# 5 PROJECT CONSTRUCTION

## 5.1 INTRODUCTION

The information presented in this Supplementary EIS chapter discusses changes in the Project scope relevant to construction, and responds to submissions on the EIS. This chapter builds on the EIS, Volume 1, Chapter 5 Project Construction and should be read in conjunction with the EIS chapter.

As previously stated in the EIS Volume 1, Chapter 5 Project Construction, section 5.1, the commencement date for construction is dependent upon the timing of the Project approvals process, and the EIS and Supplementary EIS will not quote specific years for early works, construction and operation. The feasibility and progression of pre-construction and construction activities of the Project will be determined by a number of factors including the economic climate, thermal coal market outlook and resolution of infrastructure plans and costs, particularly the Surat Basin Rail, QR Network upgrades to Gladstone and export coal terminals. Taking these factors into consideration the indicative Project timing is now as provided in Table 5-1.

Table 5-1: Indicative Project timing

| Year | Explanation | Indicative dates |
|---|---|---|
| Year -3 | Early works | 2010 |
| Year -2 | 1st year of construction | 2011 |
| Year -1 | 2nd year of construction | 2012 |
| Year 1 | Commencement of operations | 2013 |

The methods associated with early works, site preparation and construction activities for the Project as described in the EIS Volume 1, Chapter 5 Project Construction generally have not changed as a result of the refinements/modifications to the Project.

## 5.2 CONSTRUCTION PROGRAM

### 5.2.3 CONSTRUCTION

Building on the information in the EIS Volume 1, Chapter 5 Project Construction, section 5.2.3, additional features and activities undertaken during the construction phase will include:

- commencement of mining of Austinvale North Pit as part of the tailings storage strategy for the Project, as further described in Supplementary EIS Chapter 6 Project Operations, section 6.4.4
- potential use of small combined cycle gas fired generators as an alternative to diesel generators for power supply during construction.

As a potential alternative to the construction power supply and ongoing emergency power supply during Project operations from 11 kV diesel generators, the use of small combined cycle gas fired generator/s with less than 10 MW combined electrical output may be undertaken. Given the small size proposed, an off-the-shelf combined cycle gas fired engine/s is considered the most feasible technology option. The location of the small gas fired generator/s would be the same as the location of the 80 MW total site supply option (Option 3) and 30 MW partial site supply option (Option 4) discussed in the EIS Volume 1, Chapter 6 Project Operations, section 6.6.9. Gas supply would be conventional gas, sourced from the lateral Peat Scotia gas pipeline, as described in EIS Volume 1, Chapter 6 Project Operations, section 6.6.9.

# 5.3 DESCRIPTION OF ACTIVITIES

## 5.3.3 CONSTRUCTION

### Civil works

Regarding construction of the gas supply pipeline, the pipeline alignment is largely adjacent to the eastern boundary of the Surat Basin Rail corridor. Further to the construction information provided in the EIS Volume 1, Chapter 5 Project Construction, section 5.3.3, a civil construction crew will proceed ahead of the pipeline construction crew to prepare the approved construction corridor. Activities will include vegetation clearing, grading, and the construction of access tracks from nearby roads to the construction corridor, if necessary. The use of existing access tracks will be given first preference to avoid any unnecessary clearing.

Vegetation clearing and grading will be carried out only when absolutely necessary to provide for safe construction within the corridor, and will follow the protocol for vegetation clearing outlined in Chapter 17A Terrestrial Ecology.

The proposed maximum width of the construction corridor will be 20 m along the entire route to allow construction activities to be carried out in a safe and effective manner.

This width may be reduced to less than 20 m at some locations where there may be environmentally sensitive areas near or at the edge of the corridor.

The corridor will be cleared of heavy vegetation but root stock will be left in the ground, where practicable, to stabilise the area and reduce soil erosion. Native seed will also be collected prior to clearing for use in the revegetation of the cleared areas during final site rehabilitation works. In treed areas, the vegetation will be mulched and stockpiled for future respreading in rehabilitated areas. All stockpiles will be placed away from drainage lines, and will not impede drainage flowpaths.

