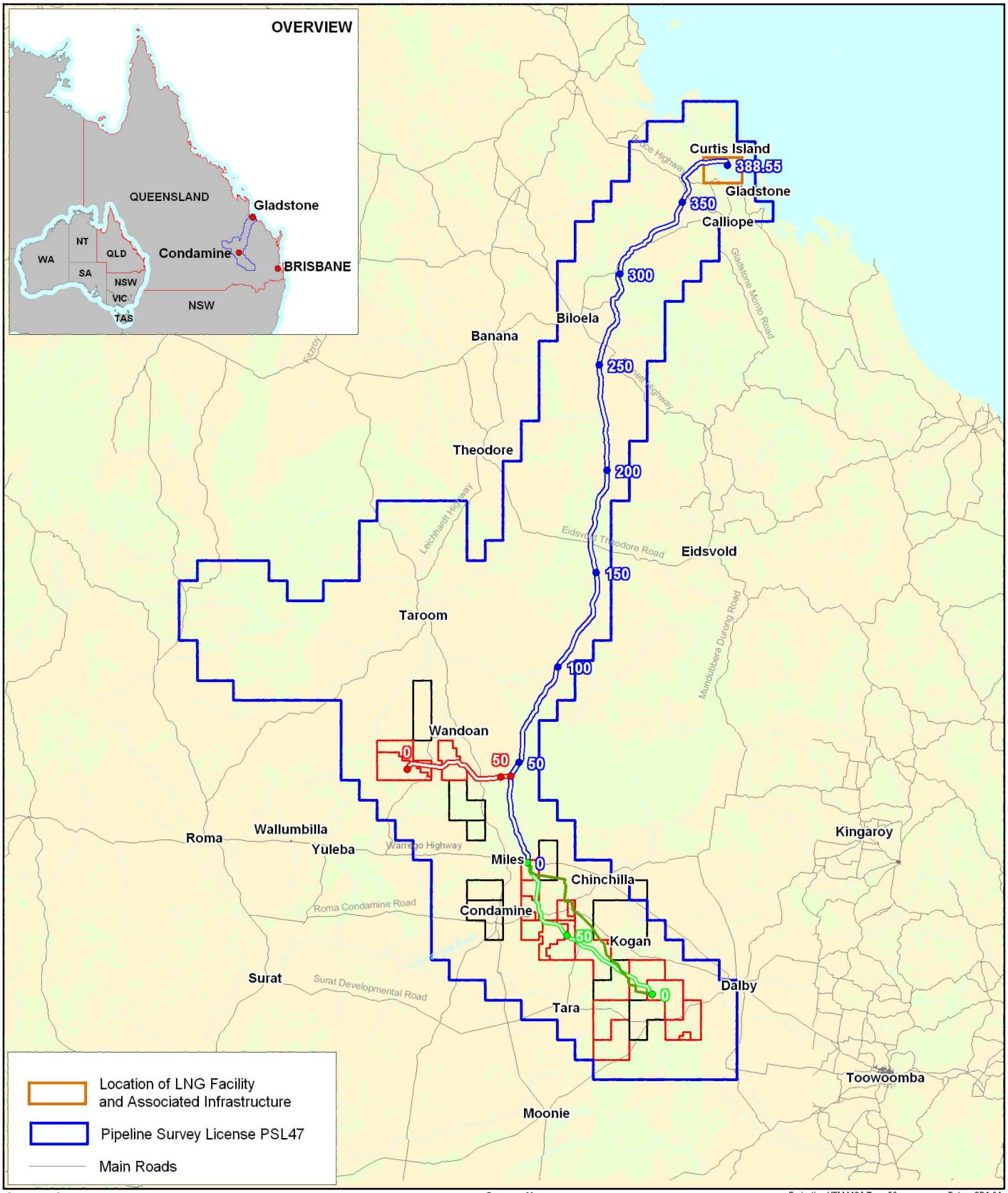
3 SUMMARY OF PROJECT COMPONENTS

The Queensland Curtis LNG (QCLNG) Project draft environmental impact statement (EIS) described the Project Components as QGC Project Components and Ancillary Components. A summary of these, including key changes subsequent to preparation of the draft EIS, is provided below.

