas. Use of USL will require an extensive public consultation process'.

Discussions have been undertaken with The Coordinator General, Department of Infrastructure, Department Natural Resources and Water and the Johnstone Shire Council. The Johnstone Shire Council has indicated its support for the alignment to be transferred as gazetted road, subject to all environmental and social impacts being acceptable.

The proposed clearing of 'of concern' vegetation will be heavily offset. Details of the offsets proposed are outlined in the draft *Integrated Package of Regulated Offsets and Additional Environmental Investments* and is under negotiation with government agencies.

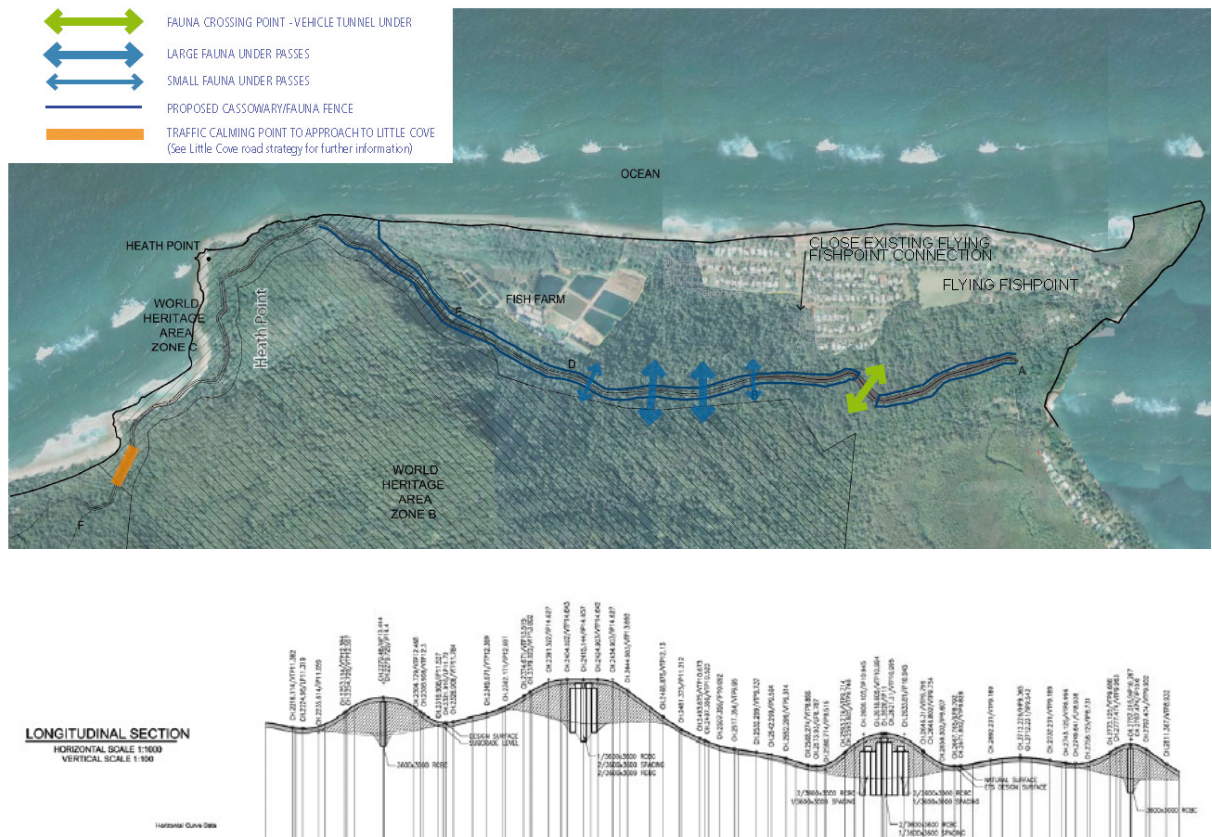


Figure 1.4.1: Access road fauna protection fencing plan, and longitudinal section of the refined Option 2 (preferred Option D)

1.4.2.4 Road Option Three

This option would enable safe cassowary access to coastal habitat south of the aquaculture facility without the current risk to the birds of crossing the Ella Bay Road. However, there are concerns that the proposed alignment will be constructed in an erosion prone area and the route would need to be supported by expert coastal engineering advice to warrant serious consideration.

A road extension along the undisturbed foreshore from Flying Fish Point north to Heath Point is contrary to policy in the Wet Tropical Coast Regional Coastal Management Plan 2003 and would not be supported.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 1/52

Environmental Protection Agency (45)

Proponent Response

The Proponent is no longer suggesting that this option be considered, and the preferred road option is described in detail in Environment North's *Access Road Strategy* (refer to Volume 4, Appendix A.2.6).

1.4.2.5 Road Option Four

Further investigation into the potential of accessing Ella Bay directly via the Bruce Highway through Garradunga should be considered.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 8/52

D & M Lowe (2), W & J Eric (3), C Randell (4), A Nurizinski (8), D & C Cook (9), U Holzrichter (19), Petition 2 (38), Environmental Protection Agency (45), Department of Main Roads (46)

Proponent Response

This option has been assessed and considered unacceptable by Queensland Government Environmental Agencies. This is due to extensive clearing and habitat segregation and fragmentation. For further details on the assessment of the Garradunga option please refer to the Environment North *Access Road Strategy* (Volume 4, Appendix A.2.6).

