BARR CREGG WIND FARM

Further Environmental Information 2018

Volume 1 - Non-Technical Summary

powering change

Contents

Preface

This Further Environmental Information 2018 has been prepared in support of the planning application for the proposed Barr Cregg Wind Farm. The proposed wind farm is located in the townlands of Barr Cregg, Ballymaclanigan and Slaghtmanus, near Claudy in County Londonderry.

The FEI has been prepared by Renewable Energy Systems Limited (RES) in collaboration with the various specialists outlined below.

FEI Technical Support

Technical Specialism	Organisation
Outline Habitat Restoration Management Plan	Ross Environmental Associates Blackstaff Ecology David Steele McCloy Consulting Paul Johnston Associates
Ornithology	David Steele
Hydrology	McCloy Consulting
Landscape & Visual	Shanti McAllister – Planning & Design
Socio-Economics	Oxford Economics

An electronic version of the FEI 2018 and other details about the project can be viewed at www.barrcregg-windfarm.co.uk.

Reference copies of the full ES (2012), FEI (2014), FEI (2016), FEI (2018) and planning application(s) may be viewed and or purchased during normal opening hours at the following location

Diamond Centre

630 Baranailt Road

Claudy

County Londonderry

BT47 4EA

028 7133 8005

Paper Copies of the NTS are available free of charge. The ES (2012), FEI (2014), FEI (2016) and FEI (2018) are available free of charge on CD or in paper form at a cost of £50 each from the address above, or by contacting RES. Cheques should be made payable to Renewable Energy Systems Ltd.

Renewable Energy Systems Ltd

Williowbank Business Park

Willowbank Road

Millbrook

Larne

County Antrim

BT40 2SF

028 2844 0580

Context

Renewable Energy Systems hereafter referred to as 'RES', applied to DOE Planning Service for consent to construct a wind farm of seven wind turbines on land at Barr Cregg, approximately 4.5km north of Claudy and 9km south/southeast of Eglinton in the townland of Barr Cregg, County Londonderry. The planning application (Ref A/2012/0401/F) was submitted on 20th August 2012.

The application was subject to Environmental Impact Assessment (EIA) under the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2012. Environmental information in the form of an Environmental Statement to accompany the planning application was prepared by RES. A full project description, including a range of technical and environmental studies were prepared to allow the Planning Service to assess the environmental impacts, and these were reported in the Barr Cregg Wind Farm Environmental Statement (ES) which accompanied the planning application.

The proposal comprises the construction of seven turbines (each with an overall maximum height of 125 m above ground level) and associated infrastructure including a hardstanding pad at each turbine for crane erection, an upgraded site entrance, new and upgraded onsite access tracks, an onsite substation and control building, underground cables, two temporary monitoring masts, a permanent meteorological mast, a temporary construction compound, a temporary enabling works compound amd road widening and improvement works on sections of the transport route (road improvement works).

DOE Planning requested Further Environmental Information on 23rd October 2013 following consultation with statutory and non-statutory bodies. RES submitted FEI on 28th February 2014, which included 2 additional applications for an additional section of site access track and passing bays (A/2014/0112/F & A/2014/0114/F respectively). All consultation responses where received by Planning Service by January 2015. By April 2015, Planning Service had not reached a decision and all 3 planning applications (A/2012/0401/F, A/2014/0112/F & A/2014/0114/F) were passed to Derry & Strabane District Council as part of the Reform of Planning Administration.

In June 2015, Derry & Strabane DC Planning Department recommended that the main application for Barr Cregg Wind Farm (A/2012/0401/F &) be refused and following presentation to the planning committee on 1st July 2015, the application was refused and a decision notice issued on 21st July 2015. On 4th August 2015, Renewable Energy Systems Ltd submitted an appeal to the Planning Appeals Commission.

In October 2015 - Derry & Strabane DC Planning Department recommended that the planning applications for additional access track (A/2014/0112/F) and passing bays (A/2014/0114/F) be refused and was presented to the planning committee on 7th October 2015. On 6th November 2015, Renewable Energy Systems Ltd appealed the decision to the Planning Appeals Commission. A decision notice was issued on 28th November 2015.

In November 2016, an Informal Hearing was undertaken by the Planning Appeals Commission (PAC) and the RES UK & Irelands appeal was dismissed on 25th June 2017 on one very narrow ground relating to impact upon priority habitats.

