The LDMG works closely with local Police as both a member of the LDMG and through our membership as part of the operations of the DDMG. QPS also has Liaison Officers within the LDCC to co-ordinate operations during an event.

Given that the Rockhampton LDMG has had multiple activations over the last 2 years with the 2008 floods, Hendra Virus in August 2009, Rockhampton Bushfires in October 2009, Shen Neng 1 Grounding on Great Barrier Reef in April 2010 and various tropical cyclone activations, a very good working relationship has been developed at the local level with all State, Not for Profit and Federal Agencies (specifically Centrelink and the ADF).

The local Police response to disaster events and specifically the 2010/2011 flood event, has been exceptional and is a great model to be adopted elsewhere. During the 2010/2011 flood event the DDC attended the LDMG meetings so that there was no need for duplication of information at the DDMG level and a greater focus could be dedicated to tactical response activities.

The only issues identified throughout the flood event relating to State or Federal Agencies were both in relation to Emergency Management Queensland (EMQ).

The first was hesitation from EMQ initially to deploy the flood barrier from Townsville and Brisbane for protection of the Rockhampton airport due to concerns about the high transport costs if there was any uncertainty about it being definitely needed. This was overcome after further discussion.

The second issue was in regards to the legislative responsibility placed upon LDMG's under the DM Act when responding to a disaster and the escalation process required to request assistance from the District and then State once resources are fully exhausted at each respective level.

The LDMG had set up a food resupply process from 31st December 2010 and had set up regular contact with all major local grocery and fuel providers to monitor stock levels and ensure adequate local supplies. The LDMG was then made aware via the media that EMQ in Brisbane had reached an agreement with the National Retailers group to undertake food resupply arrangements using a Hercules C130 which was flying food from Brisbane to Mackay and then transporting by road from Mackay to Rockhampton. Neither the LDMG nor Rockhampton DDMG were made aware of this arrangement and local retailers had indicated little benefit was to be gained by such an exercise given their stock levels at the time.

This arrangement was put in place without any 'Request for Assistance' being supplied by either the LDMG or the DDMG as required under the Act. Local EMQ also had no knowledge of this arrangement.

- End of Response -

16. The nature and timing of any communications within the disaster management hierarchy, including particularly any communications had with the District Disaster Co-ordinator (DDC), the State Disaster Co-ordinator or the State Recovery Co-ordinator, and whether any direction/s were given by the DDC and the nature of any such direction/s.

All formal communications between the LDMG and DDMG, which are generally in the form of Situation Reports or Requests for Assistance, have been provided as part of Rockhampton Regional Council's response to the initial Requirement to Provide Information received from the Queensland Flood Commission of Inquiry, dated 1 March 2011.

The only directions provided by the DDC during the 2010/2011 flood event were in regards to timing and changing of formats for Situation Reports, which was a direction from the SDC.

In regards to other communications, the LDC started to receive telephone calls on a daily basis direct from the SDMG wanting to know information about how many people were accommodated in the Evacuation Centre overnight. This information was supplied in twice daily Situation Reports provided by the LDMG to the DDMG and then to the SDMG, however it appeared that telephone calls were being made rather than reading the reports provided.

- End of Response -

17. An assessment of the adequacy of equipment and communications systems in the local area during the 2010/2011 flood events.

There were no general impacts on equipment and communication systems in the Rockhampton Regional Council area during the 2010/2011 flood event.

- End of Response -

18. An assessment of the adequacy of the community's response in the local area during the 2010/11 flood events.

The Rockhampton local community is relatively resilient in regards to dealing with flooding from the Fitzroy River. Many of the low-lying areas in the region are occupied by long term residents who have a very good local knowledge of the impacts of flooding in their area and an awareness of the preparations that they have to take to ensure that any flood waters have minimal impact on their property.

This also means that in some quarters there is a level of complacency or stubbornness, particularly amongst elderly long time residents who have lived through floods before but do not appreciate that their ability to act quickly has diminished over time and that an event bigger event could be possible than those they have previously experienced. Getting these people to consider evacuation is a challenge.

The fact that the last big flood in Rockhampton occurred 20 years ago in 1991 and that since this time, all response agencies now operate under greater controls and restraints in regards to insurance and risk management, workplace health and safety and changes to legislative responsibilities and liabilities, means that the activities undertaken in 1991 are not necessarily acceptable, given the above requirements, in 2010/2011.