1.4.3 Submitter Issue: Flora and Fauna

1.4.3.1 Flora and Fauna Analysis

Further targeted flora and fauna impact surveys within the Ella Bay Road access corridor are requested. Estimations of the area of vegetation expected to be cleared from the Ella Bay Road reserve should be included.

Additional information relating to the assessed impacts of this level of proposed vegetation clearance should be supplied, with detailed flora analysis conducted to enable a thorough assessment of the impact of the proposed road realignment.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 5/52

J Dall (6), J Rainbird (CAFNEC) (20), Environmental Protection Agency (45), Johnstone Shire Council (48), Wet Tropics Management Authority (50)

Proponent Response

A further targeted *Flora and Fauna Study* along the Ella Bay Road access corridor has been undertaken and this information is included in the *Environment North Access Road Strategy* (Volume 4, Appendix A.2.6).

The estimated vegetation clearing for the road reserve is proposed to be 2.44 hectares. Impacts of this clearing are also assessed in the *Access Road Strategy* (Volume 4, Appendix A.2.6).

All vegetation cleared will be offset through the establishment of significant new and upgraded vegetation corridors and ecosystems at the Ella Bay Site. Details of the offsets proposed are currently under negotiation with government agencies.

1.4.3.2 Flora and Fauna Impact Mitigation

A detailed discussion of the proposed risk minimisation measures, and potential offsets, associated with off-site road and traffic impacts of the preferred route is required.

The following mitigation measures should be considered; treatment of verges to ensure adequate sight lines for motorists, signage, appropriate speed limits, fencing of certain sections and cassowary road crossings at appropriate locations based on Les Moore's analysis.

The means by which road design would restrict vehicle speeds to reduce Cassowary and other wildlife mortality should be describe in detail.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 8/52

E Bock (11), B Harvey (12), R Eastment (13), J Beasley (14), M Hooker (15), Environmental Protection Agency (45), Wet Tropics Management Authority (50), Department of Environment and Water Resources (51)

Proponent Response

Road ecology consultants, Environment North, have conducted a detailed study into the Proposal's access requirements. The report, the *Access Road Strategy*, is contained in Volume 4, Appendix A.2.6. The *Access Road Strategy* provides details of risk mitigation measures and potential offsets which include:

- a Fence and Funnel Strategy (comprising fauna corridors, fencing, fauna bridges (see figure 1.4.2) and associated road ecology initiatives);
- a Traffic Management Strategy (for traffic calming, speed reduction, surveillance and ways to reduce and restrict the use of private vehicles at Ella Bay);
- a Cassowary Management Strategy (to reduce conflict with traffic and thereby promote the conservation of this species);
- a Road Runoff Strategy (to document the approach to road drainage and pollution control);
- the use of green verges, special retaining walls and embankments;
- the building of adequate and appropriate sight lines at crossing points and appropriate speed limits; and
- the building of a cut and cover tunnel at Flying Fish Point.



Figure 1.4.2: Fauna friendly bridge to be incorporated along the Flying Fish Point Bypass and on internal roadways.

Some clearing will be required for the new bypass road arrangements around Flying Fish Point, and for road widening to the existing Ella Bay Road. The proposed clearing program will be offset by extensive revegetation and rehabilitation programs.

Details of the Proponent's recommended approach with regard to offsets are set out in Volume 2, Section 2.7.3 *Regulated Offsets and Additional Environmental Investments*. Offset issues are also further discussed in Section 1.2 *Flora and Fauna*.

An overall Environmental Management Plan for the access road sets out the Proponent's recommended approach to minimise road impacts through the design, construction and operational phases. Suitable on-site and off-site works or other actions to mitigate or offset residual impacts on listed species, vegetation communities, and ecological processes will also be carried out.

For further details, refer to the Environment North report *Access Road Strategy* in Volume 4, Appendix A.2.6.

1.4.3.3 Cut and cover

'Cut and cover' treatments at specific locations as a means of ensuring habitat connectivity should be explored further, including detailed engineering assessments, habitat implications and alignments.

EIS reference: Volume 3, Section 3.5.1.2.1

Submitter reference: 1/52

V Holden (10), Department of Environment and Water Resources (51)

Proponent Response

The Proponent has found that the Flying Fish Point bypass option with a cut and cover tunnel is the recommended road access solution. This solution ensures that critical areas of fauna movement will not be adversely impacted upon, and that the high levels of connectivity in this area from one habitat zone to another remain.

The Proponent has identified other strategic zones to maintain connectivity that will help mitigate or limit any physical danger to fauna. However these do not require the building of a cut and cover tunnel.

A detailed Fencing Strategy has been developed (refer to Volume 2, Section 2.2.9.3) and traffic will be slowed by a variety of means at the key fauna crossing points.

A detailed engineering assessment has been undertaken by the ETS Group (refer to Volume 3.2 for drawings and design report) and an *Access Road Strategy* been completed by Environment North (refer to the Environment North *Access Road Strategy*, Volume 4, Appendix A.2.6).

1.4.4 Submitter issue: Visual Amenity

1.4.4.1 Visual Amenity Impacts

The visual amenity impacts of the access road should be further discussed. Potential mitigation measures have not been explicitly addressed in relation to the particular values of either the Wet Tropics Queensland World Heritage Area (WTQWHA) or the Great Barrier Reef World Heritage Area (GBRWHA).

