Appendix 4.4 ECU Gatecheck Report

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Knockcronal Wind Farm

Gatecheck Report

Client:	Statkraft
Project/Proposal No:	3206
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V1	2021-05-19	S McArthur	J Hazzard	J Hazzard	First draft
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V3	2021-05-27	S McArthur	J Yanetta	J Hazzard	Final Draft

Contents

1. Introduction

1.1 Introduction

Statkraft Ltd (hereafter referred to as "the Applicant") intends to apply to the Scottish Ministers for permission to construct and operate Knockcronal Wind Farm (hereafter referred to as the "Proposed Development"), at site centre British National Grid (BNG) NS 37746 00094 (refer to Figure 1). The total generating capacity of the Proposed Development will be greater than 50 MW, therefore the Applicant intends to submit an application to the Scottish Ministers via the Scottish Government Energy Consents Unit (ECU) under Section 36 of the Electricity Act 1989.

1.2 The Applicant

Statkraft is a leading company in renewables internationally, as Europe's largest renewable energy producer and a global company in energy market operations. With 4,500 employees in 17 countries, the group produces wind power, hydropower, solar power, gas-fired power and supplies district heating.

Statkraft has operated in the United Kingdom since 2006, developing, owning and operating renewable production facilities including wind farms in Scotland and Wales. Statkraft also delivers grid stability services to support National Grid ESO's target to deliver a zero-carbon electricity system by 2025.

Statkraft has invested £1.4 billion in the UK's renewable energy infrastructure and is a leading provider of Power Purchase Agreements (PPAs), having facilitated over 6GW of PPAs for renewable energy generators and energy consumers, and is the leading provider of short and long term PPAs in the UK.

Statkraft is owned by the Norwegian government and has 125 years of history in renewable energy. 100% of the company's investments are targeted towards the growth of renewables.

1.3 Background

The Applicant submitted an Environmental Impact Assessment (EIA) Scoping Report for the Proposed Development in December 2020 to the ECU. The Applicant received an EIA Scoping Opinion in March 2021.

This Section 36 Gatecheck Report provides ECU with an update on the status of the Proposed Development and progress with the EIA Report. It summarises the design iteration process which the Applicant has undertaken to date and how the Applicant intends to respond to the points raised within the EIA Scoping Opinion.

2. Scoping Responses

Scoping responses were received from the following organisations (refer to Table 2-1).

Table 2-1: Scoping Responses Received

Consultee	
Ayrshire Rivers Trust	NatureScot

Consultee	
British Horse Society (BHS)	NATS Safeguarding
BT	RSPB
Crosshill, Straiton and Kirkmichael Community Council	South Ayrshire Council (SAC)
Dailly Community Council	Scottish Forestry
Defence Infrastructure Organisation	Scottish Right of Way and Access Society
ECU	Scottish Water
Fisheries Management Scotland (FMS)	Scottish Wild Land Group
Galloway Fisheries Trust	The Coal Authority
Glasgow Prestwick Airport (GPA)	Transport Scotland
Galloway & Southern Ayrshire Biosphere (GSAB)	West of Scotland Archaeology Service
Historic Environment Scotland (HES)	
John Muir Trust	
Joint Radio Company	

No responses to the scoping request were received from the following consultees (refer to Table 2-2).

Table 2-2 - No Scoping Response Received

Consultee	
Barr Community Council	Scottish Wildlife Trust
Civil Aviation Authority – Airspace	Scottish Environment Protection Agency (SEPA)
Crown Estate Scotland	Visit Scotland
Mountaineering Scotland	

3. Design Iterations

3.1 Scoping Design

In December 2020, as part of the EIA Scoping Report, the Applicant submitted an indicative turbine layout for the Proposed Development of 12 turbines. This is labelled Layout C (refer to Figure 3) as it had already been subject to initial design iteration work from the initially proposed layout, as some baseline surveys had progressed. Further information is provided in Section 3.2 EIA Scoping Opinion Comments on Design.

The following comments in Table 3-1 were received from ECU and consultees on the design of the Proposed Development presented in the EIA Scoping Report.

Table 3-1: EIA Scoping Opinion – Design

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
ECU	The proposed development set out in the Scoping Report refers to wind turbines, and grid technologies including battery storage. Any application submitted under the Electricity Act 1989 requires to clearly set out the generation station(s) that consent is being sought for. For each generating station details of the proposal require to include but not limited to: – the scale of the development (dimensions of the wind turbines, battery storage); – components required for each generating station; and – minimum and maximum export capacity of megawatts and megawatt hours of electricity for battery storage.	Noted – details as noted will be set out in the EIA Report.	N/A
NatureScot	The consent of this proposal, in combination with previously mentioned wind farm proposals, is likely to result in significant adverse cumulative impacts on the Merrick Wild land Area. With turbines proposed at 5.5km from Cornish Hill and less than 9km from Shalloch on Minnoch, we advise that likely impacts on the Merrick WLA should be fully considered and that viewpoints within the WLA are likely to be key points in considering the design of the wind farm.	This feedback has been taken into account in the design iteration process (refer to Section 3.3) and will be considered within the EIA report (Chapter 6 Landscape and Visual LVIA). Additional viewpoints at Cornish Hill and Loch Girvan Eye within the WLA have been included for assessment. The final list of viewpoints was agreed between the Applicant and NatureScot on 21 May 2021.	No further consultation on viewpoints within the WLA required.

3.2 Design Iterations

Since the submission of the EIA Scoping Report and the receipt of the EIA Scoping Opinion the Applicant has undertaken design iterations to maximise the capacity of the Proposed Development while minimising the environmental impacts. The main iterations are described below and shown on Figures 2 to 9. These iterations have taken into consideration the existing tracks and on-site environmental and engineering constraints, including avoidance and/or appropriate buffering of watercourses and sensitive habitats (refer to Figure 10a and b).

