

**Submission
No 173**

INQUIRY INTO PACIFIC HIGHWAY UPGRADES

Organisation:

Name: Mr Robert Howard

Telephone:

Date Received: 18/08/2005

Subject:

Summary

Summary

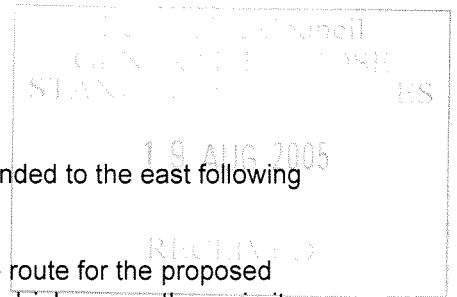
The Ewingsdale to Tintenbar highway upgrade study area was expanded to the east following the request from many community representatives.

The plain, within the expanded study area, offers a viable alternative route for the proposed highway upgrade. It provides a route that minimises the impact of the highway on the majority of people both within the study area and the general community.

Benefits in placing the new road on the plain include:-

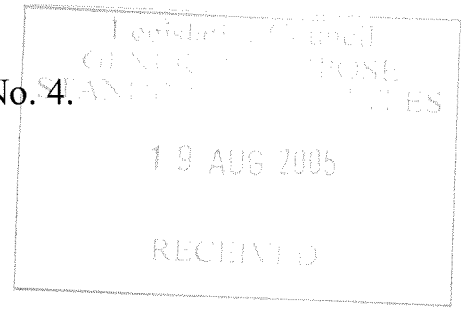
- lower cost of construction
- o value of land substantially lower than that of the Plateau
- o flat land compared with cut and fill through rolling hills
- minimal disturbance of existing highway during construction phase
- not destroying prime agriculture land
- larger size of farm on the plain – less farms impacted
- few residences on the plain – less people impacted
- no risk to Ballina water catchment area
- location of highway away from existing communities and majority of residences
- o minimise impact of noise
- o minimise impact of pollution

The majority of people living within the study area clearly desire the new upgrade to be located away from existing communities and residences.



Submission to the General Purpose Standing Committee No. 4.

Inquiry into the Pacific Highway Upgrades



The Plateau or the Plain.

This submission relates to the proposed Pacific Highway Upgrade between Ewingsdale and Tintenbar. Planning of the Upgrade commenced in November 2004 with the study area expanded to the west six months later. The initial study area (herein referred to as the **Plateau**) essentially joined the two ends of the existing highway upgrades – the planned Ballina Bypass to the completed Ewingsdale section. The expanded study area (herein referred to as the **Plain**) opened up further route options and also generated a vocal community group.

The two areas are extremely diverse in topography, geology, vegetation type and population density. However people from both areas have a common plea – neither area wishes to host the highway upgrade.

There are a few outcomes that are obvious to all. The upgrade is inevitable. It is required to improve road safety and it will consist of at least a dual lane carriageway. The focus of all decision makers should therefore concentrate on ensuring the final outcome has the minimum impact on the majority of people.

My interest in making a submission is that I live and work on our 20ha macadamia property centrally located within the combined study area. Our residence on the Newrybar escarpment overlooks the Plain. Besides being a local farmer, I have Tertiary qualifications in Earth Science and Environmental Management that provide some expertise and interest in the issues discussed.

Constraints on the upgrade

Due to technical limits on curves and slopes the upgrade will not fit on the site of the existing highway. Despite the vocal calls from a particular community group there is no existing highway corridor. The upgrade will be a new road, be it on the Plateau or the Plain.

Topography

The Plain is flat – slopes are 0-1%, relief is 1-2m and elevation is 2-5m. A network of deep drains has been excavated to assist with natural drainage.

The plateau consists of low rolling hills – slopes are 15-20%, relief is 40-100m and elevation is 100-150m.

