Volume 2: Chapter 10 - Cultural Heritage



VOLUME 2, CHAPTER 10: CULTURAL HERITAGE

VOLUME	2, CHAPTER 10: CULTURAL HERITAGE	1
10.	CULTURAL HERITAGE	4
10.1	Introduction	4
10.2	Scope of the Assessment	5
10.3	Assessment Methodology	7
10.4	Baseline Conditions	14
10.5	Mitigation and Monitoring	16
10.6	Assessment of Likely Significant Effects - Construction	18
10.7	Assessment of Likely Significant Effects - Operation	30
10.8	Assessment of Likely Significant Effects - Decommissioning	44
10.9	Assessment of Likely Cumulative Effects	44
10.10	Summary of Total Intra and Inter Cumulative Effects	60
10.11	Summary of Significant Effects	60

Figures (Volume 3 of this EIAR)

Figures 10.1.1 - 10.1.27: Heritage Assets: Inner Study Area

Figures 10.2.1 - 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)

Visualisations (Volume 4 of this EIAR)

Volume 4 a

Figure 9.17a-i VP13 Tannadice

Figure 9.18a-f VP14 Angus Hill Layby, B9134

Figure 9.22a-d VP18 White Caterthun

Figure 9.24a-d VP20 Inveriscandye Road, southeastern edge of Edzell

Volume 4 b

Figure 9.40a-f VP36 Barmekin Hill

Volume 4 d

Figure 10.3a-c CH01 Craig Hill, Fort and Broch (SM 3038)

Figure 10.4a-o CH02 Balkemback Cottages Stone Circle (SM 2868)

Figure 10.5a CH03 Carlunie Hill Cairn (SM 6449)

Figure 10.6a-c CH04 Arniefoul Cairn (SM 389)

Figure 10.7a-d CH05 Glamis Castle (LB 11701) / Glamis Castle GDL (GDL 189)

Figure 10.8a-d CH06 Glamis Castle (GDL 189)

Figure 10.9a-d CH07 St Orland's Stone (SM 90270)

Figure 10.10a-b CH08 St Orland's Stone (SM 90270)

Figure 10.11a-f CH09 Ballinshoe Castle (SM 162)

Figure 10.12a-f CH10 Battledykes Cairn (SM 7234)

Figure 10.13a-h CH11 Law of Baldoukie, Barrow (SM 6314)

Figure 10.14a-f CH12 Finavon, Fort (SM 139)

Figure 10.15a-i CH13 Law of Windsor, Cairn (SM 3375)

Figure 10.16a-f CH14 Careston Castle (LB 4656)

Figure 10.17a-d CH15 Stracathro House (LB 17803)

Figure 10.18a-f CH16 Stracathro Roman Camp (SM 2829)

Figure 10.19a-d CH17 Witch Hillock Burial Mound and Stone Setting (SM 4823)

Figure 10.20a-b CH18 Balbegno Castle (LB 6754)

Figure 10.21a-b CH19 Phesdo House (LB 9646)

Figure 10.22a-c CH20 Glenbervie GDL (GDL 194)

Volume 4 e

Figure 10.23a CH21 Glenbervie House (GDL 194)

Figure 10.24a-i CH22 Droop Hill, Cairns (SM 4778)

Figure 10.25a-d CH23 Cairn o' Mount Cairns (SM 4968)

Figure 10.26a-f CH24 Raedykes, Roman Camp (SM 1016)

Figure 10.27a-f CH25 Cairn-mon-earn Cairn (SM 4892)

Figure 10.28a-f CH26 Park House GDL (GDL 309)

Figure 10.29a-d CH27 Park House GDL (GDL 309)

Figure 10.30a-h CH28 Park House GDL (GDL 309)

Figure 10.31a-d CH29 Normandykes Roman Camp (SM 2478)

Figure 10.32a-d CH30 Drum Castle (LB 3113) / Drum Castle GDL (GDL 141)

Figure 10.33a-f CH31 Tillyorn Moated Homstead (SM 12161)

Figure 10.34a-e CH32 East Finnercy, Cairn (SM 6076)

Figure 10.35a-c CH33 Dunecht House GDL (GDL 153)

Figure 10.36a-f CH34 Dunecht House (LB 3133) / Dunecht House GDL (GDL 153)

Figure 10.37a-b CH35 Barmekin Hillfort (SM 57)

Figure 10.38a-f CH36 New Wester Echt, Stone Circle (SM 6074)

Figure 10.39a-d CH37 Upper Corskie Stone Circle and Pictish Symbols (SM 6075)

Figure 10.40a CH38 Glack Cairn (SM 12120)

Figure 10.41a CH39 South Fornet Stone Circle (SM 12353)

Figure 10.42a-f CH40 South Leylodge Steading, Stone Circle (SM 12350)

Appendices (Volume 5 of this EIAR)

Appendix 10.1: Baseline Characterisation Methodology

Appendix 10.2: Cultural Heritage Consultation Responses

Appendix 10.3: Cultural Heritage Viewpoint Information

Appendix 10.4: Cultural Heritage Baseline Conditions

Appendix 10.5: Cultural Heritage Assets within in the Inner Study Area

Appendix 10.6: Inner Study Area: Predicted Effects



Appendix 10.7: Designated Heritage Assets in the Outer Study Area

Appendix 10.8: Listed Buildings in Conservation Areas and Townscapes

Appendix 10.9: Designated Heritage Assets outwith the Outer Study Area

Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area

Appendix 10.11: Detailed Assessment of Designated Heritage Assets outwith the Outer Study Area

Appendix 10.12: Stone Circles Mitigation Response

10. CULTURAL HERITAGE

10.1 Introduction

- 10.1.1 This Chapter considers the potential effects of the Proposed Development on cultural heritage interests (historic environment sites and features, archaeology, and built heritage) hereafter referred to as 'heritage assets'.
- 10.1.2 The assessment details the results of a desk-based assessment and targeted walk-over reconnaissance field survey, and draws on consultation with Aberdeenshire Council, Angus Council, Historic Environment Scotland (HES), Aberdeenshire Council Archaeology Service (ACAS), heritage advisors to both Aberdeenshire and Angus Council, and Aberdeenshire Council Built Heritage Officers.
- 10.1.3 The specific objectives of this Chapter are to:
 - describe the cultural heritage and archaeological baseline;
 - describe the assessment methodology and significance criteria used in carrying out this impact assessment;
 - describe the potential effects, including direct effects (construction), effects in setting and cumulative effects;
 - assess the residual effects of the Proposed Development remaining following implementation of mitigation measures.
- 10.1.4 This Chapter presents environmental information relevant to the Kintore to Tealing 400 kV OHL. It should be read in conjunction with Volume 1, Chapter 3: Project Description of the EIAR for full details of the Proposed Development. Where appropriate, cross reference is made to Volume 2, Chapter 9: Landscape and Visual Amenity.
- 10.1.5 The cultural heritage assessment was prepared and overseen by experienced archaeological and cultural heritage consultants with appropriate memberships of the Chartered Institute for Archaeologists (ClfA), and experience of cultural heritage assessments in the context of wind farm, electricity transmission grid, and mixed-use developments. Field survey and data collection were undertaken by archaeologists with extensive experience and training in undertaking archaeological survey for gird and renewable energy projects. Further details on team competency can be found in **Volume 5**, **Appendix 5.1: The EIA Team.**
- 10.1.6 The Chapter is supported by the following figures in **Volume 3**:
 - Figures 10.1.1 to 10.1.27: Heritage Assets: Inner Study Area; and
 - Figures 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment).
- 10.1.7 The following visualisations in **Volume 4** are cross referred to where relevant throughout the Chapter:

Landscape and Visual Amenity Visualisations:

- Figure 9.17a-i VP13 Tannadice;
- Figure 9.18a-f VP14 Angus Hill Layby, B9134;
- Figure 9.22a-d VP18 White Caterthun;
- Figure 9.24a-d VP20 Inveriscandye Road, southeastern edge of Edzell; and
- Figure 9.40a-f VP36 Barmekin Hill.

Cultural Heritage Visualisations:

- Figures 10.3-10.42: Cultural Heritage Visualisations.
- 10.1.8 The following appendices in **Volume 5** are also referred to where relevant throughout the Chapter:
 - Appendix 10.1: Baseline Characterisation Methodology;
 - Appendix 10.2: Cultural Heritage Consultation Responses;
 - Appendix 10.3: Cultural Heritage Viewpoint Information;
 - Appendix 10.4: Cultural Heritage Baseline Conditions;



- Appendix 10.5: Cultural Heritage Assets within the Inner Study Area;
- Appendix 10.6: Inner Study Area: Predicted Effects;
- Appendix 10.7: Designated Heritage Assets in the Outer Study Area;
- Appendix 10.8: Listed Buildings in Conservation Areas and Townscapes;
- Appendix 10.9: Designated Heritage Assets outwith the Outer Study Area;
- Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area;
- . Appendix 10.11: Detailed Assessment of Designated Heritage Assets outwith the Outer Study Area; and
- Appendix 10.12: Stone Circles Mitigation Response.
- 10.1.9 The following terminology has been referred to throughout this Chapter:
 - Site defined as the area bounded by the LOD (for the proposed OHL and access tracks) Volume 3, Figure
 1.1: Overview of the Proposed Development).
 - Proposed Development the infrastructure including towers, OHL conductors, access tracks and working areas, (see Volume 1, Chapter 3: Project Description).
 - Horizontal Limit of Deviation (LOD) Area in which micrositing of the OHL and associated access tracks could take place within the terms of the Section 37 Consent (see **Volume 1, Chapter 3: Project Description**).
 - Vertical LOD Height by which the proposed towers could be increased in tower height (up to a maximum of 9 m).
 - Zone of Theoretical Visibility (ZTV) digital terrain model used to identify the likely extent of predicted visibility of the OHL (for further details see **Volume 2**, **Chapter 9**: **Landscape and Visual Amenity**)
 - Bare-Earth Zone of Theoretical Visibility (ZTV) bare-earth model that does not feature buildings, vegetation or other boundaries which may have a significant effect on the visibility of a development.
 - Inner Study Area defined as the Standard LOD for the Proposed Development (see above) which forms the study area for the identification of cultural heritage assets that could be directly affected by the Proposed Development.
 - Outer Study Area a wider study area, extending 3 km either side of the Proposed Alignment, used to identify
 those heritage assets with statutory and non-statutory designations that could have their settings adversely
 affected by the Proposed Development
- 10.1.10 A glossary providing information on specific technical terms used throughout the Chapter is provided as part of **Volume 1** of this EIAR.

10.2 Scope of the Assessment

Effects Assessed in Full

- 10.2.1 The EIA Scoping process, baseline conditions and professional judgement has identified the following effects for detailed assessment:
 - direct physical effects during construction on heritage assets within the inner study area;
 - setting effects during operation on statutory and non-statutory designated heritage assets within 3 km of the Proposed Alignment (outer study area) and those outwith the outer study area, which are considered to be especially sensitive to changes to their setting from the Proposed Development;
 - cumulative effects during construction on heritage assets within the inner study area; and
 - · cumulative effects during operation on designated heritage assets within the outer study area.
- 10.2.2 The assessment is based on the characteristics and description of the Proposed Development as described in **Volume 1**, **Chapter 3: Project Description.**
- 10.2.3 With embedded and applied mitigation (see **Section 10.5: Mitigation and Monitoring**), many potential significant direct and cumulative effects on cultural heritage have been and can be avoided or reduced; however, potential significant effects could occur where impacts upon setting and direct impacts upon buried archaeology are



unavoidable. These potential significant residual effects form the focus of the cultural heritage assessment presented in this Chapter.

