# **TECHNICAL APPENDIX 10.1**

**Assessment Methodology** 



# The Study Areas

- 1 This assessment employs two study areas:
  - The Inner Study Area, corresponding to the boundary of the proposed development; and
  - The Outer Study Area, corresponding to the area 5km from the locations of the turbines.
- In addition, in response to scoping consultation responses, nationally important designated heritage assets up to 10km from the proposed locations of the turbines have been considered where the asset is of a type where distant views are to and from the asset may be important for the understanding and appreciation of the asset.
- 3 This assessment includes a consideration of all known designated and non-designated heritage assets within the Inner Study Area. Within the Outer Study Area indirect impacts on designated heritage assets are considered. This has been considered sufficient to:
  - identify all designated heritage assets within the Site;
  - identify all designated heritage assets with the potential to be subject to significant indirect impacts from the proposed development;
  - identify all recorded non-designated heritage assets lying within, or with the potential to extend within, the proposed development;
  - assist understanding of the historic environment context of the proposed development; and
  - assist assessment of the probability that as yet undiscovered archaeological sites lie within the proposed development, and indicate what their character might be.
- 4 Consideration has been given to the potential need to include additional assets beyond, but adjacent to, the study area in order to avoid artificial truncation of groups.
- 5 The study areas are shown in Figures 10.1 and 10.2.

# Zone of Theoretical Visibility (ZTV) Analysis

- Assessment of visual impact has been assisted with the aid of a ZTV calculation, prepared principally for the Landscape and Visual Impact Assessment and presented in Figure 10.2. The ZTV calculation methodology is set out in detail in Chapter 7: Landscape and Visual, but in summary it maps the predicted degree of visibility of the proposed development from all points within a study area around the Site, as would be seen from an observer's eye level 1.8m above the ground. The degree of visibility is expressed as the theoretical vertical subtended angle of view (visible vertical angle, or VVA).
- 7 The resulting map does not take into account the screening or filtering effects of vegetation, buildings or other surface features, and in that respect is likely to provide an over-estimate of the actual visibility. The width of the feature is not taken into account in the VVA; where relevant the corresponding visible horizontal angle (VHA) has been calculated or otherwise taken into account.



### **Data Sources**

8 Table 10-1-1 sets out the main data source used in this study.

Table 10-1-1
Historic Environment Data Sources Consulted

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| Subject   | Source  | Location   |
|---|---|--|
| Designated heritage<br>assets (except<br>Conservation Areas)      | Historic Environment Scotland   | On line.   |
| Conservation Areas  | Aberdeenshire County Council  | On line.   |
| Heritage assets   | Historic Environment Scotland   | Digital data supplied as download.   |
| Heritage assets   | Aberdeenshire Council Archaeology Service   | Digital data supplied by email.  |
| Historic maps   | National Library of Scotland  | On line.   |
| Historic Land Use<br>Assessment                                   | Historic Environment Scotland   | On line.   |
| Historic Environment  | Unpublished reports   | Various.   |
|   | Published synthetic works   | Various.   |
| Current OS maps   | Ordnance Survey   | Licence<br>acquired for<br>project.  |
| Condition of recorded heritage assets within proposed development | Field inspection  | Inspected by<br>SLR Consulting<br>on 23 <sup>rd</sup> June<br>2017.                      |
| Setting of heritage assets  | Field inspection within study areas and other specified assets from areas of public access. | Inspected by SLR Consulting on 23 <sup>rd</sup> June and 6 <sup>th</sup> September 2017. |

- Heritage assets within the Inner Study Area are numbered in the following text as set out in the gazetteer in Technical Appendix 10.2: Gazetteer of Heritage Assets. As this gazetteer is composed of records from a number of sources these have been combined into a single sequence with each assigned an SLR Number. References to other coding systems, e.g. Aberdeenshire Council Historic Environment Record (HER) and Canmore, are also included in this Technical Appendix. The designated assets within the Study Areas are listed separately within Chapter 10: Cultural Heritage and are identified by the number by which they are designated on the relevant statutory register or index.
- The following attribution statement applies to the downloaded Historic Environment Scotland data set for designated heritage assets except Conservation Areas:
  - © Historic Environment Scotland 2017. Contains Ordnance Survey data © Crown copyright and database right 2017. The Historic Environment Scotland GIS Data contained in this material was obtained on 28-03-2017.

Designated and non-designated heritage assets assessed are listed in Table 10-7 and Technical Appendix 10-2: Gazetteer of Heritage Assets and mapped in Figures 10.1 and 10.2.

## Impact Assessment

#### **Framework of Assessment**

- Impacts may be caused by the proposed development where it changes the baseline condition of either the asset itself or its setting.
- In accordance with Environmental Impact Assessment (EIA) Regulations, the assessment identifies impacts and effects as either direct or indirect, adverse or beneficial, and short-term, long-term or permanent. Direct impacts are those which physically alter an asset and therefore its heritage significance; indirect impacts are those which affect the heritage significance of an asset by causing change within its setting.
- All assessment commenced by establishing an understanding of the historic environment of the study area through synthesis of the acquired data from the sources noted above, informed by professional experience.
- Direct effects on the heritage significance of assets have been identified from consideration of a combination of the heritage significance of the known affected assets, the probability of further currently-unknown assets being affected, and their likely significance, and the magnitude of impact to be formed by the implementation of the proposed scheme.
- Indirect effects on the heritage significance of assets have been identified with reference to guidance from Historic Environment Scotland (Ref 10-1.1), and assessment has been carried out in the following stages:
  - initial consideration of intervisibility and other factors leading to identification of potentially affected assets;
  - assessment of the heritage significance of potentially-affected assets;
  - assessment of the contribution of setting to that heritage significance;
  - assessment of the magnitude of impact of the proposed scheme due to causing change within the setting of the assets; and
  - prediction of the significance of the effect.