EIS reference: Volume 2, Section 2.2.4 & Volume 4, Section 4.1.1.8 & Section 4.1.2.5

Submitter reference: 2/52

Wet Tropics Management Authority (50), Department of Environment and Water Resources (51)

Proponent Response

The Proponent has conducted an analysis regarding the visual impact of the Flying Fish Point bypass and road widening of the Ella Bay road, and examined a number of measures that may be used to limit any potential impact. Visual amenity impacts are also assessed in the *Environment North Access Road Strategy* (Volume 4, Appendix A.2.6) and should be read in conjunction with this response. The Ella Bay road is an existing road (see figure 1.4.3) and the visual impact focuses on the additional road widening, not the impact of the existing road. The analysis has found that the proposed road, with incorporated visual impact mitigation measures, is unlikely to adversely affect the scenic values of the World Heritage Areas and in some cases the visual amenity is improved.

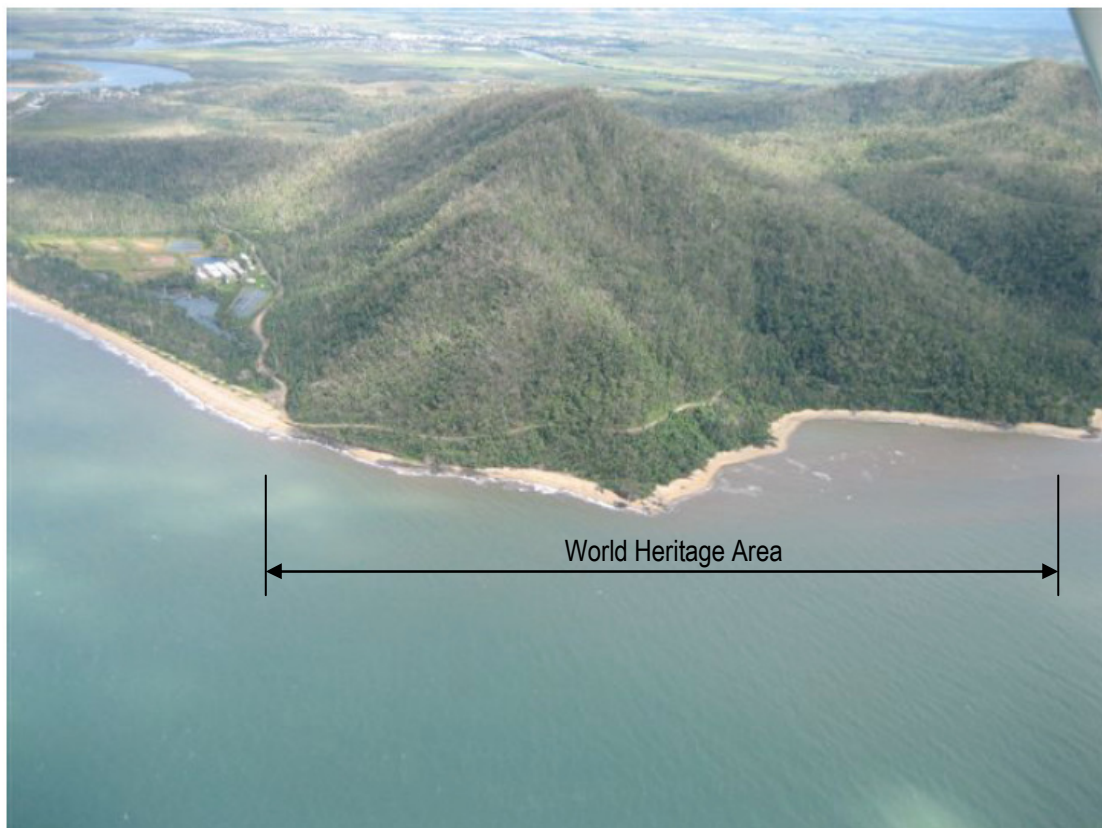


Figure 1.4.3: Photograph of the existing Ella Bay dirt road around Heath Point.

There are three road sections to consider:

- *Flying Fish Point bypass*

This area is outside of the WHA boundary and involves a new section of road. Much of the visual impact of this section has been mitigated through the use of green retaining walls and verges, and a 'cut and cover' tunnel (see figure 1.4.4 and 1.4.5). The 'cut and cover' tunnel involves tunnel construction followed by revegetation of the area above the tunnel (see figure 1.4.6). Initially there will be some loss of visual amenity until such time as the replantings have developed. After plantings are established the impact of this section is considered to be minimal. The only likely residual impact may be the tunnel portal which will be approximately seven metres high and nine metres wide (see figure 1.4.6) with vegetation screening the road beyond the portal mouth.



Figure 1.4.4: Photograph indicating the approximate location of the 'cut and cover' tunnel.

