Master Plan

Project Title:
Rest Areas and Stopping Places Review

Project Area:
Bowen Basin and Regional Road Network
Document control
Contact for enquiries and proposed changes

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Endorsements

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Executive Summary

The Master Plan for the Rest Areas and Stopping Place (RASP) review represents a framework that will encourage investment in and guide development of new and upgraded rest areas across the Bowen Basin and Regional Road Network.

The aim of the RASP review is to identify and select specific sites in and around the regional road network for the establishment of new or upgrading of existing rest areas and stopping places.

This project has identified sites on key freight routes in the area, but has excluded the Bruce Highway, Capricorn Highway and Gregory Developmental Road during this round of assessments as they are currently being considered through TMR and federal government funding packages. These important links may however be included in the future where appropriate.

The project aligns with the RAAG statement of purpose aimed at reducing fatigue related road crashes on key routes in the region. It will assist in reducing fatigue related road safety risks through the delivery of additional rest opportunities for motorists and heavy vehicle drivers.

The Master Plan is the end result of input from members and supporters of the Mackay Road Accident Action Group (RAAG). It has been progressively developed from the inaugural forum in October 2010 and subsequent regular meetings of the RASP Working Group set up to plan and deliver the intended aim of the project.

The development of these sites will provide greater opportunities for motorists to take a break from driving and for heavy vehicle drivers to make scheduled stops for short and long term rest breaks to meet driving hours requirements. These sites will benefit all road users, whether they are mining industry personnel, service providers to mines, people from regional communities, tourists or freight services transiting through the region.

The delivery of new and upgraded rest areas is a program of works aimed at meeting the demands and needs for current and future road users, in particular, the workers of tomorrow who will be needed to support ongoing growth of the mining sector in the region. It will promote road safety and potentially save lives through the reduction of fatigue related incidents.

The Master Plan for the RASP review is an important step forward for road safety in the region and will guide the future development of new and upgraded rest areas across the rapidly developing Bowen Basin regional area.
Introduction

In early 2010 RAAG approached the Department of Transport and Main Roads (TMR) with a proposal to engage with mining corporations and associated industries operating in the Bowen Basin to seek their funding and support to build new and upgraded rest areas on the road network in the Bowen Basin, Mackay/Whitsunday region. This initiative was aimed at reducing the incidences of fatigue related crashes in the region.

In July 2010, RAAG members and TMR officers, working in conjunction with representatives from the road freight transport industry, undertook an inspection of the road network in and around the Bowen Basin, Mackay/Whitsunday region, driving over 3000km of roads to identify potential sites where new or upgraded rest areas would be effective.

Following the road trip in 2010, RAAG hosted a forum on 20 October 2010 in Mackay resulting in the establishment of the RASP Working Group to support and guide the RASP review project for the Bowen Basin, Mackay/Whitsunday Region.

The aim of the review project is to identify specific sites in and around the Bowen Basin, Mackay/Whitsunday Region for the establishment or upgrade of rest areas and stopping places for motorists and heavy vehicle drivers.

These sites will provide greater opportunities for motorists to rest and take a break from driving and for heavy vehicle drivers to make scheduled stops for short and long term rest breaks to meet driving hours regulatory requirements.

This group, including representatives from RAAG, TMR, QPS, Local Governments, mining corporations and industry representatives, meets regularly in Mackay to progress the project.

The project will primarily focus on the development of new rest areas. Formal and informal stopping places will also be taken into consideration as potential sites.

A key focus of the project is to encourage and attract interest from industry, business and the community within the region to build new sites. This project will improve road safety and manage fatigue in a more appropriate manner.

Aim of the RASP Project

The project aim is to reduce the incidence and severity of road crashes on key routes in the region through the delivery of additional rest opportunities for motorists and heavy vehicle drivers.

The aim will support RAAG’s statement of purpose to ensure a coordinated and collaborative approach to reduce the incidence and severity of fatigue related road crashes on key routes in the region. It will target identified crash causal factors and reduce road safety risks through the delivery of additional rest opportunities for motorists and heavy vehicle drivers.
Purpose of the Master Plan

The purpose of the Master Plan is to:

- Present a framework which will guide investment in and development of identified new and upgraded rest area sites that will meet the demands and needs for current and future road users, including the workers of tomorrow.
- Promote a network of sites that are responsive to increasing traffic growth, including ongoing growth within the mining sector and in doing so, promote road safety and potentially save lives through the reduction of fatigue related incidents.
- Promote opportunities for private enterprise to contribute to enhanced road safety outcomes through participation in the development of new and upgraded rest area sites.
- Allow flexibility to ensure new sites can be included in future planning for the RASP project.

Mackay Road Accident Action Group

The Mackay Road Accident Action Group (RAAG) was established in April 2002 and developed strategies in a collaborative approach with stakeholders to reduce the high rate of crashes occurring in the Mackay/Whitsunday region. Since then strategies have been further developed by RAAG as further areas of concern are identified. The RASP project represents one way RAAG is responding to the impacts of fatigue on driver safety in the region.

Statement of Purpose

To ensure a coordinated and collaborative approach to reducing the incidence and severity of road crashes on key routes in the region by targeting identified crash causal factors, in this case fatigue, through driver education programs and initiatives.