Effects Scoped Out

- 10.2.4 On the basis of the desk-based and field survey work undertaken, the professional judgement of the EIA team, experience from other relevant projects and policy guidance or standards, and feedback received from consultees, the following effects have been 'scoped out' of detailed assessment, as proposed in the EIA Scoping Report:
 - indirect effects on standing archaeological remains or structures and buried archaeological remains or deposits.
 The Proposed Development is unlikely to give rise to significant adverse effects through hydrological changes or other potential indirect impacts such as those from vibration and seismic events (eg quarry blasting);
 - temporary setting effects on cultural heritage assets arising from construction activities such as the presence of
 the pull through/machine positions, erection of scaffolding and creation of temporary access tracks and working
 areas. These construction activities would be temporary, resulting in short-term, **Minor** effects on heritage assets
 close to the Proposed Development and would have no significant permanent effects;
 - assessment of the effect of the Proposed Development on the settings of Listed Buildings in urban locations.
 These buildings typically have localised townscape settings and relationships with other historic buildings around them and there are no sections of the Proposed Development where it is predicted there would be significant effects on the settings of such designations. Where specific heritage assets that lie within townscapes have been raised by statutory consultees as requiring consideration these have been included within the assessment. A list of those Listed Buildings recorded within the outer study area within an urban setting or townscapes, and which have been scoped out of the assessment, is provided in Volume 5, Appendix 10.8: Listed Buildings in Conservation Areas and Townscapes; and
 - assessment of direct operational effects from maintenance or replacement works. As a consequence of design
 and pre-construction mitigation there are no heritage assets likely to receive a direct effect during operation of
 the Proposed Development and any required maintenance or replacement works would use the as-built access
 tracks and infrastructure to facilitate such works.

Study Area

- 10.2.5 The following study areas have been employed for the cultural heritage assessment:
 - Inner study area, defined as the Standard LOD for the Proposed Development (see Volume 1, Chapter 3: Project Description for further details) forms the study area for the identification of cultural heritage assets that could be directly affected by the Proposed Development (see Volume 1, Chapter 3: Project Description for further details on LODs) this includes:
 - a 100 m area either side of the alignment centre line (including all temporary working areas, EPZs, conductors and forestry operational corridor), 200 m around proposed tension towers, 100 m either side of the centre line for proposed new permanent and temporary access tracks and 25 m either side of existing access tracks proposed for upgrading; and
 - a 100 m area either side of additional developments required as part of the Section 37 application, including the realignment of the existing Kintore to Tealing 275 kV OHL, Cable Sealing End Compound, realignment of the existing Kintore to Fetteresso 275/400 kV OHL and crossing of the existing Kintore to Craigiebuckler 132 kV OHL (see Volume 1, Chapter 3: Project Description for further details on these other developments).
 - Outer study area: a wider study area extending 3 km either side of the Proposed Alignment (including the inner study area) was used to identify those heritage assets with statutory and non-statutory designations (including those within the inner study area) whose settings may be affected by the Proposed Development (including cumulative effects). Assets identified as having settings sensitive to change are included in the assessment, even where no visibility is predicted from the asset, as views towards or across such sites may be important aspects of the settings. Consideration has also been given to designated heritage assets beyond 3 km where these have been raised by statutory consultees, or where, based on appraisal of the ZTV, long-distance views and intervisibility are considered to be important aspects of an asset's setting.



10.3 Assessment Methodology

10.3.1 This assessment was carried out in accordance with the principles contained within the following legislation, policies, and guidance.

Legislation

- 10.3.2 Legislation governing the investigation, preservation, and recording of Scheduled Monuments, Listed Buildings, and other areas of special architectural and/or historic interest.
 - The Ancient Monuments and Archaeological Areas Act 1979;
 - Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997;
 - Historic Environment Scotland Act 2014;
 - Protection of Military Remains Act (1986);
 - The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017; and
 - Electricity Act 1989.

Policy

- 10.3.3 Relevant planning policy at both national and local levels that are a material consideration in decision-making with respect to the historic environment are:
 - National Planning Framework for Scotland 4 (NPF4) (Scottish Government);
 - Policy 7: Historic Assets and Places;
 - Historic Environment Policy for Scotland (HEPS) (2019);
 - Planning Advice Note 2/2011: Planning and Archaeology (PAN2/2011);
 - Aberdeenshire Local Development Plan 2023 (LDP);
 - Policy HE 1 Protecting Listed Buildings, Scheduled Monuments and Archaeological Sites (including other historic buildings);
 - Policy HE 2 Protecting Historic, Cultural and Conservation Areas;
 - Angus Local Development Plan;
 - Policy 8 Built and Cultural Heritage.

Guidance

- 10.3.4 Industry guidance which sets out best-practice working methods for those investigating, advising on, and categorising the historic environment.
 - Standards and Guidance for Historic Environment Desk-Based Assessment (ClfA, 2014; updated 2020);
 - Code of Conduct: professional ethics in archaeology (CIfA, 2014; revised 2021);
 - Designation Policy and Selection Guidance (HES, 2019);
 - Managing Change in the Historic Environment: Setting (HES, 2016);
 - Environmental Impact Assessment Handbook (SNH & HES, 2018); and
 - Principles of Cultural Heritage Assessment (IEMA, 2021).

Consultation

10.3.5 In undertaking the assessment, consideration has been given to the scoping and pre-consultation responses as detailed in Volume 5, Appendix 10.2: Cultural Heritage Consultation Responses. A full summary of the consultation process is provided in Volume 1, Chapter 6: Scope and Consultation and the related Volume 5, Appendix 6.3: Consultation Matrix containing the Consultation Matrix.



Desk Based Research and Data Sources

Inner Study Area

- 10.3.6 A detailed desk-based assessment was conducted for the inner study area (Volume 3, Figures 10.1.1 to 10.1.27: Heritage Assets: Inner Study Area) using a range of documentary, archival and bibliographic sources. Up-to-date information was obtained from appropriate sources on the locations and extents of heritage assets within the study area with statutory and non-statutory designations, and those with non-designated classifications.
- 10.3.7 Details of the sources consulted during the desk-based study area are provided in **Volume 5**, **Appendix 10.1**: **Baseline Characterisation Methodology**.
- 10.3.8 During public consultation for the Proposed Development, the potential for a number of Second World War downed aircraft sites to be located within, or in close proximity, to the inner study area was raised. Research was carried out on these potential crash sites as part of the desk-based assessment, to determine their exact locations. Details on the sources consulted and a summary of the results of the aircraft crash research is provided in Annex A of **Volume** 5, Appendix 10.4: Cultural Heritage Baseline Conditions.

Outer Study Area

10.3.9 Up to date information was obtained from HES and the Aberdeenshire and Angus Councils' Historic Environment Records (HERs) on statutory and non-statutory designated heritage assets within the outer study area and within the ZTV area for the Proposed Development.

Field Survey

Inner Study Area

- 10.3.10 Targeted reconnaissance walkover field survey was undertaken in specific areas (ie rough pastureland and moorland) where the desk-based assessment indicated that there was more potential for previously unrecorded remains to survive as upstanding earthworks.
- 10.3.11 No walkover field survey was carried out through areas of commercial forestry unless sites of interest were identified through the desk-based assessment. In such instances, efforts were made to access those sites, where practicable, in order to assess their baseline condition.
- 10.3.12 Field survey was not carried out in areas of improved pasture or cultivated arable farmland, where there is little or no potential for upstanding remains to be present.
- 10.3.13 Full details on the approach to field surveys undertaken are provided in Volume 5, Appendix 10.1: Baseline Characterisation Methodology. The scope and methodology for the field survey was agreed by ACAS (see Volume 5, Appendix 10.2: Cultural Heritage Consultation Responses).
- 10.3.14 A gazetteer of heritage assets identified from desk-based assessment and field survey within the inner study area is provided in Volume 5, Appendix 10.5: Cultural Heritage Assets within the Inner Study Area and the locations and extents of these heritage assets are shown on Volume 3, Figures 10.1.1 to 10.1.27: Heritage Assets: Inner Study Area.

Outer Study Area

- 10.3.15 Site visits to selected heritage assets within the outer study area (Volume 3, Figures 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) were also carried out to assess the character and sensitivity of their settings. Site visits focused on those heritage assets most likely to receive appreciable effects on their settings from the Proposed Development (ie those closest to the LOD and those specifically identified as requiring assessment by HES), see Volume 5, Appendix 10.1: Baseline Characterisation Methodology. Where access was difficult or denied, publicly accessible locations as close as possible to each asset was sought as a basis for assessment.
- 10.3.16 A list of relevant assets identified within the outer study area is provided in **Volume 5**, **Appendix 10.7: Designated Heritage Assets in the Outer Study Area** and the locations of these heritage assets is provided, together with the



Actual Tower Height bare-earth ZTV¹ produced for the Proposed Development, on **Volume 3**, **Figures 10.2.1 to 10.2.11**: **Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)**. Those additional heritage assets outwith the outer study area considered to be especially sensitive to changes to their setting and included in the assessment are listed in **Volume 5**, **Appendix 10.9**: **Designated Heritage Assets outwith the Outer Study**.

Cultural Heritage Viewpoints

10.3.17 Forty viewpoints (see Volume 4, Figures 10.3-10.42: Cultural Heritage Visualisations and Volume 5, Appendix 10.3: Cultural Heritage Viewpoint Information) were produced for cultural heritage assets that were considered to be specifically sensitive to changes on their settings from the Proposed Development. The heritage assets were identified through consultation with HES, ACAS and Aberdeenshire Council's Built Heritage Officer (see Volume 5, Appendix 10.2: Cultural Heritage Consultation Responses) and from site visits. The locations of the cultural heritage viewpoints are provided on Volume 3, Figures 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the Assessment). In addition, cross reference was made to LVIA viewpoints where appropriate (details of LVIA VPs cross-referenced with the following assessment are provided in Volume 5, Appendix 10.3: Cultural Heritage Viewpoint Information).

Criteria for the Assessment of Effects

- 10.3.18 The effects of the Proposed Development on heritage assets have been assessed on the basis of their type (direct effects, effects on setting and cumulative effects) and their nature (adverse or beneficial). The assessment takes into account the value/sensitivity of the heritage asset and its setting (Table 10.1: Sensitivity of Heritage Assets) and the magnitude of the predicted impact (Table 10.2: Magnitude of Impact).
- 10.3.19 The following impacts, as defined in *Environmental Impact Assessment (EIA) Handbook* (SNH/HES, 2018²) Appendix 1, Paragraph 44, have been considered:
 - Direct (physical) impacts: occur where the physical fabric of the asset is removed or damaged as a direct result
 of the proposal. Such impacts are most likely to occur during the construction phase and are most likely to be
 permanent;
 - Indirect (physical) impacts: occur where the fabric of an asset, or buried archaeological remains, is removed or damaged, or where it is preserved or conserved, as an indirect result of the proposal even though the asset may lie some distance from the proposal. Such impacts are most likely to occur during the construction phase and are most likely to be permanent;
 - Setting impacts: these are generally direct and result from a proposal causing change within the setting of a
 heritage asset that affects its cultural significance or the way in which it is understood, appreciated, and
 experienced. Such impacts are generally, but not exclusively, visual, occurring directly as a result of the
 appearance of a proposal in the surroundings of the asset. However, they may relate to other senses or factors,
 such as noise, odour or emissions, or historical relationships that do not relate entirely to intervisibility, such as
 historic patterns of land-use and related historic features. Such impacts may occur at any stage of a proposal's
 lifespan and may be permanent, reversible, or temporary;
 - Cumulative impacts: can relate to the physical fabric or setting of assets. They may arise as a result of impact interactions, either of different impacts of a proposal itself, or additive impacts resulting from incremental changes caused by a proposal together with other projects already in the planning system;
 - Adverse effects are those that detract from or reduce cultural significance or special interest of heritage assets;
 and
 - Beneficial effects are those that preserve, enhance, or better reveal the cultural significance or special interest of heritage assets.

