

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Context

The Corrib development consists of a series of gas wells and seabed infrastructure in the Corrib field, a manifold that gathers the flow of gas from each of the wells, and a pipeline leading from the manifold to the onshore terminal located at Bellanaboy Bridge. There will also be a multipurpose umbilical that runs from the terminal to the Corrib field. The multipurpose umbilical contains the following services:

- 5 electrical power cables and signal cables;
- 5 hydraulic fluid lines;
- 5 chemical lines; and
- 2 treated produced water cores.

An outfall pipeline for the discharge of treated surface water run-off from the terminal site runs along the route of the pipeline between the terminal and a point offshore approximately 12.7km from the landfall. The treated surface water run-off discharge pipeline will terminate vertically on the seabed in around 65m water depth.

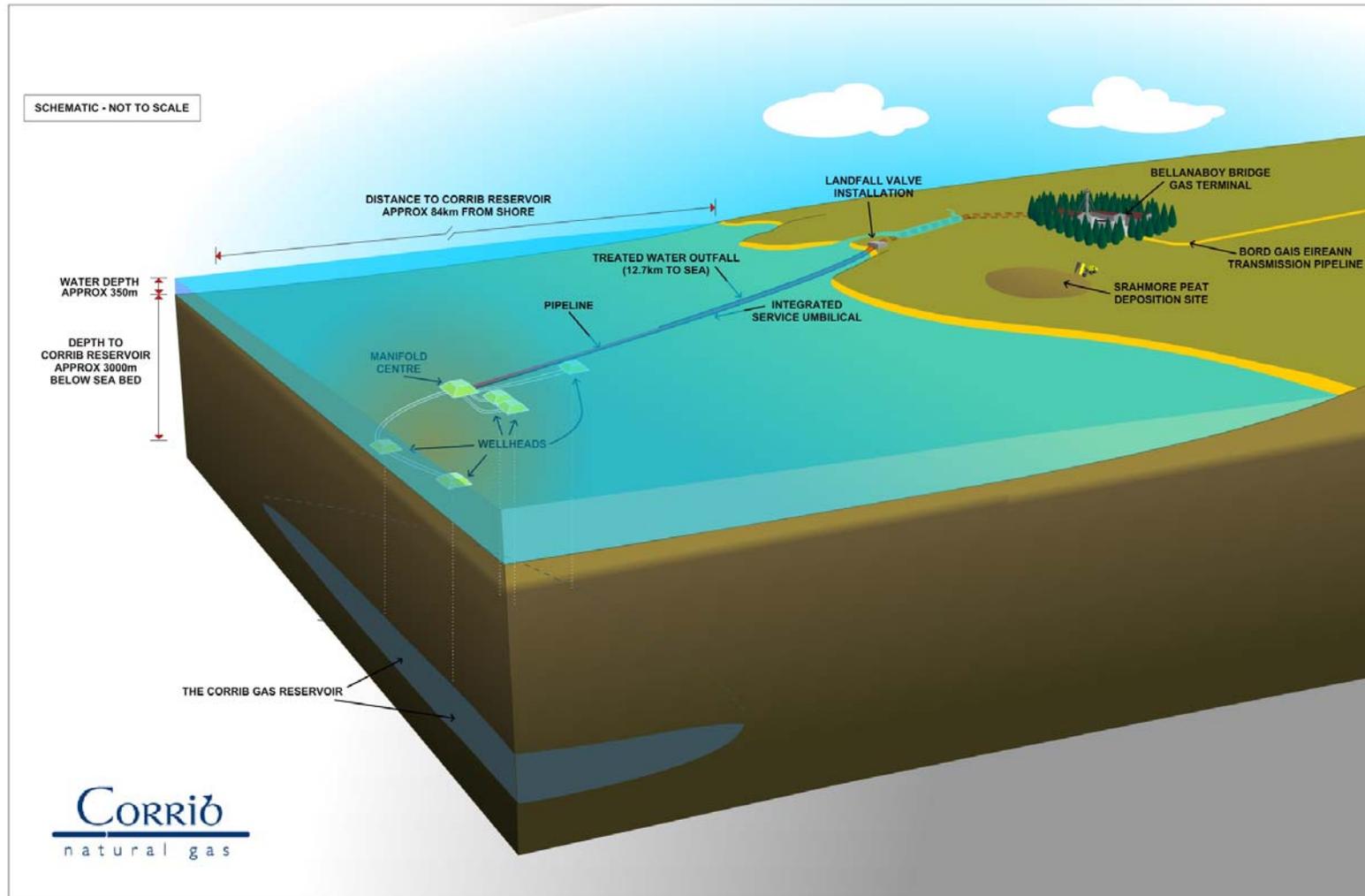
A schematic of the Corrib Development is shown in Figure 2-1.

This Supplementary Update Report focuses on the offshore components of the development, the section of pipeline between the landfall (including a new landfall valve installation (LVI)) and the terminal itself are discussed in the RPS Onshore Pipeline EIS 2010.

The description of the proposed development remains very much as described originally in the 2001 Offshore EIS. However, there have been some construction activities on the project, which are described in the following paragraphs.