Table 3-2 – Main Design Iterations to Date

Design Iteration	No. Turbines	Date	Description
A (Figure 2)	12	August 2020	Initial design maximising yield and capacity on the site.
C (Figure 3)	12	August 2020	Original Scoping Report design which took into account the findings of initial environmental surveys. The northern most turbines were relocated to avoid areas identified as being deep peat.
K (Figure 4)	10	September 2020	This iteration involved the deletion of T2 and T4 to reduce potential noise impact on the property at Knockskae. Remaining turbines were relocated further to the south west of the site and appropriately sited to maintain watercourse buffers and avoid areas of deep peat.
N (Figure 5)	11	October 2020	Movement of turbines in order to increase capacity by allowing one additional turbine to be included in this design iteration, while still maintaining watercourse buffers and an appropriate distance from noise receptors, and avoiding areas of deep peat. Design input from landscape architect (throughout) including draft visualisations from key receptors, helped to ensure iteration would minimise landscape and visual effects, including in the Merrick WLA.
O (Figure 6)	11	September 2020	Movement of turbine T13 west and T16 south to reduce visual effects. Most other turbines were consequently moved slightly west to maintain appropriate separation distance. Continued consideration of minimising the view from Merrick WLA.
S (Figure 7)	9	March 2021	Removal of T1 and 8 and movement of turbines to increase distance from woodland buffers (minimising potential ecological impacts) and further reduce potential noise impacts. Renumbering of turbines as T1 to T9 for clarity.

Design Iteration	No. Turbines	Date	Description
U (Figure 8)	9	April 2021	Site boundary updated to include access track. Additional access route option included from the west. Both will be included in the application, but only one will be taken forward to construction.
V (Figure 9)	9	May 2021	Design chill layout. Northern access route modified to follow the forestry access track currently under construction, which will be completed by the time of application. The forestry track will be utilised by the Proposed Development, with upgrades made as required.

3.3 Future Design Iterations

The Applicant, together with the EIA team, have gathered environmental baseline information for the site across the various technical disciplines to identify a design layout that considers the environmental constraints identified and the consultee opinions received to date. Details of the design iterations leading to a finalised design will be provided within Chapter 2 of the EIA Report. Figure 10a and b show the local environmental and engineering constraints, identified to date, that have been considered in the iterative design process for the Proposed Development. Data collection and baseline surveys are still ongoing, and a final design has not yet been reached. Information gathered during the ongoing surveys, as well as feedback from community consultation events will be taken into consideration in the final design presented in the EIA Report.

4. Planning Policy

The following comments were received as part of the EIA Scoping Opinion on planning policy.

Table 4-1: EIA Scoping Opinion – Planning Policy

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
ECU	The Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments (Second Edition) should be followed in the preparation of the EIA Report, which should contain such assessment and details of mitigation measures.	This concurs with relevant guidance as referenced in the scoping report and will be considered within Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	N/A
	The noise assessment should be carried out in line with relevant legislation and standards as detailed on page 31 of the scoping report. The noise assessment report should be formatted as per Table 6.1 of the IOA "A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise."	This will be considered within Chapter 10 Noise and Vibration Noise of the EIA report.	N/A
SAC	SAC would particularly like to bring to the applicant and ECU's attention the publication of the revised South Ayrshire Landscape Wind Capacity Study. The updated version is dated August 2018 and is available on the Council's website. Accordingly, we would request that the assessment within the LVIA chapter of the EIA Report addresses and references the relevant findings of the 2018 Study amongst the sources it draws from, and that any mitigation/design response to the same is clearly articulated.	Strategic guidance in the South Ayrshire Landscape Wind Capacity Study is being taken into account as part of the design approach.	N/A
	The Noise Chapter of the Scoping Report identifies the main relevant guidance documents that ACCON would expect to be used in the noise assessment. These include ETSU-R-97 and IOA Good Practice Guide (GPG) for the assessment of wind turbine noise, and B2 5228-1 and Design Manual for Roads and Bridges (DMRB) for construction and construction traffic noise. The noise assessment should also take	These guidance notes will be considered with Chapter 10 Noise and Vibration Noise and Vibration of the EIA Report. 'Wind Turbine Development: Submission Guidance Note' (SGN) issued by SAC Environmental Health is available from SAC website but is undated.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
	account of 'Wind Turbine Development: Submission Guidance Note' (SGN) issued by SAC Environmental Health.		
NatureScot	States the applicant should refer to NatureScot guidance on onshore wind farm development and ensure relevant guidance is fully considered when undertaking the EIA Report.	This will be addressed in Chapter 5 Planning Policy of the EIA Report, and the relevant technical chapters.	N/A
HES	We recommend that this assessment is undertaken by a suitably qualified professional and meets the requirements of Scottish Planning Policy (SPP, 2014) and the Historic Environment Policy for Scotland (HEPS, 2019).	This assessment will be undertaken by a suitably qualified professional and will be considered within Chapter 11 Cultural Heritage of the EIA Report.	N/A

5. EIA Report Requirements

The following comments were received as part of the EIA Scoping Opinion on EIA Requirements.

