

4 EIS Transportation





EIS Transportation

The respondent comments provided in this section have been collated from all stakeholder submission comments relating to EIS Section 4 Transportation. Please refer to **Attachment A** for copies of all submissions received.

4.1 Introduction

No submissions have been received on this section.

4.2 Scope of Study

Respondent Comment

Maranoa Regional Council states that the EIS doesn't comment on the use of rail to transport materials to the gas fields. This is a worrying exclusion given the current condition of the Warrego Highway.

Santos Response

Transportation of materials (e.g. pipe) by rail has been assessed where available (and discussed in EIS Section 4.5.2 and Appendix J). Queensland Rail does not have capacity to transport materials from Brisbane to Roma due to limitations in rail infrastructure that include a single line up the Toowoomba range and limited rolling stock and locomotives. The existing infrastructure is fully committed to hauling existing cargo such as coal and grain resources. Santos is also investigating alternative routes such as the Carnarvon Highway to reduce traffic on the Warrego Highway.

Should suitable rail capacity become available in the future Santos will consider its use.

4.3 **Project Description**

No submissions have been received on this section.

4.4 Existing Environmental Values

No submissions have been received on this section.

4.5 **Proposed Development**

4.5.2 Gas Transmission Pipeline Corridor

Respondent Comment

Gladstone Regional Council states the EIS identifies that it is proposed to ship the gas pipeline components to Gladstone for unloading at the Auckland Port wharves. From the wharves the two feasible options stated for delivery of the pipes inland are either transportation by train or by truck. Regardless of the option selected, appropriate management plans should be in place for the unloading and loading of the pipes at the wharf to ensure that amenity impacts on third parties such as air and noise pollution are minimised and scheduled within appropriate daylight hours.

Santos Response

The Gas Transmission Pipeline EMP has been updated with the following text:

Transport and Traffic Management

EIS Transportation

 Santos will develop appropriate management plans for the unloading and loading of pipes at the wharf prior to the commencement of shipping to ensure environmental impacts on the surrounding area are considered.

Refer to Attachment B for all revised EMPs.

Respondent Comment

Gladstone Regional Council considers that transportation of gas pipeline components to the field by train is the only realistic transportation option for the following reasons:

- That existing rail infrastructure will deliver the pipes to three laydown areas, with dispersed impacts on the region's road infrastructure, users and surrounding development; and
- In the section of the EIS traffic report prepared by Cardno Eppell Olsen titled "Material by Rail" Option, the authors indentify the following benefits in transporting materials by rail:
 - A reduction in heavy vehicle traffic using the road network, especially within Gladstone and along the Dawson Highway;
 - A reduction in the number of heavy vehicles crossing the Callide Range;
 - An improvement in highway safety; and
 - Whereas not all deliveries of pipe by road can be eliminated, the distance travelled by road is significantly reduced by transporting pipe by rail from Gladstone to as far as Moura.

Santos Response

Available information indicates that Queensland Rail is not able to provide the necessary rolling stock, rail network capacity and infrastructure to service the GLNG Project. However, Santos has investigated and assessed other transport alternatives including:

- The development of a revised transport and logistics strategy, which includes construction of additional mainland marine facilities in Gladstone for the separate handling and transport of personnel and materials (refer Attachment L); and
- Investigating the use of Port Alma as an option for the import and distribution of pipe and other field construction materials (refer **Attachment H**).

Santos will give further consideration to transportation by rail should capacity become available prior to logistics arrangements for the GLNG Project being put in place.

Respondent Comment

Gladstone Regional Council states they have significant concern about the implications associated with transportation by truck including the impacts resulting from up to 140 additional daily heavy truck movements within the city of Gladstone and out along the Dawson Highway (Safety concerns for other road users and pedestrians; Reduced flow efficiency for local roads; The cumulative wear on road infrastructure and amenity impacts on surrounding development) and the proponent has not identified any advantages in pursuing this option against transportation by rail. It is strongly recommended that the proponent be required to contribute towards extensions of the Port Access Road through to the Blain Drive area to take traffic pressures off the Glenlyon / Hanson Road areas. If the proponent wishes to pursue the transportation of pipes by truck option it would be imperative to separate the heavy vehicle movements from urban traffic to ensure a safe traffic environment for the community. A contribution should also be made towards grade separation at the Dawson Highway/Don Young Drive intersection.