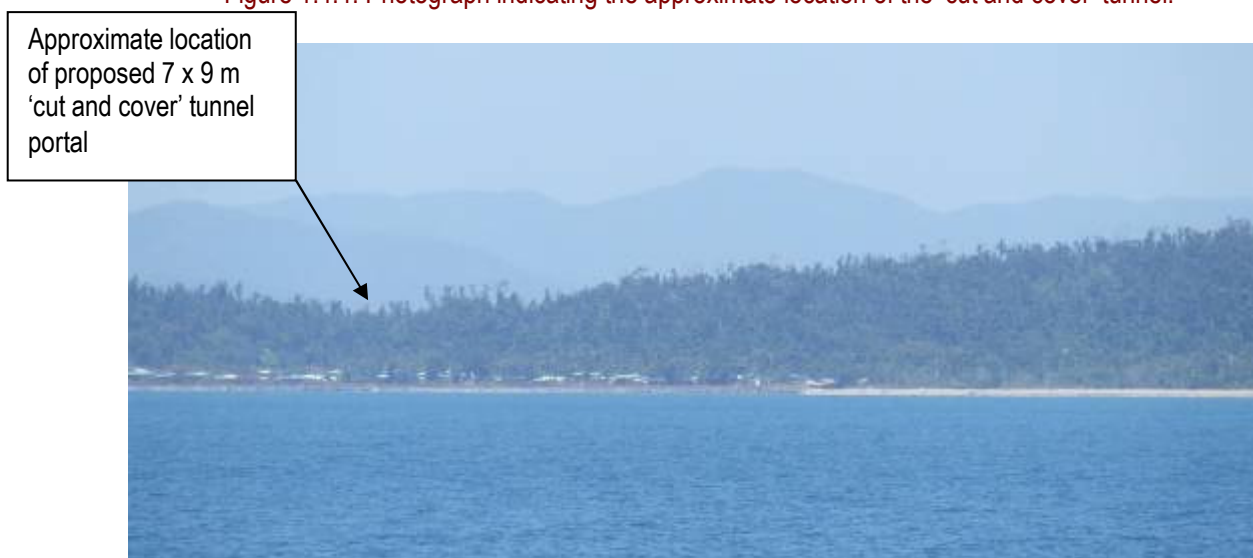


Figure 1.4.5: View of 'cut and cover' portal from reef lagoon.

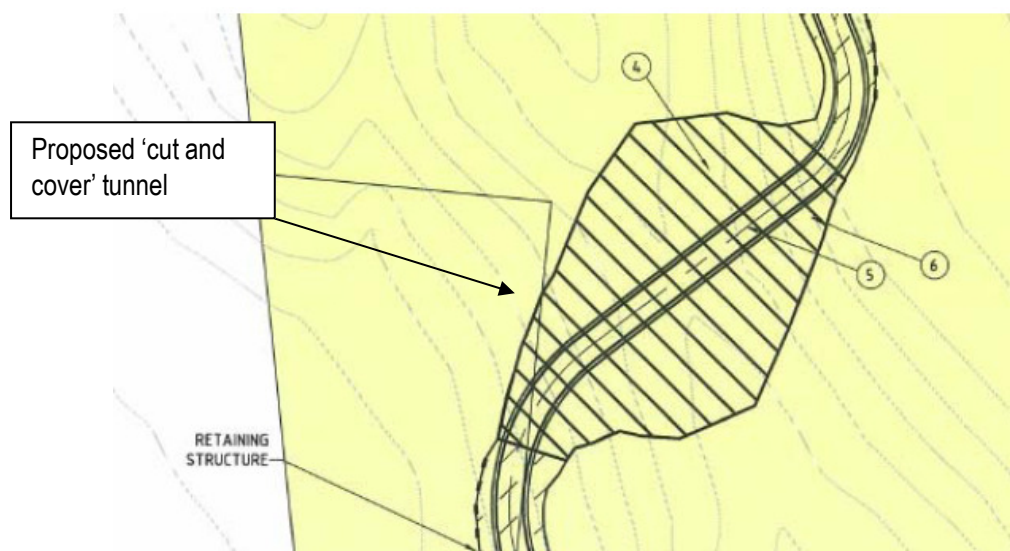


Figure 1.4.6: Plan indicating the area to be revegetated as part of the proposed 'cut and cover' tunnel.