Aspects of the development that are yet to be installed, and have undergone minor design changes, are detailed in Section 2.2.

Figure 2-1: Schematic of the Corrib development



2.1.1 Corrib Field

At the time of submission of the 2001 Offshore EIS, five exploration and appraisal wells had been drilled in the field (P1 to P5). These had been suspended (i.e. made safe but enabling later conversion to production wells).

In 2006, wells P3 and P4 were completed using the Sedco 711 drilling rig. Christmas trees (arrays of valves at the top of a well that control the production rate from the well) were installed at both of these wells. Wellhead protection structures were installed over each of the five wellheads (P1 to P5).

In 2007, the Sedco 711 returned to the field to drill a new well P6 (which is located close to the manifold), and it also drilled well P101 as a replacement for P1 (again close to the manifold). Christmas trees were installed at both wells and also at well P5 to the south-west of the main cluster of wells. Wellhead protection structures were installed over the two new wells (P101 & P6). In addition, the foundation and protection cover for the manifold and the concrete foundation for the Pipeline End Manifold (PLEM) were installed.

In 2008, wells P5, P6 and P101 were completed, and the manifold module was installed inside its protection structure.

The final completion of well P2 including the installation of a Christmas tree will, if required, be carried out at a later stage in accordance with a detailed schedule to be agreed with the DCENR.

2.1.2 Pipeline Route

The offshore pipeline was installed in 2009, this included burial wherever necessary. There remains one short section within Broadhaven Bay where additional works on the pipeline are required to provide full stabilisation. In 2009 some finer grade rocks were deposited on the pipeline between KP80 and KP81.5, and it is intended that coarser grade rocks are placed over these in 2010 to complete the stabilisation. Poor weather at the end of the 2009 construction season precluded the completion of this operation at that time.

2.2 Proposed Development

This section describes any changes to the specification of project components since the submission of the Offshore EIS in 2001.

2.2.1 Pipeline

The wall thickness of the offshore gas pipeline varies from 21 to 27mm (compared with 25mm as stated in the 2001 Offshore EIS).

The gas pipeline was constructed of high-strength carbon steel specified in accordance with the requirements of Det Norske Veritas (DNV) code OS-F101 and is at least equivalent to the American Petroleum Industry's standard API 5L grade X70.

The wall thickness and material grade of the steel pipe gives the pipeline its strength to resist the internal pressure of the gas.

Sections of the pipeline have been provided with a concrete coating where required to assist with protection and to increase the overall weight. Pipeline stability has been designed in accordance with DNV code RP E305.

Due to the presence of an area of bedrock outcrop in Broadhaven Bay a section of the offshore pipeline was identified as requiring additional protection to prevent scour and potential free-spanning of the pipeline. In September and October 2009 a filter layer of

rock was placed over the pipeline between KP 80 and KP81.5, including a section west of the outcrop that was left untrenched as a result of the boulder-rich sub soil.

In 2010 it is envisaged that remedial work to the existing rock berm may be required (to be ascertained following a survey) followed by the placement of an over coat of rock armour of heavier grade to ensure long term stability of the rock berm. The berm will be approximately 13-17m in width and rising to a height of around 1.5-2m above the surrounding seabed when completed. Additional protection may be required in the event that the planned survey of the trenched section identifies areas of insufficient backfill or insufficient cover.

Similar rock placement or alternative methods of stabilisation e.g. matting may be required in specific locations following the installation and burial of the umbilical in 2011 (see below).

2.2.2 Umbilical

The control umbilical will be approximately 5 inches in diameter. Two cores within the umbilical previously identified as spare will be used to carry treated produced water to the Corrib field manifold where it will be discharged in approximately 350m water depth. The two cores will be 19mm in diameter and 25.4mm in diameter respectively. Discharge from the cores will take place approximately 2m above the seabed, within the manifold, where seven access apertures/windows will effectively provide a multi-port outfall.

2.2.3 Discharge Pipeline

The discharge pipe (outfall pipe) described in the 2001 Offshore EIS as being laid from the terminal to a discharge point in Broadhaven Bay was installed at the same time as the gas pipeline. It was "piggy-backed" onto the larger gas pipe, and now terminates approximately 2.5km north of Erris Head, in water depths of around 65m in the open Atlantic Ocean, outside Broadhaven Bay cSAC. The discharge point is located approximately 12.7km from the pipeline landfall (compared with 7km as stated in the 2001 Offshore EIS). The assembly terminates approximately 0.5m above the sea bed and is protected by a steel cover. This assembly has been partially trenched to minimise trawl interference. This discharge pipe will carry treated surface water run-off only. The outfall pipeline is 10 inches in diameter and constructed of high density polyethylene.

2.2.4 Landfall Facilities

As detailed in the 2001 Offshore EIS, there will be a requirement for valves in the pipeline from the landfall to the terminal, and a termination unit for the umbilical. These will be contained within an underground enclosure at the landfall known as the landfall valve installation (LVI). The LVI is discussed in further detail in the RPS Onshore Pipeline EIS 2010.