Corrib Field

P6 Flexible Flowline Installation

Method Statement

Revision 03

August 2020

Confidential

Contents

1 Scope and method of works 3

1 Scope and method of works

Overview of Activities	**Work will include:** - Mobilise Vessel from UK Port - Sail directly to the Corrib field - Conduct DP trials and a USBL verification - Complete As-Found Survey - Complete Flexible Replacement Operations - Complete As-Left Survey - Vessel sails for UK Port for demobilisation - End of offshore Operations
Location	- Corrib Field – P6 Wellhead/Protection Structure (Lat/Long: 54° 20' 18.224"N / 11° 03' 26.705"W - See Fig. 1) - Distance of vessel activity from West Connacht Coast SAC approx. 65 kms
Timescale[1]	- The above works are anticipated to be carried out between July and October in either 2021 or 2022[1] for circa 6 days depending on weather conditions
Technique	- As-found video survey and seabed preperation. - Depressurise the existing flowline and displace hydrocarbon gas into Corrib manifold and subsea process system (approx. 27m^3 hydrocarbon gas will be displaced using a combination of a Methanol gel slug followed by Inhibited MEG/Water and a final Methanol gel slug) - Install isolations at Corrib subsea manifold and P6 tree - Disconnection of existing flexible flowline from Corrib subsea manifold and tree and installation of long term protection endcaps - Reposition existing flowline ends. - Prepare laydown area and layroute for new flexible flowline - Deploy new flexible flowline from installation vessel prefilled with Methanol Gel from mobilisation - Connect new flexible flowline to Corrib subsea manifold and P6 wellhead (Max. 158m in length and max 8” diameter) - Carry out pressure testing and pre-commissioning activities of new flowline - Install protecitve matresses along the length of the new flowline - Install protective concrete matresses onto disconnected flexible - Tidy up worksite and carry out visual ROV As-left survey - Vessel operates to the Vessel Code of Conduct.
Equipment	- ROV Support Vessel

[1] timescale estimates are subject to regulatory approvals and suitable weather and sea state conditions

	- Workclass ROVs c/w ROV Tooling as follows: o Rock replacement system o Matress lifting beam o Water jet cleaner o Icarus remote invertention tooling o New flexible flowline (Max. 158m in length and max 8" diameter) - Concrete protection mattresses (6m x 4m x 0.15m) Approx 25qty max - Subsea pre-comissioning spread (On Vessel) and chemicals. Note: any chemicals used for comissioning activities other than inhibited potable water will not be released to sea, but will remain within the subsea production system and will be processed at the plant. - Sand bag or rock gabions will be deployed to be used as turning bollards. These will be recovered to deck post flexible installation - Survey Equipment proposed for Post and As-Built Surveys as follows: o Vessel DGNSS high accuracy positioning o Vessel high accuracy GPS based heading reference and motion sensor o Vessel 501 HiPAP USBL system o ROV USBL Transponder / responder o ROV survey class gyro compass and motion sensor o ROV Centre colour and SIT cameras o ROV Green Line laser o ROV High accuracy bathymetric sensor o ROV forward looking multibeam sensor
Restrictions	- Sea conditions (e.g. wave height and period, wind speed) - Observe Vessel Code of Conduct
Environmental Impact	- Potential impact on marine mammals from the presence of vessel/ROV operations. Behavioural avoidance responses might occur close to the works (within 200m) but are unlikely at distances greater than 200m. - There is a risk of minor leaks of oil/diesel from equipment on the vessel deck during the course of the work. - Inhibited MEG/Water will be used for flexible precomissioning activities. - An inhibited MEG/Water mix with a Methanol Gel Slug will be injected into the existing flowline from P6 via a hot stab to displace gas into the manifold prior to depressurizing the flowline. This prevents any requirement for displacement of gas or chemicals to sea during this process. - A methanol gel will be injected into the in the new flexible prior to mobilization, which will not be released to sea and will be retained within the subsea process system and produced back to Bellanaboy Bridge Gas Terminal - The work will be scheduled in order to minimise the duration of project activities and to confine activities to as small an area as possible to limit disturbance

	- Pre-Scans and watches conducted by MMOs as per Vessel Code of Conduct - Consultation with fishing organisations in advance of planned workscopes - Maintenance, audits and inspection plans are in place to identify oil leaks at an early stage
Mitigation	- Minimal use of acoustic survey equipment only required for As-found and As-left Surveys. At all other times, noise will be limited to vessel operations only. - No requirements for refueling of any deck equipment. - Maintenance, audits and inspection plans are in place to mitigate the risk of potential oil leaks at an early stage. - MSDS Sheets will be made available for any chemicals used for pre-commissioning activities - In the event of an oil/diesel spill from equipment on the vessel deck during the course of the work, oil spill equipment will be provided on board operating vessels.
Reinstatement	- Not applicable
Contingency	- Shipboard Oil Pollution Emergency Response Plan will be implemented in the event of a spill.