Table 5-1: – EIA Scoping Opinion – EIAR

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
ECU	States that the EIA must consider in full all consultation responses.	This will be addressed in Chapter 5 Planning Policy of the EIA Report, and in each relevant technical chapter. Each technical chapter will contain a table of the consultation(s) undertaken for that discipline and how consultation responses have been addressed.	N/A
	Applicants are asked to provide a consolidated schedule, in tabular form, of all mitigation measures proposed in the environmental assessment, and of where within the EIA Report each of the specific matters raised.	This will be included within the EIA Report. A summary of mitigation measures will be provided in each technical chapter, and an overall Schedule of Mitigation will be provided (in tabular form) as a separate EIA Report chapter.	N/A
	Request the ECU is kept informed of relevant discussions regarding the refinement of the design of the Proposed Development.	Noted – the EIA Report will also document all consultation undertaken for the Proposed Development. A Gatecheck meeting will be offered prior to the application submission to provide ECU with a project update and to agree the final consultee list.	N/A
	To facilitate uploading to the Energy Consents portal, the EIA Report and its associated documentation should be divided into appropriately named separate files of sizes no more than 10 megabytes (MB). In addition, a separate disc containing the EIA Report and its associated documentation in electronic format will be required.	The EIA Report and all associated documentation will be divided into files of less than 10 MB where required and will be appropriately named for ease of reference. A naming convention of all files will be agreed with the ECU case officer prior to upload. An	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
		electronic copy of all documentation will also be provided in a format acceptable to ECU.	
	Suggest the mitigation measures suggested for any significant environmental impacts identified should be presented as a conclusion to each chapter.	A summary of mitigation measures will be provided in each technical chapter, and an overall Schedule of Mitigation will be provided (in tabular form) as a separate EIA Report chapter.	N/A

6. Landscape and Visual

The following comments were received as part of the EIA Scoping Opinion on the landscape and visual assessment.

Table 6-1: EIA Scoping Opinion – Landscape and Visual

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Crosshill Straiton and Kirkmichael Community Council	Highlights that the 'Guidelines for Landscape and Visual Impact Assessments: 3rd Edition' should be followed.	Noted.	N/A
	Suggested addition of two viewpoints: on the B7023 at a point 200 metres north of Gartlea Farm; and on the Kirkmichael to Crosshill Road, just as it approaches Crosshill.	Additional viewpoint location included - represents views from an elevated section of the B7023 on approach to Crosshill from Maybole. No additional viewpoint included at approach to Crosshill. Theoretical visibility along this road is restricted to the section of road immediately east of Crosshill. From this section of road, visibility of the Proposed Development is limited and considered to have no potential for significant effects. A visualisation from Crosshill will be provided for the purpose of community consultation, however, will not be assessed within the EIA Report due to limited visibility. Viewpoints have been agreed with NatureScot.	N/A
	Requests that the Residential Visual Amenity Assessment (RVAA) should be extended out with 2km given the height of the proposed turbines.	The Landscape Institute (LI) has published a technical guidance note relating to RVAA – 'Landscape Institute (2019) Technical Guidance Note 2/19 - Residential Visual Amenity Assessment'. The LI Technical Guidance Note explains that the 'exceptionally large' study areas of up to 3 km are disproportionate further stating that *"The logic for these (exceptionally) large study*	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
		areas was based on certain findings of LVIAs which identified significant visual effects from 'settlements' or from clusters of residential properties within this range. This fails to recognise that RVAA is a stage beyond LVIA. Consequently, many RVAAs, including those of wind farms with large turbines (150 m and taller), have included disproportionately extensive study areas incorporating too many properties. This appears to be based on the misconception that if a significant effect has been identified in the LVIA adjacent to a property at 2.5 km it will also potentially lead to reaching the RVA Threshold." The Guidance then advocates a RVAA study area of between 1.5km and 2km *"when assessing relatively conspicuous structures such as wind turbines",* recommending smaller study areas for less conspicuous development types. The RVAA for Knockcronal Wind Farm will therefore consider a 2km study area.	
	Design of the 200m height turbines mean the study area should be increased to cover more areas of visibility. Landscape character receptors should be greatly increased to take most of North Carrick, Arran, Mull of Kintyre, therefore expanding area of focus beyond the current 20km radius.	Visibility out with the 20km radius is very limited. Based on the overview of theoretical visibility of the Proposed Development, it is considered that the potential for significant effects is considered to be limited in extent and may only arise within an area of approximately 20km radius and as such the landscape character assessment will focus on this area.	N/A
Dailly Community Council	Hardly any viewpoints from the western side of the Proposed Development – such as Wallacetown, and all along that ridge to Girvan and towards Crosshill. Viewpoints should be demonstrated without any obstructions, i.e. forestry, buildings, hedges.	No additional LVIA viewpoint included. There is no visibility in Wallacetown or Girvan or the roads that connect these settlements. It is not considered that there is the potential for significant effects from Crosshill due to limited levels of visibility.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
ECU	States as maximum blade tip height of turbines exceeds 150m the LVIA must include a robust Night Time Assessment with agreed viewpoints to consider the effects of aviation lighting and how the chosen lighting mitigates the effects.	The night time visual assessment of visible aviation lighting will include an assessment of selected LVIA viewpoints, representing various distances and receptor types to represent lighting effects (using dusk photography). – VP 2 – Minor Road near Craig; – VP 12 – Maybole; and – VP 20 – Cornish Hill.	N/A
SAC	Requested that a detailed ZTV should be provided based on an OS 1:50,000 scale map base within approximately 15km of the proposal to allow more accurate appraisal of potential visibility.	A detailed ZTV on an 1:50:,000 scale map base will be provided as requested within the EIA Report (Chapter 6 Landscape and Visual Landscape and Visual).	N/A
	The representative viewpoints shown on the ZTV and listed in the Scoping Report should be supplemented with additional viewpoints from: – Cornish Hill – which is a popular destination for walkers and where some visibility is indicated from its summit in Figure 4.3 in the Scoping Report (GR.404 941). – The B741 east of Straiton where it descends into the village near Largs Farm and offers views over the upper Girvan valley and adjacent uplands.	Viewpoints have been agreed with South Aryshire Council, ECU, SLC, NatureScot and HES. Additional viewpoint location at Cornish Hill included - represents elevated views from within the WLA and Dark Sky Park. Also included as a night-time viewpoint location following a request from NatureScot. Additional viewpoint location included at B741 near Largs Farm which represents views from the rural landscape to the east of Straiton on the B741. This location will require micrositing to avoid intervening trees and roadside hedgerows.	N/A
	A wireline visualisation should also be produced from the minor road in the upper Stinchar valley between Barr and South Balloch where visibility of 1-3 turbines is indicated in the ZTV.	Additional wireline to be provided - location in area of limited visibility between Barr and South Balloch.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
	Deemed unnecessary to include a representative viewpoint from the Royal Troon Golf Course (Viewpoint 20 listed in Table 4-1 of the Scoping Report) as this area lies some 30km from the proposal and effects on views are therefore unlikely to be significant. Consideration should also be given to visibility and key views from the Barr Trails recreational routes in the Stinchar Valley.	Viewpoint 20 has been removed from assessment.	N/A
John Muir Trust	Recommend that NatureScot's guidance in Annex 2 of 'General pre-application and scoping advice for onshore wind farms' is used to inform the landscape and visual impact assessment given that aviation lighting may be required and this wind farm is close to Merrick Wild Land Area and the Galloway Dark Sky Park.	This will be addressed in Chapter 6 Landscape and Visual of the EIA Report.	N/A
NatureScot	Recommend that the Applicant assesses the potential for adverse impacts of aviation lighting on the wild land qualities of the Merrick WLA.	It is not normal practice to include remote locations within the night time assessment due to health and safety concerns associated with photography and walking in and out of remote areas during the hours of darkness. However, following this request from NatureScot for the inclusion of a night time viewpoint within the Dark Sky Park an exception has been made for the Cornish Hill location given the short walk from the nearest public road. Cornish Hill is proposed as a replacement for the previously proposed night time viewpoint near Stinchar Bridge.	N/A
	Recommend that the related landscape and visual assessment of turbine lighting should be informed by the scoping advice at Annex 2 of NatureScot's recently updated 'general scoping and pre application advice' document.	This will be considered in Chapter 6 Landscape and Visual of the EIA Report.	N/A
Scottish Wild Land Group	No comment.	No response required.	N/A