Following a judicial review hearing at Belfast High Court on 24th January 2018, Keegan J concluded on the 21st February 2018 that "I have decided that this decision must be

quashed and any reconsideration must be made in light of this judgement". She quashed all three decisions.

A re-hearing is due to be heard by the Planning Appeals Commission on the 25th October 2018 and this FEI (2018) has been prepared and submitted to take into account the upcoming hearing.

This document is a 'non-technical' summary of the Further Environmental Information (2016) with detailed information being presented in the FEI (2016), FEI (2014) and ES (2012).

Further Environmental Information

The purpose of this FEI is to update and complement, where appropriate, the environmental information previously submitted. The FEI (2018) together with the FEI (2016), FEI (2014) and ES (2012) will comprise the environmental information before the Planning Appeals Commission.

This FEI (2018) is to be read in conjunction with the following documents and associated appendices:

- Environmental Statement (2012) except Socioeconomic Chapter which has been superceded by the Socioeconomic Chapter within FEI (2016);
- Further Environmental Information (2016) and FEI (2014) which provides addenda to the full chapters included within the ES (2012);

The information contained in the Further Environmental Information (2018) Volumes 1 – 3 has been produced to present addenda (where relevant) that take account of amendments to the proposed scheme in the form of increased habitat enhancement and to reflect any changes in the baseline of the respective topics. This has been undertaken to provide clarity for the Planning Appeals Commission.

The Applicant

RES is one of the world's leading independent renewable energy project developers with operations across Europe, the Americas and Asia-Pacific. At the forefront of renewable energy development for over 30 years, RES has developed and/or built more than 9,000 MW of renewable energy capacity worldwide. In the UK alone, RES currently has more than 1,000 MW of projects either constructed, under construction or consented. RES is active in a range of renewable energy technologies including both onshore and offshore wind, solar, wave and tidal as well as enabling technologies such as energy storage and demand side management. RES has been developing wind farms in Ireland since the early 1990s.

RES has developed 16 onshore wind farms in Northern Ireland totalling 229 MW, which equates to 36% of Northern Ireland's onshore wind capacity. RES currently operates over 83 MW of wind capacity across Northern Ireland, has secured planning permission for a further 112 MW awaiting construction and has 92 MW in the planning system.

Project Description

Excepting the changes described herein, the elements of the proposed Barr Cregg Wind Farm remain as described in Chapter 3 of the Barr Cregg Wind Farm Environmental Statement (Aug 2012), Further Environmental Information (2014) and Further Environmental Information (Feb 2016) remain unchanged.

Alternative Infrastructure Layout

The Alternative Infrastructure Layout (Figure E - RevA), which was submitted as a separate planning application (A/2014/0112/F) has been updated to take account of the omission of the permanent meteorological mast and associated infrastructure which reduces the overall permanent infrastructure by 569m2 to 36,151m2.

The removal of the met mast also frees up an additional area of drained and degraded bog and wet heathland habitat that is now proposed for habitat enhancement through ditch blocking.

The Alternative Infrastructure Layout (Figure E - RevB) is attached.

Supplementary / Additional Assessments

Outline Habitat Restoration Management Plan (Addendum) 2018

The purpose of this OHRMP (Addendum) 2018 is to describe and quantify the proposed habitat restoration and enhancement/improvement proposed as part of the mitigation package for the Barr Cregg Wind Farm.

In the original OHRMP (2016), six areas of the site were identified as locations where ditch blocking would take place. In April 2018, an additional ten new areas have been identified for ditch blocking and rewetting of drained and degraded bog.

An additional 19 hectares of habitat enhancements is now incorporated into the current proposal covering an area of over 30 hectares. The overall package of habitat enhancement at Barr Cregg is now assessed to be approximately 11.575 times more than the 2.6 hectares of degraded habitat lost to the proposed development.

In conclusion, the Barr Cregg Wind Farm Development will provide a valuable vehicle for delivering enhancement/improvement of degraded blanket bog and wet heath habitat and contributing to Northern Ireland's Habitat Action Plan (NIHAP) targets. In the absence of other funding for habitat management outside of designated sites, cooperation between the NIEA and other partners, including wind farm developers, is likely to be one of the very few ways in which existing degraded and fragmented blanket bog habitats in the uplands of Northern Ireland can be restored and enhanced, and one of the few ways that NIHAP targets can be achieved.