EIS Transportation

Santos Response

As detailed above, Santos has revised its transport and logistics strategy in response to stakeholder concerns. This includes the construction and operation of additional mainland marine facilities, which will reduce the amount of traffic generated from Auckland Point (Port Central). Material loading/unloading facilities at Fisherman's Landing (temporary only), the south bank of the Calliope River and potentially adjacent to the existing RG Tanna site are proposed, in addition to the proposed Port Central site, which will be predominantly used for the transport of personnel. This strategy is aimed at separating personnel movements from material (including pipe) movements. **Attachment L** provides further details, including an assessment of impacts.

As a result of the revised strategy (plus other project description changes as described in Part 1 - Section 2 of this EIS Supplement report), Santos has re-assessed the transport impacts, including its contribution to road upgrade programs (refer **Attachment C**). Santos proposes to enter into an agreement with council identifying the likely issues associated with road infrastructure related to the GLNG Project. This agreement will identify the contribution attributable to Santos for its specific impact on road infrastructure and identify the means of mitigating this impact.

Santos is also considering Port Alma as another option for the transport of pipeline materials. These materials will be offloaded from the ships at the existing Port Alma facility and trucked to a proposed laydown area on the Bajool – Port Alma Road. From the laydown area the pipe will again be trucked to various locations along the gas transmission pipeline route. If Port Alma is selected for importation of materials this would further alleviate the traffic impacts in Gladstone. Santos understands that as part of the Port Alma option being considered, the Bajool – Port Alma road may need to be upgraded. Santos will work with the relevant agencies (e.g. local council and DTMR) to determine the appropriate contribution by Santos to this upgrade work. Refer to **Attachment H** for a more detailed description and impact assessment of this Port Alma option.

4.5.2.1 Railway Crossings

Respondent Comment

Queensland Department of Transport and Main Roads states that Paragraph 3 of subsection 4.5.2.1 should include an additional sentence that confirms that there is sufficient laydown area at Auckland Point wharves to receive and store the pipes in preparation for transport to their subsequent laydown areas along the pipeline corridor.

Santos Response

Santos notes the comment. Since the release of the EIS, and in response to stakeholder concerns about the use of Auckland Point for the transport of both personnel and materials, further transport and logistics strategies have been developed. The revised strategy has proposed for an initial six month period, material and equipment departing from Fisherman's Landing and personnel departing from Auckland Point (Port Central) to Curtis Island. During this initial six month period, permanent facilities will be constructed so that material and equipment departs from either a site located on the south bank of the Calliope River or alternatively the RG Tanna facility (this is still to be confirmed) and personnel will travel from Port Central. Refer to **Attachment L** for further details, including laydown area availability at these sites.

EIS Transportation

4.5.3 LNG Facility

Respondent Comment

Gladstone Regional Council recommends that an appropriate management plan be provided which, for the period of bridge construction, limits the hours of construction and associated heavy truck movements to appropriate daylight hours.

Santos Response

Please refer to the Bridge, Road and Services Corridor EMP (**Attachment B5**), which includes the provision of mitigation measures that will be implemented during the bridge construction phase to minimise the likelihood of off-site impacts. Santos believes that these will deal with the impacts associated with the hours of construction and the truck movements. Specifically, refer to the following sections in **Attachment B5**:

- 15.15.1 (Access), including commitments to minimise disruption to third parties;
- 15.15.3 (Earthworks);
- 15.15.14 (Noise and Vibration);
- 15.15.15 (Air Quality);
- 15.15.16 (Transport and Traffic Management); and
- 15.15.20 (Incidents and Complaints).

Santos believes that the commitments made in this EMP, and outlined above, address the submission raised.