Kintore to Tealing 400 kV OHL: EIAR Volume 2, Chapter 10: Cultural Heritage

¹ The ZTV has been based on the location of the Proposed Development and the height of the towers as per the tower schedule set out in **Volume 5**, **Appendix 3.1: Tower Schedule**. Further information on the methodology used to generate the ZTV is provided in **Volume 2**, **Chapter 9**, **Landscape and Visual Amenity**.

² Scottish Natural Heritage (SNH) & Historic Environment Scotland (HES), 2018. Environmental Impact Assessment Handbook.



Criteria for Assessing the Sensitivity of Receptors

- 10.3.20 Cultural heritage assets are given weight through the designation process. Designation ensures that sites and places are recognised by law through the planning system and other regulatory processes. The level of protection and how a site or place is managed varies depending on the type of designation and the laws and policies that apply to it (HES, 2019 updated 2020³).
- 10.3.21 **Table 10.1: Sensitivity of Heritage Assets** summarises the relative sensitivity of those heritage assets and their settings relevant to the Proposed Development drawing on the guidance provided by the HES (2019) 'Designation Policy and Selection Guidance' document. Only those heritage assets relevant to the Proposed Development are considered here (excluding, in this instance, World Heritage Sites, Inventory Historic Battlefields and Marine Resources, because none are present within the study areas.

Table 10.1: Sensitivity of Heritage Assets

Sensitivity of Impact	Definition/Criteria
High	 Assets valued at an international or national level, including: Scheduled Monuments; Category A Listed Buildings; Inventory Gardens and Designed Landscapes; and Non-designated assets that meet the relevant criteria for designations.
Medium	 Assets valued at a regional level, including: Archaeological sites and areas that have regional value (contributing to the aims of regional research frameworks); Category B Listed Buildings; and Conservation Areas.
Low	Assets valued at a local level, including: • Archaeological sites that have local heritage value; • Category C Listed Buildings; and • Unlisted historic buildings and townscapes with local (vernacular) characteristics.
Negligible	 Assets of little or no intrinsic heritage value, including: Artefact find-spots (where the artefacts are no longer in situ and where their provenance is uncertain); and Poorly preserved examples of particular types of features (e. quarried and gravel pits, dilapidated sheepfolds, etc)

Criteria for Assessing the Magnitude of Impact

10.3.22 The magnitude of impact (adverse or beneficial) has been assessed in the categories **High**, **Medium**, **Low**, and **Negligible**, as defined in **Table 10.2: Magnitude of Impact** and which has been informed by Appendix 1 of the *EIA Handbook* (SNH & HES 2018⁴).

Table 10.2: Magnitude of Impact

Magnitude of Impact	Definition/Criteria		
	Adverse	Beneficial	
High	Changes to the fabric or setting of a heritage asset resulting in the complete or near complete loss of the asset's cultural significance,	Preservation of a heritage asset in situ where it would otherwise be completely or almost completely lost in the do-nothing scenario.	

³ Historic Environment Scotland (HES), 2019. 'Designation Policy and Selection Guidance', Edinburgh.

⁴ Scottish Natural Heritage (SNH) & Historic Environment Scotland) HES, 2018. Environmental Impact Assessment Handbook, Appendix 1: Cultural Heritage Impact Assessment, Figure 1 – Example of Scale of Magnitude of Changes to the Historic Environment, page 184.



Magnitude of Impact	Definition/Criteria	Definition/Criteria		
	Adverse	Beneficial		
	such that it may no longer be considered a heritage asset.			
Medium	Changes to those elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is substantially altered.	Changes to key elements of a heritage asset's fabric or setting, that result in its cultural significance being preserved where this would otherwise be lost, or restored.		
Low	Changes to those elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is slightly altered.	Changes that result in elements of a heritage asset's fabric or setting that detract from its cultural significance being removed.		
Negligible	Changes to fabric or setting of a her significance unchanged.	Changes to fabric or setting of a heritage asset that leave its cultural significance unchanged.		

Assessment of Effects on Setting

10.3.23 HES's guidance document, 'Managing Change in the Historic Environment: Setting'⁵, notes that:

"Setting can be important to the way in which historic structures or places are understood, appreciated and experienced. It can often be integral to a historic asset's cultural significance."

"Setting often extends beyond the property boundary or 'curtilage' of an individual historic asset into a broader landscape context."

10.3.24 The HES guidance also advises that:

"If proposed development is likely to affect the setting of a key historic asset, an objective written assessment should be prepared by the applicant to inform the decision-making process. The conclusions should take into account the significance of the asset and its setting and attempt to quantify the extent of any impact. The methodology and level of information should be tailored to the circumstances of each case".

- 10.3.25 The HES guidance⁶ recommends that there are three stages in assessing the impact of a development on the setting of a historic asset or place:
 - Stage 1: identify the historic assets that might be affected by the Proposed Development;
 - Stage 2: define and analyse the setting by establishing how the surroundings contribute to the ways in which the historic asset or place is understood, appreciated, and experienced; and
 - Stage 3: evaluate the potential impact of the proposed changes on the setting, and the extent to which any adverse impacts can be mitigated.
- 10.3.26 The EIA Handbook (SNH & HES 2018) Appendix 1, paragraph 43 advises that:

"When considering setting impacts, visual change should not be equated directly with adverse impact. Rather the impact should be assessed with reference to the degree that the proposal affects those aspects of setting that contribute to the asset's cultural significance."

10.3.27 Following these recommendations, the Actual Tower Height bare-earth ZTV⁷ for the Proposed Development has been used to identify those heritage assets from which there could be theoretical visibility of one or more elements of the Proposed Development, and the degree of theoretical visibility. Consideration was also given to designated

⁵ Historic Environment Scotland, 2016. Managing Change in the Historic Environment: Setting'.

⁶ Historic Environment Scotland, 2016. Managing Change in the Historic Environment: Setting, Section 3: Assessing the Impact of Change, page 8.

⁷ The ZTV has been based on the location of the Proposed Development and the height of the towers as per the tower schedule set out in **Volume 5**, **Appendix 3.1: Tower Schedule**. Further information on the methodology used to generate the ZTV is provided in **Volume 2**, **Chapter 9**, **Landscape and Visual Amenity**.



- heritage assets where there is no predicted visibility from the asset but where views of, or across, the asset are important factors contributing to its cultural significance. In such cases, consideration was given to whether the Proposed Development could appear in the background of those views.
- 10.3.28 Cultural heritage assets within the outer study area that were considered to have a localised setting, those presumed not to have long distance views and vistas (to and from their locations); those that are demonstrably functional in their purpose, for example cairnfields, ancillary farm buildings and minor architectural structures (ie dovecots, mills, cottages, road bridges), those standing in woodland (detailed in Volume 5, Appendix 10.7: Designated Heritage Assets in the Outer Study Area, and those within built environs (listed in Volume 5, Appendix 10.8: Listed Buildings in Conservation Areas and Townscapes), have not been considered further.
- 10.3.29 Cultural heritage assets within the outer study area that were considered as having long distance views and vistas (to and from their locations) that contribute to their cultural significance, or prominent visual components of the landscape or are local land marks (for example prehistoric hill forts, funerary cairns, castles, country houses and gardens and designed landscapes) were included in the assessment (detailed in Volume 5, Appendix 10.7:
 Designated Heritage Assets in the Outer Study Area) and further assessed using the criteria detailed in Tables 10.1-10.3. These assets are included in the tabulated assessment in Volume 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area.
- 10.3.30 Additional heritage assets outwith the outer study area that were considered to be especially sensitive to changes to their setting from the Proposed Development, or specifically requested to be included in the assessment by statutory consultees (see Volume 5, Appendix 10.2: Cultural Heritage Consultation Responses) are listed in Volume 5, Appendix 10.9: Designated Heritage Assets outwith the Outer Study Area, and assessed in detail in Volume 5, Appendix 10.11: Detailed Assessment of Designated Heritage Assets outwith the Outer Study Area.

Significance of Effect

10.3.31 The sensitivity of the asset (**Table 10.1**: **Sensitivity of Heritage Assets**) and the magnitude of the predicted impact (**Table 10.2**: **Magnitude of Impact**) has been used to inform an assessment of the significance of the effect (direct effect, or effects on setting), following the criteria provided in **Table 10.3**: **Significance of Effect**. The matrix employs a graduated scale of significance (from **Negligible** to **Major** effects) and where two outcomes are possible through application of the matrix, professional judgment supported by reasoned justification, has been used to determine the level of significance.

Table 10.3: Significance of Effect

	Sensitivity of Asset					
		High	Medium	Low	Negligible	
oę	High	Major	Major/Moderate	Moderate/Minor	Minor/Negligible	
tude	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible	
<u>i</u>	Low	Moderate/Minor	Moderate/Minor	Minor	Negligible	
Mag Chal	Negligible	Minor/Negligible	Minor/Negligible	Negligible	Negligible	

- 10.3.32 **Major** and **Moderate** effects are considered to be '**Significant**' in the context of the EIA Regulations; **Minor** and **Negligible** effects are considered to be '**Not Significant**'.
- 10.3.33 Where a significant effect on the setting of a heritage asset is predicted as a result of change within its surroundings, using the approach outlined above, an assessment has been made as to whether that effect would result in a significant adverse effect on the integrity of its setting (NPF4 Policy 7). For the purposes of the assessment, the integrity of the setting has been considered to be maintained if the setting's contribution to the cultural significance of the monument, and its capacity to convey that significance to visitors, would not be compromised by the Proposed Development either alone or cumulatively.

Assessment Limitations

10.3.34 The desk-based assessment draws on the records in the Angus and Aberdeenshire HER, provided in a digital Geographic Information System (GIS) dataset acquired in September 2023 ahead of the field survey. It is assumed



- that the data provided was accurate and up to date at the time it was acquired. Updated data was acquired in March 2024 and September 2024, and checked against the original data, in respect of which no discrepancies were identified.
- 10.3.35 Designated heritage assets within the study areas have been identified from the HES database and downloaded from HES's Data Spatial Warehouse⁸ in January 2025. This data is assumed to have been up to date at the time of its acquisition.
- 10.3.36 Targeted field survey was undertaken in specific areas focusing on unmanaged grassland and heathland where the desk-based assessment indicated that there was more potential for previously unrecorded remains to survive as upstanding earthworks. The field survey did not include areas of improved farmland where there is a limited potential for upstanding remains to survive, or areas in current use as commercial forestry plantation, where ploughing and drainage, tree planting and subsequent root growth, and tree throw, and felling activities are often such that previously unknown sites or features of archaeological and cultural heritage interest are not preserved intact and in undisturbed condition. It is not considered that the omission of survey within improved arable farmland areas or commercial forestry plantation has detracted from the validity of the assessment presented below.
- 10.3.37 Some limitations were encountered in respect of field survey at Cross Den/Balcalk (between Towers S196-S195 and along the proposed access track to S195 from the south) (Volume 3, Figures 10.1.1 10.1.2, Volume 5, Appendix 10.4: Cultural Heritage Baseline Conditions, Section A: Tealing to Nether Drumgley) and at Between Bogfold and South Leylodge (between Towers N6 and N4) (Volume 3, Figure 10.1.27, Volume 5, Appendix 10.4: Cultural Heritage Baseline Conditions, Section F: West Park to Kintore), where land access was restricted during the field survey period. As a consequence, the baseline information for heritage assets previously recorded in these areas, is limited by the information available at the time of preparing the EIA, including preparation of this Chapter. It is however considered that the data obtained is sufficient to provide a reliable assessment of the archaeological baseline within these areas and that the information has been sufficient to allow a proper assessment of the likely significant effects of the Proposed Development on the heritage assets.
- 10.3.38 Limitations were encountered in respect of site visits to designated heritage assets at Vayne (Vayne Castle (SM 4015), Vayne Standing Stone SM 135, and Law of Windsor Cairn (SM 3375), where land access was restricted. Publicly accessible locations as close as possible to each asset was sought as a basis for assessment and it is considered that the information obtained has been sufficient to allow a proper assessment of the likely significant effects of the Proposed Development on these heritage assets.