Ornithology

The baseline for breeding birds for the Barr Cregg Wind Farm site has been updated by way of four Moorland Bird Survey (MBS) visits completed during April to early July 2018. These surveys were undertaken to inform habitat enhancement measures proposed as part of the oHRMP and confirm the validity of the original baseline breeding surveys.

The updated baseline indicates that the breeding bird community found within the Barr Cregg Wind Farm site is overall very similar to that found by the original baseline surveys. The most significant change is that snipe is not now recorded as a breeding species within the site and this is likely due to deterioration in habitat quality for this species.

It is concluded that providing the proposed mitigation measures are implemented then there are no significant ornithological issues in relation to the proposal and the oHRMP proposals are likely to deliver benefits (by way of improved habitat) for snipe and several other bird species of conservation concern (skylark, meadow pipit, stonechat and reed bunting).

Hydrology

This assessment appraises of the effects of the proposed amendments to the development, comprising particular aspects of the proposed Revised Outline Habitat Restoration Management Plan (OHMRP) on hydrology.

To inform habitat restoration planning, all areas where restoration measures are proposed have been subject to a thorough hydrological / ditch mapping exercise. Mapping was undertaken based on a combination of desktop survey from orthophotographic mapping, following by detailed groundtruthing which included verification of ditch location, typical flow, and measurement of typical dimensions.

Hydrological surveys coincided with proposed wind farm infrastructure and were undertaken between 2011 and 2016. A new detailed survey in additional habitat enhancement areas G to J was undertaken in April 2018.

The potential effects of the revised OHMRP on the hydrological site setting have been identified and assessed, including additional baseline assessment for areas affected by the proposals.

There are no new or changed effects that would affect the outcome of the previous Water Framework Directive assessment, and the mitigation stated in that assessment would remain effective.

Specific to habitat restoration measures to restore bog habitat, over the operational lifetime of the wind farm and those restoration measures, it would be reasonable to anticipate that the restoration measures would have a beneficial effect to the hydrological environment.

Landscape & Visual

Appendix 6.3 has been updated to reflect changes to the baseline since the original planning application (2012). The current cumulative baseline includes a total of 22

existing, 11 consented and 8 proposed wind farms within 30km of the Proposed Development.

Figure 6.4 (Vol 3) has been updated to illustrate all known changes to the cumulative baseline.

Figure 6.25 (Vol 3) has been updated to show visibility of Ballyhanedin Wind Farm and its relationship with the Proposed Development. Although visible from several Viewpoints used in the LVIA, Ballyhanedin is not generally visible in proximity to Barr Cregg, or where Barr Cregg would have a significant effect on the nature of the available view. No other LVIA Viewpoints have been revised.

The updated assessment does not change the previous conclusions. The Development is well designed and sited in accordance with best practice guidance and policy:

- It has a simple compact layout;
- Its location on an upland hill slope rather than a ridge serves to limit its visibility significantly as evidenced by the very small Zone of Theoretical Visibility in comparison with other wind farm developments;
- It has minimal effects on designated landscapes.

Socio – Economics

This addendum to the economic impact report has been undertaken to reflect changes to both project economics and wider economy since the last assessment. The report re-iterates the main positive benefits that are likely to emanate from the Barr Cregg Wind Farm scheme.

The proposed development is estimated to result in a capital spend of approximately £21.53 million. Of this an estimated £7.77 million of construction phase spend will be realised in Northern Ireland.

Over the lifetime of the project, the business rates, taxes and land rental will collectively amount to approximately £12.14 million

Electricity production of 46.6 GWh per year (based on a load factor of 38%, provided by RES), meeting the needs of 12,200 homes[1], the equivalent of 21.1% of all households in Derry City and Strabane District Council[2].

Reduction of CO2 emissions by 21,400 tonnes each year, the equivalent of 13,5003 newly registered cars.

[1] The number of homes is calculated by dividing the amount of electricity produced (46.6 GWh) by the annual UK average domestic household consumption (temperature adjusted) figure published by the Department of Business, Energy and Industrial Strategy (BEIS).

[2] Oxford Economics' Local Model Suite

[3] Figure is based on the average C02 emissions (grams per km) for newly registered cars in 2014 in Great Britain. This data is published by the Department for Transport Statistics (Table VEH0150).