Respondent Comment

Gladstone Regional Council states that the Traffic Report addendum to the EIS, prepared by Cardno Eppell Olsen, states that the possible bridge linking Friend Point (mainland) with Laird Point (Curtis Island) is unlikely to be operational until after Train 1 of the LNG facility has been completed. While this will mitigate additional heavy traffic movements in Gladstone, it will result in significant boat movements at the peak construction period when construction worker numbers are greatest (please refer to 'Barge/ferry option - construction phase' comments below).

Santos Response

Section 12.3 of the amended traffic report (Attachment C) includes a discussion of the marine transport movements associated with LNG facility construction, including barge movements for material/cargo deliveries and ferry movements for personnel transport. In addition, Section 2 of Attachment L provides a description of expected barge and ferry traffic movements associated with the mainland marine facilities.

It is acknowledged that there will be significant boat movements at the peak of construction, which is calculated to be as follows:

- Stick build option (months 20-22) out of a 48 month construction period; and
- Modular option (months 30-36) out of a 48 month construction period.

The overall impact on non-GLNG Project related marine vessels will be modified due to the fact that the barges and ferries will not need to be confined to the major shipping channels (due to their shallower drafts) and the fact that outside these peak construction periods the number of project vessels is anticipated to be much lower.

Prepared for Santos, November 2009

EIS Transportation

Santos will continue to work closely with MSQ, including the Regional Harbour Master to determine the requirements for safe navigation associated with GLNG Project related barge and ferry movements within the port, and ensure compliance with relevant regulatory requirements.

Respondent Comment

Gladstone Regional Council would insist that only those heavy vehicles with loads exceeding the identified height restrictions along the heavy traffic routes be diverted through alternative access routes so as to minimise the impacts on Gladstone's urban environments.

Santos Response

Santos notes your comment. Please refer to Section 9.2 of **Attachment C** for a discussion on heavy and oversized loads and the appropriate routes for their movement.

Respondent Comment

Gladstone Regional Council state that Table 12.2 in the Traffic Report addendum prepared by Cardno Eppell Olsen, states that the required number of 'personnel ferry movements' for the initial 4 year construction period of Train 1 will range from 195 to 535 ferry movements per annum (based on yearly peak personnel numbers of 1,120 to 3,080 – which is inconsistent with the figures in the EIS).

Santos Response

The EIS proposed that material, equipment and personnel would be barged/ferried to Curtis Island from Auckland Point. Since the release of the EIS, a revised transport and logistics strategy has been developed and is summarised in **Attachment L** of the EIS Supplement. The revised strategy proposes that for an initial six month period material and equipment will depart from Fisherman's Landing and personnel will depart from the existing ferry terminal within the Gladstone Marina. During this initial six month period, permanent facilities will be constructed so that bulk and raw materials and some equipment will depart from either a site located on the south bank of the Calliope River or alternatively a site behind the RG Tanna coal terminal. Personnel and some materials will travel from Auckland Point (Port Central).

An impact assessment has been undertaken on these alternate sites, with results provided in **Attachment L**.

As a result of this new strategy, the proposed number of ferry movements has also changed to between 3,073 and 5,095 per train as outlined in Table 3 of **Attachment C**.

Respondent Comment

Gladstone Regional Council states logistics concerns for:

- Moving significant numbers of people through a working port;
- The potential for conflict of use and safety implications;
- Appropriate passenger handling facilities are not currently available at Auckland Point;
- Ease of access for this number of people in regard to the existing security measures and other site constraints;
- The provision of secure car parking areas, drop-off and pick-up zones and delineated areas for commercial traffic (taxis and bus);

EIS Transportation

- The capacity of the port, the extent of works needed and a management plan to address the above concerns; and
- Noise impacts upon the residents of Auckland Hill and the CBD area. Whilst it is acknowledged that
 there are few alternatives where all tide access is available for this type of facility the area will need
 to be appropriately planned and managed.