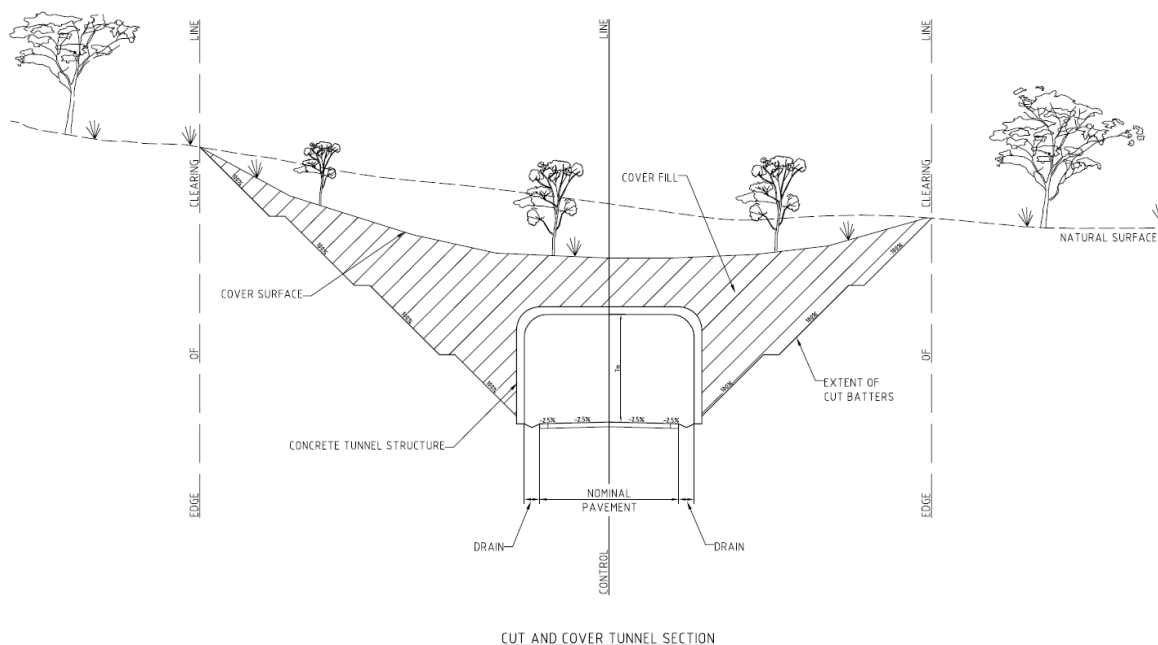


Figure 1.4.7: Cross section of the proposed 'cut and cover' tunnel with cover surface to be revegetated

- *Flying Fish Point to Heath Point*

This is an existing, flat road section and there will be little visual impact arising as a result of the proposed road improvements. This section requires minimal road widening and limited vegetation clearing, predominantly consisting of weeds surrounding the existing road. The design will ensure minimum amounts of vegetation clearing is conducted, with a series of green retaining walls and verges used to mitigate any potential impacts (see figures 1.4.8 to 1.4.10). In addition, the proposed bitumen road surface is likely to have less visual impact than the current dirt surface (see figures 1.4.3, 1.4.11 and 1.4.12).

- *The World Heritage Area*

This section also involves only limited road widening and is a relatively short section of existing road. The visual amenity impact is considered to be low. As with the Flying Fish Point to Heath Point section, the impact of the minimal road widening required will be mitigated with the use of green retaining walls and verges (see figures 1.4.8 to 1.4.10), and the proposed bitumen road surface is likely to have less visual impact than the existing dirt surface (see figures 1.4.3, 1.4.11 and 1.4.12).

Green retaining walls are to be used where required to reduce the extent of road widening and clearing (see figure 1.4.8). They allow trees and other vegetation to grow through a mesh structural system (see figure 1.4.9 and 1.4.10) and provide considerable visual improvements to the existing untreated, dirt cuttings.

The existing dirt road has limited visibility when viewed from the reef lagoon (see figure 1.4.11). While the proposed road improvements will involve some clearing and widening, with the incorporation of green retaining walls it is likely that these sections will be less visible than existing untreated dirt cuttings.

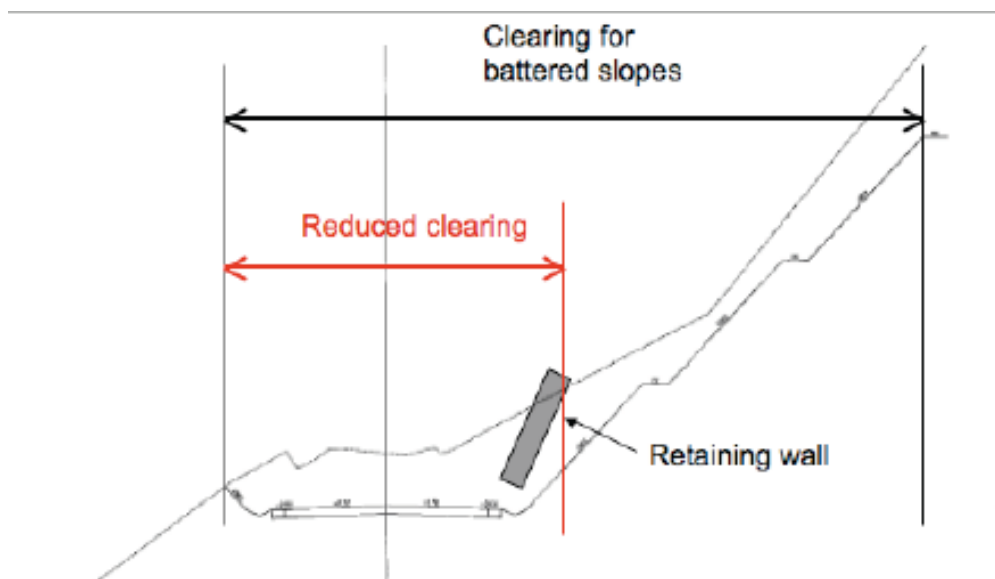


Figure 1.4.8: Retaining walls limit the amount of clearing required thereby minimising visual impacts.



Figure 1.4.9: Verges and retaining walls are to be greened with extensive planting



Figure 1.4.10: Retaining walls allow large trees and vegetation to grow through Green Terramesh.



Figure 1.4.11: View of the existing access road from the reef lagoon highlighting its limited visibility. Green walls and other associated mitigation measures will minimise the visual impacts from the reef lagoon.