The general community does not have an appreciation of the changes or necessarily accept the reasons for the changes that have taken place over time. The community expectations of actions taken by various levels of government and government departments, community and not-for-profit groups and volunteer organisations such as the SES were compared to their 1991 experiences.

Given the reduced level of regulation and risk management in 1991, responses in 2010/2011 were more managed and controlled which was perceived by some parts of the community to be less responsive and less helpful. As the risk of litigation for actions taken during a disaster event is seen to increase in the future there is no doubt that certain groups within the community will also become more negative to the level of response provided.

- End of Response -

19. **Any measures being proposed, planned or implemented to prepare for, mitigate or manage future events (such as the installation of automatic river gauges, culvert management, levee construction and the like).**

The Rockhampton Regional Council currently has a Fitzroy River Floodplain Study underway which commenced in 2008 and is due to be completed in June 2011. A draft copy of the study was provided with the initial response to the 'Requirement to Provide Information' received from the Queensland Flood Commission of Inquiry, dated 1 March 2011.

Council has also been working as a stakeholder with the Queensland State Government Department of Main Roads on the Federally funded 'Fitzroy River Floodplain and Road Planning Study – Bruce Highway and North Coast Rail Line Options' which is seeking to provide flood-free access to Rockhampton. A copy of the current project update and road and rail options paper dated March 2011 is attached.

Council has also been considering a number of levee bank options for the city including a levee for the entire Rockhampton city area (copy attached) and a single option for a levee to protect the Rockhampton Airport (copy attached) given its important role as a key access point for transporting key equipment, resources and personnel into and out of the region during disaster events.

The LDMG has also investigated the use of a car-mounted loud hailer system as another possible mechanism for communicating with local communities to increase awareness of an imminent disaster event. The use of the SMS Alert system has also been investigated for certain communities within the region.

- End of Response -

Project Update No.1 | March 2011

Fitzroy River Floodplain and Road Planning Study

Bruce Highway and North Coast Rail Line options

The Fitzroy River Floodplain and Road Planning Study is assessing current and future demands on the Bruce Highway and North Coast Rail Line to make recommendations that will inform short to long-term transport (road and rail) investment decisions within the Rockhampton region.

The $5 million study is an Australian Government funded initiative being delivered by the Queensland Department of Transport and Main Roads. The study commenced in November 2009 and is due for completion in late 2011.

Following technical studies, traffic modelling and a review of community feedback, the study has identified a two part strategy to reduce the impact of flooding on the Bruce Highway and to address freight issues in and around Rockhampton.

What's inside?

- Map showing the options
- Key features for each option

Short-term priority: flooding

educing the impact of flooding on the Bruce Highway across the Yeppen flood plain has been identified as a short to medium-term priority outcome or the study. As a short to medium-term solution, the study will make recommendations to provide a high level Bruce Highway crossing of the eppen flood plain, reducing the risk of the southern entrance into Rockhampton being isolated during flood events.

g-term (2031) priority: traffic demand

ne study team has undertaken traffic modelling on the Bruce Highway which indicates that by the year 2031 (depends on traffic growth rate ssumptions) a new bridge may be required across the Fitzroy River to accommodate traffic growth and demand. The predicted timing of when a new ridge will be required depends on traffic growth rate assumptions. Until a new bridge is constructed, a number of improvements can be made to the xisting Bruce Highway to manage traffic flow. These improvements could include upgrading intersections and changing some intersections to 'left-, left-out' accesses. A new connection from Glenmore Road onto the Neville Hewitt Bridge may also divert a majority of livestock freight away from ne Fitzroy River Bridge and CBD.

ne study team has identified options that could provide long-term transport infrastructure solutions for the Rockhampton region. As the study is i its early stages of route identification, only broad corridors of intent are available for community consideration. The options presented in this ıformation sheet are suggested options for the ultimate long-term location of the Bruce Highway (once it approaches capacity) and the North Coast ail Line.

ne long-term options are not required until well into the future. However it is important that planning is undertaken now to identify the footprint for ıture infrastructure and progressively preserve transport corridors for the future. Any future construction of the final long-term transport solution will e undertaken in stages and will be dependent on future demand and the availability of funding.

echnical, engineering, environmental, cultural heritage, social, safety and community analysis will be undertaken on the options to help identify the est long-term transport solutions.