Santos Response

The EIS proposed that material, equipment and personnel would be barged/ferried to Curtis Island from Auckland Point. Since the release of the EIS, and in response to stakeholder concerns, a revised transport and logistics strategy has been developed. This strategy includes the construction and operation of additional mainland marine facilities, as described in **Attachment L**. The revised strategy proposes that for an initial six month period material and equipment will depart from Fisherman's Landing and personnel will depart from the existing Gladstone marina. During this initial six month period, permanent facilities will be constructed so that material and equipment can depart from either a site located on the south bank of the Calliope River or alternatively the RG Tanna facility (this is still to be confirmed) and personnel will travel from Auckland Point (Port Central). A description of the extent of works proposed and an impact assessment of these works has been undertaken on these alternate sites, with results provided in **Attachment L**. Assessment of traffic and noise impacts and development of mitigation measures have also been included. All mitigation measures have been included in the amended Marine Facilities EMP (refer **Attachment B4**).

This revised strategy will minimise congestion around Port Central and address the concerns expressed by Gladstone Regional Council above. As part of this revised strategy Santos also proposes that suitable provision is made for bus shuttle services to transport construction workers to the ferry terminal. Within the traffic assessment in **Attachment C**, it is assumed that 80 % of the workforce is transported by bus to the ferry terminal, with the remaining 20 % being either dropped off or using longer term, secure parking facilities for private vehicles.

Respondent Comment

Gladstone Regional Council suggests that the proponents would need to bus their workforce to the ferry terminal to alleviate pressure on the road network.

Santos Response

As part of Santos' revised transport and logistics strategy (as described above), the use of buses to transport the GLNG Project workforce to the ferry terminal is proposed. Refer to Section 2.2 of the Mainland Marine Facilities report in **Attachment L** for further details and **Attachment C**, which describes the likely transport modes and routes for these traffic movements.

Respondent Comment

Gladstone Regional Council recommends that separate receiving/dispatch points (MOFs) be provided to minimise the number of movements through a single point; remove the inherent conflict between personnel movements and material deliveries; and ensure acceptable levels of operational safety.

Santos Response

Since the release of the EIS, Santos has developed a revised transport and logistics strategy, which is summarised in **Attachment L**. The revised strategy has proposed, for an initial six month period, material and equipment will depart from Fisherman's Landing with personnel departing from the existing Gladstone Marina to Curtis Island. During this initial six month period, permanent facilities will be constructed so that material and equipment departs from either a site located on the south bank of the

EIS Transportation

Calliope River or alternatively the RG Tanna facility (this is still to be confirmed) and personnel will travel from Port Central.

However, at this stage no further plans to been made to separate the receiving and dispatching points on Curtis Island.

An impact assessment of these additional mainland marine facility sites has been undertaken as part of supplement studies, and is provided in **Attachment L**.

Respondent Comment

Gladstone Regional Council states that the water demand estimates for the construction phase of the project also do not appear to account for the expected water consumption by the CAF. Water demand is more likely to be in the order of at least 300,000 litres per day for the 2,000 person CAF, without including water demand for site construction. If this is in turn transported to the facility via tankers from the mainland it will have an impact upon the transportation estimates and impacts in the EIS. Rainwater tanks should be used to supplement rainwater supply from construction accommodation.

Santos Response

Santos has taken into consideration transportation of water tankers from the mainland to Curtis Island in its Logistics Summary in Table 4.3 of **Attachment C.** This includes the transportation of water to Curtis Island for construction and accommodation requirements. The assumption made is that all water requirements will be transported from the mainland for the first 12 months of construction, when workforce numbers on the island will be significantly less than 2,000 persons. Thereafter, water supply requirements will be obtained from alternative sources, which may include a combination of desalinated water, harvested rainwater or possibly reticulated water from the mainland.

Respondent Comment

Gladstone Regional Council states that there is no mention of the power supply for construction accommodation in the EIS. Will energy come from diesel generations? If so, will the accommodation then be powered by the gas turbine once Train 1 is complete? What is the staging of power supply for the project?

Santos Response

Energy for the Construction Accommodation Facility (CAF) will be supplied by diesel generator sets. This power supply will be isolated from the LNG facility.

Note that the CAF will be decommissioned and removed after construction of Train 1, unless Train 2 construction is to commence immediately following Train 1.