Mackay Road Accident Action Group’s Role

RAAG must fulfil a variety of roles relating to the promotion of good driving behaviours including:

- Advocating good driving behaviour
- Planning future initiatives
- Coordinating the implementation of planned initiatives
- Facilitating the progression of driver awareness initiatives
- Providing expert advice to stakeholder groups
- Monitoring trends in road crash causal factors
- Evaluating the effect of initiatives and actions taken.

Strategic Framework

RAAG has identified five strategic objectives aimed at improving road safety. These will be developed and implemented over the next three years. Regular performance outcome reviews will be conducted. Where necessary objectives will be modified or new objectives implemented as indicated by future road crash trends.

This project addresses the requirements of Objective 2: Reduce road crashes involving fatigue.
Fatigue Crashes

Fatigue related crashes are more likely to result in a fatality than a serious injury, indicating that fatigue related crashes are more severe than other crashes. Fatigue crashes are more common when drivers are on trips away from home and on roads with higher speed limits. In about 75% of the fatigue related crashes the vehicle drifted off the road. Mackay Police District figures suggest that 43% of fatal crashes in the district can be attributed to fatigue.

There is not a single definition of fatigue. Fatigue is ‘invisible’ and there is no single symptom. Fatigue related crashes often involve a loss of alertness, physiological changes and resultant poor driving. For road safety, poor driving is the most important result of fatigue. The deterioration in driving occurs well before falling asleep, but can be combated through effective fatigue management practices while driving.

A 5 minute nap can temporarily reduce fatigue but a 15 minute nap is of more substantial benefit. Some people use stimulant drugs as a countermeasure to fatigue however whilst these drugs have the effect of maintaining alertness and delaying sleep there may be a sudden onset of sleepiness as they wear off which can lead to an even further risk of accident.

People have only a limited capacity to resist sleep and fatigue, and there is a natural urge for humans to sleep at night when the biological rhythm of sleepiness dictates. We are not good judges of our own level of fatigue so we may not take appropriate action such as pulling over.

Feelings of sleepiness are dangerous and the most appropriate action is to get off the road. Adequate preparation for a trip requires sleep before departure to reduce any sleep debt. Some people suffer chronic, medically caused, sleepiness.

This can be treated by drivers taking regular rest breaks whenever they travel longer distances. In order for drivers to manage fatigue, it is important to provide appropriate roadside rest areas where they can stop, rest, and revive before continuing their journey in safety.

Fatigue is a major cause of serious crashes involving heavy vehicle drivers and the resultant impact on families, the community and business can be significant. Under revised heavy vehicle driver fatigue laws introduced into Queensland in late 2008 stronger emphasis has been placed on managing driver fatigue to protect the safety of workers and all road users.

In addition, under Chain of Responsibility laws, which are consistent with existing Occupational Health and Safety laws, everyone in the supply chain must take reasonable steps to prevent driver fatigue and ensure a driver does not drive a heavy vehicle while impaired by fatigue.
**Strategies to Fight Fatigue**

RAAG has identified six important strategies aimed at reducing road crashes involving fatigue:

- Develop campaigns using the services of television, radio and print media aimed at this target group.
- Conduct targeted advertising and promotion to raise awareness of fatigue dangers.
- Provision of information packs and flyers for drivers.
- Promote employer and employee run fatigue education programs for shift workers.
- **Liaise with local authorities to upgrade/develop rest areas.**
- Develop trip planning materials, diary and passenger activities.

As part of RAAG’s integrated approach to fighting fatigue, this project aims to upgrade and develop rest areas by working with state and local authorities, community groups, business groups and mining operations that generate much of the traffic demand in the area.

**Consultation**

Consultation on development of the RASP Project through project inception, development of a project plan and development of the Master Plan has been managed via the RASP Working Group that was created under agreement at the inaugural RAAG rest area and stopping place forum held in October 2010.

The working group has met on a regular basis to progress decision making on identification and mapping of proposed rest area sites, agreement on types and standards to be applied to each individual site, concept design layouts and progression of the Master Plan.

Consultation with major stakeholders both within the working group and outside the working group has been conducted by RAAG officers and officers from TMR.

Significant contributions to development of the RASP Project and Master Plan have come from:

- RAAG officers and members
- TMR officers – Mackay, Rockhampton & Brisbane officers
- QPS officers
- Local Government councillors and representatives
- Mining corporation officers
- Mining industry representatives
The following consultation list identifies the various corporate and governing bodies that have contributed and liaised in this project.

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![Fatigue Management Poster](image-url)
Rest Areas and Stopping Places Review Project (Bowen Basin and Region)

This program of works is aimed at meeting the demand for current and future road users, including the workers of tomorrow, who will be needed to support ongoing growth of the mining sector and associated traffic in the region. It has been initiated by RAAG to respond to the needs of tired or fatigued drivers and will promote road safety and potentially save lives through the reduction of fatigue related incidents.

To date, desktop surveys have been combined with information compiled from on road surveys and inspections undertaken by RAAG, TMR and local government which have identified strategic gaps in the rest area and stopping place network within the region. From these assessments 14 sites have been agreed to and endorsed by the RASP Working Group as strategically important rest area sites.

Identification of these sites has been based on TMR rest area guidelines that stipulate that rest opportunities should be no more than 80km apart, which under usual road conditions, will provide rest opportunities at approximately one hour intervals. This will provide opportunities for motorists to stop and rest at regular intervals as and when they require and for heavy vehicle drivers to comply with fatigue and Chain of Responsibility (COR) laws that impose obligations on all parties that influence driver behaviour.