Why are we doing the study?

- Investigating ways to reduce the impact of flooding on the Bruce Highway and rail approaches into Rockhampton
- Identifying potential traffic capacity issues and safety improvements for heavy vehicle movements on the Bruce Highway through Rockhampton
- Investigating requirements for strategic connections between the Bruce Highway and freight generating hubs within Rockhampton
- Providing recommendations for a long-term solution to improve network efficiency for the North Coast Rail Line in Rockhampton.

Community feedback

In February 2010, the community was asked to submit their comments on transport issues in and around the city of Rockhampton. Feedback from the community included issues relating to congestion, flooding, safety and rail operations.

Community feedback along with technical review and traffic and hydraulic (flood) modelling has been considered by the study team to inform the development of all short-listed road and rail corridors.

The Department of Transport and Main Roads thanks the community for their valuable contribution so far and encourages them to continue being involved in this important process.

Australian Government
Nation Building Program
Queensland Government

Long-term rail options

The two long-term rail corridors which have been identified both have the potential to remove rail operations from Denison Street, reduce the impact of flooding on the North Coast Rail Line and reduce rail travel time.

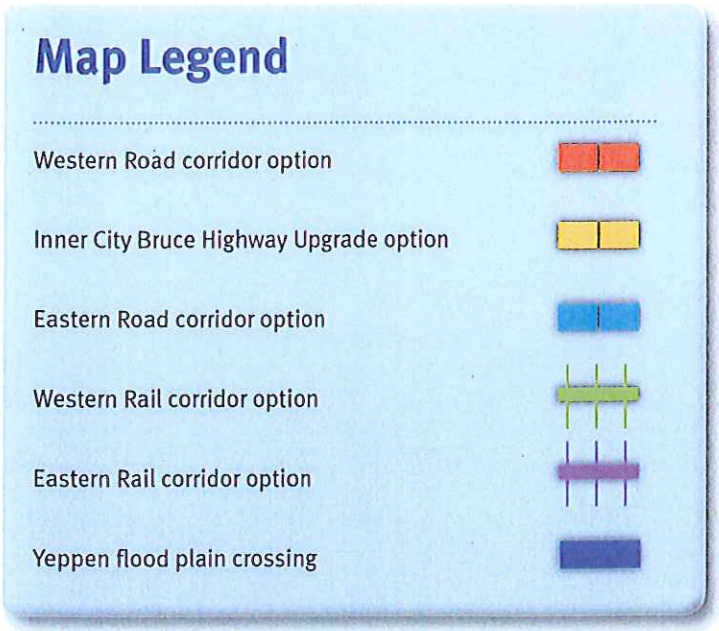
Key features and considerations for the Western Rail corridor option

- Corridor west of the Rockhampton Airport.
- Rail junction at Egans Hill enables rail traffic to enter Rockhampton and access existing passenger station, intermodal terminal and maintenance yards.
- Rail junction at Parkhurst retained as rail spur to Yeppoon Branch, track maintenance and sleeper factory.
- Long connections required to access existing station and rail facilities.
- Potential environmental impact on the Yeppen flood plain.
- Construction cannot be staged.

Key features and considerations for the Eastern Rail corridor option

- Corridor east of the existing Rockhampton Railway Station and reconnects with the North Coast Rail Line in North Rockhampton.
- Passenger and freight rail will continue to pass through urban areas of North Rockhampton but not through city streets.
- Maintains direct access to Yeppoon Branch Line and other existing Rockhampton rail facilities for Queensland Rail.
- Potential environmental impacts on The Common and Depot Hill area.
- Staged implementation possible.

Map Legend



Long-term road options

The three long-term road corridors identified all have the potential to deliver significant improvements to the traffic flow and amenity of the Bruce Highway through Rockhampton. All options being considered would:

- improve cross river traffic flow
- reduce inner-city congestion
- reduce the impact of flooding on the Bruce Highway
- reduce journey (travel) times
- improve safety.

Key features and considerations for the Western Road corridor option

- Corridor west of the Rockhampton airport.
- New river crossing (north of Rockhampton CBD).
- Links to the Airport and future growth areas north of the city.
- Reduction in long distance freight traffic within city centre.
- Intersections at key locations.
- Some impacts on existing properties and accesses.
- Potential environmental impacts on the Yeppen flood plain.

