CHAPTER 11: CULTURAL HERITAGE

A.11.1 Introduction
A.11.2 Consented Development
A.11.3 Scope of Assessment
A.11.4 Legislation, Policy & Guidance
A.11.5 Methodology
A.11.6 Baseline
A.11.7 Potential Effects
A.11.8 Mitigation Measures
A.11.9 Residual Effects
A.11.10 Cumulative Effects
A.11.11 Comparison of Effects
A.11.12 Conclusions

Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A11.2.4</td>
<td>Comparative Wireline from Balnacoil Hill Cairn</td>
</tr>
<tr>
<td>A11.3.4</td>
<td>Comparative Wireline from Kilbraur Hut Circle</td>
</tr>
<tr>
<td>A11.4</td>
<td>Archaeological Features within the Site Boundary</td>
</tr>
</tbody>
</table>

List of Figures from EIA Report (January 2019) for Reference

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1</td>
<td>Sites with Statutory Protection within 15km, including ZTV</td>
</tr>
<tr>
<td>11.2.1a – 11.2.1c</td>
<td>Wireline from Balnacoil Hill Cairn (90°)</td>
</tr>
<tr>
<td>11.2.2</td>
<td>Wireline from Balnacoil Hill Cairn (53.5°)</td>
</tr>
<tr>
<td>11.2.3</td>
<td>Photomontage from Balnacoil Hill Cairn</td>
</tr>
<tr>
<td>11.3.1a – 11.3.1b</td>
<td>Wireline from Kilbraur Hut Circle (90°)</td>
</tr>
<tr>
<td>11.3.2</td>
<td>Wireline from Kilbraur Hut Circle (53.5°)</td>
</tr>
<tr>
<td>11.3.3</td>
<td>Photomontage from Kilbraur Hut Circle</td>
</tr>
</tbody>
</table>
A.11. CULTURAL HERITAGE

A.11.1 Introduction

A.11.1.1 Chapter 11 of the EIA Report (January 2019) assessed the potential indirect effects on archaeological sites and sites of historic or cultural heritage interest as a result of the Proposed Varied Development, resulting from the removal of four turbines from the Consented Development and the increase in turbine dimensions, with a proposed tip height of 149.9m and rotor diameter of 136m. This Chapter updates these results where relevant in light of the changes to the Proposed Varied Development.

A.11.1.2 The previous assessment (January 2019) did not include an assessment of direct effects given that there was no change to the position of the remaining turbines and track infrastructure, and potential effects were as assessed in the 2015 ES. However, given the relocation of Turbine 4, additional circa 300m of access track and inclusion of one additional borrow pit search area and associated access, the potential for direct effects is assessed in this Chapter in relation to these changes only. This is discussed further in Section 11.3.

A.11.1.3 This Chapter has been prepared by ASH and Catherine Dagg (BA, ACiFA), a freelance archaeological consultant with over thirty years experience.

A.11.2 Consented Development

A.11.2.1 Please refer to Section 11.2 of the EIA Report (January 2019).

A.11.3 Scope of Assessment

A.11.3.1 Section 11.3 of the EIA Report (January 2019) noted that given the turbine positions of the Proposed Varied Development remain unchanged from the Consented Development, albeit four are being removed, and the access tracks will be reduced in length but otherwise in the same position, it is not proposed to carry out further assessment of direct effects as the changes would result in a slight reduction in the number of directly effected cultural heritage sites.

A.11.3.2 However, given the proposed changes to the Proposed Varied Development (Addendum), the consideration of direct effects is relevant for these new areas. This Chapter therefore considers the potential for direct effects on cultural heritage features as a result of these proposed changes, drawing on previous survey effort and recent Ground Investigation supervision.

A.11.3.3 In relation to indirect effects, Chapter 11 of the EIA Report (January 2019) provided an assessment of indirect effects on archaeological sites and sites of historic or cultural heritage interest in relation to the Proposed Varied Development. This assessment is reviewed and updated in relation to the proposed changes.

A.11.3.4 The assessment of cumulative effects has not been updated as it is considered that the proposed changes will not result in a change to the assessment findings reported in the EIA Report (January 2019).

A.11.4 Legislation, Policy & Guidance

A.11.4.1 Please refer to Section 11.4 of the EIA Report (January 2019).
A.11.5  Methodology

A.11.5.1 The methodology stated in Section 11.5 of the EIA Report (January 2019) for the assessment of indirect impacts remains relevant and should be referred to. The assessment of direct impacts has been prepared using the methodology referred to in this Section.