7. Ornithology

The following comments were received as part of the EIA Scoping Opinion on ornithology.

Table 7-1: EIA Scoping Opinion – Ornithology

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Crosshill Straiton and Kirkmichael Community Council	States that the study area needs to extend beyond the 2km study area for scarce breeding raptors.	2km has been agreed as an appropriate study area for scare breeding raptors with NatureScot.	N/A
	States that 'Red listed birds' should not be scoped out during the operational phase, nor should 'Habitat Loss, Fragmentation or Change' be scoped out during construction and decommissioning, nor should 'Disturbance to and loss of nest sites, eggs and/or dependent young' be scoped out during operation as maintenance work and replacement of blades are necessary. 'Mortality due to collision' should not be scoped out during operation either.	This will be addressed in Chapter 7 Ornithology of the EIA Report.	N/A
NatureScot	Support utilising the ornithology surveys from 2011-12, which supported the previous Linfairn Wind Farm application, as additional baseline information to support the 2019-2020 agreed suite of bird surveys.	Noted. This will be included in Chapter 7 Ornithology of the EIA Report.	N/A
	Advise a breeding bird protection plan should be produced which includes pre-construction surveys for sensitive ornithology species e.g. all breeding raptors and black grouse.	This will be addressed in Chapter 7 Ornithology of the EIA Report.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
	Suggest contact made with South of Scotland Black Grouse Group for any further information they may have on black grouse distributions on/close to the site.	Contact has been made and appropriate measures will be taken if further information arises on black grouse distribution.	N/A

8. Ecology

The following comments were received as part of the EIA Scoping Opinion on ecology.

Table 8-1: EIA Scoping Opinion – Ecology

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
ECU	Request that Marine Scotland's generic scoping guidelines are reviewed for both onshore wind farm and overhead line development which outline how fish populations can be impacted during the construction, operation and decommissioning of a wind farm development.	This will be addressed in Chapter 8 Ecology of the EIA Report.	N/A
Ayrshire Fisheries Trust	Request that macroinvertebrate surveys be undertaken within the receptor watercourses to inform the baseline prior to construction.	These surveys are not required to inform an EIA as they are unlikely to be subject to significant effects as a result of wind farm developments, providing suitable mitigation measures are implemented.	N/A
	Request that the EIA Report assesses the following: – Forest felling and subsequent effects of this activity; – Construction activities – impediment to fish movement; – Construction/operation activities – increased silt loading to watercourses; and – The Construction Environmental Management Plan (CEMP) should include provision for continuous monitoring of fish and macroinvertebrates and water quality parameters.	The listed issues will be considered in Chapter 8 Ecology of the EIA Report. An outline CEMP will be provided as an appendix to the EIA Report, including preliminary plans for construction-phase monitoring of relevant watercourses.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
NatureScot	Advise EIA should include a map of the National Vegetation Classification (NVC) habitat survey results (including all groundwater dependent terrestrial ecosystems (GWDTE)) with the wind farm boundary, proposed turbines, tracks and infrastructure layout overlain. A similar map showing peat and peatland habitats should be produced showing their relationship with the fore mentioned site infrastructure.	This will be included in Chapter 8 Ecology and Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	N/A
	Recommend the Habitat Management Plan (HMP) should follow NatureScot guidance on planning for development: What to consider and include in HMPs, and the plan should tie in with any relevant bog (and other) habitat restoration proposals for adjacent sites in the area.	An outline HMP will be provided as an appendix to the EIA Report.	N/A
	State that surveys for protected species should be completed no more than 18 months prior to submission of the application, to ensure that the survey results are a contemporary reflection of species activity at and around the site.	Noted. Survey timing will be appropriate and in line with this guidance, in relation to application submission date.	N/A

9. Geology, Peat, Hydrology and Hydrogeology

The following comments were received as part of the EIA Scoping Opinion on geology, peat, hydrology and hydrogeology.