4.5.3.1 Construction Deliveries

Respondent Comment

Gladstone Ports Corporation states that the quantum of fuel to be transferred to Curtis Island would appear low when consideration is given to the needs for power generation for the camp, earthworks activity (in particular that associated with site levelling and the dredge material placement facility) and general construction activities.

EIS Transportation

Santos Response

Table 4.3 of **Attachment C** sets out a revised summary of construction materials to be transported to the island. At this stage it is estimated that 2x 20 cubic metre tankers per month of fuel will be imported to Curtis Island. Note that this is projected to continue over the four years of construction.

4.5.3.4 Traffic Movement Patterns

Respondent Comment

Gladstone Ports Corporation states that the LNG facility Operation Personnel will be barged from Auckland Point. It should be noted that the barge facility at Auckland Point is only a temporary fixture for the duration of the construction phases. Therefore an alternative permanent solution for a barge facility will need to be considered and addressed.

Santos Response

Santos is working with the GPC to identify and secure access to suitable logistics locations. Current options include sites at Auckland Point, behind the RG Tanna coal terminal and on the Calliope River.

Attachment L provides further details of Santos' revised transport and logistics strategy, including:

- A description of proposed activities at each of the abovementioned sites; and
- An assessment of potential impacts from the construction and operation of these sites.

Improvements to existing infrastructure at each of these sites may be required, as described in Sections 2.2.2, 2.3.2 and 2.3.3 of **Attachment L**.

4.5.3.5 Traffic Generation

Respondent Comment

Gladstone Ports Corporation states that it is unclear from Table 4.5.6 whether the traffic generation combines the traffic associated with the construction workforce to Curtis Island and the transportation of pipes from the port to the hinterland. Both activities are undertaken on the Port Access Road and may occur simultaneously.

Santos Response

The traffic assessments carried out for the EIS predicted and modelled that within any peak hour, 10 % of daily materials haulage would occur, coinciding with the construction workforce movements. As part of the EIS Supplement all transportation of pipeline is modelled as being transported from marine facilities other than Auckland Point, thereby negating simultaneous materials and workforce transport movements on the Port Access Road. Please refer to **Attachment C**.

Note also that an option to deliver pipe to the field from Port Alma is also being considered. An assessment of this option (including an assessment of traffic impacts) is provided in **Attachment H**.

Respondent Comment

Gladstone Ports Corporation states that it is not clearly identified what the cumulative impacts of the maritime traffic associated with the development are. Vessel movements will include ferries, barges

EIS Transportation

(mainland to Curtis Island) and heavy lift vessels (lift-on/lift-off, roll-on/roll-off) and support vessels (dredgers, survey vessels, etc). This should be clearly identified and the issues associated with controls around scheduling of movements and interaction with existing commercial traffic due to the number of crossings of the mainland shipping channels and constricted waterway adjacent to Auckland Point Wharves should be addressed.

Santos Response

Since the release of the EIS a number of projects included in the cumulative impact assessment have advanced with further information becoming available. In addition, a number of new projects have been announced. As a consequence of this, a further cumulative impact traffic assessment has been undertaken and is provided in **Attachment J**.

In addition to other project information becoming available, Santos has revised the transport and logistics strategy for the mainland marine facilities in Gladstone. The EIS proposed that material, equipment and personnel would be barged/ferried to Curtis Island from Auckland Point. The revised strategy proposes that material and personnel be transported from Fisherman's Landing and the existing Gladstone Marina respectively for the first six months of construction. After this initial six month period, shipping of materials will occur at either a site on the south bank of the Calliope River or adjacent to the RG Tanna coal facility; and personnel will be transported from Port Central. An impact assessment of these new facilities has been undertaken as part of EIS supplement studies, and is provided in **Attachment L**.

4.5.3.7 LNG Shipping through the Great Barrier Reef

Respondent Comment

Capricorn Conservation Council states that comprehensive EMPs to mitigate against oil spills / leaks and other contaminants, anti-fouling systems, ballast / waste discharge, collisions with marine mammals, groundings and collisions with other vessels, anchorage destruction of seabed, erosion and seabed disturbances, and finally and very importantly, safe transportation of LNG. The proponent must adhere to all regulative and legislative requirements both nationally and internationally.