Sensitivity/Importance (Direct Impacts)

A.11.5.2 Archaeological sites, the definition of which extends to include areas considered to be of archaeological potential, and sites of historical or otherwise cultural interest fall into three categories:

- **National**: this category contains all sites and monuments with statutory protection, i.e. SMs and Listed Buildings. Other monuments, although not scheduled, may be considered to be of national importance if they are particularly rare and well-preserved examples of a type;

- **Regional**: almost all prehistoric and mediaeval sites would be considered to be of regional importance. Post medieval sites would be placed in this category if they are particularly well-preserved or unusual, dependent on the distribution of similar sites in the vicinity and if they form an element within a complex archaeological or historical landscape. Post-mediaeval townships, shieling sites and the more substantial relict agricultural, sporting or military remains of the 19th and 20th centuries would fall into this category; and

- **Local**: this category applies to minor landscape features of the post-mediaeval period, particularly those which are common or poorly preserved. Boundaries and trackways, unless forming elements of a well-preserved relict, archaeological or historical landscape, or bearing historical or cultural associations, would fall into this category.

Magnitude of Direct Impact

A.11.5.3 Criteria for assessing the magnitude of a direct impact include:

- **High Impact**: direct impact on sites of National importance is considered to be high, as these sites tend to be those with statutory protection. As such, any potential high impact would be unacceptable and would require a review of the development design in order to avoid or reduce direct impact;

- **Medium Impact**: direct impact on sites of Regional importance is considered to be medium, although each case will require separate consideration. In some cases this impact would be considered acceptable, most likely following a further programme of recording and investigation, while in other cases, the recommendation would be to modify the development design if possible to avoid or reduce direct impact;

- **Low Impact**: sites of local importance would not generally require modification of the development design to avoid direct impact. Some recording may be advisable as mitigation; and

- **Imperceptible Impact**: impact on sites which lie within the study area but would not be intentionally directly affected will be imperceptible.

Significance of Direct Impact

A.11.5.4 The predicted significance of impact is determined by consideration of a Site’s importance in conjunction with the magnitude of impact predicted on it. **Table A11.1** summarises the criteria for assessing the significance of a direct impact. A moderate or major effect is considered to be significant (shaded grey in **Table A11.1**).
Table A11.1: Significance of a Direct Impact:

<table>
<thead>
<tr>
<th>Magnitude of Impact</th>
<th>Sensitivity / Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>High</td>
<td>Major</td>
</tr>
<tr>
<td>Medium</td>
<td>Major</td>
</tr>
<tr>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>Negligible</td>
<td>Negligible</td>
</tr>
</tbody>
</table>

**Desk Study**

A.11.5.5 A desk based evaluation made use of available datasets and documentary sources, including all previous reported archaeological investigations in the area.

**Field Survey**

A.11.5.6 A site visit was carried out in August 2014 for the 2015 ES. This identified all previously unrecorded archaeological features within the study area and verified the nature and precise location and extent of features identified during previous fieldwork. This information provided in the 2015 ES remains relevant.

A.11.5.7 Previous survey effort has been carried out in the Bull Burn plantation (C. Dagg, 2009 EHG3254 - Pre-felling archaeological survey at Bull Burn Plantation, Gordonbush, Strathbrora).

**Baseline**

A.11.6.1 Baseline conditions relevant to SMs, Listed Buildings and Gardens and Designed Landscapes present within a 15km radius of the site boundary are as noted within the EIA Report (January 2019). Section 11.6 and Figure 11.1 of the EIA Report (January 2019) should be referred to. There are no designated battlefields or World Heritage Sites within the study area.

A.11.6.2 Baseline conditions on site are as reported in the 2015 ES (Chapter 11).

A.11.6.3 This section provides a summary of the baseline conditions on site in relation to the proposed changes.

A.11.6.4 One previously recorded archaeological site, MHG11015, is located in the vicinity of Borrow Pit Search Area 3 (within the Bull Burn plantation) but there are no recorded sites or associated minor features within the area and it is assumed that no unrecorded features will have survived forestry operations.

MHG11015: Hut Circles (Surveyed at 1:10,560. Visited by OS (J B) 5 January 1976)

A.11.6.5 There are two stone-walled huts ('A' and 'B') and a minor field system situated in undulating moorland. These are described below and shown on Figure A11.4.