Fatigue is a major cause of serious crashes involving heavy vehicle drivers and the resultant impact on families, the community and business can be significant. Under revised heavy vehicle driver fatigue laws introduced into Queensland in late 2008 stronger emphasis has been placed on managing driver fatigue to protect the safety of workers and all road users.

Under COR legislation, drivers and transport operators are no longer solely responsible for breaches of road laws and every party that has influence in the supply chain is responsible for preventing driver fatigue. If a party exercises control or influence over road transport activities they can be held legally responsible for their actions, inactions or demands if they cause or contribute to a road safety breach. Authorities can investigate along the supply chain and up and down the corporate chain of command and prosecute those who have contributed to breaches of COR legislation.

Consignors and consignees such as major mine operators in the Bowen Basin have a duty to make sure they do not make demands on drivers or transport operators for delivery of freight that may cause a driver to drive:
- while impaired by fatigue
- while in breach of their work and rest hours obligations
- in breach of other laws

Under COR laws, everyone in the supply chain must take reasonable steps to prevent driver fatigue and ensure a driver does not drive a heavy vehicle while impaired by fatigue. This approach is consistent with existing Occupational Health and Safety laws.
Rest areas for heavy vehicle drivers are therefore critically important to support fatigue and COR laws through the provision of regular opportunities for drivers to rest and comply with fatigue management obligations. Strategically placed rest areas are a major countermeasure to prevent fatigue related incidents.

The 14 sites have been categorised into three types (A, B or C), and are small, medium or large in size, depending on vehicle parking capacity. These types define the requirements of each site and have been based on the location, type of traffic and the Annual Average Daily Traffic (AADT) as well as local knowledge regarding current and expected usage. The types are defined as follows:

- **Type A** rest areas provide higher levels of facilities, are generally larger in capacity, and cater to a variety of vehicle types. They are generally located on roads with greatest traffic levels.

- **Type B** provides adequate facilities for short to medium stays for an average number of motorists or heavy vehicle drivers. These have more standardised facilities, and are generally smaller in capacity than Type A sites.

- **Type C** is a supplementary site provided predominantly for short-term stops. Whilst smaller and often located on roads with lower traffic volumes, they provide important locations for drivers to pull off the roadway and rest in safety before they continue their journey.

As a part of this process, formal and informal stopping places have been taken into consideration as potential sites and a number of the 14 potential rest area identified sites are existing formal stopping places, which can be developed into rest areas.

Stopping places play an important support role for the rest area network by providing areas immediately adjacent to a road where drivers can safely pull over and take a short break before continuing their journeys. They also play an important role for fatigue regulated heavy vehicle drivers to allow them to take their short breaks as required by fatigue driving regulations and to complete important tasks such as load restraint and vehicle safety checks.
**Master Plan: RASP Project – Site Location Map**

The following map represents the sites that are to be considered part of this project. It is important to remember that these sites are only those considered significant for the immediate needs within the region and that over time further sites may be added as needs change, particularly where new mining operations are established and the demand for travel on particular routes increases.

(See addendum for full size map (Page 27))

This initial project has excluded the Bruce Highway, Capricorn Highway and Gregory Developmental Road during this round of assessments as they are currently being considered, through TMR and federal government funding packages. These important links may however be included in the future where appropriate.
Project Proposals

RAAG has developed project proposals for each site which defines the requirements and expectations on a site-by-site basis. These project proposals allow for each site to be developed independently. This approach ensures flexibility within the overall program of works, and provides opportunities for individual sites to be developed by business groups and/or mining operations at locations that provide benefit to their operations and employees.

The sites that have been chosen were strategically placed along the connecting haul roads and highways within the Bowen Basin. These roads are considered major freight routes and are occupied by Type 1 and Type 2 Road Trains as well as local motorists.

The Bowen Developmental Road

The Bowen Developmental Road is a key east - west connecting road linking Bowen to Collinsville and major mines in the Northern Bowen Basin. The local traffic is expected to increase significantly as several new mines in the Glenden area are expanded, and up to 10 new mines will use the Bowen Developmental Road as a major access road. There will also be significant traffic increases with long distance travel on this route to service new mines in the Galilee Basin.

At present the Bowen Developmental Road (Bowen to Belyando Crossing) has a total Annual Average Daily Traffic count ranging from 1500 in the east to 40 vehicles in the far west with a respective Heavy Vehicle Annual Average Daily Traffic count of between 200 and 20. In the period 1 January 2003 to 31 March 2009 on the Bowen Development Road (Bowen to Belyando Crossing) there were 67 crashes. Of these 67 crashes 16 (or 25.4%) involved a fatigued driver/rider.

There are no formal rest areas or stopping places to service motorist or heavy vehicle traffic on the Bowen Developmental Road.

1. Collinsville

Site A: A site to the east of Collinsville has been identified for the development of a heavy vehicle rest area. The site will provide a much needed facility for long distance heavy vehicle movements between Bowen, Collinsville, mines in the Northern Bowen Basin and for future movements to the west, including supply chains via the Gregory Developmental Road to the Galilee Basin.