Santos Response

Santos is committed to adhering to all regulatory and legislative requirements both nationally and internationally. Please refer to **Attachment B** for revised EMPs and specifically **Attachment B4** (Marine Facilities EMP).

Respondent Comment

Queensland Department of Transport and Main Roads states that within the GLNG Shipping Section, Paragraph 3: "These ships will navigate through the Marine Park within the designated shipping area before entering the Port of Gladstone, and again navigate through the Marine Park Shipping Area when leaving the Port of Gladstone."

We suggest adding in something like the following sentences after Paragraph 3: "LNG ships transiting the Marine Park Shipping Area and the Port of Gladstone will be guided by a pilot. Within the Port of Gladstone LNG ships will be under active (tethered) tug escort during the transit through the port (inbound and outbound)."

Santos Response

The Marine Facilities Environmental Management Plan (EMP) has been updated (refer to **Attachment B**) with the following:



EIS Transportation

Shipping

 Santos will continue to work closely with MSQ including the Regional Harbour Master and Senior Pilots to determine the requirements for safe navigation (including pilotage) associated with LNGC transits within the port. Santos will continue to work with MSQ to define pilotage requirements and ensure compliance with the relevant regulatory requirements for pilotage of vessels in Queensland waters. In areas where pilots are currently mandated, LNGCs will be guided by pilots."

Respondent Comment

Queensland Department of Transport and Main Roads states that in Section 4.5.3.7 LNG shipping through the Great Barrier Reef, Oil Pollution and Spills (page 4.29) 'The likelihood of a bunker spill is almost non-existent.' MSQ does NOT support this risk assessment statement.

Santos Response

Santos considers that the likelihood of bunker fuel spills is low based on the fact that all modern LNG carriers are double hulled, and that they will be powered by gas turbines with no or very limited quantities of bunker fuel carried.

Santos is taking steps to ensure the safety of LNG transportation, and will continue to engage with MSQ to ensure they are satisfied that the proposed transportation processes minimise the potential for shipping accidents and the potential for bunker spills.

This includes appropriate pilotage on tug assistance measures as outlined in section 14.15.17 of **Attachment B4**.

4.5.4 Curtis Island Access Road and Potential Bridge Construction

Respondent Comment

Capricorn Conservation Council states that they support the 'no bridge' option.

Santos Response

Santos notes the Capricorn Conservation Council's position.

4.6 Assessment Methodology

No submissions were received for this section.

4.7 Intersection Capacity Impact Assessment

No submissions were received for this section.

4.8 Roadway Link Capacity Impact Assessment

No submissions were received for this section.

4.9 Pavement Impact Assessment

No submissions were received for this section.

EIS Transportation

4.10 Environmental Impacts

No submissions were received for this section.

4.11 Pedestrian and Cycle Network Impacts

No submissions were received for this section.

4.12 Access Standards

No submissions were received for this section.

4.13 Summary Impact Assessment

4.13.1 CSG Fields

Respondent Comment

Central Highlands Regional Council states that the Arcadia Valley Road will, without doubt, be significantly affected by the transport of pipeline materials and it is strongly recommended that Santos arrange for investigation of the existing pavement to determine the current condition from which a pavement suitable for the transport of the proposed loads involved in the project can be designed and constructed with Santos meeting all costs.

Santos Response

Santos proposes to enter into an agreement with council identifying the likely issues associated with road infrastructure related to the GLNG Project. This agreement will identify the contribution attributable to Santos for its specific impact on road infrastructure and identify the means of mitigating this impact.

4.14 Development Mitigation Measures

Respondent Comment

Department of Environment and Resource Management suggests including an assessment of the potential impact on stock routes. Mitigation measures should also be described to prevent and or minimise the potential impacts.

Santos Response

In areas where stock routes are identified, Santos will consult with the appropriate body prior to any activities which could potentially impact stock route values in order to mitigate impacts from the project's activities.

Please refer to EIS Section 6.11.5; 6.11.5.1; Fig 6.11.9a & b. for assessment of the impact to stock routes. Additionally the commitments in the CSG Field and Gas Transmission Pipeline EMPs are "tenure" blind and will serve to protect the conservation values of Stock Routes.