Limits of Deviation

- 10.3.39 It is noted that the Proposed Development, as described in **Volume 1**, **Chapter 3: Project Description**, includes horizontal and vertical LODs to allow for micrositing of towers and access tracks, and any variations of tower heights in the event that changes are needed post consent. The assessment presented in this Chapter is based on the likely effects on heritage assets associated with the construction and operation of the Proposed Development, based on the proposed tower schedule provided in **Volume 5**, **Appendix: 3.1: Tower Schedule** and access track information provided in **Volume 1**, **Chapter 3: Project Description**, **Section 3.8: Typical Construction Activities for Overhead Line Infrastructure**.
- 10.3.40 The potential for movement in the position of towers away from the alignment described in **Volume 1, Chapter 3: Project Description** will potentially change the specific heritage assets that could be directly affected by construction of the Proposed Development. This is taken into consideration within the assessment with commentary on effects from potential change set out in **Section 10.6: Assessment of Likely Significant Effects Construction**. Final tower positions and access tracks would be subject to micrositing within the horizontal LOD on the basis of detailed ground investigation. At this stage, consideration would also be given to detailed local environmental sensitivities, including the proximity to heritage assets. Towers and access tracks which lie within close proximity to heritage assets would be microsited as far from heritage assets as possible and movement of towers within the horizontal

Kintore to Tealing 400 kV OHL: EIAR Volume 2, Chapter 10: Cultural Heritage

⁸ Historic Environment Scotland (HES), n.d. GIS downloader. [Online] Available at: https://portal.historicenvironment.scot/apex/ [Accessed January 2025].



LOD would be subject to review by an Archaeological Clerk of Works (ACoW) and would seek to avoid or minimise direct effects where practicable.

10.3.41 The potential increase in tower height within the vertical LOD could potentially exacerbate adverse effects on the setting of heritage assets, particularly those that are in close proximity to the Proposed Development. The vertical LOD, indicated as a red marker above each tower, is shown on the cultural heritage visualisations provided in Volume 4, Figures 10.3-10.42. Where the vertical LOD is considered to potentially result in a greater level of effect than that assessed for the Proposed Development, this is taken into consideration within the assessment (see Section 10.7: Assessment of Likely Significant Effects – Operation).

10.4 Baseline Conditions

Summary of Baseline

Inner Study Area

- 10.4.1 In total, 346 heritage assets have been identified within or partly within the inner study area for the Proposed Development. These include:
 - five Scheduled Monuments: Balkemback Cottages Stone Circle (SM 2868), Law of Baldoukie Barrow (SM 6314), (Baldoukie Souterrains (SM 6315), Cowie Line, Pillbox and Earthworks (SM 6437) and South Leylodge Steading Stone Circle (SM 12350);
 - two Non-Inventory Designed Landscapes (Inshewan House and Auchenreoch House); and
 - 339 non-designated heritage assets.
- 10.4.2 The Angus and Aberdeenshire HER also holds records for nine archaeological events (desk-based assessment, field survey, watching briefs / evaluations) that produced no archaeological finds, and these have been excluded from the assessment.
- 10.4.3 The Proposed Development primarily passes through an area of long-term rural settlement and related agricultural activity, and the majority of the heritage assets are settlement remains and agrarian/small-scale industrial features primarily dating to the medieval/post-medieval periods.
- 10.4.4 The historic landscape character of the inner study area comprises largely of 18th to 19th century enclosed improved farmland, with small pockets of rough grazing/moorland and 20th century commercial forestry scattered throughout.

 There are no large urban centres and settlement consists mainly of scattered small villages/hamlets and farmsteads.
- 10.4.5 Prehistoric settlement and funerary activity is known within the inner study area, with a number of excavations having taken place in the past. Prehistoric funerary and ritual sites include the upstanding remains of prehistoric burial cairns, stone circles and standing stones, as well as cropmark evidence for a cursus and barrows. Prehistoric settlement remains within the inner study area generally consist of ring ditches, enclosures, souterrains and pit alignments that survive as cropmark sites visible on aerial photographs, as well as lithic scatters and findspots. Roman features include Roman camps.
- 10.4.6 Medieval and later activity indicates a landscape of agricultural and associated light industry and includes numerous farmsteads and associated features such as enclosures, dykes, wells, trackways and clearance cairns. Limited industrial activity exists in the form of transport (19-20th century railways and bridges), quarries, and mills making use of the widely available water sources.
- 10.4.7 Some of the heritage assets within the inner study area are related to military efforts of the First and Second World Wars, such as the Cowie Line, and aircraft crash sites (see **Volume 5**, **Appendix 10.4**: **Cultural Heritage Baseline Conditions**, **Annex A**) and bomb craters are also evident. Defences were ordered by Scottish Command in 1940 when it was thought that German forces would invade from Norway, using beaches in northeast Scotland to establish a foothold, before moving south by land.
- 10.4.8 A detailed description of the baseline conditions within the inner study area and an assessment of the archaeological potential of the inner study area in general, is provided in **Volume 5**, **Appendix 10.4**: **Cultural Heritage Baseline Conditions**, and a full description, and assessment of the heritage assets' value/sensitivity, on a site-by-site basis is



provided in Volume 5, Appendix 10.5: Cultural Heritage Assets within the Inner Study Area. The location, and extents of the heritage assets are shown on Volume 3, Figures 10.1.1 to 10.1.27: Heritage Assets: Inner Study Area.

Outer Study Area

- 10.4.9 There are 478 designated heritage assets within the outer study area (excluding those that are scoped out from the assessment, see Section 10.2 for details), including five within the inner study area, as shown on Volume 3, Figures 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment).
 - 117 Scheduled Monuments (115 with predicted theoretical visibility of the Proposed Development);
 - 23 Category A Listed Buildings (21 with predicted theoretical visibility of the Proposed Development);
 - 197 Category B Listed Buildings (188 with predicted theoretical visibility of the Proposed Development);
 - 128 Category C Listed Buildings (127 with predicted theoretical visibility);
 - Eight Inventory Garden and Designed Landscapes (with some degree of predicted theoretical visibility); and,
 - Five Conservation Areas (with some degree of predicted theoretical visibility).
- 10.4.10 A description of the baseline conditions within the outer study area, is provided in Volume 5, Appendix 10.4: Cultural Heritage Baseline Conditions, and details of these heritage assets on a site-by-site basis are provided in Volume 5, Appendix 10.7: Designated Heritage Assets in the Outer Study Area. Their locations, and extents, are shown on Volume 3, Figures 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area include in the assessment).

Designated Heritage Assets outwith the Outer Study Area

10.4.11 Thirteen designated heritage assets (eight Scheduled Monuments, two Category A Listed Buildings, two Inventory Designed Landscapes and one Conservation Area) that are located outwith the 3 km outer study area were identified through consultation with statutory consultees as requiring consideration. These designated heritage assets were considered to be especially sensitive to changes in their setting from the Proposed Development. Details of these heritage assets on a site-by-site basis are provided in Volume 5, Appendix 10.7: Designated Heritage Assets in the Outer Study Area and their locations and extents are shown on Volume 3, Figures 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area include in the assessment).

<u>Future Baseline in the Absence of the Proposed Development</u>

- 10.4.12 If the Proposed Development were not to proceed, there would likely be no material change to the baseline conditions of the various heritage assets that presently exist within the inner and outer study areas. Current agricultural land-use practices would most likely continue and there would be no change to the character of the heritage assets, other than the erosion of features through natural processes and agricultural activities. The current rough pasture and moorland land-use (on higher ground) would also likely continue, limiting the potential for disturbance to heritage assets, and only natural decay (weathering and erosion) would affect the surviving upstanding remains.
- 10.4.13 Commercial forestry land-use would also be likely to continue on a cyclical felling and replanting basis, with some potential for the extension of areas covered by forestry and for new areas of woodland planting to be identified. The forestry land-use regime would be subject to the normal requirements of UK Forestry Standards and would result in limited potential for disturbance to identified historic assets and could result in new heritage assets being brought to light and added to the archaeological record. It is probable that only natural decay through erosion or disturbance arising from tree planting would have the potential to affect surviving remains within forested areas.
- 10.4.14 Settlements are likely to continue to change locally the nature of the outer study area, particularly given the proximity of the Proposed Development to the towns of Forfar, Brechin, Laurencekirk and Stonehaven, with potential future expansion of settlements and development of rural housing. Further development of onshore wind farms and



reinforcement and extension of the electricity transmission network, predominantly to connect further renewable energy generation in the northeast of Scotland, is likely to occur within the outer study area.

Implications of Climate Change for Baseline Conditions

- 10.4.15 Qualitatively, the UK Climate Change Projections 2018 (UKCP18) for Scotland identifies that future baseline climate conditions in Angus and Aberdeenshire may result in the following changes:
 - increased temperatures, particularly in Summer;
 - · increased Winter rainfall and a likely decrease in Summer rainfall;
 - increased heavy rain days (rainfall greater than 25 mm), particularly in Winter;
 - modest increase in near surface wind speeds expected in the second half of the 21st century with Winter months
 experiencing more significant effects of winds; and
 - · increased frequency of Winter storms.
- 10.4.16 With regards to the heritage assets identified in the inner and outer study areas, it is not thought that there would be any significant environmental effects resulting from the predicted change in the future climate baseline. The potential effects identified can be summarised as follows:
 - As outlined in HES (2019) 'A Climate Change Risk Assessment' increased water and moisture are major factors
 in chemical, biological and physical decay processes that are prolific in the deterioration of stonework. This, in
 combination with increased vegetation growth, has the potential to have an adverse impact on stone-built
 heritage assets.
 - There is a low risk that warmer and drier Summers, with longer spells of dry weather, and an increased risk of forest and moorland fires would damage any cultural heritage within these areas.
 - There is a low risk of disturbance of buried archaeological remains resulting from increased extreme wetting and
 drying of soils, leading to ground instability, as well as changes in chemical composition, compaction and erosion
 that may lead to adverse effects on long-term survival of such remains.
- 10.4.17 Based on the qualitative assessment above, and in combination with professional judgement, it is assessed that any changes in temperature, precipitation and wind speed will have a **Low** to **Negligible** effect on the current conditions of the identified cultural heritage assets within the study areas as a result of predicted future changes to the baseline in the absence of the Proposed Development.

10.5 Mitigation and Monitoring

- 10.5.1 NPF4 (2023⁹) provides a mitigation hierarchy of avoidance, minimisation, restoration and offsetting. Avoidance and minimisation measures can be achieved through design (eg embedded and applied mitigation), whilst compensatory measures offset effects that have not, and could not, been avoided or minimised.
- 10.5.2 HEPS requires the recognition, care, and sustainable management of the historic environment, and the emphasis in Planning Advice Note (PAN) 2/2011: Planning and Archaeology (PAN2) is for the preservation of important remains in situ (where practicable) and by record where preservation is not possible.
- 10.5.3 The approach advocated above is inherent in the approach adopted to the identification of mitigation measures for the EIA of the Proposed Development.
- 10.5.4 Following the approach to mitigation as set out in **Volume 1**, **Chapter 5**: **EIA Process and Methodology** mitigation has been organised in a three-tier hierarchy, as follows. A comprehensive schedule of mitigation is provided in **Volume 2**, **Chapter 17**: **Schedule of Mitigation**:
 - Embedded Mitigation: design stage mitigation;
 - Applied Mitigation: standard/best practice environmental discipline and/or construction industry mitigation; and

⁹ Scottish Government, 2024. National Planning Framework, Annex F – Glossary of definitions, Mitigation hierarchy Page 153

• Additional Mitigation: site-specific bespoke mitigation identified from impact assessments undertaken for each key environmental topic of the EIA.