A.11.6.6 'A' NC 8290 1242: On summit of a knoll, 5.5m internal diameter within a wall obscured by peat build-up spread to 1.5m broad. The position of the entrance is uncertain.

A.11.6.7 'B' NC 8294 1250: Comprising a hut similar in appearance to 'A' placed concentrically within an earlier hut each sharing a common entrance to the South, South-East. The inner hut is circular 7m internal diameter within a wall of bare stones 0.3m high and spread to 1.5m broad. Some inner facing stones and an entrance portal slab are discernible. The outer hut, partially overlaid by the inner, is oval measuring internally 11m North, North-West-South, South-East by 10m within a peat-obscured wall 0.5m high and spread to 2.5m broad.

A.11.6.8 In the vicinity of huts are scattered areas of cleared ground confined to dry rises. Three or four clearance heaps are visible.
A.11.6.9 It is assumed that ploughing, planting, felling and mulching activities will have destroyed any minor features associated with the two hut circles.

A.11.6.10 The two hut circles are considered to be of Regional sensitivity / importance. Hut circles are a relatively common feature of domestic settlement of the Bronze and Iron Ages in Strathbrora, but each individual hut circle has the potential to contain unique and important archaeological information.

A.11.7 Potential Effects

A.11.7.1 Section 11.7 of the EIA Report (January 2019) considered the potential indirect effects on the setting of Scheduled Monument sites and Listed Buildings as a result of the Proposed Varied Development.

A.11.7.2 The proposed relocation of Turbine 4 to T4b has been reviewed in relation to the findings presented in Section 11.7 of the EIA Report. It can be concluded that the minor alteration to the location of Turbine 4 will result in the same extent of visibility from receptors as the original location. As such, the findings presented in Section 11.7 and Table 11.6 of the EIA Report can be relied upon.

A.11.7.3 To supplement the assessment findings, Figures 11.2.1a to 11.3.3 of the EIA Report (January 2019) provided wireline and photomontage views from two scheduled monuments; Balnacoil Hill Cairn and Kilbraur Hut Circle. Figures A11.2.4 and A11.3.4 of this Chapter provide comparative wirelines from these locations to demonstrate the minimal change associated with the relocation of Turbine 4, and renaming to Turbine 4b.

A.11.7.4 Any indirect, visual impact of the proposed Borrow Pit Search Area 3 and batching plant will be restricted to the two SMs at Kilbraur, Kilbraur Broch and Kilbraur Hut Circle, and limited to the construction phase only.

A.11.7.5 In terms of direct effects, it can be confirmed that the relocation of Turbine 4 to T4b and the additional section of access track to Turbine 12 will have no direct impact on any archaeological features.

A.11.7.6 As described in Section 11.6, the search area for the proposed new borrow pit within the Bull Burn Plantation includes two recorded hut circles. One is located at the northern boundary of the borrow pit search area while the second is more centrally placed (see Figure A11.4).

A.11.7.7 It is anticipated that the excavation area for the borrow pit would be located to the west of these features (see Appendix A9.1: Borrow Pit Report), and therefore the magnitude of impact is likely to be negligible.

A.11.8 Mitigation Measures

A.11.8.1 No mitigation is recommended to reduce visual impacts from sites with statutory protection within 15km. Mitigation measures identified in the 2015 ES to reduce direct effects are secured through Condition 22 of the existing consent, requiring a programme of works for the evaluation, preservation and recording of any archaeological and historic features affected. It is proposed that this Condition is retained should the Proposed Varied Development (Addendum) be consented.

Additional Mitigation Measures Relevant to Proposed Varied Development (Addendum)

A.11.8.2 There are no additional mitigation measures proposed as a result of the Proposed Varied Development (Addendum). However, excavation works of the proposed borrow pit should be included within the remit of Condition 22.
A.11.9 Residual Effects
A.11.9.1 Residual visual impacts consist of significant impacts at two SMs of national importance, Balnacoil Hill Cairn and Duchary Rock Fort. The impact is considered to be to acceptable levels in both cases as, although there will be a significant visual impact, this only takes the form of increasing the density and marginally increasing the visible extent of the existing group of turbines. None of the SMs are associated with significant visual relationships with other sites or natural features which would be interrupted by the Proposed Varied Development (Addendum).

A.11.9.2 The visual impact on all other Sites would be Minor or Negligible, and not significant, due principally to screening effects from topography.