3.1 AMENDMENT TO DESCRIPTION OF PROJECT COMPONENTS

The five Project Components as described in *Volume 2, Chapter 3* of draft EIS are outlined in *Table 2.3.1* below, along with a brief description of key changes. Detailed descriptions of changes to elements within each Component are provided in *Chapters 6* to *17* of this volume.

The location of Project Components is shown in *Figure 2.3.1*. Note that no significant changes to the geographic location of the Project have been made subsequent to submission of the draft EIS.



QUEENSLAND CURTIS LNG
A BG Group business

Project	Queensland Curtis LNG Project
Client	QGC - A BG Group business

Title **QCLNG Project Study Area**

ERM
Environmental Resources Management Australia Pty Ltd

Drawn	Unidel	sEIS Volume 2	Figure S2.3.1
Approved	CDP	File No	E05-P-MA-96245
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Table 2.3.1 Amendments to Project Components

Project Component	Draft EIS description	Amendment of Description for Supplementary EIS
Gas Field Component	The expansion of QGC's coal seam gas (CSG) operations in the Surat Basin. The Gas Field Component comprises: • Approximately 6,000 *gas production wells* over the life of the project with initially 1,000 to 1,500 wells across the Gas Field by mid-2014. The remaining wells will be phased in over the life of the project (20 to 30 years) to replace declining wells • *gas- and water-gathering systems* and *gas processing and compression infrastructure* • *associated surface equipment*, such as wellhead separators, telemetry devices and metering stations • *field infrastructure* such as access tracks, warehouses, camps (both construction and operations), office and telecommunications • the management of *Associated Water* produced in the CSG extraction process on the petroleum tenements. Water transported off the petroleum tenements for beneficial use, as defined by the *Water Act 2000 (Qld)*, is not discussed in this Environmental Impact Statement (EIS).	• *Associated surface equipment* may also include wellhead compression. • Reference to *replace declining wells* has been removed as the post-2014 wells will augment the initial 1,500 to ensure steady gas flow to the LNG Facility.
Pipeline Component	Development, construction, operation and decommissioning of a gas pipeline network of approximately 730 km to link the Gas Field Component and other nearby CSG resources to the LNG Facility. The pipeline network includes: • a 380 km *Export Pipeline* from QGC's Gas Field in the Surat Basin to the LNG Facility in Gladstone • potentially a 150 km *Lateral Pipeline,* which enables the connection of additional CSG fields to the Export Pipeline • a 200 km *Collection Header* – a central pipeline located in an Upstream Infrastructure Corridor (UIC) to collect gas from centralised compressor facilities for delivery to the Export Pipeline • a *pipeline crossing at The Narrows* connecting the mainland Export Pipeline with the LNG Facility on Curtis island.	• *Lateral Pipeline* has been removed from the EIS Reference Case and is no longer included as part of the Project impact assessment. • Reconfiguration of the gas Collection Header to Woleebee Creek.