Stringent weed management procedures will be implemented during these tasks to ensure appropriate protocols are implemented to prevent or minimise the spread of noxious weeds to surrounding bushland. Weed-infested vegetation will be separated and disposed off-site to an approved waste management facility.

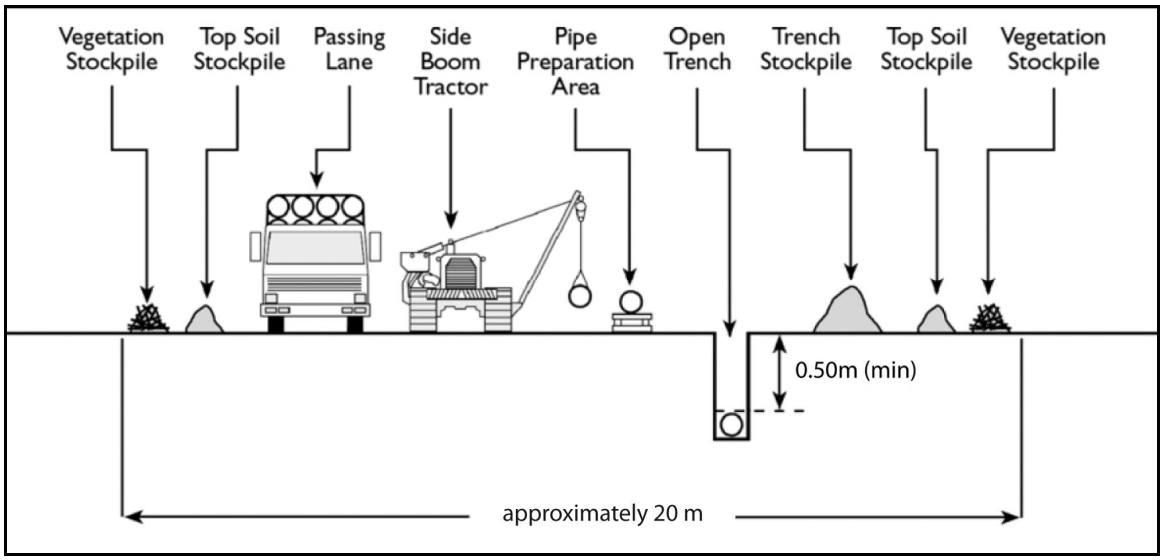
Tree hollows, dead logs and other areas of potential fauna habitat found within the corridor will either be preserved in-situ or relocated to an appropriate location outside the corridor.

Large mature trees that have not already been identified as environmentally sensitive and fenced off will be preserved, where possible, particularly in areas where they may be located near the fringes of the construction corridor.

The maintenance of the existing vegetative barrier along the fringes of the construction corridor will be a key aspect of the vegetation management plan associated with the Construction EMP, as this will limit the impact of habitat clearing on resident fauna species, as well as providing a visual screen between the construction corridor and the nearest residential premises.

The construction corridor will be levelled to the required grade using graders, backhoes and bulldozers. Topsoil will be removed and stockpiled separately for reuse during final site rehabilitation works.

The conceptual layout of stockpiles and general construction site layout is shown in Figure 5-1.




Source: APIA, 2005

Figure 5-1: Typical right-of-way construction layout

As stated in the EIS Volume 1, section 5.3.3, the depth of cover over the gas supply pipeline will be 500 mm to 1,200 mm, depending upon the land use and the assessed risk in any location. Depth of cover may be increased where a risk assessment identifies increased potential of damage to the gas supply pipeline.

## 5.4 CONSTRUCTION WORKFORCE

## 5.5 MATERIALS, PLANT AND EQUIPMENT SOURCING AND TRANSPORTATION

## 5.6 HEALTH AND SAFETY

To clarify issues raised in submissions on the EIS, the provision of food to the workforce, where food is supplied by the Wandoan Joint Venture, will comply with the *Food Act 2006* and associated Regulations.

## 5.7 SITE MANAGEMENT AND SECURITY

## 5.8 POTENTIAL IMPACTS FROM SITE PREPARATION AND CONSTRUCTION PHASES

## 5.9 REFERENCES