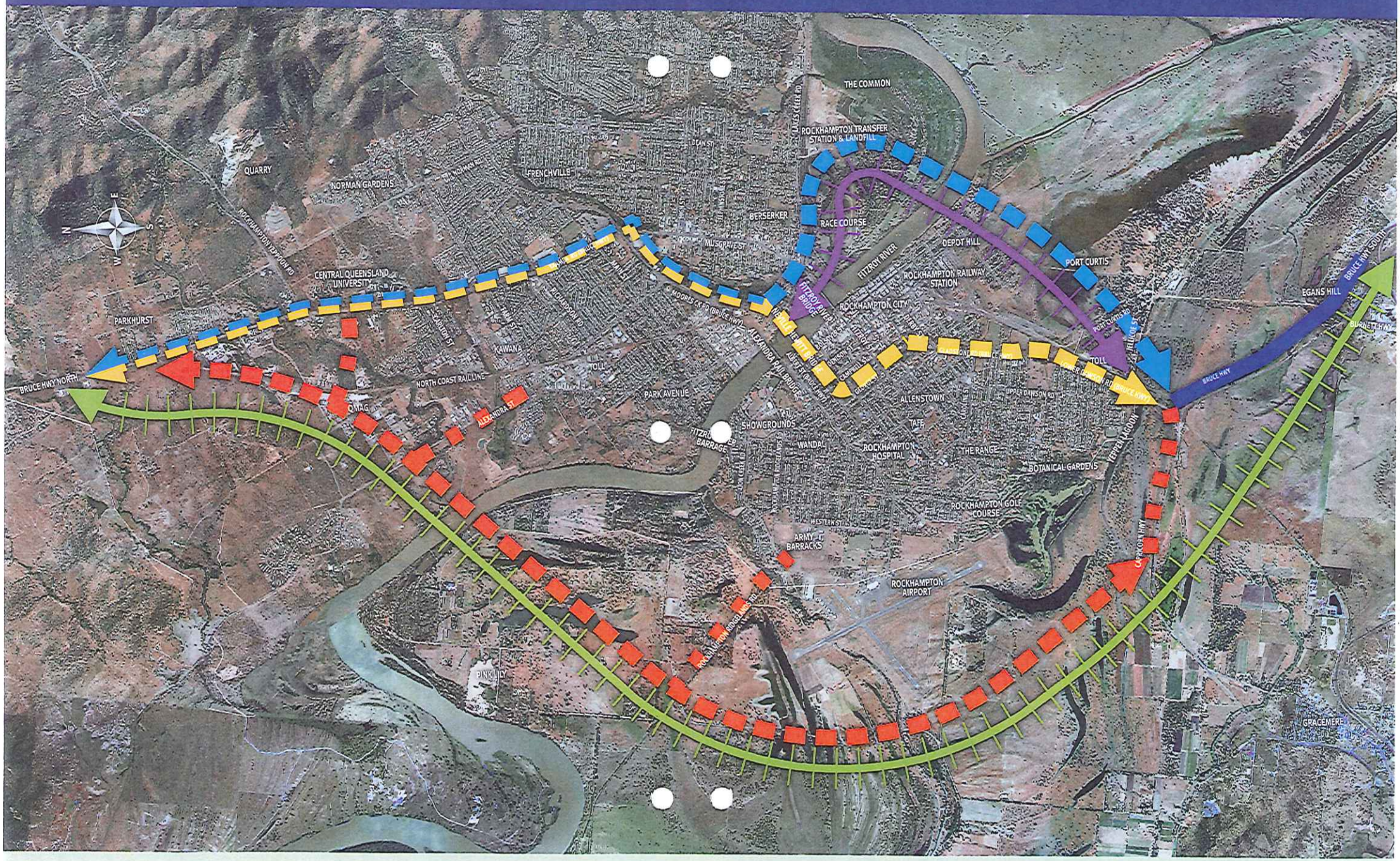
Key features and considerations for the inner-city Bruce Highway Upgrade option