Table 9-1: Geology, Peat, Hydrology and Hydrogeology

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
ECU	The Applicant are to contact Scottish Water (via EIA@scottishwater.co.uk) and make further enquires to confirm whether there are any Scottish Water assets which may be affected by the development, and include details in the EIA Report of any relevant mitigation measures to be provided.	Scottish Water has provided a scoping response and this has been responded to below.	N/A
	Request that the Applicant investigate the presence of any private water supplies (PWS), which may be impacted by the development. The EIA Report should include details of any supplies identified by this investigation, and if any supplies are identified, the Applicant should provide an assessment of the potential impacts, risks, and any mitigation which would be provided.	Initial assessment based on a review of OS mapping and aerial imagery indicated properties that may be on PWS that could be impacted by the development. A full PWS Assessment is to be undertaken and detailed in Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	N/A
	Where there is a demonstrable requirement for peat landslide hazard and risk assessment (PLHRA), the assessment should be undertaken as part of the EIA process to provide Ministers with a clear understanding of whether the risks are acceptable and capable of being controlled by mitigation measures.	A PLHRA will be included in Appendix 9.1 of the EIA Report. The presence and distribution of peat has been, and will continue to be, considered in design iteration such that siting turbines and other infrastructure on deep/ deeper peat will be avoided by design where possible.	N/A
Scottish Water	States the development proposals impact on existing Scottish Water assets. The Applicant must identify any potential conflicts with Scottish Water assets and contact the Asset Impact Team via Scottish Water's Customer Portal to apply for a diversion.	Conflicts to be identified and agreed with Scottish Water. This will be outlined in Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	Ongoing engagement with Scottish Water to identify any conflicts.
South Ayrshire EHO	The development should not adversely affect the private water supplies in the area. A report is required detailing how existing supplies will be maintained both qualitatively and quantitatively and sources and connections not adversely affected (minimum 1:25,000 scale figure).	Noted. This will be addressed in Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
	Prior to consent being granted, a water management plan covering water control and the means of drainage from all hard surfaces, structures and borrow pit sites within the site shall be submitted for approval of the planning authority and following approval shall be implemented by the company. For the purposes of this condition "hard surfaces" includes internal access tracks, construction and lay-down areas, turbine pads and crane pads. The details to be submitted shall include the means of protecting surface water and ground water and controlling surface water run-off. The management plan as approved shall then be implemented in full. Evidence MUST include a timeously prepared risk assessment in accordance with EN15975-2:2013 – Guidelines for risk and crisis management – Part 2:" Risk Management" (above) including emergency responses etc.	A site specific water management plan with figures will be provided as part of Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report. Best practice will be adhered to.	N/A.
NatureScot	Welcome a peat probing survey that has been carried out on the site and advise that the measure of peat deposits to full depth should be carried out in accordance with the Scottish Government's Peatland Survey 2017: Guidance on Developments on Peatland.	Noted.	N/A
	Advise EIA should include a map of the National Vegetation Classification (NVC) habitat survey results (including all groundwater dependent terrestrial ecosystems (GWDTE)) with the wind farm boundary, proposed turbines, tracks and infrastructure layout overlain. A similar map showing peat and peatland habitats should be produced showing their relationship with the fore mentioned site infrastructure.	This will be included in Chapter 8 Ecology and Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	N/A
Dailly Community Council	Given the variable peat depths across the site, it is requested that advice is sought from SEPA regarding the upper limiting depths for borrow pit restoration.	Appropriate guidance will be adhered to regarding peat survey and management, and restoration.	N/A

10. Noise

The following comments were received as part of the EIA Scoping Opinion on noise and vibration.

Table 10-1: – EIA Scoping Opinion – Noise

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Crosshill Straiton and Kirkmichael Community Council	State that they are strongly opposed to using previous noise survey results as they were taken using incorrect equipment, equipment was placed in unsuitable locations which rendered results unreliable.	SAC confirmed they are happy with the use of results of baseline background noise surveys carried out for the previous Linfairn application. They are content with the methodology used for the noise surveys and that the background noise results presented in the Scoping Report have been determined in accordance with the recommendations of the IOA GPG.	N/A
	Notes that 200m turbines have different noise issues than 125m, and this does not seem to have been tested.	This will be addressed in Chapter 10 Noise and Vibration of the EIA Report. The noise assessment will appropriately take account of the candidate turbine proposed.	N/A
	Highlights that the cumulative effects of noise from Dersalloch, Knockcronal, Carrick and Craiginmoddie are a major concern.	This will be addressed in Chapter 10 Noise and Vibration of the EIA Report.	N/A
SAC	Welcomes the decision that the assessment of ground-borne vibration (from construction and operation of the turbines) and low frequency noise from operation of the turbines to be scoped out.	A site assessment of these aspects will not be undertaken and a detailed reasoning for this will be included in the Chapter 10 Noise and Vibration of the EIA Report.	N/A
	The report proposes that noise from the operation of the substation and routine maintenance visits can be scoped out of the assessment. A plan or description detailing the proposed substation location is not available. However, on the assumption that it would be located at least 500 m from the nearest dwelling, I would agree it can be scoped out.	Noted for consideration in progressing the site layout.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
	Construction works require to be carried out in accordance with the approved Code of Practice BS 5228-1 and 2:2009 Noise and Vibration Control on Construction and Open Sites or any subsequent code amending consolidating or replacing it as approved by the Secretary of State pursuant to Sections 71(2) and 104 of the Control of Pollution Act 1974.	This will be addressed in Chapter 10 Noise and Vibration of the EIA Report.	N/A
	Confirm that they are content with the methodology used for the noise surveys and that the background noise results presented in Appendix 8.1 have been determined in accordance with the recommendations of the IOA GPG. The results are in line with the background noise levels that would be expected based on their experience of the local area and reviews carried out of previous assessments for the Linfairn application.	No response required.	N/A
	Requests that prior to any works being undertaken a detailed method statement for the construction project will require to be undertaken for approval by SAC Planning Department.	Noted.	N/A

11. Cultural Heritage

The following comments were received as part of the EIA Scoping Opinion on cultural heritage.