Summary

The main change made as part of FEI (2018) is the significant increase of habitat enhancement proposed as part of the development. An additional 19 hectares of habitat enhancement is now incorporated into the current proposal covering an area of over 30 hectares. The overall package of habitat enhancement at Barr Cregg is now assessed to be approximately 11.575 times more than the 2.6 hectares of degraded habitat lost to the proposed development.

The overall planning application boundary of the wind farm site is 77.0 hectares (Ha). However, the actual wind farm infrastructure will occupy a much smaller part of the area (4.3 Ha). Therefore a maximum of approximately 5.6% of the land within the planning application boundary will be utilised by the development due to the relatively small footprints of the infrastructure and the wind farm design criteria applied in the design process.

Nearly 100 Ha of habitat management is proposed within land under the applicants control, comprising a combination of drain blocking, heather brash reseeding and reduced grazing for the 25 year lifetime of the wind farm. Therefore the extent of habitat management areas are >23 fold that of the proposed development.

The proposed 14 MW wind farm is estimated to Electricity production of 46.6 GWh per year (based on a load factor of 38%, provided by RES), meeting the needs of 12,200 homes4, the equivalent of 21.1% of all households in Derry City and Strabane District Council5.

The potential effects of the proposed Barr Cregg Wind Farm have been assessed in accordance with regulatory requirements and good practice. The ES (2012), FEI (2014), FEI (2016) and FEI (2018) incorporate technical assessments of the proposed development based on requisite legislation and relevant planning policy framework and have demonstrated that significant environmental effects associated with the construction, operation and decommissioning of the proposed wind farm have been avoided or minimised through the use of the iterative design process and with the application of mitigation measures.

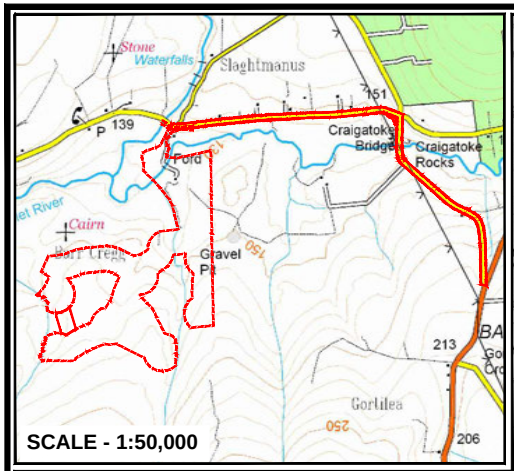
The Barr Cregg Wind Farm will provide a number of benefits. The scheme will result in a reduction in greenhouse gas emissions from the electricity generating industry by harnessing wind as an alternative to the burning of fossil fuels, in line with the local government's energy goals and wider UK energy targets.

Paragraph 5.72 of SPPS states "Planning authorities should be guided by the principle that sustainable development should be permitted, having regard to the local development plan and all other material considerations, unless the proposed development will cause demonstrable harm to interests of acknowledged importance". RES are firmly of the opinion that the Barr Cregg Wind Farm is a suitable location for a wind farm development

[4] The number of homes is calculated by dividing the amount of electricity produced (46.6 GWh) by the annual UK average domestic household consumption (temperature adjusted) figure published by the Department of Business, Energy and Industrial Strategy (BEIS).

[5] Oxford Economics' Local Model Suite

and that the ES (2012), FEI (2014), FEI (2016) and FEI (2018) demonstrate that to be the case.