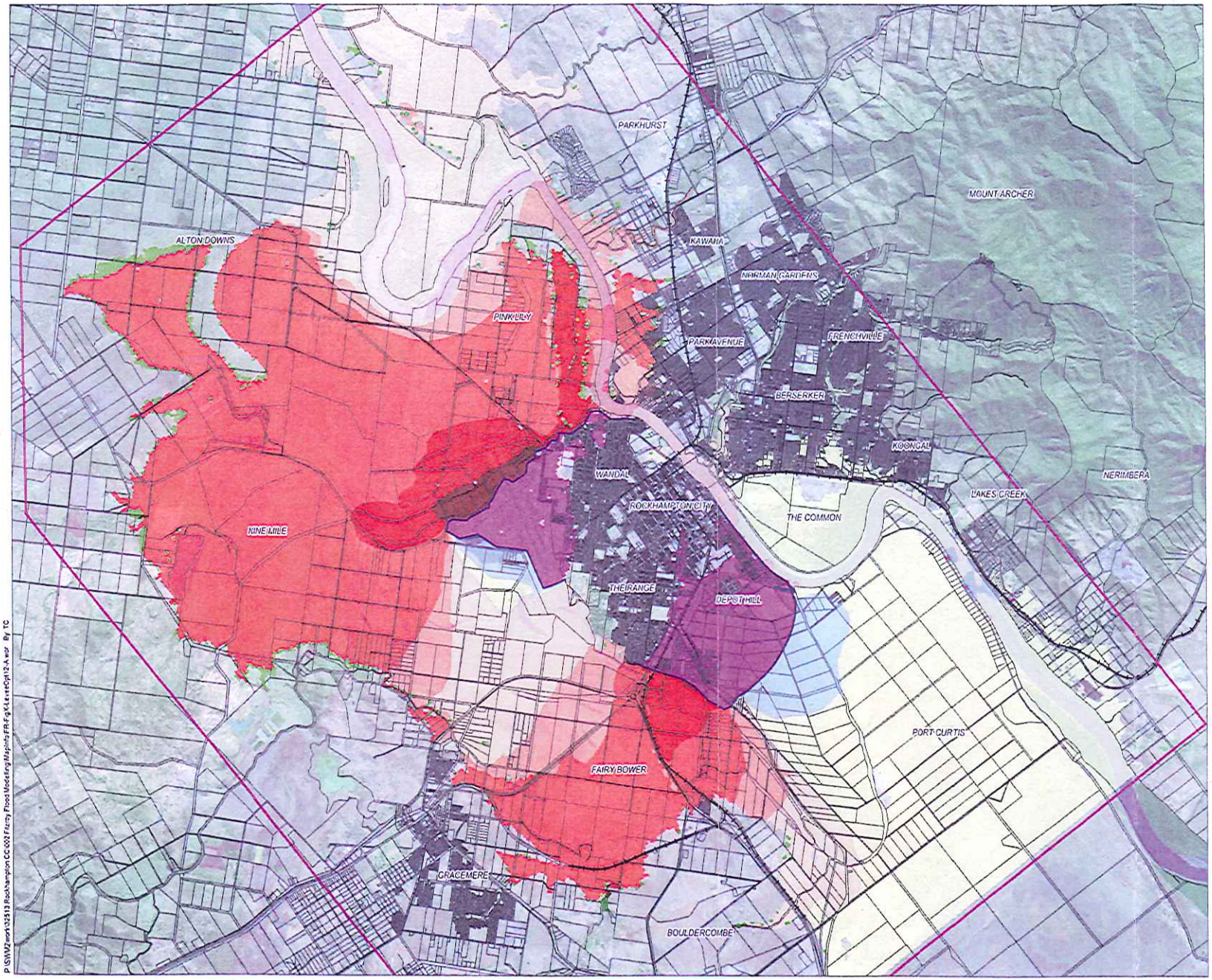
- Upgrade of existing Bruce Highway within Rockhampton.
- New river crossing (within Rockhampton CBD).
- Long distance freight traffic remains within city.
- Signalised intersections at key locations.
- Removal of some existing traffic lights (limiting side road access).
- Current freight connections are maintained.
- Potential impact for existing properties and accesses along the Bruce Highway.

Key features and considerations for the Eastern Road corridor option

- Corridor east of the Rockhampton Railway Station that connects to the existing Bruce Highway on Rockhampton's north side.
- New river crossing (south of Rockhampton CBD).
- Links to freight hubs including Parkhurst, Lakes Creek Road, CBD and rail facilities.
- Reduction in long-distance freight (including livestock freight) from the city centre.
- Intersections at key locations.
- Potential impact on existing properties and accesses.
- Potential environmental impact on The Common.