Table 11-1: EIA Scoping Opinion – Cultural Heritage

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Historic Environment Scotland	Recommend that the potential cumulative impacts of the proposed development in combination with other developments in the vicinity be assessed.	This will be addressed in Chapter 11 Cultural Heritage of the EIA Report.	N/A
	HES welcome the inclusion of cultural heritage effects and operational effects.	No response required.	N/A
	Recommend that the HES 'Managing Change Guidance Note on Setting' is used to inform setting assessments.	This will be addressed in Chapter 11 Cultural Heritage of the EIA Report.	N/A
	Recommend that a wider search is undertaken of the surrounding area for potential impacts in the first instance.	A wider study area, extending 10km from the outermost finalised proposed turbine locations, will be used for the identification of cultural heritage assets whose setting may be affected by the Proposed Development.	N/A
	Recommend that an appropriately detailed Zone of Theoretical Visibility (ZTV) should be used to identify potential setting impacts in the first instance. Consideration should also be given to including assets where even though the ZTV indicates that no direct intervisibility would be possible	A ZTV will be assessed to identify any designated assets beyond the 10km outer study area that have settings that may be especially sensitive to the Proposed Development.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
	there is the potential for turbines to appear in the background of key views towards these assets.		
	Request that the following visualisations are produced to assist in our consideration of this proposal: - a photomontage showing the view of Kilkerran House (HB Num 1114) in its designed landscape setting from the B741; - a photomontage of Blairquhan House (HB Num 19094) to be taken from the final mile of the approach with the memorial obelisk in memory of Colonel James Hunter Blair MP set on the summit of Craigengower (Highgate Hill) to the south-east; and - a photomontage demonstrating the impacts on Craigengillan House in its designed landscape.	There is no predicted visibility of the Proposed Development from Kilkerran House Garden and Designed Landscape (GDL) or from the B741 where turbines and Kilkerran House would be captured in the same view. A viewpoint further to the north-west was identified and a wireline from that location was provided to HES on 5th March 2021. HES confirmed on 1st April 2021 that they would prefer this alternative location be used and that a photomontage would not be required.	N/A
	A number of turbines may be visible from the Blairquhan designed landscape and our view is that there is potential for significant impact on this GDL and the setting of the house. A detailed assessment of these potential impacts is required.	From this viewpoint there is minimal predicted (bare ground) visibility, which may be removed following design changes. A wireline was deemed acceptable by HES on 23rd April 2021 to demonstrate a lack of visibility.	N/A
Scotways	Right of way SKC7 is used by a route promoted for its historic interest by our Heritage Paths project. HP130 Old Road through Straiton is shown on the enclosed HP map.	Right of Way SKC7 will be included as a heritage asset within the site.	N/A
Crosshill Straiton and Kirkmichael Community Council	States that the study area is limited and should be widened from 10km to 20km.	Based on the overview of theoretical visibility of the Proposed Development, it is considered that the potential for impact on the settings of heritage assets outwith the Outer Study Area of 10km is limited and would have no potential for significant effects.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
West of Scotland Archaeology Service	No comment.	No response required.	N/A

12. Traffic and Transport

The following comments were received as part of the EIA Scoping Opinion on traffic and access.

Table 12-1: EIA Scoping Opinion – Traffic and Transport

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Transport Scotland	It is recommended that an abnormal load route assessment with swept path analysis where required should be included.	A full Abnormal Load Assessment will be provided prior to turbine deliveries commencing (once final turbine model is selected), but swept path assessments for maximum component sizes will be included within the EIA Report.	N/A
	It is recommended that 'Traffic Scotland's National Traffic Data System' is an alternative source of traffic data.	Noted and will be considered throughout Chapter 12 Traffic and Transport of the EIA Report.	N/A
Crosshill Straiton and Kirkmichael Community Council	Highlights that the proposed 150 abnormal loads will require major changes to local roads to allow movement of turbines. Cumulatively these abnormal loads will cause major disruption to traffic and the way of life in a rural environment and this should be investigated further to minimise disruption.	This will be addressed in Chapter 12 Traffic and Transport of the EIA Report.	N/A

13. Land Use, Socio-economics, Tourism and Recreation

The following comments were received as part of the EIA Scoping Opinion on land use, socio-economics, tourism and recreation.

Table 13-1: – EIA Scoping Opinion – Socio-Economics, Recreation and Tourism

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Scottish Rights of Way and Access Society	Recommends that the Applicant consults the Core Paths Plans prepared by the access team at SAC as part of their duties under the Land Reform (Scotland) Act 2003.	The Core Paths Plan has been consulted and a core path identified which crosses the north-east corner of the site. The design of the Proposed Development has avoided siting any infrastructure on the core path and any potential impacts will be presented within Chapter 13 Land Use, Socio-economics, Tourism and Recreation of the EIA Report.	N/A
	States that public recreational access needs to be considered and assessed, which includes the effects the proposed development will have on the routes within the application site and the wider study areas.	Potential impacts on public recreational access will be addressed and presented within Chapter 13 Land Use, Socio-economics, Tourism and Recreation of the EIA Report.	N/A
Crosshill Straiton and Kirkmichael Community Council	Suggest a community benefit fund should be considered for the surrounding community to mitigate any socio-economic impact.	Consultation with local communities for community benefits is being undertaken by the Applicant as the project progresses. This will be outlined further in Chapter 13 Land Use, Socio-economics, Tourism and Recreation of the EIA Report.	N/A
	Highlight that many local businesses and communities could be adversely affected therefore consideration towards managing community benefits should be considered.	Consultation with local communities for community benefits is being undertaken by the Applicant as the project progresses. Potential impacts on local businesses will be considered within Chapter 13 Land Use, Socio-economics, Tourism and Recreation of the EIA Report.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
The British Horse Society (BHS)	Request for developers to work with representatives of the local horse-riding community to understand their road safety and countryside access concerns and facilitate engagement with other partners and consider whether any road safety interventions should be introduced.	Road safety for all users will be considered in Chapter 12 Traffic and Transport. The Applicant will be happy to engage with the British Horse Society as part of the ongoing stakeholder engagement process.	N/A
SAC	States that it would be beneficial for visualisations from various points along the core path which crosses the north-east corner of the site and also along sections of the national cycle route NCN7.	Potential impacts on public recreational access will be addressed and presented within Chapter 13 Land Use, Socio-economics, Tourism and Recreation of the EIA Report. Viewpoints for provision of visualisations have been agreed with SAC and NatureScot, however it is not considered that any viewpoints from within the core path within the site would materially add to the assessment. A viewpoint from the National Cycle Route 7, near Palmullan Bridge will be included in the assessment, as agreed with NatureScot and SAC.	There is ongoing consultation between the Applicant, SAC and NatureScot to agree on a final list of viewpoints.