Embedded Mitigation

- 10.5.5 Topic specific embedded mitigation (mitigation achieved through design) is outlined below:
 - CH1: Avoidance of Scheduled Monuments. The Proposed Development has been designed to avoid any direct
 impacts on Scheduled Monuments that lie in close proximity to the Proposed Development and access tracks
 have been designed to avoid Scheduled Monuments. Where Scheduled Monuments lie within the Proposed
 Development horizontal LOD these would be marked out with a suitable stand-off buffer to be agreed in advance
 with HES.
 - CH2: Avoidance of Inventory Gardens and Designed Landscapes (GDLs). The Proposed Development has been
 designed to avoid any direct impacts on GDLs that lie in close proximity to the Proposed Development. GDLs
 have been excluded from the Proposed Development LOD, and access tracks have been designed to avoid
 encroaching on GDLs.
 - CH3: Where an existing forestry track that is to be utilised as an access track to the Proposed Development crosses the Scheduled Monument Cowie Line Pillbox and Earthworks 945 m SW of Stonehouse (SM 6437) (Volume 3, Figure 10.1.17: Heritage Assets: Inner Study Area) any upgrading works required along the section of existing access track that runs immediately north of the Scheduled Monument, will be kept to the opposite side of the Cowie Water and will not encroach upon the Scheduled Monument. A temporary overbridge or similar arrangement will be placed on top of the existing bridge which crosses the Cowie Water; no groundbreaking works will be required for construction of the temporary overbridge or similar arrangement, which will sit on gravel pads laid down on top of the existing ground surface. Where vehicles cross the Scheduled Monument, they will remain within the footprint of the existing access track. No tree felling will be carried out within the Scheduled Monument.

Applied Mitigation

- 10.5.6 For its new infrastructure projects in recent years, the Applicant has developed and effectively implemented a suite of General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs) which prescribe good environmental management practices. This includes management plans that the Principal Contractors are required to prepare and implement, including a Construction Environmental Management Plan (CEMP) (see Volume 1, Chapter 3: Project Description, Section 3.13: Environmental Management During Construction), and subsidiary plans on aspects such as ecological and ornithological management, construction noise management, construction transport management, etc. These measures are referred to as Applied Mitigation. In preparing and implementing these Plans, the Principal Contractors will also be required to incorporate any additional management measures (i.e. Additional Mitigation) identified through the EIA as necessary to avoid or reduce significant residual effects.
- 10.5.7 Mitigation (Embedded, Applied and Additional) relevant for cultural heritage are set out in Section 10.6: Assessment of Likely Significant Effects Construction, Table 10.6: Committed Additional Mitigation During Construction and provided on a site-by-site basis in Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects.
- 10.5.8 Further information on general mitigation is set out in Volume 1, Chapter 5: EIA Process and Methodology, Section 5.5: Approach to Mitigation. Applied Mitigation relevant to Cultural Heritage is set out in Table 10.4: Applied Mitigation.

Table 10.4: Applied Mitigation

Mitigation Measure	Project Stage/Timing	Responsibility
CH4: Construction works will proceed in accordance with the measures outlined in the CEMP.	Construction	Principal Contractors
CH5: Construction machinery will operate only within defined working areas and access corridors, limiting ground disturbance.	Construction	Principal Contractors



Mitigation Measure	Project Stage/Timing	Responsibility
CH6: Upstanding cultural heritage remains will be retained where possible. Where necessary, existing cultural heritage features may be fenced off or otherwise visibly marked out (by placing high visibility markers at the outer limits of the visible remains facing the working area) to signal their presence to construction workers.	Construction	Archaeological Contractor and Principal Contractors
CH7: Should they be encountered, previously unidentified archaeological remains will be subject to a programme of archaeological works to be developed in consultation with ACAS and detailed in a Written Scheme of Investigation (WSI) and will be a requirement of the contract between the Applicant and the Principal Contractors. It is envisaged that the requirement for a WSI will be secured through a suitably worded planning condition.	Construction	Archaeological Contractor and Principal Contractors

Further Survey Requirements and Monitoring

10.5.9 Post-construction monitoring would be carried out for heritage assets that have been marked out for the duration of the construction works. Details on the monitoring measures are set out in **Table 10.5: Monitoring**.

Table 10.5: Monitoring

Monitoring Measure	Project Stage/Timing	Responsibility
CH8: Check that marking out of heritage assets within the inner study area has been effective and that none of the heritage assets have been disturbed during construction works.	Post Construction	Archaeological Contractor
CH9: Check that all markers have been removed from heritage assets following completion of the Proposed Development.	Post Construction	Archaeological Contractor

10.6 Assessment of Likely Significant Effects - Construction

- 10.6.1 The assessment of effects identified above is based on the project description as outlined in **Volume 1**, **Chapter 3**: **Project Description**.
- 10.6.2 Direct (physical) effects on heritage assets are most likely to arise from ground disturbing activities that occur during construction works, which may damage and possibly destroy cultural heritage remains. Direct impacts can also occur as a result of above ground disturbance: for example, as a result of landscaping, vehicle movement over cultural heritage features, or from the storage of construction materials above them. Direct effects on heritage assets are normally adverse, permanent, and irreversible.
- 10.6.3 The layout of the Proposed Development, including the positioning of proposed towers and the siting of other infrastructure, has been designed to avoid or minimise direct effects on known cultural heritage assets as far as possible (see **Section 10.5** above).
- 10.6.4 It is considered that there is potential for direct impacts on heritage assets in the following circumstances:
 - where heritage assets lie within proposed working areas around towers, proposed EPZ working areas, areas
 proposed for scaffolding erection and proposed water crossing areas to take into account working areas around
 these infrastructure locations and associated vehicle movements;
 - where heritage assets lie within proposed forestry or vegetation clearance areas; and
 - where heritage assets lie alongside, or are close to proposed access track locations, including where the proposed access tracks run along the line of the Proposed Alignment.

Micrositing (LOD)

10.6.5 It is the intention that the Proposed Development would be subject to a horizontal LOD of 100 m in either direction along the Proposed Alignment, measured from each tower centre, 200 m around proposed tension towers, 100 m



- either side of the centre line for proposed new permanent and temporary access tracks and 25 m either side of the centre line for existing access tracks proposed for upgrading. This allows for micrositing of towers and access tracks in the event that changes are needed post consent (see **Volume 1**, **Chapter 3**: **Project Description**).
- 10.6.6 Movement of infrastructure or proposed felling/vegetation clearance areas within the LOD would be dependent upon consideration of identified constraints in the micrositing area and subject to advice from an ACoW and the Applicant 's mitigation relating to change control (see Mitigation Measure G6 in Volume 2, Chapter 17: Schedule of Mitigation). No micrositing of infrastructure or proposed felling areas would be undertaken where this could potentially affect cultural heritage interests without consultation with an appointed ACoW, who would advise on the acceptability of any proposed realignments, and in consultation with the Council Archaeologist to agree appropriate mitigation where there are potential impacts as a result.

Predicted Construction Effects

- 10.6.7 The alpha-numeric references in brackets in the following sections refer to asset numbers provided on the figures within Volume 3, Figures 10.1.1 to 10.1.27: Heritage Assets: Inner Study Areas.
- 10.6.8 A total of 345 heritage assets have been identified within the inner study area. Detailed descriptions of these assets are provided in **Volume 5**, **Appendix 10.5**: **Cultural Heritage Assets within the Inner Study Area**, with an assessment of their heritage sensitivity.
- 10.6.9 **Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects**, provides a list of these assets along with a summary of predicted direct impacts on a site-by-site basis, proposed mitigation (Embedded, Applied and Additional), and assessment of residual effects.
- 10.6.10 Where effects are predicted on heritage assets taking account of Embedded and Applied mitigation, the requirement for further (Additional) mitigation has been considered, and the predicted significance of the residual effect is assessed.
- 10.6.11 It is assessed that there is potential, in the absence of Additional Mitigation, for construction works of the Proposed Development to result in direct effects on 174 heritage assets. Of these it has been assessed that there is potential for significant construction effects on 30 heritage assets. In addition, 20 heritage assets that lie within the micrositing (LOD) and could potentially be significantly affected by any micrositing of proposed towers or proposed access tracks, in the absence of Additional Mitigation.
- 10.6.12 The sections below set out the predicted significant effects arising, in the absence of Additional Mitigation, from the construction of the Proposed Development.

Section A

- 10.6.13 One Scheduled Monument (SM 2868) and 61 non-designated heritage assets have been identified within the inner study area for Section A (see **Volume 5**, **Appendix 10.5**: **Cultural Heritage Assets within the Inner Study Area**) and it has been assessed that there is potential, in the absence of Additional Mitigation, for construction works to result in significant effects on five non-designated heritage assets, these are:
 - former cist burials (NO33NE0017);
 - a souterrain (NO33NE0019);
 - a clearance cairn (HA013); and
 - two cropmark sites (NO44NW0021 and NO44NW0092/HA038).
- 10.6.14 The HER records that 'stone coffins' (NO33NE0017), were discovered at Balkemback farm in the late 18th century. The coffins were probably Bronze Age cist burials. It is not known if the cists themselves have been removed or whether the locations of the cists are accurately recorded, however, there is some potential for other buried archaeological remains, of similar date, to survive. If buried remains do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact, on asset of **medium** sensitivity, would be of **medium** magnitude, resulting in an adverse effect of **Moderate** significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in **Table 10.6: Committed Additional Mitigation During Construction**.



- 10.6.15 Two of these heritage assets (NO44NW0021 and NO44NW009/HA038) survive as cropmark sites visible on aerial photographs. No above ground remains of these heritage assets survive, however, there is potential that buried remains, relating to prehistoric settlement, survive. Any remains present could be exposed or disturbed by groundbreaking works proposed in working areas and along proposed access tracks. If buried remains of these assets do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact, on assets of **low** sensitivity, would be of **medium** magnitude, resulting in an adverse effect of **Moderate** significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in **Table 10.6: Committed Additional Mitigation During Construction.**
- 10.6.16 The HER records that a souterrain (NO33NE0019) was discovered at Prieston Farm in the 18th century. The exact location of the souterrain is not known. However, Wainright (1963¹⁰) identified the likely souterrain site in a field to the south-southeast of the farm and there is potential for buried remains of the souterrain, or associated prehistoric features, to survive in this area. If buried remains do survive and they are encountered, it is assessed, that without Additional Mitigation, the direct impact, on asset of **low** sensitivity, would be of **medium** magnitude, resulting in an adverse effect of **Moderate** significance.
- 10.6.17 A clearance cairn (HA013), of low sensitivity, lies within the proposed working area for Tower S201. Construction works for the proposed tower would disturb the cairn. It is assessed, without Additional Mitigation, the direct impact, on an asset of low sensitivity, would be of high magnitude, resulting in an adverse effect of Moderate significance. Mitigation measures to reduce the predicted effect on this heritage asset is set out in Table 10.6: Committed Additional Mitigation During Construction and provided in Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects.
- 10.6.18 Three additional heritage assets are predicted to be potentially significantly affected if the proposed towers or proposed access tracks were to be relocated in the LOD, these are:
 - two enclosures (North Balluderon, Enclosure (NO33NE0020) and Upper Hayston, Enclosure (134404)), both of low sensitivity, which could be affected if Tower S201 is moved west or southwest or if Tower S176 is moved east, respectively.
 - the site of a former building and enclosure (HA039), of low sensitivity, could be affected is Tower S164 is moved south.
- 10.6.19 No above ground remains of the former building and an associated enclosure (HA039), or cropmark sites (NO33NE020 and 134404) survive. However, there is potential that buried remains may survive. If buried remains do survive and they are encountered, it is assessed, that without Additional Mitigation, the direct impact, on assets of low sensitivity, would be of medium magnitude, resulting in adverse effects of Moderate significance. In each case, it is unlikely that micrositing would be required to the extent that the Proposed Development would impinge on these assets. Nevertheless, Additional Mitigation measures are set out in Table 10.6: Committed Additional Mitigation During Construction to ensure that measures are put in place to record any assets lost as a result of construction work, where appropriate.