Site B: This will be developed in conjunction with a proposed new rest facility for motorists and grey nomads in Collinsville being developed by the Whitsunday Regional Council.

2. Cerito Road (Collinsville – Elphinstone Road)

Cerito Road intersection with the Bowen Developmental Road has been identified as another important site on the Bowen Developmental road to service all traffic, including heavy vehicle movements to mines in the Northern Bowen Basin. It was recommended for investigation by the Safety Manager Xstrata Coal Newlands. This site is well used by heavy vehicles for load checking and short breaks. It is approx one hour from Collinsville, 2 hours from numerous mines north of Moranbah, and 2 hours from Bowen for heavy vehicles.
The Suttor Developmental Road

The Suttor Developmental Road is a major connecting road between the Peak Downs Highway to the south and the Bowen Developmental Road to the north via its connection with the Collinsville – Elphinstone Road (Cerito Road). It provides a strategic transit route and road link to the mining town of Glendon and existing mines in the region such as Hail Creek, Burton and Newlands.

It will be a key supply route for the region in the future and is expected to experience significant increases in heavy vehicle and motorist traffic due to a number of new and expanding mines in the immediate area. At present, the road has a total Annual Average Daily Traffic count of up to 1050 vehicles which includes 230 heavy vehicles.

3. The Jump Up
The Jump Up site on the Suttor Developmental Road has been identified as a necessity along this route due to limited rest opportunities. It will have the ability to service various types of vehicles travelling in both directions of travel along the Suttor Developmental Road linking to Cerito Road. In the period 1 January 2003 to 31 March 2009 on the Suttor Developmental Road (Nebo to Mt Coolon) there were 29 crashes. Of these 29 crashes 7 (or 24.1%) involved a fatigued driver/rider.

The Peak Downs Highway

The Peak Downs Highway is the most significant east-west connector route in the region. It is a major transport and tourist route that experiences a broad mix of light and heavy vehicles, including high productivity and over-dimensional heavy vehicles. Mine workers travelling to and from work between Mackay and various mine sites are heavy users of this route. It is also experiencing a growing level of tourist traffic.

The Peak Downs Highway between Nebo and Clermont has a total Annual Average Daily Traffic count ranging from 3450 vehicles in the east to 600 vehicles in the west with a respective Heavy Vehicle Annual Average Daily Traffic count of between 550 and 150. Statistics show that in the period 1 January 2003 to 31 March 2009 (Clermont to Nebo) there were 105 crashes. Of these 105 crashes 40 (or 38.1%) involved a fatigued driver/rider.

The RASP Working Group has recommended one new rest area for motorists and upgrades to two existing stopping places for dual use rest areas for motorists and heavy vehicle drivers.

4. Russell Park
This formal stopping place is regularly used by west bound heavy vehicle and motorist due to high vehicle numbers on the Peak Downs Highway. It requires significant upgrade, expansion and provision of facilities to meet rest needs for current and increasing numbers of motorists and heavy vehicle drivers.

5. Wuthing Road
This formal stopping place is regularly used by east bound heavy vehicle and motorist traffic due to high vehicle numbers on the Peak Downs Highway. The current stopping place supports heavy vehicle and motorist traffic for short breaks and longer rest periods. The site is regularly used by heavy vehicles for load checks and short breaks after exiting Wuthing Road and heading west. This site is often used as a pull over area for over dimensional loads due to limited passing opportunities along this route.
6. Coppabella
The proposed site is located in a high fatigue crash zone, with key fatigue zones located 20km each side of the site. There are other safety benefits, as previous funding of turning lanes has provided a boost to the safety characteristics of the site.

Mining corporations and associated industries have indicated strong support to contribute to the development of a new motorist rest area in the Coppabella area.

**The Fitzroy Developmental Road**
The Fitzroy Development Road is a major route connecting the Capricorn Highway in the south (from Dingo) to the Peak Downs Highway in the north (west of Oxford Downs). Originally built as a ‘Beef Road’, the Fitzroy Development road now experiences a mix of high productivity and over-dimensional heavy vehicles, particularly those supporting the growing number of mines in the area. It is also experiencing a growing level of tourist traffic, including campervans and caravans, which present challenges from a traffic management perspective. There are currently no formal rest areas on this road and in view of the increasing commercial traffic there is a critical need to develop formal sites at strategic locations to support fatigue management for this important regional route.

Statistics show that in the period 1 January 2003 to 31 March 2009 on the Fitzroy Development Road (Dingo to Mt Flora) there were 78 crashes. Of these 78 crashes 31 (or 39.7%) involved a fatigued driver/rider.

At present, the Fitzroy Developmental Road (Dingo – Mt Flora) has a total Annual Average Daily Traffic count of up to 980 vehicles which includes 255 heavy vehicles.

7. Codrilla
The Codrilla site is located on the Fitzroy Developmental Road in close proximity to the Valkyrie School, and will replace a temporary TMR base that is currently being used to house maintenance workers. The site will provide much needed rest opportunities for the northern section of the road.

8. Golden Mile
This rest area site is strategically important, for northbound traffic from Dingo (2+hours), grain and cattle trucks heavily use this route, increasing amounts of traffic accessing mines south east of Dysart. The site is approx 2+ hours from Mackay, 2 hours for trucks from Nebo heavy vehicle rest area.