BARR CREGG WIND FARM

FIGURE A

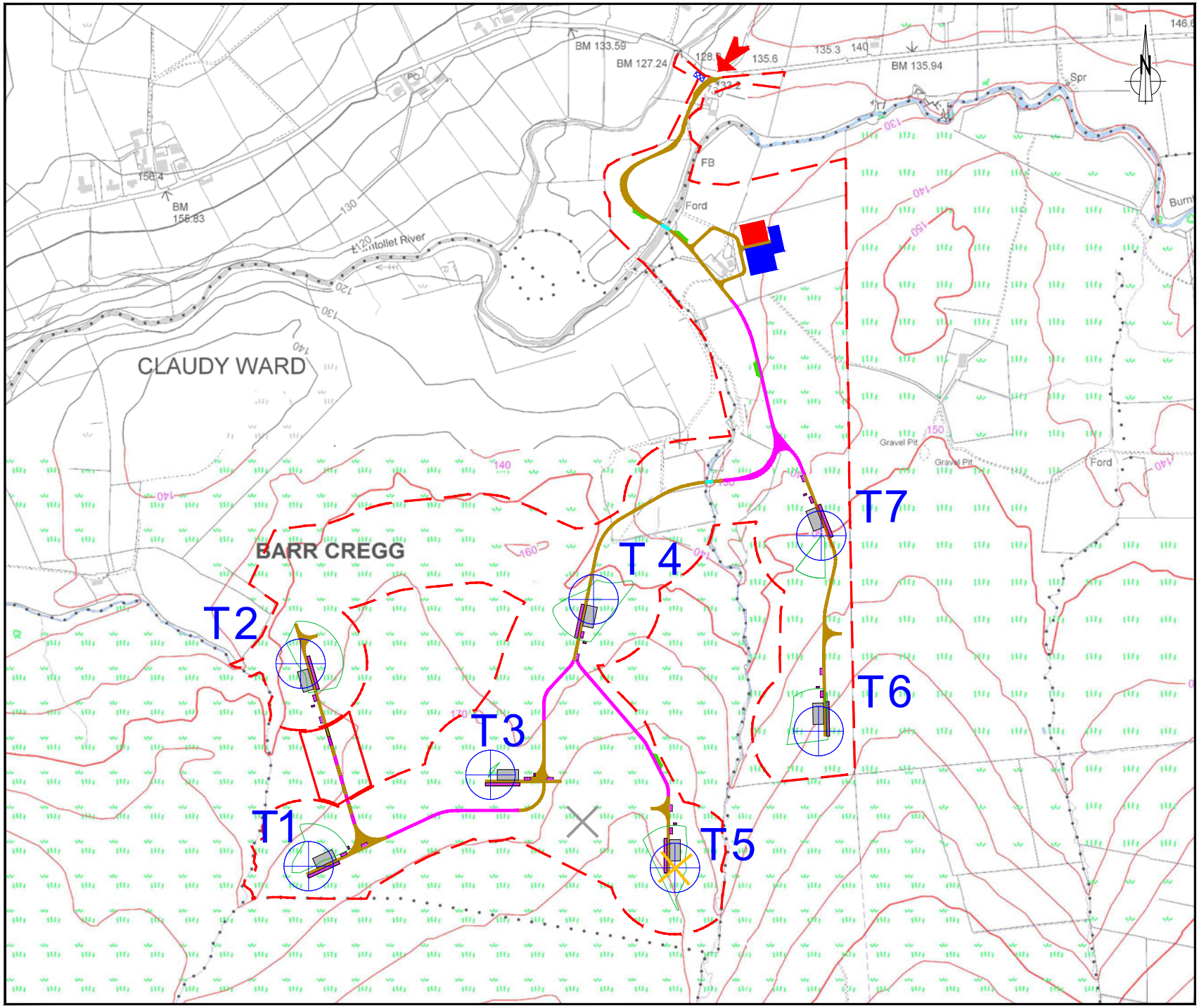
SITE LOCATION MAP

KEY:

- PLANNING APPLICATION BOUNDARY (PLANNING REFERENCE A/2012/0401/F)
- PLANNING APPLICATION BOUNDARY
- SITE CENTRE

LAYOUT DWG	N/A
T-LAYOUT NO.	N/A
DRAWING NUMBER	02381D2219-04
SCALE -	AS SHOWN @ A4

NON-TECHNICAL SUMMARY



BARR CREGG WIND FARM

FIGURE E - REVISION B

ALTERNATIVE INFRASTRUCTURE LAYOUT

Key

- Wind Turbine Location
- Micrositing Buffer (80m)
- Planning Application Boundary
- Planning Application Boundary (Planning Reference A/2014/0114/F)
- Site Tracks (New Excavated)
- Site Tracks (New Floated)
- Site Tracks (New Excavated on Floated)
- Control Building & Substation Compound
- Clear Span Watercourse Crossing
- Crane Hard Standing Area
  - Permanent
  - Temporary
- Temporary Passing Places & Turning Heads
- Temporary Construction Compound
- Temporary Enabling Works Compound
- Meteorological Calibration Reference Mast Location
- Meteorological Calibration Mast Location
- Site Entrance Location

LAYOUT DWG	02381D0001-12
T-LAYOUT NO.	PNIRBRC034
DRAWING NUMBER	02381D1004-07
SCALE -	1:10,000 @ A4
	FEI 2018