The sealing of the existing dirt road with bitumen and the removal of weeds from verges will be a significant enhancement to scenic values along the road alignment (see figures 1.4.12 and 1.4.13). An additional overall positive visual amenity impact will be the reduction of dust on trees during the dry season. Dust presently develops as vehicles use the existing dirt road to access Ella Bay and Little Cove. Once the road is sealed, dust will no longer be a concern. In addition, the sealing of the road and associated Water Sensitive Urban Design (WSUD) features will greatly improve run-off quality and reduce sediment within watercourses. The reduction of sediment within watercourses will be a significant visual improvement to minor creeks and streams.



Figure 1.4.12: The existing Ella Bay dirt road with weed infested verges.



Figure 1.4.13: The visual improvements of sealing the road is highlighted in this image of the Cape Tribulation Road.

After discussions with the Wet Tropics Management Authority the scenic values and outward views of World Heritage Areas from the access road has emerged as an important to consideration. They have indicated that a viewing section may be a worthwhile addition for vehicle amenity and to emphasise the scenic values of the Wet Tropics Queensland and Great Barrier Reef World Heritage Areas. It offers a significant opportunity to showcase the World Heritage Values of the Ella Bay region (see figure 1.4.14 to 1.4.16).



Figure 1.4.14: View from the access road highlighting the scenic values of the World Heritage Area.



Figure 1.4.15: View from the access road highlighting the scenic values of the World Heritage Area.



Figure 1.4.16: View from Ella Bay looking back towards the World Heritage Area.

The amount of clearing required for the road alignment is restricted to only 2.44 hectares (0.44 hectares within the WHA) with 0.49 hectares to be revegetated as part of the 'cut and cover' tunnel (refer to figure 1.4.17). A number of measures have been incorporated to mitigate the limited impact of this clearing so that the proposed access road does not adversely affect the scenic values of the World Heritage Areas and in some cases actually improves the visual amenity.

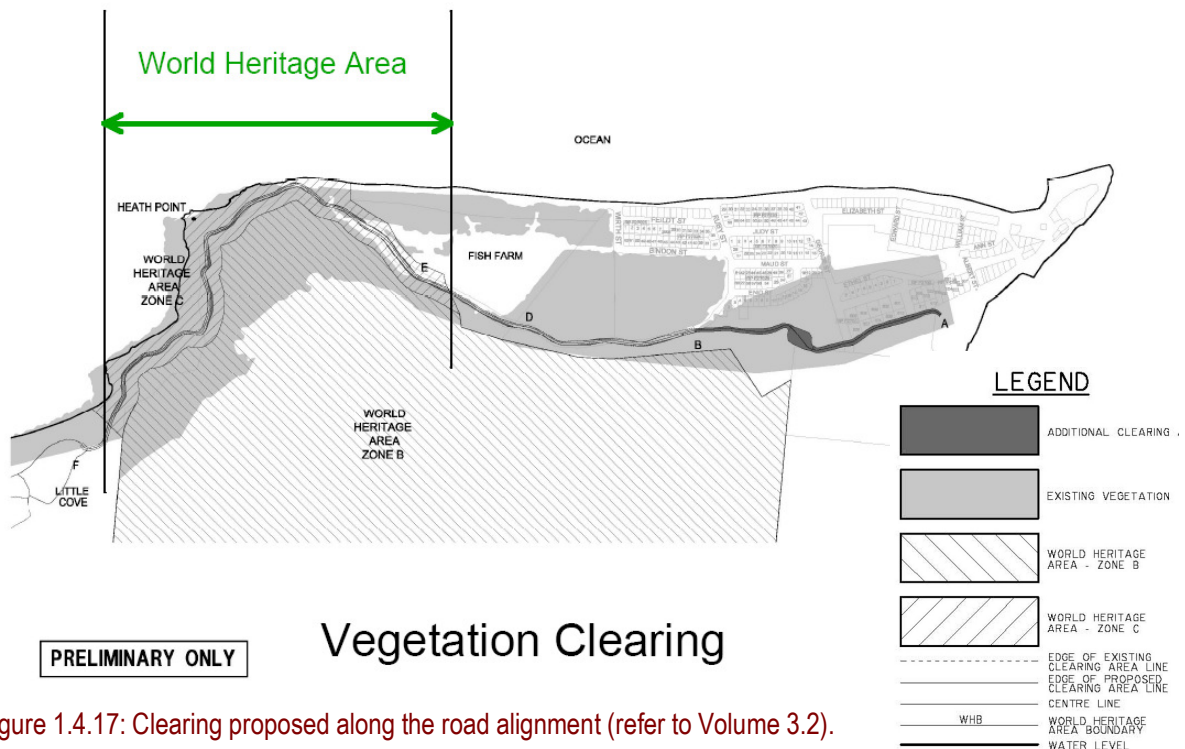


Figure 1.4.17: Clearing proposed along the road alignment (refer to Volume 3.2).

For further discussion on visual impacts, refer to the Environment North Access Road Strategy (Volume 4, Appendix A.2.6) and discussion on the visual impact of built form at Volume 1 Section 1.7.5.1.

1.4.5 Submitter Issue: Existing Road Infrastructure Demand

1.4.5.1 Existing Road Infrastructure Demand

There is concern that the proposed development will place higher than expected demands on existing road infrastructure, most particularly the network connection from Innisfail through to Ella Bay.