Section B

- 10.6.20 Two Scheduled Monuments (SM6134 and SM6315) and 31 non-designated heritage assets have been identified within the inner study area for Section B (see Volume 5, Appendix 10.5: Cultural Heritage Assets within the Inner Study Area) and it has been assessed that there is potential, in the absence of Additional Mitigation, for construction works to result in significant effects on four non-designated heritage assets, these are:
 - a former farmstead (NO45SW0079);
 - the site of a former building and well (HA042);
 - the site of former building (HA045); and
 - the remains of a settlement (NO56SE0070), surviving as cropmarks visible on aerial photographs.

¹⁰ Wainwright, F T. (1963) The souterrains of southern Pictland. London. Page(s): 212-13 RCAHMS Shelf Number: E.11.WAI



- 10.6.21 No above ground remains of these heritage assets survive, however there is potential that buried remains relating to the former farmstead/buildings and cropmark site may survive. Any remains present could be exposed or disturbed by groundbreaking works proposed in working areas and along proposed access tracks. If buried remains of these assets do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact on assets of low sensitivity would be of medium magnitude, resulting in adverse effects of Moderate significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in Table 10.6: Committed Additional Mitigation During Construction and provided on a site-by-site basis in Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects.
- 10.6.22 Two additional heritage assets are predicted to be potentially significantly affected if the proposed towers or proposed access track were to be relocated within the LOD, these are:
 - the site of a former building (HA046), of **low** sensitivity, which could potentially be affected if Tower S131 is moved northeast; and
 - the site of a former building and enclosure (HA048); of **low** sensitivity, which could potentially be affected if Tower S126 is moved south.
- 10.6.23 No above ground remains of these former buildings (and associated structures) survive however there is some potential that buried remains relating to the settlement sites. If buried remains do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact on assets of low sensitivity would be of medium magnitude, resulting in adverse effects of Moderate significance. In each case, it is unlikely that micrositing would be required to the extent that the Proposed Development would impinge on these assets. Nevertheless, Additional Mitigation measures are set out in Table 10.6: Committed Additional Mitigation During Construction to ensure that measures are put in place to record any assets lost as a result of construction work, where appropriate.

Section C

- 10.6.24 68 non-designated heritage assets have been identified within the inner study area for Section C (**Volume 5**, **Appendix 10.5**: **Cultural Heritage Assets within the Inner Study Area**) and it has been assessed that there is potential, in the absence of Additional Mitigation, for construction works to result in significant effects on seven non-designated heritage assets, these are:
 - Former settlement remains and other remains including enclosures and a pit alignment (331549, NO66NW0065, 263639, NO66NW0080 and NO67SE0012) all surviving as cropmark sites visible on aerial photographs;
 - the site of a former building (HA062); and
 - the site of a former building and enclosure (HA071).
- 10.6.25 No above ground remains of these heritage assets survive, however there is potential that buried remains relating to the former buildings and cropmark sites may survive. Any remains present could be exposed or disturbed by groundbreaking works proposed in working areas and along proposed access tracks. If buried remains of these assets do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact on assets of low sensitivity would be of medium magnitude, resulting in adverse effects of Moderate significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in Table 10.6: Committed Additional Mitigation During Construction and provided on a site-by-site basis in Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects.
- 10.6.26 Nine additional heritage assets are predicted to potentially be significantly affected if the proposed towers or proposed access tracks were to be relocated within the LOD, these are:
 - the site of burial cists (NO56SE0010), of **low** sensitivity, which could potentially be affected if Tower S106 is moved southwest; and
 - the site of a burial cairn (NO56SE0002), of **low** sensitivity, which could potentially be affected if Tower S103 is moved southeast.
 - the site of a building and enclosure(s) (HA055), of **low** sensitivity, which could potentially be affected if Tower S99 is moved northeast of if the proposed access track to Tower S97 is moved north;



- the remains of an earthwork (34983), of **low** sensitivity, which could potentially be affected if Tower S92 is moved south;
- the remains of a spinning mill (NO66NW0087), of low sensitivity, which could potentially be affected if Tower S89 is moved south;
- rig and furrow remains and possible enclosure (NO66NW042), of low sensitivity, which could potentially be affected if Tower S76 is moved west.
- a former building (HA063), of low sensitivity, which could potentially be affected if Tower S70 is moved southeast;
- a former enclosure (NO67SE0064), of low sensitivity, which could potentially be affected if Tower S67 is moved northwest:
- a former building (NO67SE0022), of low sensitivity, which could potentially be affected if Tower S58 is moved north:
- 10.6.27 No above ground remains of these survive however there is potential that associated buried remains may survive. If buried remains do survive and they are encountered, it is assessed, that without Additional Mitigation, the direct impact on assets of **low** sensitivity would be of **medium** magnitude, resulting in adverse effects of **Moderate** significance. In each case, it is unlikely that micrositing would be required to the extent that the Proposed Development would impinge on these assets. Nevertheless, Additional Mitigation measures are set out in **Table 10.6:** Committed Additional Mitigation During Construction to ensure that measures are put in place to record any assets lost as a result of construction work, where appropriate.

Section D

- 10.6.28 56 non-designated heritage assets have been identified within the inner study area for Section D (**Volume 5**, **Appendix 10.5**: **Cultural Heritage Assets within the Inner Study Area**) and it has been assessed that there is potential, in the absence of Additional Mitigation, for construction works to result in significant effects on seven heritage assets, these are:
 - the remains of a ring ditch (NO77NW0032), enclosure and ring ditch (NO77NW0024), unenclosed settlement (NO77NW0026), and ring ditch and souterrain (NO77NE0031), all surviving as cropmark sites visible on aerial photographs
 - a burial cist (NO77NW0009);
 - a former field boundary (305995/HA077), surviving as cropmarks visible on aerial photographs; and
 - the site of a former garden (HA078).
- 10.6.29 The majority of these heritage assets (NO77NW0032, NO77NW0024, NO77NW0026, NO77NE0031) survive as cropmark sites visible on aerial photographs at Burnhead of Monboddo. The Aberdeenshire HER records that these cropmark sites are of regional significance and of **medium** sensitivity. No above ground remains of these heritage assets survive, however there is potential that buried remains relating to prehistoric settlement and funerary activity to survive. Any remains present could be exposed or disturbed by groundbreaking works proposed in working areas and along proposed access tracks. If buried remains of these assets do survive and they are encountered, it is assessed that, without additional mitigation, the direct impact on assets of **medium** sensitivity would be of **medium** magnitude, resulting in adverse effects of **Moderate** significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in **Table 10.6**: **Committed Additional Mitigation During Construction** and provided on a site-by-site basis in **Volume 5 Appendix 10.6**: **Inner Study Area: Predicted Effects**.
- 10.6.30 The NRHE records that a former field boundary, and other potential associated features, are visible as cropmarks on aerial photographs at Pittarow (305995/HA077) and there is potential that buried remains of these features may survive. Any remains present could be exposed or disturbed by groundbreaking works proposed in the working area and along the proposed access track for Tower S40. If buried remains of this asset do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact, on an asset of **low** sensitivity, would be of **medium** magnitude, resulting in an adverse effect of **Moderate** significance. Additional Mitigation measures to



cover the possibility that archaeological remains may be present are set out below in **Table 10.6**: **Committed Additional Mitigation During Construction** and provided on a site-by-site basis in **Volume 5**, **Appendix 10.6**: **Inner Study Area**: **Predicted Effects**.

- 10.6.31 The site of a former designed garden (HA078) associated with Redhall House lies within the proposed working area for Tower S35. No upstanding remains of this garden now survive, however, there is some potential for buried remains to survive. Any remains present could be exposed or disturbed by groundbreaking works for the construction of this tower. It is assessed that without Additional Mitigation, the direct impact, on an asset of **low** sensitivity, would be of **medium** magnitude resulting in an adverse effect of **Moderate** significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in **Table 10.6: Committed Additional Mitigation During Construction** and provided on a site-by-site basis in **Volume 5, Appendix 10.6:**Inner Study Area: Predicted Effects.
- 10.6.32 Four additional heritage assets are predicted to potentially be significant affected if the proposed towers or proposed access tracks were to be relocated within the LOD, these are:
 - the site of a former croft (NO78SE0048), of low sensitivity, which could potentially be affected if Tower S22 or the proposed access track to Tower S22 are moved northeast;
 - the site of a former building (NO78SE0064), of **low** sensitivity, which could potentially be affected if Tower S21 is moved northeast, or the proposed access tracks to Towers S21 and S22 are moved north or west;
 - the site of a former smithy (NO78SE0045), of low sensitivity, which could potentially be affected if Tower S14 is moved west; and
 - the site of a former building (HA090), of low sensitivity, which could potentially be affected if Tower S20 is moved southeast.
- 10.6.33 No above ground remains of these survive; however, there is potential that associated buried remains may survive. If buried remains do survive and they are encountered, it is assessed that without Additional Mitigation, the direct impacts on assets of low sensitivity would be of medium magnitude, resulting in adverse effects of Moderate significance. In each case, it is unlikely that micrositing would be required to the extent that the Proposed Development would impinge on these assets. Nevertheless, additional mitigation measures are set out in Table 10.6: Committed Additional Mitigation During Construction to ensure that measures are put in place to record any assets lost as a result of construction work, where appropriate.
- 10.6.34 There is some limited possibility that the site of a Second World War military aircraft crash site may survive near to Tannachie, between Towers S11 to S7 (see Volume 5, Appendix 10.4: Cultural Heritage Baseline Conditions, Annex A Military Aircraft Crash Site Records for further details). Little is known about the aircraft crash site, no remains of the aircraft crash site have been discovered to date and the exact location of the crash site is unknown. As the land immediately around Tannachie is arable farmland, it is likely that any remains would have been recovered at the time of the crash and the potential for any military aircraft crash site to survive within this area of the inner study area is assessed as being Negligible. In the highly unlikely instance that buried remains of the aircraft crash site are encountered, during construction works for the Proposed Development, it is assessed that the predicted impact, without mitigation, will be of medium magnitude resulting in an effect of Major significance. Additional Mitigation During Construction.

Section E

- 10.6.35 One Scheduled Monument (SM 6437) and 37 non-designated heritage assets have been identified within the inner study area for Section E (Volume 5, Appendix 10.5: Cultural Heritage Assets within the Inner Study Area) and it has been assessed that there is potential, in absence of Additional Mitigation, for construction works to result in significant effects on one heritage asset, a former stone cist (NO79NE0003).
- 10.6.36 The Aberdeenshire HER records that a stone cist (NO79NE0003) was discovered in the 19th century at West Durris Farm, when a hillock was levelled. No remains of the stone cist are likely to now survive, however there is potential for other buried remains associated with the stone cist to survive. If buried remains do survive and they are



encountered, it is assessed that, without Additional Mitigation, the direct impact on an asset of **low** sensitivity, would be of **medium** magnitude, resulting in an adverse effect of **Moderate** significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in **Table 10.6: Committed Additional Mitigation During Construction**.

10.6.37 There is some limited possibility that two Second World War military aircraft crash sites may survive between Towers S2 and N90 (in Fetteresso Forest) (see Volume 5, Appendix 10.4: Cultural Heritage Baseline Conditions, Annex A Military Aircraft Crash Site Records for further details). No remains of the aircraft crash sites have been discovered to date, and the exact locations of the crash sites are unknown. Given previous ground disturbance through ploughing and drainage works as well as planting, the potential for any military aircraft crash sites to survive within this area of the inner study area is assessed as being Negligible. In the highly unlikely instance that buried remains of the aircraft crash site are encountered, during construction works for the Proposed Development, it is assessed that the predicted impact, without mitigation, will be of medium magnitude resulting in an effect of Major significance. Additional Mitigation to avoid or reduce this potential impact is set out below in Table 10.6: Committed Additional Mitigation During Construction.