EIS Transportation

4.14.1.2 Heavy and Oversized Loads

Respondent Comment

Queensland Police Service states that there should be a breakdown of the number of over-dimensional vehicles that will be used in all components (CGS Fields, Pipeline, LNG Facility) in all phases (construction and operational) to enable the QPS to determine resourcing requirements. This should include a schedule that details those over-dimensional heavy vehicle movements that require a police escort.

Santos Response

Santos expects that the initial years of gas transmission pipeline corridor construction will be the most significant in terms of frequency and volume of over-dimensional vehicles. It is currently assumed that there will be numerous over dimensional loads that will require Police escort. Santos will work closely with QPS to develop the Transport and Traffic Management Plan for project traffic. As part of this process, Santos will provide QPS with the requested breakdown and schedule as part of on-going construction methodology development, including a breakdown of police escort requirements.

Respondent Comment

Queensland Police Service states that it is anticipated that the QPS will require an additional 4 marked police vehicles in the Gladstone District to ensure capacity for movement of wide loads is maintained. As the provision of wide load movements is not a core policing responsibility and an essential nexus is identified with road safety and traffic management, a contribution from Santos toward funding for vehicles is sought.

Santos Response

Santos will make appropriate commitments to police infrastructure commensurate with its level of impact and noting the presence of other possible contributors in the Gladstone area. It should also be noted any impact will be temporary in nature.

Respondent Comment

Queensland Police Service states that they will need to review strategic planning for traffic and road safety responsibilities in the Gladstone District. It is accepted that there will be an increase in injury traffic crashes involving heavy vehicles. Additional staffing (2) for traffic enforcement capability in the Gladstone District Western Cluster would meet operational needs associated with the GLNG Project as there will be an increase in calls for service as these will be over and beyond standard growth assets and resources to ensure service delivery is maintained. Vehicles supplied for wide-load movements would supplement current fleet requirements and support growth in other Call for Service areas associated with the GLNG Project.

Santos Response

This matter will be the subject of consideration by the CG in his report and Santos will make appropriate commitments to police infrastructure commensurate with its level of impact and noting the presence of other possible contributors in the Gladstone area. It should also be noted any impact will be temporary in nature.

EIS Transportation

Respondent Comment

Queensland Police Service suggests that consideration should be given to the development of additional 'Park Up' areas for wide load and heavy vehicle trucks. These park-up areas should be on the Dawson, Warrego and Carnarvon Highways.

Santos Response

Santos will continue to work closely with the Department of Transport and Main Roads to ensure park up areas are situated in appropriate locations for wide loads and heavy vehicles. Traffic matters have been assessed and are reported on in **Attachment C** Transport.

Respondent Comment

Queensland Police Service states that the proponent should provide further information on traffic volumes for Curtis Island. This will assist in determining the need to establish a permanent police presence on the island. A contribution to accommodation costs for police required to attend the island for traffic or other responsibilities will assist in managing the long-term response to calls for service on the island.

Santos Response

For latest traffic volumes and an updated traffic assessment refer to **Attachment C**. However, it is unlikely that there will be a requirement for a continuous police presence on the Island as the LNG facility and associated areas will be a private construction site. If the bridge is built, the road and LNG facility area would still not be open to the general public.

Santos will work with QPS and other relevant proponents at time of bridge construction (if it is built) to assess policing requirements.

Respondent Comment

Maranoa Regional Council states that the transportation section of the EIS focuses exclusively on the declared road network in the gas field which is built to a relatively high standard and disregards the local road network which is generally constructed to a lower standard and therefore less likely to be able to cater for the impacts of the project. The methodology adopted is entirely inappropriate for consideration of the local road impacts.

Santos Response

Santos proposes to enter into an agreement with council identifying the likely issues associated with road infrastructure related to the GLNG Project. This agreement will identify the contribution attributable to Santos for its specific impact on road infrastructure and identify the means of mitigating this impact.

4.15 Summary of Findings

No submissions were received for this section.