There is limited detail provided in the EIS as to the existing capabilities of this network and what the expected impacts might be should the proposed development proceed.

EIS reference: Volume 3, Section 3.5.1.2

Submitter reference: 2/52

D & M Lowe (2), Johnstone Shire Council (48)

Proponent Response

The Proponent wishes to be part of the planning process in assisting the Johnstone Shire Council plan for road infrastructure requirements, particularly from the council road from Innisfail to Flying Fish Point. Detailed assessment of traffic flows have been carried out by the Proponent.

The Ella Bay Integrated Resort Proposal is a staged development expected to be completed over 10 to 15 years. It is accepted that the Ella Bay Integrated Resort Proposal will increase demands on existing road infrastructure. It is also likely that other developments along this road will occur as additional, approved lot developments have been created nearer to the town of Innisfail which will also make use of the road infrastructure.

Fortunately there is time to plan for this increase in traffic, and these lot developments, as well as the Ella Bay Integrated Resort Proposal, will significantly increase the general base for levying rates. As a result, there should be sufficient government funds available for such work.

The Proponent has requested information from the Johnstone Shire Council to assist in assessing expected demands on existing road infrastructure. In general however, the Proponent's responsibility for managing demands on existing infrastructure is restricted. The Proponent intends to be responsible financially for road construction from Flying Fish Point to Ella Bay and notes that this is a significant contribution to existing Johnstone Shire Council infrastructure.

1.4.6 Submitter Issue: Internal Traffic Movements

1.4.6.1 Education Precinct Traffic Movements

It is not clear from the EIS that the traffic movements generated by the education precinct are included in the calculations i.e. trips from students, staff, buses etc.

EIS reference: Volume 3, Section 3.5.1.2.2

Submitter reference: 1/52

Department of Communities (52)

Proponent Response

It is expected that the proposed St Peters Lutheran International School will have approximately 200 students and 20 staff, and that the Ella Bay Institute for Sustainable Development will have in the order of 5 to 10 staff.

As a result of the small school size, traffic movements to and around the education precinct will be of a manageable size.

Internal traffic management strategies have been developed that will be applied for students and staff accessing the education precinct. These include:

- the encouragement of staff and students to utilise alternative forms of transport such as buggies, bicycles, shuttle busses and walking, which in turn leads to the improvement of health and wellbeing of the school community;
- the adoption of 'Walking School Bus' programs within the proposed development to provide a safe environment for children to travel to school. TravelSmart (Department of Environment and Water Resources) describe the Walking School Bus as a group of primary school children who walk to and from school along a safe and enjoyable set route, accompanied by a minimum of two parent driver/supervisors per 'Bus'. One supervisor leads at the front of the Bus, while the other supervises at the rear. The Walking School Bus picks up passengers along the way at designated stops. The service is free and every child is welcome to join, regardless of whether or not their parents can be drivers;
- the provision of appropriate shelters, racks and storage arrangements for bicycles and electric buggies within the school; and
- the provision of a safe and convenient environment for children to travel sustainably to school, through extensive use of traffic calming and vehicle restriction measures.

1.4.7 Submitter Issue: Sustainable Transport

1.4.7.1 Transport Modal Choice

'Numerous pedestrian and cycle paths' is an insufficient description of the infrastructure required to encourage and promote cycling and pedestrian mode choice.

It is recommended that a network of pedestrian and cycle paths be constructed that connect all destinations within the proposed development.

These connections should be provided primarily along the internal road network, and fronted and overlooked by the development to provide passive surveillance of pedestrians and cyclists and to improve personal safety.

In addition, the EIS does not discuss end of trip facilities for cycling and walking.

EIS reference: Volume 3, Section 3.5.1.2.7

Submitter reference: 1/52

Queensland Transport (49)

Proponent Response

The EIS stated that 'all residents, guests and visitors will also be encouraged to cycle or walk for internal trips and numerous pedestrian and cycle paths will be provided throughout Ella Bay'. An integrated network of pedestrian, electric buggy and cycle paths will be constructed throughout the proposed development. A possible layout for this network is shown in figure 1.4.18 below. Please refer to the Ella Bay Circulation Plan (Volume 3, Section 3.1).



Figure 1.4.18: Circulation plan (Volume 3, Section 3.1).

The detailed design of the integrated network of paths, bikeways and roads will be carried out during the design stage. A balance that favours and encourages the use of alternative means of travel such as bicycles and electric buggies will be sought in this design.

Connections for bicycles, electric buggies and pedestrians will follow the road network in most instances. However, as shown on the Circulation Plan (see figure 1.4.18) a series of paths away from the road network will also be developed. These paths will link other residential areas to the Village Precinct and resorts as an alternative access option to the roadways.

Transport Modal Choice

The following initiatives have been proposed to encourage sustainable transport mode choice.

- 1 An extensive network of walking paths will be built along or adjacent to roadways, and additional pathways traversing the proposed development which will be further developed at a detailed design stage. There may be concrete paths within golf course as well that can also be used for cycling.
- 2 There will be a shared environment of bicycles and vehicles along proposed roadways which have speed limitations of 20 km/h to 40 km/h.
- 3 The Village Precinct will have facilities for changing rooms, showers and bicycle storage areas accessible to residents, guests, staff and visitors including cyclists.
- 4 There is an emphasis on encouraging the Ella Bay Community to adopt, value and support schemes that avoid unnecessary travel by car.
- 5 Safe and enjoyable movement using bicycles will be facilitated throughout Ella Bay.