Section F

- 10.6.38 One Scheduled Monument (SM 12350) and 88 non-designated heritage assets have been identified within the inner study area for Section F (Volume 5, Appendix 10.5: Cultural Heritage Assets within the Inner Study Area) and it has been assessed that there is potential, in the absence of Additional Mitigation, for construction works to result in significant effects on six heritage assets, these are:
 - the site of a three former crofts (NJ70SE0114, NJ70NW0135 and NJ71SW0146);
 - the site of a former, Farmstead (NJ70NW0057); and
 - the site of two former buildings (NJ70NW0088 and NJ71SW0147).
- 10.6.39 No above ground remains of five of these heritage assets (NJ70SE0114, NJ70NW0057, NJ70NW0088, NJ71SW0147 and NJ71SW0146) now survive, however, there is potential that buried remains could survive. Any remains present could be exposed or disturbed by groundbreaking works proposed in working areas and along proposed access tracks. If buried remains of these assets do survive and they are encountered, it is assessed that, without Additional Mitigation, the direct impact on assets of low sensitivity would be of medium magnitude, resulting in adverse effects of Moderate significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in Table 10.6: Committed Additional Mitigation During Construction and provided on a site-by-site basis in Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects.
- 10.6.40 The site of a former croft (NJ70NW0135) lies within the proposed working area for Tower N17 and would be crossed by the proposed new access track to Tower N17. All that survives of the former croft are fragments of an enclosure that originally stood to the southwest of the croft buildings; no above ground remains of the croft buildings now survive. There is, however, potential for buried remains of the former buildings, or other associated remains, to survive and any remains present could be exposed or disturbed by groundbreaking works for the construction of this tower. It is assessed that without Additional Mitigation, the direct impact, on an asset of low sensitivity, would be of medium magnitude resulting in an adverse effect of Moderate significance. Additional Mitigation measures to cover the possibility that archaeological remains may be present are set out below in Table 10.6: Committed Additional Mitigation During Construction and provided on a site-by-site basis in Volume 5, Appendix 10.6: Inner Study Area: Predicted Effects.
- 10.6.41 Two additional heritage assets are predicted to potentially be significantly affected if the proposed towers or proposed access tracks were to be relocated within the LOD, these are:
 - the site of former buildings (NO79NE0087), of low sensitivity, could be affected if Tower N56 IS moved north or Tower N55 is moved south; and
 - the site of a building (HA112), of low sensitivity, could be affected if Tower N54 is moved east.



10.6.42 No above ground remains of these assets survive however there is potential that associated buried remains may survive. If buried remains do survive and they are encountered, it is assessed, that without additional mitigation, the direct impact on assets of **low** sensitivity would be of **medium** magnitude, resulting in adverse effects of **Moderate** significance. In each case, it is unlikely that micrositing would be required to the extent that the Proposed Development would impinge on these assets. Nevertheless, additional mitigation measures are set out in **Table 10.6:**Committed Additional Mitigation During Construction to ensure that measures are put in place to record any assets lost as a result of construction work, where appropriate.

Additional Mitigation

10.6.43 The following additional mitigation to avoid or reduce impacts and thereby offset the potentially significant construction effects identified above is set out in **Table 10.6**: **Committed Additional Mitigation During Construction**.

Table 10.6: Committed Additional Mitigation During Construction

Mitigation Measure	Rationale	Project Stage/Timing	Responsibility
CH10: Watching briefs will be carried in archaeological sensitive areas where previously recorded cropmark sites or other heritage assets may survive as buried remains and which could be potentially affected by groundbreaking works for the Proposed Development. If significant discoveries are made during any required archaeological monitoring, and preservation in situ of any sites or features is not possible, provision would be made for an appropriate amount of investigation and recording to be agreed in writing with ACAS. This provision would include the consequent production of written reports on the findings, with post-excavation analyses and publication of the results of the work where appropriate.	To ensure preservation by record of any buried remains.	Construction phase	Archaeological Contractor and Principal Contractors
CH11: Where upstanding features cannot be avoided or protected during construction, these areas would be investigated and recorded prior to construction works being carried out, to a specification and standard to be agreed in consultation with ACAS. If significant discoveries are made during any required archaeological monitoring, and preservation in situ of any sites or features is not possible, provision would be made for an appropriate amount of investigation and recording to be agreed in writing with ACAS. This provision would include the consequent production of written reports on the findings, with post-excavation analyses and publication of the results of the work where appropriate.	To ensure preservation by record.	Construction phase	Archaeological Contractor and Principal Contractors
CH12: Any disturbance to surviving remains of minor historic features, such as field banks and poorly preserved areas of former rig and furrow cultivation from the Proposed Development, would be kept to a minimum.	To ensure that most of the remains of these minor historic features would be retained intact.	Construction phase	Principal Contractors
CH13: Written guidelines will be set out outlining the possibility that remains of a military aircraft crash site may survive within the Site in Fetteresso Forest or near to Tannachie and that there is a need to avoid causing unnecessary damage to these sites should any remains be encountered.	To ensure that if any military aircraft crash remains are potentially encountered during	Construction phase	Archaeological Contractor



Mitigation Measure	Rationale	Project Stage/Timing	Responsibility
The guideline will make clear that military aircraft crash sites are protected by legislation and that it is an offense to tamper with, damage, move or unearth any remains. The guidelines will set out arrangements for calling upon an appointed ACoW if military aircraft crash site remains should be discovered during any construction activities.	construction works these are suitably recorded and recovered.		

Residual Construction Effects

- 10.6.44 The adoption of Embedded, Applied, and Additional Mitigation measures set out above (**Tables 10.4-10.6**) would avoid, minimise, or offset the loss of any archaeological and/or cultural heritage remains that may occur as a result of the construction of the Proposed Development.
- 10.6.45 Construction residual effects (effects that remain following the implementation of the identified mitigation (Embedded, Applied and Additional measures)) are set out on a site-by-site basis in **Volume 5**, **Appendix 10.6**, **Inner Study Area: Predicted Effects**. Residual effects are predicted on 94 heritage assets from the Proposed Development following the implementation of mitigation, and on an additional 48 heritage assets if the proposed towers or proposed access tracks were to be located within the LOD, these are summarised below for each geographical section (Section A-F) of the Proposed Development.

Section A

- 10.6.46 Minor adverse residual effects (Not Significant) are predicted on four non-designated heritage assets: the site of prehistoric cist (NO33NE0017), the site of a souterrain (NO33NE0019) and two settlement remains (cropmark sites) (NO44NW0021 and NO44NW0092/HA038)). The impact of the Proposed Development on any surviving buried remains of these heritage assets would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.47 A **Minor** adverse residual effect (**Not Significant**) is predicted on a clearance cairn (HA013), the impact of the Proposed Development would be mitigated by archaeological and recording to a standard acceptable to ACAS.
- 10.6.48 **Minor** adverse residual effects (**Not Significant**) are predicted on four sections of field banks (HA014, HA015, HA024, HA032) from minimal disturbance during construction of the Proposed Development.
- 10.6.49 **Negligible** adverse residual effects (**Not Significant**) are predicted on 15 non-designated heritage assets: five former trackways (HA002, HA004, HA006, HA012 and HA035), poorly preserved remains of rig and furrow cultivation (HA008, HA018, NO34SE0046, HA031 and HA034), stone dykes and modern clearance (HA001), and a potentially associated brick structure (HA005), a former quarry (HA022), a former gravel pit (HA023) and the remains of a reservoir (HA021) these are minor historic features of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on these assets.
- 10.6.50 **Negligible** adverse residual effects (**Not Significant**) are predicted on four non-designated heritage assets: two areas of former rig and furrow cultivation (HA017 and (HA026), a field boundary (HA028) and the fragmentary remains of a former WWII military camp (NO33NE0116)) from minimal disturbance during construction of the Proposed Development.
- 10.6.51 In addition, if the proposed towers or proposed access tracks were to be relocated within the LOD it is assessed that there would be residual effects on the following heritage assets:
 - Minor adverse residual effects (Not Significant) on two enclosures (cropmark site) (NO33NE0020 and 134404)
 and the site of a former building (HA039). The impact of the Proposed Development on any surviving buried
 remains of these heritage assets would be mitigated by archaeological investigations and recording to a
 standard acceptable to ACAS.



- Minor adverse residual effects (Not Significant) on two former quarries (HA011 and HA036) and a trackway (HA033). These are minor historic features of lesser heritage value, and no mitigation is recommended in respect of the predicted effects on these assets.
- 10.6.52 Any adverse effect on hitherto unknown buried archaeological remains that may be encountered during the construction of the Proposed Development would be offset by archaeological investigations and recording to a standard acceptable to ACAS. The residual effect would be of no more than **Minor** significance (**Not Significant**) as a consequence of recording to a standard acceptable to ACAS.

Section B

- 10.6.53 **Minor** adverse residual effects (**Not Significant**) are predicted on four non-designated heritage assets: a former farmstead (NO45SW0079), a former building (HA042), a possible former building (HA045) and a settlement (cropmark site) (NO56SE0070). The impact of the Proposed Development on any surviving buried remains of these heritage assets would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.54 A **Minor** adverse residual effect (**Not Significant**) is predicted on a section of former railway embankment (NO45NW0043) from minimal disturbance during construction of the Proposed Development.
- 10.6.55 Negligible residual effects (Not Significant) are predicted on six non-designated heritage assets: two sections of Roman Road (NO45NE9910 and NO45SW9913), two enclosures (cropmark site) (NO45NW0011 and NO46SE0043), structures/rig and furrow (cropmark site) (NO45NE0053) and a linear feature (cropmark site) (NO45NW0028). The impact of the Proposed Development on any surviving buried remains of these heritage assets would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.56 A **Negligible** residual effect (**Not Significant** in EIA terms) is predicted on a mill lade (HA049), this is a minor historic feature of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on this asset.
- 10.6.57 In addition, if the proposed towers or proposed access tracks were to be relocated within the LOD it is assessed that there would be residual effects on the following heritage assets:
 - Minor adverse residual effect (Not Significant) on two former buildings (HA046 and HA048). The impact of the
 Proposed Development on any surviving buried remains of these assets would be mitigated by archaeological
 investigations and recording to a standard acceptable to ACAS.
 - **Minor** adverse residual effect (**Not Significant**) on a section of former railway (HA040) from minimal disturbance during construction of the Proposed Development.
 - Negligible adverse residual effects (Not Significant) on a former quarry (NO45NW0042), this is a minor historic
 feature of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on this
 asset.
- 10.6.58 Any adverse effect on any other hitherto unknown buried archaeological remains that may be encountered during the construction of the Proposed Development would be offset by archaeological investigations and recording to a standard acceptable to ACAS. The residual effect would be of no more than **Minor** significance (**Not Significant**) as a consequence of recording to a standard acceptable to ACAS.

Section C

- Minor residual effects (Not Significant) are predicted on seven non-designated heritage assets: settlement remains (331549), two enclosures (NO66NW0065) and (NO66NW0080), a field boundary (cropmark site) (263639), a pit alignment (NO67SE0012), a former building and enclosure (HA071) and the site of two former buildings (HA062). The impact of the Proposed Development on any surviving buried remains would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.60 Negligible residual effects (Not Significant) are predicted on six non-designated heritage assets: settlement remains (cropmark sites) (NO56SE0074), a linear feature (cropmark site) (NO56NE0018), a souterrain (NO66NW0073), a field boundary (cropmark site) (35998), a field system and ring ditch (NO66NW0086) (cropmark site), and the possible site of an alleged battle (NO56NE0017). The impact of the Proposed Development on any



surviving buried remains would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.