Project Component	Draft EIS description	Amendment of Description for Supplementary EIS
LNG Component	Development, construction and operation within the Curtis Island Industry Precinct of the Gladstone State Development Area (GSDA) of an LNG processing plant (LNG Facility) with production capacity up to 12 million tonnes a year, nominally comprising three LNG processing units or 'trains' with 4 mtpa production capacity each. The LNG Component comprises: • onshore *gas reception* facilities • *gas pre-treatment facilities* for the removal of water and impurities from the feed gas • *gas refrigeration and liquefaction* units sized for 4 mtpa production trains • a *nitrogen rejection unit* for the removal of nitrogen in the feed gas • *three full containment LNG storage tanks* with up to 180,000 m³ capacity each, with space for another if required • *a full containment propane storage tank* with approximately 100,000 m³ capacity • *jetty and docking facilities* with turning basin for the loading of LNG carriers and unloading of propane ships to storage • a *material offloading facility (MOF)* for ferry transportation and construction material receiving • associated *onshore mainland facilities* • *utility requirements* to support the LNG Facility.	• *Gas refrigeration and liquefaction units* will have average production capacity of approximately 4 mtpa (per LNG train). In any given year, production may be up to approximately 4.3 mtpa of LNG per train, subject to optimisation of operations and maintenance scheduling. • The *three full containment LNG storage tanks* will be smaller, with capacities of between 140,000 m³ and 160,000 m³ each. • The *full containment propane storage tank* with approximately 100,000 m³ capacity has been removed from the EIS Reference Case and is no longer included as part of the Project impact assessment. • *Jetty and docking facilities* will be for loading of LNG carriers only. Unloading of bulk propane will not be required.
Swing Basin and Channel	Comprising the development of the following: • *MOF Channel* – a temporary access channel to the MOF for vessel access during construction of the Project • *Curtis Spur Channel* consisting of Berth Pocket, Swing Basin, Connecting Channel and upgrade of existing port channels • consideration of the range of options for *disposal or use of dredge material* from dredging activities undertaken for the above.	• The *MOF Channel* will provide access during both construction and operation of the Project. • In addition to the *MOF Channel*, a near-shore channel will be required to provide vessel access to a Construction Dock during the construction of the Project. • *Disposal or use of dredge material* for the MOF Channel and dredging for initial site access to a Construction Dock is considered as part of this supplementary EIS. • *Disposal or use of dredge material* from the *Curtis Spur Channel* is considered under the Port of Gladstone Western Basin Strategic Dredging and Disposal (WBSDD) Project and is therefore no longer included as part of the Project impact assessment.

Project Component	Draft EIS description	Amendment of Description for Supplementary EIS
Shipping Operations	Regular transit of LNG tankers and, potentially, infrequent transit of ships carrying propane to the LNG Facility for the 'spiking' of LNG. Shipping operations will involve three stages: loading LNG/unloading propane at the marine jetty; transit of ships through Gladstone Harbour; and transit of ships through the Great Barrier Reef Marine Park to open ocean.	The Project no longer proposes 'spiking' of LNG with propane. Bulk LPG carriers to deliver and unload propane have been removed from the EIS Reference Case and are no longer included as part of the Project impact assessment.

3.2 AMENDMENT TO DESCRIPTION OF ANCILLARY INFRASTRUCTURE

As noted in the draft EIS, the execution of the Project will require a range of associated or Ancillary Infrastructure. Other parties, solely or possibly with the involvement of QGC, will develop this Ancillary Infrastructure. The environmental assessment and planning permit processes for these Components are separate to this EIS.

Ancillary infrastructure as described in *Volume 2, Chapter 3* of draft EIS are outlined in *Table 2.3.2* below, along with a brief description of key changes.

Table 2.3.2 Amendments to Project Ancillary Infrastructure

Project Component	Draft EIS description	Amendment of Description for Supplementary EIS
Associated Water Infrastructure	Off-tenement transport of the associated water, covering water produced from the development of the Gas Field Component off-tenement and its beneficial use.	As for draft EIS.
Western Basin Strategic Dredging and Disposal (WBSDD) Project	The WBSDD Project to be undertaken by Gladstone Ports Corporation (GPC) involves the staged dredging of five new shipping channels and the reclamation of land in the Western Basin of the Port of Gladstone using the dredged material.	Western Basin Dredging and Disposal Project as described in the Gladstone Ports Corporation EIS as issued for public comment November 2009.
Bridge and Roads	Construction and operation of roads connecting existing roads on the mainland side of the Port of Gladstone with Curtis Island via a bridge from Friend Point to Laird Point. This is an alternative access option to marine transportation that is currently not preferred by QGC, and permitting for this component is not sought under this EIS.	A bridge and associated roads from Gladstone mainland to Curtis Island is not proposed by the Project and forms no part of planning for construction, operation or decommissioning of the LNG Facility. The bridge and associated roads have been removed from the EIS Reference Case and are no longer included as part of the Project impact assessment.