14. Aviation

The following comments were received as part of the EIA Scoping Opinion on aviation.

Table 14-1: EIA Scoping Opinion – Aviation

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
NATS Safeguarding	NATS foresees that the terrain screening available will not adequately attenuate the signal, therefore the development will likely cause false primary plots to be generated. A reduction in the RADAR's probability of detection for real aircraft is anticipated.	This will be addressed in Chapter 14 Aviation and Radar of the EIA Report. NERL will be engaged to aid in the agreement of mitigation.	N/A
	Prestwick ATC were consulted on the technical impact on specific NATS' RADAR to them, and this was deemed unacceptable by Prestwick ATC.	The Applicant is undertaking an aviation assessment (Chapter 14 Aviation and Radar of the EIA Report) and is in ongoing communication with Prestwick ATC regarding a mitigation solution.	N/A
Defense Infrastructure Organisation	The development site occupies Tactical Training Area 20T (TTA 20T) therefore in the interests of air safety, the MOD would request that the development be fitted with MOD accredited aviation safety lighting in accordance with the Civil Aviation Authority, Air Navigation Order 2016.	This will be addressed in Chapter 14 Aviation and Radar of the EIA Report.	N/A
Crosshill Straiton and Kirkmichael Community Council	Welcome the aviation study area although due to the large numbers of helicopters within the airspace from Scottish Water, Forestry and Land Scotland, Rescue situations and tourist trips from Trump Turnberry, the relevant organisations should be contacted.	Noted. This will be addressed in Chapter 14 Aviation and Radar of the EIA Report.	N/A
Glasgow Prestwick Airport (GPA)	Requests for an assessment to be undertaken for this proposed wind farm against GPA's published Instrument Flight Procedures (IFPs) (both conventional and RNAV/RNP) – to satisfy GPA that the turbine tip heights have no impact on existing published IFPs.	The Applicant is undertaking an aviation assessment (Chapter 14 Aviation and Radar of the EIA Report) and is in ongoing communication with Prestwick ATC regarding a mitigation solution.	

15. Telecommunication and Television

The following comments were received as part of the EIA Scoping Opinion on telecommunication and television.

Table 15-1: EIA Scoping Opinion – Telecommunication and Television

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
BT	The conclusion is that the turbine locations indicated should not cause interference to BT's current and presently planned radio network.	No response required.	N/A
Joint Radio Company	Welcomes the proposal while not foreseeing any problems.	No response required.	N/A

16. Shadow Flicker

The following comments were received as part of the EIA Scoping Opinion on shadow flicker.

Table 16-1: EIA Scoping Opinion – Shadow Flicker

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Crosshill Straiton and Kirkmichael Community Council	Request the full extent of shadow flicker on all properties in the upper Girvan valley should be assessed.	The shadow flicker study area for assessment will be ten rotor diameters from each turbine, in accordance with Scottish Government advice. No significant impacts from shadow flicker would be anticipated to occur outwith this area.	N/A
	In previous local wind farm responses it has been shown that shadow flicker is a real issue for residents within a certain proximity to the site area. There is considerable local expertise in this field and I would recommend the proposers contact Save Straiton for Scotland to access the most up to date evidence on this issue.	Potential impacts from shadow flicker on residents within the study area will be minimised by design where possible, and the shadow flicker assessment will be undertaken in line with Scottish Government advice and relevant good practice. The Applicant is actively engaging with local residents and interested parties via the ongoing stakeholder engagement process.	N/A
Dailly Community Council	State that for potential shadow flicker a 1m x 1m ground floor window at each identified sensitive receptor location is not appropriate.	The shadow flicker assessment will be undertaken in accordance with good practice. The assumption of a 1m x 1m ground floor window facing directly at the proposed wind farm for all receptors is a worst case assumption.	N/A

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
SAC	State that a suitably qualified person should undertake the investigation into the incidence of shadow flicker at the compliant location and where shadow flicker is confirmed to result in loss of amenity, then mitigation measures require to be implemented, to the satisfaction of the Local Authority.	Any required shadow flicker investigations will be completed to the required standard and will be undertaken in accordance with good practice.	N/A

17. Forestry

The following comments were received as part of the EIA Scoping Opinion on forestry.