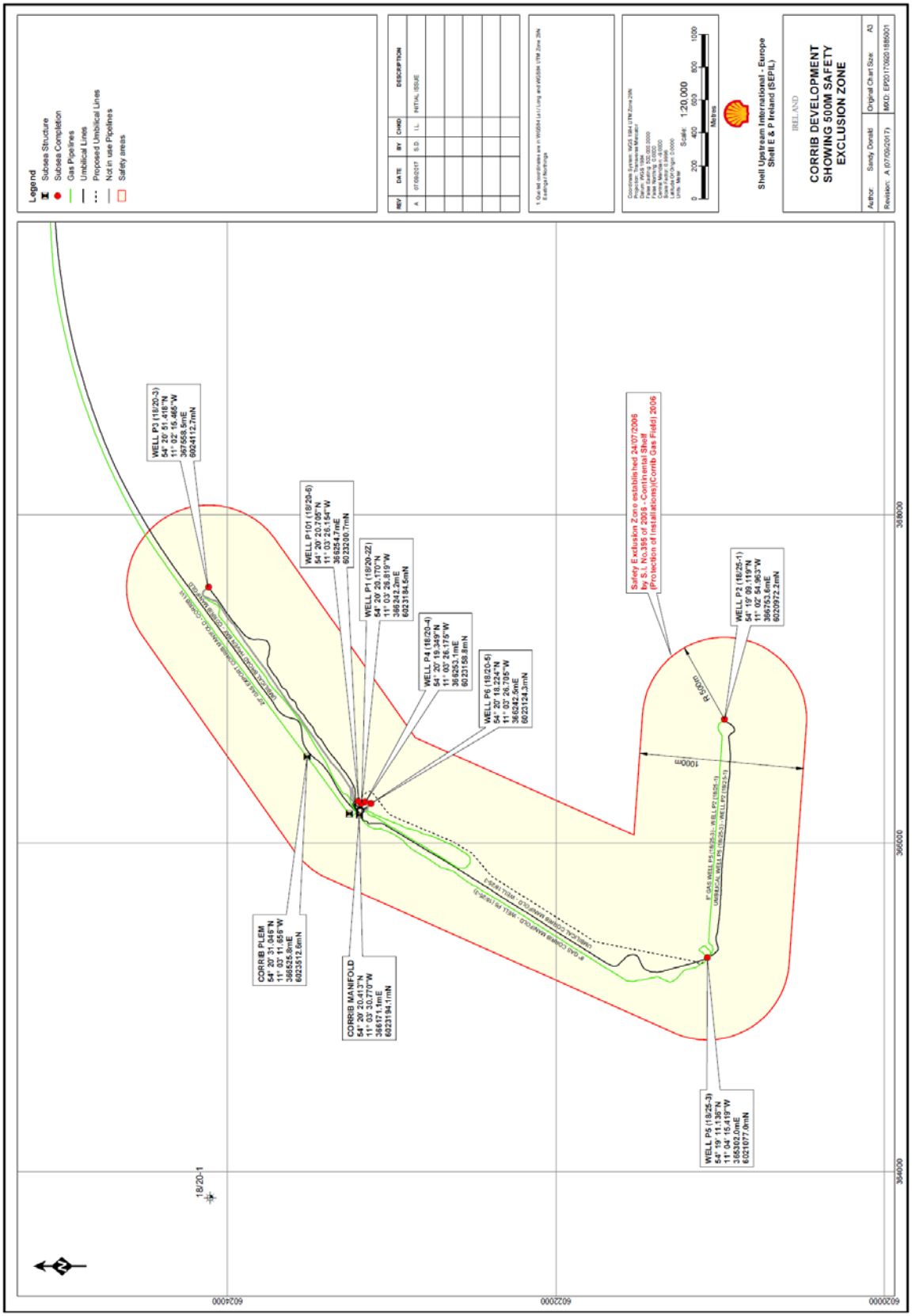

Fig 1. Corrib Field Layout

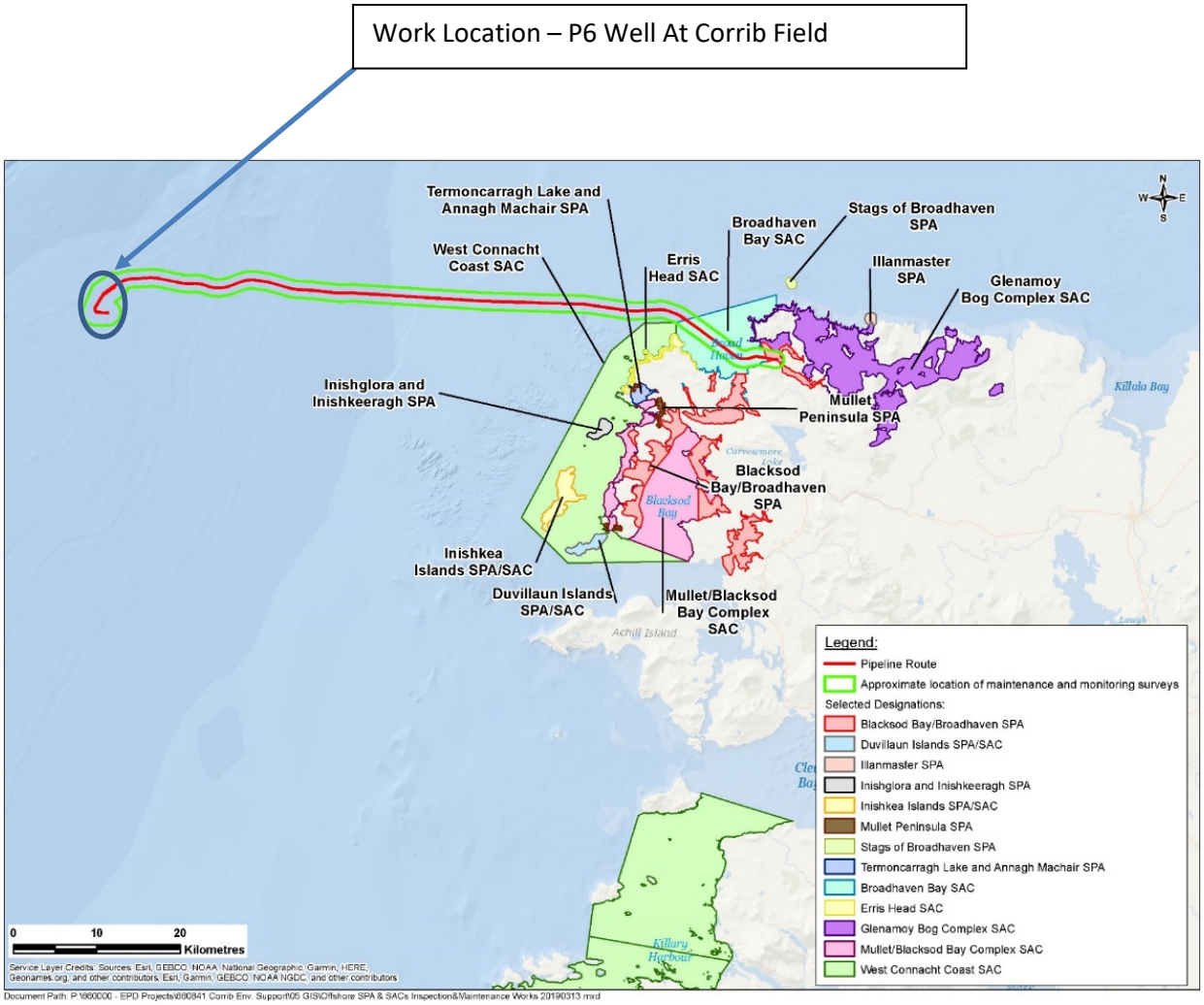

Fig 2. Location of works with respect to Special Areas of Conservation (SAC) and Special Protection Areas (SPA's)