Long-term road and rail options





P:\SWI2\work\32513 Rockhampton CC\002 Fitzroy Flood Modelling Majority\FR-Fig\Fig14.wor By: TC

aurecon

Rockhampton Regional Council

Australian Government Attorney-General's Department Emergency Management Australia

Emergency Management EMQ Queensland

Queensland Government Department of Emergency Services

Legend

- Cadastre
- TUFLOW Model Extents
- Railway Line
- Major Road
- Proposed Levee Location

Afflux (m)

< -0.300	0.020 to 0.075
-0.300 to -0.225	0.075 to 0.150
-0.225 to -0.150	0.150 to 0.225
-0.150 to -0.075	0.225 to 0.300
-0.075 to -0.020	> 0.300
-0.020 to 0.020	

- Was Dry Now Wet
- Was Wet Now Dry

Notes:

DRAFT

Date: 15/02/2011 Version: 0

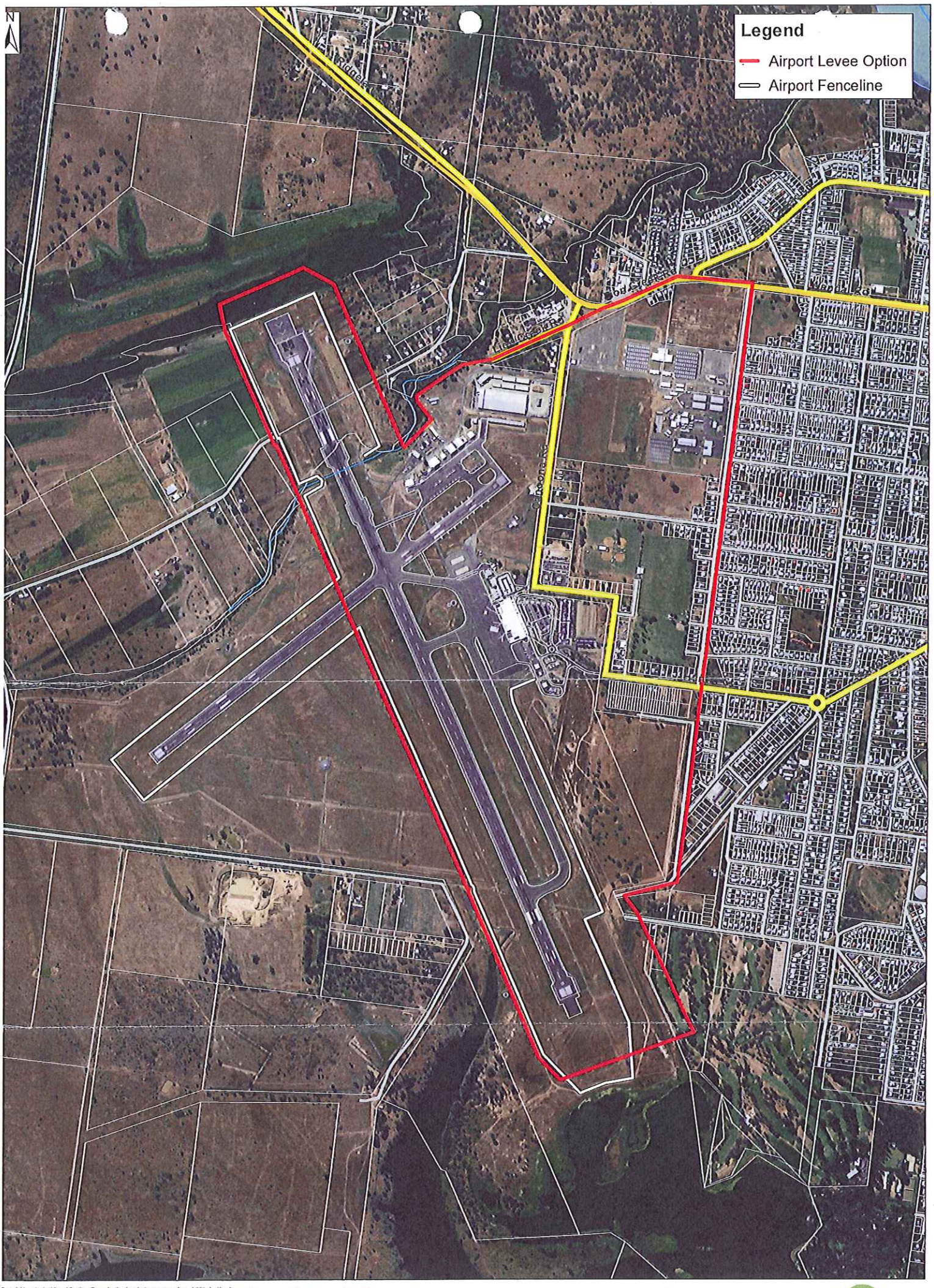
0 4000 (m)