### **Heritage Significance**

The heritage significance of potential heritage assets have been assessed using professional judgement, with reference to Table 10-1-2 which has been devised by SLR, with reference to Historic Environment Scotland Guidance (Ref 10-1.2, Ref 10-1.3). Table 10-1-2 shows the potential levels of heritage significance of an asset related to designation status and grading, and, where non-designated, to a scale of Highest to Negligible importance. This table acts as an aid to consistency in the exercise of professional judgment and provides a degree of transparency for others in evaluating the conclusions reached by this assessment.



Table 10-1-2
Heritage Significance of Heritage Assets

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| Heritage<br>Significance | Explanation  |  |  |
|--------------------------|--|--|--|
| Highest                  | Sites of national or international importance, including:  World Heritage Sites;  Scheduled Monuments;  Category A Listed Buildings;  Gardens and Designed Landscapes included on the national inventory;  Designated Battlefields; and  Non-designated assets of equivalent importance. |  |  |
| High                     | Sites of regional importance, including:  Category B Listed Buildings;  Conservation Areas; and  Non-designated assets of equivalent importance.   |  |  |
| Medium                   | Sites of local importance, including:  Category C Listed Buildings; and  Non-designated assets of equivalent importance.   |  |  |
| Low                      | Sites of minor importance or with little asset remaining to justify a higher importance.   |  |  |
| Negligible               | Negligible or no heritage importance.  |  |  |
| Unknown                  | Further information is required to assess the significance of these assets.  |  |  |

# **Contribution of Setting to Heritage Significance**

This is not quantified on a scale but has been used to assist the assessment of the magnitude of impact.

## **Magnitude of Impact**

19 Magnitude of impact have been assessed with reference to the criteria set out in Table 10-1-3.

Table 10-1-1
Magnitude of Impacts on Heritage Assets

| Magnitude of Impact | Explanation   |  |
|---------------------|---|--|
| High beneficial     | The proposed development would considerably enhance the heritage significance of the affected asset, or the ability to appreciate it.   |  |
| Medium beneficial   | The proposed development would enhance to a clearly discernible extent the heritage significance of the affected asset, or the ability to appreciate it.  |  |
| Low beneficial      | The proposed development would enhance to a minor extent the heritage significance of the affected asset, or the ability to appreciate it.  |  |
| Very low beneficial | The proposed development would enhance to a very minor extent the heritage significance of the affected asset, or the ability to appreciate it.   |  |
| Neutral/None        | The proposed development would not affect, or would have harmful and enhancing effects of equal magnitude, on the heritage significance of the affected asset, or the ability to appreciate it. |  |
| Very low adverse    | The proposed development would erode to a very minor extent the heritage significance of the affected asset, or the ability to appreciate it.   |  |
| Low adverse         | The proposed development would erode to a minor extent the heritage significance of the affected asset, or the ability to appreciate it.  |  |

| Magnitude of Impact | Explanation  |
|---------------------|--|
| Medium adverse      | The proposed development would erode to a clearly discernible extent the heritage significance of the affected asset, or the ability to appreciate it. |
| High adverse        | The proposed development would severely erode the heritage significance of the affected asset, or the ability to appreciate it.                        |

## **Significance of Effect**

- The significance of effect is presented in Table 10-1-4 below. This provides a matrix that relates the heritage significance to the magnitude of impact (incorporating contribution from setting where relevant), in order to establish the likely significance of effect.
- The terms 'harm' and 'enhancement' used to define effects relate to the terms 'harm' and 'enhance'/'better reveal' used in English policy guidance, and 'not significant' refers to significance in the context of EIA (which is considered also to apply to historic environment assessments).
- SPP paragraph 141 (Ref. 10-1.6) notes that:
  - '...Listed building should be protected from demolition or other work that would adversely affect it or its setting.'
- SPP paragraph 145 notes that:

"Where there is potential for a proposed development to have an adverse effect on a scheduled monument or on the integrity of its setting, permission should only be granted where there are exceptional circumstances."

Table 10-1-2
Significance of Effects on Heritage Assets

| Magnitude of           | Heritage Significance |             |             |             |  |  |
|------------------------|-----------------------|-------------|-------------|-------------|--|--|
| Impact                 | Highest               | High        | Medium      | Low         |  |  |
| High beneficial        | Substantial           | Substantial | Moderate    | Slight      |  |  |
| Medium<br>beneficial   | Substantial           | Moderate    | Slight      | Very slight |  |  |
| Low beneficial         | Moderate              | Slight      | Very slight | Very slight |  |  |
| Very low<br>beneficial | Slight                | Very slight | Negligible  | Negligible  |  |  |
| Neutral/None           | Neutral/Nil           | Neutral/Nil | Neutral/Nil | Neutral/Nil |  |  |
| Very low adverse       | Slight                | Very slight | Negligible  | Negligible  |  |  |
| Low adverse            | Moderate              | Slight      | Very slight | Very slight |  |  |
| Medium adverse         | Substantial           | Moderate    | Slight      | Very slight |  |  |
| High adverse           | Substantial           | Substantial | Moderate    | Slight      |  |  |

# References

Ref. 10-1.1 Historic Environment Scotland (2016). Managing Change in the Historic Environment: Setting. Historic Environment Scotland



SLR Ref No: 405.03640.00011

November 2019

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