9. Wilpena
This site is subject to further consideration by the RASP Working Group. It is a current stock pile site utilised by TMR for maintenance work on the Fitzroy Developmental Road. Advice from TMR is pending on the possibility to move the site north to the intersection of the Dysart – Middlemount Rd. TBA.
10. Mackenzie River
The Mackenzie River site is an existing heavy vehicle stopping place that is well used by roadtrains, over-dimensional loads and livestock trucks. It is also well used by motorists for rest breaks. The site is in a very strategic position, being half way between Dingo and the Middlemount Road turnoff. The site has capacity for a large rest area and feedback from industry and the Isaac regional Council indicates that a rest area with appropriate facilities is critically needed at this location.

Dysart-Middlemount Rd.
The Dysart-Middlemount Road is a significant regional route connecting major mining operations, and several small communities to both the Peak Downs Highway and the Fitzroy Developmental Road.

Along its length, Dysart-Middlemount road currently has a total Annual Average Daily Traffic count of 1207 vehicles which includes 182 heavy vehicles. The junction of Connection Rd may experience local movements of up to 2100 vehicles which include 619 heavy vehicles.

In the period 1 January 2003 to 31 March 2009 on the Dysart to Middlemount Road there were 24 crashes. Of these 24 crashes 3 (or 12.5%) involved a fatigued driver/ rider.

11. Dysart-Middlemount Rd – Connection Road
Located at the junction of Connection Rd (servicing Tieri and Capella townships), and Dysart- Middlemount Rd (servicing Dysart and Middlemount), this site experiences significant motorist traffic which interacts with high-productivity heavy vehicles servicing major mining operations, including rail loading facilities.

The site is well used by heavy vehicles for fatigue breaks southbound on Dysart Rd, before heading west and vice versa. Numerous contractors servicing regional mines approx 50kms to the south west also take a break here.

12. Dysart town
The Dysart Town site is located on the Dysart-Middlemount Road at the entry to the town of Dysart. This section of road has an Annual Average Daily Traffic count of 1207 vehicles and a Heavy Vehicle Annual Average Daily Traffic count of 182.

At present a major upgrade of facilities and town entrance is underway, organised by a joint stakeholder committee. Some members of this committee are in communication and understand the need for a rest area.

In the period 1 January 2003 to 31 March 2009 on the Dysart to Middlemount Road there were 24 crashes. Of these 24 crashes 3 (or 12.5%) involved a fatigued driver/ rider. This site will accommodate local workers and the increasing numbers of grey nomads also in the area as part of local council and tourist promotion of the Mining Trail.

Crinum Road
Site 13 is located on Crinum Road this is a local government owned and operated road connecting the Gregory Development Rd at Capella in the west to the Dysart-Middlemount Road. This road is the sole access route for the township of Tieri and supports the local community’s transport needs. It is also an important route for several large mining operations in the area.
Heavy Vehicle movements, including grain, cattle, machinery and coal mine over-dimensional movements occur frequently in this area.

In the period 1 January 2003 to 31 March 2009 on the Crinum Road and Oaky creek Mine Road there were 17 crashes. Of these crashes, 17 (or 29.4%) involved a fatigued driver/rider. This site will accommodate local workers and the increasing numbers of grey nomads also in the area as part of local council and tourist promotion of the Mining Trail.

In addition to the motorist rest area site that is being proposed for Crinum Road near the Township of Tieri, the Central Highlands Regional Council is investigating a site for a heavy vehicle stopping place to support heavy vehicle movements along Crinum Road.

**Marlborough - Sarina Road**

Site 14 is located on Marlborough-Sarina Road and Oxford Downs- Sarina Road, which serves as a regional connector between the Peak Downs Highway and Sarina. This road connects Oxford Downs with the Bruce Highway. Whilst Oxford Downs – Sarina Road is predominantly a low-level road with an Annual Average Daily Traffic count of around 450, it is primarily used by motorists with a Heavy Vehicle Annual Average Daily Traffic count of around 50.

In the period 1 January 2003 to 31 March 2009 on the Oxford Downs - Sarina Road there were 7 crashes. Of these 7 crashes, 3 (or 42.9%) involved a fatigued driver/rider.

In 2010, a serious increase of fatigue related crashes including fatal incidents occurred on the Marlborough - Sarina section.
Type of Rest Areas and Standards

What is a Rest Opportunity?
A rest opportunity is a location that is accessible from the roadway in which a driver can safely stop their vehicle, without blocking the flow of traffic, and rest for a period of time suitable for meeting their fatigue needs.

Ideally these sites provide a reasonably quiet location with adequate separation from the road, and appropriate facilities to allow drivers to achieve effective rest.

For motorists, including tourism travellers, there are many types of opportunities available on the road network. These include town centres and tourism locations, commercial centres such as service stations and locations such as historical villages provided by local governments as well as locations provided by TMR. Heavy vehicle drivers however rely more heavily on TMR-provided sites.

Types of Rest Areas
The functional requirements of rest areas differ according to location, vehicle mix, and desired user type. Traffic volumes at each location will determine capacity requirements, however rest areas can generally be categorised as follows:

**Type A.**
Sites providing extensive facilities of a high standard supporting all potential motorist types including those wishing to utilise the site for limited camping opportunities (for motorist sites- up to 20hr max). These sites are generally ‘mid-block’ and do not conflict with commercial or civic sites within the area.