A key initiative of the Ella Bay Proposal is to reduce (as much as possible) motor vehicle use within the Township. Internal motor vehicle use will be significantly reduced because:

- visitor's cars are not permitted on the internal road network;
- restrictions are placed on residents' and guests' use of motor vehicles;
- the Proponent intends to keep out the majority of cars and incorporate low speed limits, and, as a result, a shared environment for bicycles and vehicles is possible both from a safety and operational viewpoint; and
- a separate bike path from the Village Precinct to the Northern Resorts has been included in the refined Master Plan.

This will help encourage the uptake and usage of bicycles and encourage people to get out of their cars more frequently.

End of trip facilities for cycling and walking will be developed including hire facilities for bicycles, changing rooms and lock up racks.

Passive Surveillance

The Proponent supports the concept of passive surveillance of pedestrians and cyclists to help improve personal real and perceived safety. Passive surveillance is a design issue and will be included in the Principles for Design and Living at Ella Bay. The improved and refined Ella Bay Master Plan also incorporates design principles to provide passive surveillance of pedestrians and cyclists. This will help improve the personal safety and wellbeing of cyclists. Please refer to *Getting Around Ella Bay: Transport Considerations* contained in Volume 2, Section 2.2.6.

1.4.7.2 Bicycle and Pedestrian Connection between Ella Bay and Flying Fish Point

Not providing a connection for pedestrian or cyclists between the Site and Flying Fish Point is inconsistent with the Johnstone Shire Cycleway and Shared Pathway Strategy.

The connection should be developed to provide transport modal choice for future employees, some of which are likely to live in Flying Fish Point or The Coconuts.

EIS reference: Volume 3, Section 3.5.1

Submitter reference: 1/52
Queensland Transport (49)

Proponent Response

The Proposal will encourage a range of transport mode choices and the Proponent supports the use of more environmentally sustainable forms of transport in keeping with the objectives of the Johnstone Shire Cycleway and Shared Use Pathways Strategy.

The revised *Access Road Strategy* incorporates a bicycle/pedestrian pathway from Flying Fish Point to Heath Point, and a shared cycle/traffic roadway with reduced speed and traffic calming measures for the short distance from Heath Point to the Ella Bay Integrated Resort.

Refer to Environment North's *Access Road Strategy* Volume 4, Appendix A.2.6 for details.

1.4.7.3 Bus Shuttle

Request an undertaking from the Proponent to commit to an external shuttle bus service and thereby reduce dependency on private vehicle use between the site, Innisfail and Flying Fish Point.

EIS reference: Volume 3, Section 3.5.1

Submitter reference: 1/52

Queensland Transport (49)

Proponent Response

The EIS indicated that a shuttle bus would be utilised to help transport employees, construction workers as well as visitors to and from work sites during the construction period. The incorporation of a shuttle bus is considered to be an integral part of the Proposal's overall environmentally sustainable operation.

It is the Proponent's intention to provide a shuttle bus from Ella Bay to Innisfail for residents, guests and day visitors, even if there is a limited economic case to warrant such a service.

Within Ella Bay, a public shuttle bus service (powered by electricity or LP Gas) will provide regular transportation around the Ella Bay Integrated Resort. This will minimise the need for tourists, residents and staff to use their personal vehicles within Ella Bay.

The benefits of operating a public shuttle bus include:

- a service to avoid potential congestion and maintain air quality;
- a cost effective way of reducing vehicle trips and to facilitate residents being less dependent on their cars;
- a well-organised transportation system to improve community's development. The public shuttle bus will operate in an efficient circular route around Ella Bay, traversing through a number of bus, bicycle, pedestrian and buggy only thoroughfares; and
- encouraging the use of public transport, with a bus interchange located in the Ella Bay Village Precinct and at the Welcome Centre.

1.4.8 Submitter Issue: Marine facilities

1.4.8.1 Marine Infrastructure Capabilities

It is understood that provision of additional boat ramps is not part of the current application, and options for dedicated beach access are not discussed in detail.

Identification of potential maritime facilities may be warranted to assist with planning, including location of future boat ramps or requirements for beach access.

EIS reference: Volume 3, Section 3.5.1.4

Submitter reference: 1/52

Department of Primary Industries and Fisheries (43), Department of Environment and Water Resources (51)

Proponent Response

The Proponent did not include the proposal of a boat ramp or other marine infrastructure capabilities in the EIS. A boat ramp facility is already available at Flying Fish Point. The proponent does not anticipate any increased marine activities and associated impacts on the Great Barrier Reef due to this Ella Bay Integrated Resort proceeding.

In the EIS, it was acknowledged that commercial and recreational boating activities occur within 10 kilometres of the Ella Bay site. The main location for this activity is the Johnstone River. Commercial fishing companies operate out of Innisfail from jetties and port facilities along the river all year long. There is also a ship servicing facility at the Coconuts/Flying Fish Point.

At present, a draft *Marine Precinct Plan* has been lodged with relevant State Government authorities for the Johnstone River. This proposal provides for long and short-term moorings and provision for additional industry focused on marine servicing, rebuilding and repairs.