Scale 1:80 000 (m) (@ A3 size)

Projection: MGA Zone 56

Fitzroy River Flood Study

Figure X - Increases in Peak Water Levels
Levee Option 12 - Small Airport, Depot Hill and Port Curtis Levees



Airport Levee Option

1:12,000
Page Size: A3

0 0.05 0.1 0.2 km

Rev: A
25/02/2011

Rockhampton Regional Council

20. Advice as to any special consideration that should be given the local area by reason of particular regional or geographic differences.

The location of Rockhampton City is within the Fitzroy River Floodplain so the likelihood of inundation of large areas of the city during large flood events is high.

The former Rockhampton City Council and current Rockhampton Regional Council are well aware of this issue and as such have had controls in place within their Town Planning Schemes to limit development in flood-prone areas to ensure that there is no intensification of use and therefore greater properties at risk in these areas.

Rockhampton is fortunate in that being at the end of the 2nd largest river catchment in Australia there is generally considerable notice provided regarding an impending flood. Given the location of the city within the floodplain, this notice period provides residents in low-lying areas sufficient notice to take the necessary measures and do the necessary planning to minimise losses and damage due to flooding.

From a preparedness perspective, the lead time provided by our location on the river system also provides the LDMG with time to put mitigation measures in place (such as installation of the flood barrier around the airport), communicate with residents and take the necessary actions and precautions to prepare for the event. It also means that all local response agencies have time to deploy equipment, resources and personnel to the area to prepare.

- End of Response -

21. Advice as to any feature of the disaster preparation and planning stages or the special consideration that should be given the local area by reason of particular regional or geographic differences.

The LDMG came across specific logistical issues on two (2) occasions during the 2010/2011 flood event which both related to the use of ADF resources. It must be pointed out that the ADF have some local resources located at the Western Street Barracks and a local reserves brigade in Rockhampton and that the ADF have a Liaison Officer who is an observer at LDMG meetings.

In the first instance, the LDMG was seeking to assist local residents who wished to self-evacuate in the Depot Hill area, an area that is very low-lying and significantly impacted by floods. At the time of assisting with evacuations the flood waters in some streets were already at a depth of greater than 1 metre which meant that all local passenger vehicles operated by Council and other local response agencies did not have adequate clearance. In order to safely move people out with some of their valuable possessions a 'Request for Assistance' (RFA) was sent to the DDMG for use of a locally based ADF Unimog which has high clearance and passenger carrying ability. As the ADF resources are Federal resources, the RFA had to be escalated to the SDMG. The RFA was subsequently declined and the LDMG had to use a high clearance Rural Fire Engine that had a water tank on the back and limited passenger carrying capacity thus requiring multiple trips to take a maximum of 2 persons at a time.

On another occasion when the Gracemere township, which was cut off from Rockhampton by floodwaters across the Yeppen Floodplain, required resupply of essential goods (bread, milk) and some flour for the local bakery to make bread, the local ADF representative offered the keys to a local Unimog to assist with getting the items across the flooded Bruce Highway to Gracemere. Despite being in the same room as the LDMG, in order to follow the DM Act escalation protocols, the LDMG once gain had to raise a RFA which was once again escalated to the DDMG and then SDMG. On this occasion the request was approved and the local Unimog could be utilised.

In both cases above, the response times to get decisions on the RFA's were generally 24 - 48 hours after being sent due to the escalation process for a decision.

The LDMG is of the view that to facilitate quicker responses it would be advantageous for relevant authorisations and delegations to be given to the appropriate local officers responsible for locally based State and Federal resources and assets such that decisions about local issues can be made locally without the need for escalation through District and State Groups who have little direct knowledge or awareness of local situations.

- End of Response -