A.11.9.3 In terms of direct effects, the magnitude of impact is likely to be negligible and therefore the residual effect is also deemed to be negligible.

A.11.10 Cumulative Effects
A.11.10.1 The assessment of cumulative effects has not been updated as it is considered that the proposed changes will not result in a change to the assessment findings reported in the EIA Report (January 2019) (see Section 11.10).

A.11.11 Comparison of Effects
A.11.11.1 Table A11.8 summarises the effects that were assessed for the Consented Development and compares these with the effects of the Proposed Varied Development. An Additional column is added to record where the proposed changes to the Proposed Varied Development (Addendum) result in a change in the assessment of environmental impacts as reported in the EIA Report (January 2019), or, record where there is no change.

Table A11.8: Comparison of Effects

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Site Name</th>
<th>Consented Development Significance</th>
<th>Consented Development Significance (Cumulative)</th>
<th>Proposed Varied Development Assessment (including cumulative) (January 2019)</th>
<th>Proposed Varied Development Addendum (June 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>74</td>
<td>Balnacoil Hill Cairn</td>
<td>Major</td>
<td>Minor</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>75</td>
<td>Kilbraur Hut Circle</td>
<td>Minor</td>
<td>Moderate</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>77</td>
<td>Carrol Broch</td>
<td>Minor</td>
<td>Negligible</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>78</td>
<td>Duchary Rock Fort</td>
<td>Moderate</td>
<td>Moderate</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>79</td>
<td>Killin Chambered Cairn</td>
<td>Negligible</td>
<td>Not Visible</td>
<td>Decrease from Negligible to Not Visible</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>81</td>
<td>Uppat Homestead</td>
<td>Negligible</td>
<td>Negligible</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>82</td>
<td>Achnagarron</td>
<td>Negligible</td>
<td>Negligible</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
</tbody>
</table>
A.11.12 Conclusions

A.11.12.1 Chapter 11 of the EIA Report (January 2019) assessed the likely significance of visual effects on cultural heritage sites within 15km of the Proposed Varied Development.

A.11.12.2 The January 2019 assessment concluded that there would be a significant visual impact at two SMs (Balnacoil Cairn and Duchary Rock Fort). The visual impact on all other Sites would be Minor or Negligible, and not significant, due principally to screening effects from topography. The changes to the Proposed Varied Development assessed within this Addendum do not change these assessment findings.

A.11.12.3 On potential cumulative effects, Chapter 11 of the EIA Report (January 2019) concluded that the Proposed Varied Development would result in significant cumulative effects two SMs (Kilbraur Hut Circle and Duchary Rock Fort). The changes to the Proposed Varied Development assessed within this Addendum do not change these assessment findings.

A.11.12.4 The changes to the Proposed Varied Development (Addendum) assessed within this Chapter do not add any direct effects on the archaeological record.

A.11.12.5 Comparatively, impacts are similar to those assessed in the 2015 ES and 2016 FEI Report as part of the Consented Development. No new significant effects have been identified for the Proposed Varied Development (Addendum) that were not already assessed for in the EIA Report (January 2019) or the 2015 ES/2016 FEI. Those significant effects that have been identified are therefore considered to be acceptable.

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Site Name</th>
<th>Consented Development Significance</th>
<th>Consented Development Significance (Cumulative)</th>
<th>Proposed Varied Development Assessment (including cumulative) (January 2019)</th>
<th>Proposed Varied Development Addendum (June 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hut Circle</td>
<td>Negligible</td>
<td>Minor</td>
<td>Increase from Negligible to Minor</td>
<td>January 2019 assessment.</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Achnagarron Standing Stones</td>
<td>Negligible</td>
<td>Minor</td>
<td>Increase from Negligible to Minor</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>84</td>
<td>Learable Hill</td>
<td>Negligible</td>
<td>Minor</td>
<td>Increase from Negligible to Minor</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>86</td>
<td>Gordonbush Lodge</td>
<td>Negligible</td>
<td>Minor</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>88</td>
<td>Uppat House</td>
<td>Negligible</td>
<td>Minor</td>
<td>Increase from Negligible to Minor due to the house being restored, and therefore its sensitivity increasing</td>
<td>No change from January 2019 assessment.</td>
</tr>
<tr>
<td>89</td>
<td>Uppat, Memorial</td>
<td>Negligible</td>
<td>Negligible</td>
<td>No Change</td>
<td>No change from January 2019 assessment.</td>
</tr>
</tbody>
</table>