**Type B.**
Sites focussed on providing an appropriate number of parking bays with facilities intended to cater for short to medium term rest periods in support of achieving rest during journeys. These sites represent medium standard sites that do not conflict with commercial or civic sites, and provide a standard level of fatigue-related facilities on the SCRN.

**Type C.**
Sites providing locations with an adequate number of parking bays at which motorists can safely stop away from the roadway in order to rest. Facilities may be minimal, potentially including only hardstand areas, bins and shade. These sites are provided where fatigue-related facilities are required without the need to provide a greater level of facilities. These sites may include those that are adjacent to commercial or civic facilities, or support roads with low vehicle numbers for the appropriate vehicle type.

Due to the differing functional requirements of heavy vehicles and other vehicle types, it is important to differentiate between motorists and the needs of heavy vehicle drivers. Heavy Vehicle drivers are also impacted by issues including:

- fatigue management legislation, which requires them to comply with prescribed fatigue management requirements during the course of their work cycle,
• transportation of various goods that may impact on their scheduling, an indication of differing requirements for consideration of the various fleet applies to:
  – Dangerous goods vehicles that may not be able to stop at the same rest area as other heavy vehicles. (An explosive vehicle must not stop near a fuel tanker, and will need to proceed to the next available rest area.) Dangerous goods vehicles must not park within 15 meters of a building or a concentration of people, they are also restricted to 8 meters from another vehicle which is a placard load.
  – Cattle vehicles must with animal welfare requirements, which impacts on effective fatigue management and interaction with other vehicles on the roads and within rest areas.

**Standards for Rest Area Types**

The following table defines the desired standards and facilities for each rest area type. Specific requirements for each component shall be in accordance with TMR design standards and requirements, or as appropriate for each individual site (further detail is provided in the ‘Design’ section of this document).
## Rest Area Types

<table>
<thead>
<tr>
<th></th>
<th>Heavy Vehicle</th>
<th>Motorist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type A</td>
<td>Type B</td>
</tr>
<tr>
<td><strong>Capacity</strong>&lt;br&gt;(for largest vehicle permitted on route)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large: 15+ bays (&gt;2000 HV AADT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium: 10-15 bays (500 - 2000 HV AADT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small: 5-10 bays (&lt;500 HV AADT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All-weather seal</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Separation for vehicle types</strong></td>
<td>Yes</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Separation for long term/short term visitors</strong></td>
<td>Yes</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Bins</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Natural Shade/trees (where available)</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Tables/chairs</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Shelters/Artificial Shade</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Toilets</strong></td>
<td>Yes</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Lighting</strong></td>
<td>Yes</td>
<td>Desirable</td>
</tr>
<tr>
<td><strong>Separation from road</strong>&lt;br&gt;(Well separated and screened with vegetation, mounding, barrier, etc. Separated as a minimum by line marking)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>On-Road Signage</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>BBQ</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Playground</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Private Camping allowed (20 hr max)</strong></td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Caravan dump point</strong></td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Rest Area Concept Designs

The rest area concept design layouts for identified sites under the Master Plan are indicative only and are representative of designs that could be applied across the 14 selected sites.

All sites will be subject to site assessment and site design analysis prior to agreement on final design layout on a site per site basis.

In order to be compatible with various standards during the development phase of each site the TMR Rest Area Guidelines will be applied to provide a directive.

Key considerations for location of rest areas will include:

- The final location of a rest area site can be identified based on preferences of features that the local conditions naturally provide such as grade, natural shade, availability of utilities, and the geometric and environmental constraints of the site and adjacent road configuration and type.

- Rest areas should be located within safe access to the route, whilst providing sufficient separation from through traffic for both safety and rest purposes. Separation is a key element in providing effective rest, and screening from the road corridor should be provided, particularly for areas used at night, to allow drivers to sleep without disturbance from headlights of vehicles moving along the adjacent roadway.

- Areas that provide shade are highly desirable for rest areas. Shade is important for heavy vehicle drivers travelling in summer months, particularly in the Bowen Basin region. Natural shade is preferred as it can be utilised to protect the heavy vehicle itself from the heat of the day. As such, as much vegetation as possible should be retained when designing/constructing sites.

- When choosing a site, close proximity to utilities such as water, sewerage, and electricity is desirable, as this reduces the cost of building and operating the rest area, as well as improving the quality of services for drivers.

- In more remote areas, the use of composting toilets and water tanks is becoming more common in order to provide facilities at lower expense. For safety purposes, solar lighting is also being used in many rural/remote Queensland areas.

- Lighting for security or safety may be provided where appropriate. Availability will depend on access to services, however in remote areas solar lighting is being used successfully. Lighting should be maintained at a safe level, but should not be so bright that it would disturb sleep. For example, flag lighting, maintained at a level suitable for pedestrians and located only around available facilities may be appropriate in many circumstances.

- Potential locations for rest areas should undertake environmental assessments as required to ensure environmental impacts are minimised.