Prime Agriculture Land

The plain is poor agriculture land according to the Northern Rivers Farmland Protection Project (DIPNR) consisting of estuarine alluvium mixed with aeolian sands. The limitations to agriculture (Morand, 1994) include being strongly acidic, highly permeable, often waterlogged soils of low fertility and low water-holding capacity with localised salinity. Additionally there are permanently high watertables and potential for wind erosion. Land use is predominately sugar cane.

In contrast DIPNR mapped the plateau as regionally significant land to be protected for agriculture. Geologically the plateau consists of deep red volcanic soils developed in-situ from weathering of basalts. Morand (1994) classified the soil as self-mulching dark reddish brown Krasnozems with high nutrient storage capacity. The soils have a high suitability as a growth medium. This is reflected in the land use within the study area predominately of horticulture (macadamias, coffee, low-chill stonefruit).

Northern Rivers Farmland Protection Project recommended that public infrastructure should avoid State and Regionally significant land where feasible alternatives are available.

Population Density

The population density on the Plateau is many times greater than on the Plain due to a number of reasons. The higher fertility of the Plateau allows smaller farms to be viable. Residences have established both along the existing highway and local feeder roads. The towns of Bangalow and Newrybar are located on the existing Highway.

On the Plain the combination of high watertable (swamp) and infertile soil limited its early agricultural development until an extensive drain system was established. More recently, with the population growth, residences have established on the escarpment overlooking the plain rather than on the plain itself.

Ballina water catchment

The Plateau contains the water catchment for Emigrant Creek dam, part of the local water supply for Ballina. The new road would traverse the entire length of the catchment area. Although sediment runoff during construction could be managed there is always the risk of chemical pollution from a vehicular or tanker accident on a high speed highway. The risk can be eliminated by locating the new road on the Plain.

Highway Impacts

The most significant impact of the new road is noise. Other impacts such as reduction in aesthetic values, reduction in property prices, air pollution are all relatively minor compared with noise. Noise can interfere with communication, disturb sleep, cause cardiovascular and psycho-physiological effects, reduce performance, and provoke annoyance responses and

changes in social behaviour (WHO). The most effective method of minimising noise is to tackle the problem at the source. This can be achieved by

- 1) adopting stricter commercial vehicle noise standards
- 2) moving the source away from residences. The impact of noise reduces exponentially with distance.

On the Plateau the new road would be located within 1km of Newrybar and if the existing bypass was selected at Bangalow, houses would be only 50m from the highway and most of the town within 1km.

On the Plain the closest communities of Lennox Head and Broken Head would be 4km and 5km respectively from the new road.

The impact of exhaust pollution is a growing concern in the general community. Both acute and chronic poisons from the exhausts are however rapidly diluted when mixed with air. The impact of air pollution is therefore also mitigated by distance.

The impact on scenic values can be minimized by landscaping and planting a corridor of trees on both sides of the new road. It is difficult to imagine that the scenic values of some people have greater relevance than the multiple noise impact on the bulk of the community.

Misinformation

Extensive misinformation is being spread by numerous groups. Unfortunately many vocal protagonists reside outside the study area and are not directly impacted by the upgrade but more by indirect impacts such as perceived changes in property values.

Conclusion

The Plain offers a viable alternative route for the proposed highway upgrade. It provides a route that minimises the impact of the highway on the majority of people both within the study area and the general community.

Benefits in placing the new road on the Plain include:-

- lower cost of construction
 - value of land substantially lower than that of the Plateau
 - flat land compared with cut and fill through rolling hills
- minimal disturbance of existing highway during construction phase
- not destroying prime agriculture land
- larger size of farm – less farms impacted
- few residences – less people impacted
- no risk to Ballina water catchment area
- location of highway away from existing communities and majority of residences
 - minimise impact of noise
 - minimise impact of pollution
 - desired result from the majority of people living within the study area

Robert Howard

B App Sc (App Geol), Grad Dip App Sc (Comp Studies), PostGrad Dip (Env Mang)