Table 17-1: EIA Scoping Opinion – Forestry

Consultee	Scoping Comment	Response to Consultee	Further EIA Consultation
Crosshill Straiton and Kirkmichael Community Council	All effects should be thoroughly assessed, taking account of forestry felling; there will be impacts on drainage, flora and fauna, habitats and infrastructure.	This will be addressed in Chapter 17 Forestry of the EIA Report and other technical chapters as appropriate.	N/A
SAC	Prior to consent being granted, in relation to all forestry works, all PWS user properties, their PWS pipes and lines, sources, abstraction points and potential catchment areas are to be identified and shown as marked on maps, to scale, on minimum of 1:25000, as part of the development risk assessment, in order to assess risk to catchment areas of the sources that private water supply water is potentially drawn from.	This will be included in Chapter 17 Forestry and Chapter 9 Geology, Peat, Hydrology and Hydrogeology of the EIA Report.	N/A
Scottish Forestry	No comment, but state they will be in close contact with the proposed forestry actions.	No response required.	N/A

18. Carbon Calculator

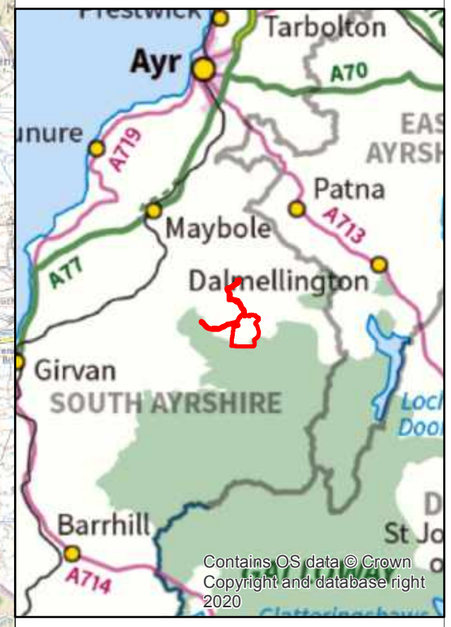
No comments were received as part of the EIA Scoping Opinion with regards to carbon calculator.

19. Figures

N

KEY

Site Boundary



0 0.75 1.5 km

Scale 1:30,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 1
Site Location

Date:	Drawn by:	Checked by:	Version:
12/05/2021	SM	JH	V1

Project Number: 3206

N

T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12

KEY

Turbine Development Area

Indicative Turbine Locations

0 0.6 1.2 km

Scale 1:24,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 2
Layout A - Intial Turbine Layout

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Turbine Development Area
- Indicative Turbine Locations

0 0.6 1.2 km

Scale 1:24,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 3
Layout C - Scoping

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Turbine Development Area
- Indicative Turbine Locations

1
2
3
4
5
6
7
8
9
10
11
12

0 0.6 1.2 km

Scale 1:24,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 4
Layout K

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Turbine Development Area
- Indicative Turbine Locations

8 1 16 5 11 3 7 6 12 9 13

0 0.6 1.2 km

Scale 1:24,000 @ A3

Statkraft

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Gatecheck Report

Figure 5
Layout N

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

8
1
16
5
11
3
7
12
6
9
13

KEY

Turbine Development Area

Indicative Turbine Locations

0 0.6 1.2 km

Scale 1:24,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 6
Layout O

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Turbine Development Area
- Indicative Turbine Locations
- Proposed Access Track
- Proposed Turbine Hardstanding

0 0.5 1 km

Scale 1:20,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 7
Layout S

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Site Boundary
- Indicative Turbine Locations
- Proposed Met Mast
- Proposed Access Tracks
- Proposed Temporary Borrow Pit Access
- Proposed Alternative Access
- Proposed Hardstandings
- Proposed Substation
- Proposed Battery Storage
- Proposed Construction Compound
- Proposed Gatehouse Compound
- Proposed Borrow Pit
- Proposed Borrow Pit Search Area

0 0.45 0.9 km

Scale 1:18,500 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 8
Layout U

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Site Boundary
- Indicative Turbine Locations
- Proposed Met Mast
- Proposed Access Tracks
- Proposed Temporary Borrow Pit Access
- Proposed Alternative Access
- Proposed Hardstandings
- Proposed Substation
- Proposed Battery Location
- Proposed Construction Compound
- Proposed Gatehouse Compound
- Proposed Borrow Pit
- Proposed Borrow Pit Search Area

0 0.5 1 km

Scale 1:21,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 9
Layout V - Design Chill

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Site Boundary
- Indicative Turbine Locations
- Proposed Access Tracks
- Proposed Temporary Borrow Pit Access
- Proposed Alternative Access
- Proposed Turbine Hardstanding
- Proposed Borrow Pit
- Proposed Borrow Pit Search Area
- Proposed Substation
- Proposed Construction Compound
- Proposed Battery Storage

Constraints

- Residential Properties
- 1km Residential Property Buffer
- 1.4km Residential Property Buffer - Knockskae
- Ancient Woodland
- 15m Woodland Buffer (Infrastructure)
- 115m Woodland Bat Buffer (Turbines)
- Watercourse
- 50m Watercourse Buffer (Infrastructure)
- 108m Watercourse Bat Buffer (Turbines)
- Cultural Heritage Feature
- Cultural Heritage Linear Feature
- Cultural Heritage Feature Buffer (Point - 50m, Line and Area - 20m)

Peat Depth (m)

- 0.5 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 3
- 3 - 4
- >4

0 0.25 0.5 km

Scale 1:10,000 @ A3

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Knockcronal Wind Farm
Gatecheck Report

Figure 10a
Layout V and On Site Constraints
- Turbine Development Area

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

N

KEY

- Site Boundary
- Proposed Access Tracks
- Proposed Temporary Borrow Pit Access
- Proposed Alternative Access
- Proposed Turbine Hardstanding
- Proposed Gatehouse Compound
- Proposed Borrow Pit
- Proposed Borrow Pit Search Area

Constraints

- Residential Properties
- 1km Residential Property Buffer
- Ancient Woodland
- 15m Woodland Buffer (Infrastructure)
- 115m Woodland Bat Buffer (Turbines)
- Watercourse
- 50m Watercourse Buffer (Infrastructure)
- 108m Watercourse Bat Buffer (Turbines)
- Cultural Heritage Feature
- Cultural Heritage Linear Feature
- Cultural Heritage Feature Buffer (Point - 50m, Line and Area - 20m)

0 0.4 0.8 km

Scale 1:15,000 @ A3

Statkraft

Knockcronal Wind Farm
Gatecheck Report

Figure 10b
Layout V and On Site Constraints
- Access Routes

Date:	Drawn by:	Checked by:	Version:
25/05/2021	SM	JH	V1

Project Number: 3206

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