- It is important to consider proximity of the site to domestic homes or developments, institutions, or businesses in the area. Particularly in rural settings and locations where noise can travel unimpeded for long distances, it has been known for the arrival and departure of heavy vehicles on a site to cause disturbances to homes a kilometre or more away. Conversely, a local activity can cause noise at night that may disturb the driver’s ability to rest effectively.
Key considerations for design layouts of rest areas will include:

- Available depth of road corridor so as to prevent land buyback.
- The presence of utilities within the adjacent corridor.
- Native title issues.
- Types of vehicles accessing the site, particularly heavy vehicles such as type 1 & 2 road trains.
- Circulation of vehicles within a rest area should minimise internal traffic conflicts.
- In dual rest areas, heavy vehicle parking spaces should be separated from other vehicles.
- Heavy vehicle parking bays should be separated from each other to ensure driver’s sleep can be maintained. This will be subject to available space within each site.
- Safety issues for vehicle movements, parking locations, access to amenities and pedestrian movements must be considered.
- Access and egress to each site must provide an adequate level of safety for vehicle movements to and from the site. Issues such as sight distances, road speed environment, grade, provision of acceleration and deceleration lanes, turning lanes, turning radii – especially for multi combination heavy vehicles.
- Aesthetics such as landscape design, including nature noise and light barriers or built barriers.
- Location of facilities.
- Type of pavement and seal.
- Types and location of facilities such as toilets, bins, shelters, lighting etc.
Rest Area Concept Design Layouts

**Proposed Standard Design**

**Type A: Medium Dual-Use Rest Areas**

- **Overall Length:** Approx. 250m
- **Overall Depth:** Approx. 35m
- **Truck Bays:** 10 (Type 1 Road Trains)
- **Car Bays:** Approx. 7
- **Caravan Bays:** 3

**Truck Area**
- Total Length of Back Row = 175 m
  - Truck parking bay length = 50 m each
  - Number of Heavy Vehicle Bays = 10

**Minibuses Area**
- Total Length of Back Row (near infield) = 70 m
  - Caravan Parking Bays = 20 m

**Total Depth = approx. 30 - 35 m (excluding free area)**
Proposed Standard Design
Type A: Small Heavy Vehicle Rest Areas

Overall Length: Approx. 150 m
Overall Depth: Approx 21 m

Truck Bays Long Term: 3 x Type 1 Road Trains (50 m bays) and 2 x Type 2 Road Trains (60 m bays)
Truck Bays Short Term: 3 x Type 2 Road Trains (60 m bays)
Proposed Standard Design
Type A: Medium Heavy Vehicle Rest Areas

Overall Length: Approx. 200 m
Overall Depth: Approx. 21 m

Truck Bays Long Term: 5 x Type 1 Road Trains (50 m bays) and 2 x Type 2 Road Trains (60 m bays)
Truck Bays Short Term: 2 x Type 1 Road Trains (50 m bays) and 2 x Type 2 Road Trains (60 m bays)
Proposed Standard Design
Type A: Medium Dual-Use Rest Areas

Overall Length: Approx. 150 m
Overall Depth: Approx. 60 m

Truck Bays Long Term: 12 x Type 1 Road Trains (50 m bays)
Heavy Haulage Stopping Area: 3 x Type 1 Road Trains (50 m bays)
Car Bays: Approx. 6 bays
Caravan Bays: 10 bays
Development Phase

At the commencement of the development phase for each project (site), a process will be established between the road authority and the proposed provider of the works (the contractor). As a minimum, the design and/or project plan should outline the following:

- The type of rest area and desired standards (including amenities) as determined by functionality and the detailed design;
- Construction, ongoing maintenance and performance review requirements for the site and other requirements of TMR; and
- Acknowledgement of external contributions and appropriate signage.

As a condition for each project, although work is being carried out on a state and local government assets under permit, the asset owner is not liable for payment of works approved for a developer via sub-contractors. Sub-contractors are employed by developers to carry out works of construction, therefore; it is up to the developers to carry out payment methods and agreements.

Construction within a State-controlled Road

TMR regulates works and activities that occur inside a state-controlled road corridor to ensure the safe and efficient operation of the road network. For any activities or works proposed within a road corridor, it may be necessary to obtain one or more of the following permits:

- Road Corridor Permit
- Driveway Approval
- Public Infrastructure Approval
- Resource Allocation (required for development approval under Integrated Development Assessment System).

Road Corridor Permit

TMR provides and manages the state-controlled road network, including non-transport activities occurring within the road corridor. Under the Transport Infrastructure Act 1994 and the Transport Infrastructure (State-controlled Roads) Regulation 2006, applicants wishing to undertake an activity, works within the road corridor must first apply for a Road Corridor Permit.

Stage 1 – Road Corridor Permit Process

An application is to be submitted to the relevant TMR Region, at which point the region will assess the site of proposed construction. The site inspection may occur over a number of weeks or months, due to the distribution of sites across the Bowen Basin.

Appendix 1 - The information bulletin outlines requirements when applying for road corridor permits.

Appendix 2: The assessment and conditioning flow chart demonstrates the process applied to each application.

Appendix 3: Road Corridor Permit Forms (M2373)
Stage 2 – Project Schedule for on-site Construction by Proponent
This stage will provide the proponent with an indication of the consultation process required to be undertaken with the key stakeholders. This will allow the hold points to be used as an opportunity to schedule a workshop or evaluation, in order to obtain appropriate outcomes as the project moves forward.

Application or Site
Preliminary approval given based on concept designs, etc
Proponent prepares detailed designs and construction plans

HOLD POINT 1
Proponent presents detailed designs for regional approval

HOLD POINT 2
Commencement of work inspection by Region may be required (eg inspection of WH&S, Traffic Management Plans, Material Quality testing, etc)

HOLD POINT 3
Key milestone/timeline inspections may be required (eg: inspections to ensure construction quality is adequate for a public facility such as substrate compaction, etc)

HOLD POINT 4
This and other hold points may be needed as required by Region, and it is likely each site will vary somewhat according to local needs

Final Inspection
Standard final inspections will apply upon completion of work

The benefits of hold points are to ensure that any issues throughout the project are addressed and a work breakdown structure is put in place. This will allow consistency with TMR policies and procedures (e.g. Road Design Manuals), which will consider on-road safety measures to be taken into account with regards to on-site workers and local traffic, for example, a Traffic Management Plan.

Each of the individual development projects (sites) identified in the RASP works program will require sign off from the relevant road authority prior to the commencement of any works. The relevant road authority will work closely with the contractor to move through the concept, development, implementation and finalisation phases of the project, as required.

Marketing
RAAG, in conjunction with BMC, has developed a Stakeholder Register and Engagement Schedule which will form a key part of the marketing process. The marketing process and procedures have been developed to help achieve business and project objectives and is an important component of the RASP project that will deliver new and upgraded rest areas in the region.

These processes will assist in analysing customer and stakeholder needs, ideas and opportunities to fund and contribute to the delivery of the 14 individual primary rest area sites (#s 1-14) and the 11 ancillary sites (A-K) identified in the Master Plan: RASP Project – Site Location Map.
In conjunction with the marketing process, each project proposal will also have a strategy for funding with timelines for site development and delivery and will list the RAAG liaison person responsible for site implementation.

**Next Steps**

The key actions that need to be undertaken to commence implementation of the master plan include:

- Final preparation of the marketing plan through development of the stakeholder register and engagement schedule.
- Commencement of negotiations with key stakeholders to gain financial and in kind services support to build selected sites in line with each project proposal.
- Determination of detailed site design and costings.
- Negotiation of Road Corridor Permits for developments between the relevant road authority and the proposed provider of the works (the contractor).
- Site construction, ongoing maintenance and performance review requirements for the site and other requirements of TMR.
- Develop methodology to assess utilisation and effectiveness of sites over time.

**Addendum**

**Site Location Map**

**Project Proposals**

- Collinsville (Site A: Umina Station HV, Site B: Collinsville Township MRA)
- Cerito Road Intersection
- The Jump Up
- Russell Park
- Wuthing Road
- Coppabella
- Codrilla
- Golden Mile Road
- Wilpena Road (site TBA)
- Mackenzie River
- Dysart – Middlemount Rd – near Connection Road
- Tieri Town
- Oxford Downs – Sarina Road
Site Map

Potential new rest area sites:

Bowen Dev. Rd:
1. Collinsville
   - Site A: Umina Station - Type B, medium size, HV only
     -20.3000, 147.4945 (65A @ 70.6km)
   - Site B: Collinsville Town, Type B, Motorist Rest Area
2. Curra Rd intersection (Collinsville-Elphinstone Rd)
   - Type A for trucks, B for motorist, medium size, dual use
     -21.0740, 147.7781 (58B @ 03.3km)

Sutton Dev. Rd:
3. Jump Up
   - Type B, small size, dual use
     -21.0240, 146.2752 (58A @ 50.5km)

Peak Downs Hwy:
4. Russell Park
   - Type B, medium, dual use
     -22.6228, 147.8300 (33A @ 33.2km)
5. Wurung Road Turnoff
   - Type B, medium size, dual use
     -22.2684, 147.9018 (33A @ 50.6km)
6. Coppabella
   - Type A, large size, motorist only
     -21.9129, 146.3501 (33A @ 120.5km)

Fitzroy Dev. Rd:
7. Codella
   - Type A, medium size, dual use
     -22.0005, 146.5704 (55G @ 212.5km)
8. Golden Mile Rd
   - Type C, medium size, dual use
     -22.5337, 146.8610 (55G @ 149.5km)
9. Wilpena Road
   - Type C, small size, dual use
     -22.8446, 146.8850 (55G @ 102.9km)
10. Mount Coottha
    - Type A, medium, dual use
       -23.0463, 146.0630 (55G @ 77.5km)

Dysart - Middlemount Rd:
11. Near Consoer Rd
    - Type B, medium size, HV Only
       -22.0080, 146.5630 (H6B @ 1.2km)
12. Dysart Town
    - Type B, medium size, motorist only
       -22.5523, 146.3304 (519 @ 1.3km)

Crimin Rd:
13. At Tipt
    - Type B, medium, motorist only
       -23.0423, 146.3408 (Non-TMR Road)

Marborough - Sarina Rd
14. At Oxford Downs - Sarina Rd
    - Type C, small size, Motorist only
       -21.7714, 146.9330 (512 @ 188km)

Bowen Developmental Road
- 40km North East of Collinsville
  Possible Stopping Place

Peak Down Highway
- South of Coppabella Site #938 North of Moranbah (Signage)
- North coast area #192 (Signage)
- Retreat Hotel (Signage)

Marborough - Sarina Road
- 40km North East of Collinsville
  Possible Stopping Place

Kimberley Developmental Road
- 50km North East of Collinsville
  Possible Stopping Place