- 10.6.61 A Negligible residual effect (Not Significant) is predicted on the remains of a former dam (HA073). This is a minor historic feature of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on this asset.
- 10.6.62 In addition, if the proposed towers or proposed access tracks were to be relocated within the LOD it is assessed that there would be residual effects on the following heritage assets:
 - Minor residual effects (Not Significant) on nine non-designated heritage assets: site of former burial cist (NO56SE0010), the site of a former burial cairn (NO56SE0002), the sites of four former buildings (HA052, HA055, HA063 and NO67SE0022), an earthwork (34983), site of a former spinning mill (NO66NW0087), and possible enclosure and rig and furrow remains (cropmark site) (NO66NW0042), and a former enclosure (cropmark site) (NO67SE0064). The impact of the Proposed Development on any surviving buried remains of these assets would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
 - A Minor residual effect (Not Significant) on the remains of a field bank (NO66NW0116), from minimal disturbance during construction of the Proposed Development.
 - A Negligible residual effect (Not Significant) on a former enclosure (HA056), the impact of the Proposed
 Development on any surviving buried remains would be mitigated by archaeological investigations and recording
 to a standard acceptable to ACAS.
- 10.6.63 Any adverse effect on hitherto unknown buried archaeological remains that may be encountered during the construction of the Proposed Development would be offset by archaeological investigations and recording to a standard acceptable to ACAS. The residual effect would be of no more than **Minor** significance (**Not Significant**) as a consequence of recording to a standard acceptable to ACAS.

Section D

- 10.6.64 Minor residual effects (Not Significant) are predicted on six non-designated heritage assets: a field boundary and other possible features (cropmark site) (30599/HA077); a former designed garden (HA078), a ring ditch (cropmark site) (NO77NW0032), an enclosure/ring ditch (NO77NW0024), an unenclosed settlement (cropmark site) (NO77NW0026), and a ring ditch and souterrain (NO77NE0031). The impact of the Proposed Development on any surviving buried remains would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.65 Negligible residual effects (Not Significant) are predicted on eight non-designated heritage assets: a former farmstead (NO77NW0085), two linear features (cropmark site) (NO77NW0051 and NO77NW0046), an unenclosed settlement site (cropmark site) (NO77NW0043), a former blast shelter (NO77NW0228), a former road (NO77NE0038), the site of a former building (NO78NE0021) and the site of a former cist burial the potential site of a burial cist (NO77NW0009). The impact of the Proposed Development on any surviving buried remains would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.66 A Negligible residual effect (Not Significant) is predicted on a section of trackway (NO78NE0056), this is a minor historic feature of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on these assets.
 - A residual effect of **Minor** significance (**Not Significant**) is predicted on any possible buried military aircraft crash site remains that may survive within this section of the inner study area (around Tannachie), the impact of the Proposed Development on any surviving remains being offset by appropriate recording and recovery of the remains.
- 10.6.67 In addition, if the proposed towers or proposed access tracks were to be relocated within the LOD it is assessed that there would be residual effects on the following heritage assets:
 - **Minor** residual effects (**Not Significant**) on four non-designated heritage assets: a former croft (NO78SE0048), two former buildings (NO78SE0064 and HA090) and a former smithy (NO78SE0045). The impact of the



- Proposed Development on any surviving buried remains of these assets would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- A Minor residual effect (Not Significant) on a section of field bank (HA088), from minimal disturbance during construction of the Proposed Development.
- Negligible residual effects (Not Significant) on the remains of a Roman Marching Camp (NO77NW0007) and
 two former blast shelters (NO77NW0227 and NO77NW0229). The impact of the Proposed Development on any
 surviving buried remains would be mitigated by archaeological investigations and recording to a standard
 acceptable to ACAS.
- **Negligible** residual effects (**Not Significant**) on a field boundary (HA091) and former millpond (HA087), from minimal disturbance during construction of the Proposed Development.
- Negligible residual effects (Not Significant) on five non-designated heritage assets: two former quarries
 (HA082 and HA093), a former gravel pit (HA083), a possible soakaway (HA089) and a section of trackway
 (NO88NW0115). These are minor historic features of lesser heritage value, and no mitigation is recommended in
 respect of the predicted effect on these assets.
- 10.6.68 Any adverse effect on hitherto unknown buried archaeological remains that may be encountered during the construction of the Proposed Development would be offset by archaeological investigations and recording to a standard acceptable to ACAS. The residual effect would be of no more than **Minor** significance (**Not Significant**) as a consequence of recording to a standard acceptable to ACAS.

Section E

- 10.6.69 A Minor significant residual effect (Not Significant) is predicted on one non-designated heritage asset: the site of a former cist burial (NO79NE0003). The impact of the Proposed Development on any surviving buried remains of this heritage asset would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.70 Minor residual effects (Not Significant) are predicted on two non-designated heritage assets: a section of plantation wall (HA101) and a trackway (NO78NE0058). These are minor historic features of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on this asset.
- 10.6.71 Minor residual effects (Not Significant) are predicted on three non-designated heritage assets: two mill lades (NO78NE0050 and HA099) and walls/trackway (HA102), from minimal disturbance during construction of the Proposed Development.
- 10.6.72 A Negligible significant residual effect (Not Significant) is predicted on one non-designated heritage asset, the former route of a drove road (NO79SE0010). The impact of the Proposed Development on any surviving buried remains of this heritage asset would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.73 Negligible residual effects (Not Significant) are predicted on three non-designated heritage assets: a section of field wall (HA104), a woodland plantation wall (HA100) and a quarry (HA107). These are minor historic features of lesser heritage value, and no mitigation is recommended in respect of the predicted effects on these assets.
- 10.6.74 A residual effect of **Minor** significance (**Not Significant**) is predicted on any possible buried military aircraft crash site remains that may survive within this section of the inner study area (Fetteresso Forestry), the impact of the Proposed Development on any surviving remains being offset by appropriate recording and recovery of the remains.
- 10.6.75 In addition, if the proposed towers or proposed access tracks were to be relocated within the LOD it is assessed that there would be a **Minor** residual effect (**Not Significant**) on two groups of grouse butts (NO78NE0057 and HA108). These are features of likely recent date and of little heritage value, and no mitigation is recommended in respect of the predicted effects on these assets.
- 10.6.76 Any adverse effect on hitherto unknown buried archaeological remains that may be encountered during the construction of the Proposed Development would be offset by archaeological investigations and recording to a standard acceptable to ACAS). The residual effect would be of no more than **Minor** significance (**Not Significant**) as a consequence of recording to a standard acceptable to ACAS.



Section F

- 10.6.77 Minor residual effects (Not Significant) are predicted on seven non-designated heritage assets: the sites of former buildings (NJ70NW0088 and NJ71SW0147), three former crofts (NJ70NW0135, NJ71SW0146 and NJ70SE0114), one former farmstead (NJ70NW0057), and a cairnfield (219740). The impact of the Proposed Development on any surviving buried remains of these heritage assets would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.78 A **Minor** residual effects (**Not Significant**) is predicted on a bridge/culvert (NJ71SE0024), this is a minor historic feature of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on this asset.
- 10.6.79 A **Negligible** residual effect (**Not Significant**) is predicted on a former military road (141914), the impact of the Proposed Development on any surviving buried remains of this heritage asset would be mitigated by archaeological investigations and recording to a standard acceptable to ACAS.
- 10.6.80 Negligible significant residual effects (Not Significant) are predicted on an area of rig and furrow remains (NJ71SE0034) and an area of rig and furrow cultivation/clearance cairns (NJ70SE0010), from minimal disturbance during construction of the Proposed Development.
- 10.6.81 Negligible residual effects (Not Significant) are predicted on four non-designated heritage assets: two former quarries (168890 and 243156), one former sand pit (NJ71SE0068) and poorly preserved area of rig and furrow cultivation (NJ70NE0050). These are minor historic features of lesser heritage value, and no mitigation is recommended in respect of the predicted effect on these assets.
- 10.6.82 In addition, if the proposed towers or proposed access tracks were to be relocated within the LOD it is assessed that there would be residual effects on the following heritage assets:
 - A Minor residual effect (Not Significant) on former buildings (NO79NE0087), the impact of the Proposed
 Development on any surviving buried remains of these heritage assets would be mitigated by archaeological
 investigations and recording to a standard acceptable to ACAS.
 - Minor residual effects (Not Significant) on a former quarry (NJ70NW0162) and a former sand pit
 (NJ71SW0089), these are minor historic features of lesser heritage value, and no mitigation is recommended in
 respect of the predicted effect on these assets.
 - A Negligible residual effect (Not Significant) on a former building (HA112), the impact of the Proposed
 Development on any surviving buried remains of this heritage asset would be mitigated by archaeological
 investigations and recording to a standard acceptable to ACAS.
 - A Negligible residual effect (Not Significant) on the upstanding remains of a cairnfield (219740) which cannot
 be avoided by construction works, with any impact being offset by archaeological investigations and recording to
 a standard acceptable to ACAS.
 - A Negligible residual effect (Not Significant) on an area of rig and furrow remains (NJ70SE0056) from minimal disturbance during construction of the Proposed Development.
 - A Negligible residual effect (Not Significant) on a former sand pit (HA131) and dyke (NJ71SE0154), these are
 minor historic features of lesser heritage value, and no mitigation is recommended in respect of the predicted
 effect on these assets.
- 10.6.83 Any adverse effect on hitherto unknown buried archaeological remains that may be encountered during the construction of the Proposed Development would be offset by archaeological investigations and recording to a standard acceptable to ACAS. The residual effect would be of no more than **Minor** significance (**Not Significant**) as a consequence of recording to a standard acceptable to ACAS.



10.7 Assessment of Likely Significant Effects - Operation

Predicted Operational Effects

Direct Operational Effects

- 10.7.1 There are no heritage assets within the required operational corridor for the OHL which would be predicted to receive a direct effect during operation of the Proposed Development. Operational works and maintenance activities would use the as-built tracks and infrastructure installed during construction to facilitate any required maintenance works.
- 10.7.2 It may be necessary, on occasion, to upgrade short sections of existing access tracks or construct temporary access track to facilitate operational (maintenance and repair) works; such works are not anticipated to be required widely or at scale. The mitigation proposed for the construction phase (see above Section 10.5: Mitigation and Monitoring) would apply equally to the operational phase where applicable and it is not predicted that the short-term nature of these effects and their limited scale would have significant direct effects on cultural heritage assets.

Setting Effects during Operation

- 10.7.3 The presence of the Proposed Development, particularly the installed OHL towers and conductors, has the potential for significant adverse effects on the setting of cultural heritage assets, both within the inner and outer study areas, although such effects would diminish with increasing distance from the Proposed Development. At distances greater than 3 km, it is considered that, in most instances, the Proposed Development would not appreciably alter the characteristics of the settings of the heritage assets that contribute to their cultural significance. Neither would it appreciably alter how a heritage asset is understood, appreciated and experienced.
- 10.7.4 The assessment of operational effects on the setting of designated heritage assets has been carried out with reference to the layout of the Proposed Development and the locations of the cultural heritage assets shown on Volume 3, Figure 10.2.1 to 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the Assessment). All operational effects are presumed to be permanent for the operational lifetime of the Proposed Development, these may be reversible upon decommissioning if the Proposed Development is removed.
- 10.7.5 Following the assessment process (set out in Section 10.3 above) it was assessed that 76 Scheduled Monuments, 12 Category A Listed buildings, 28 Category B Listed Buildings, two Category C Listed Buildings, eight Inventory GDLs and five Conservation Areas within 3 km of the Proposed Alignment have settings that would potentially be affected by the presence of the Proposed Development (see Volume 5, Appendix 10.7: Designated Heritage Assets in the Outer Study Area). Volume 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area, contains tabulated assessments of the predicted operational effects of the Proposed Development on the settings of each of these heritage assets.
- 10.7.6 In addition, designated heritage assets that were identified through consultation with statutory consultees as requiring consideration (see Volume 5, Appendix 10.2: Cultural Heritage Consultation Responses for details) and those heritage assets identified beyond 3 km from the Proposed Alignment that are considered to be especially sensitive to changes on their setting from the Proposed Development (see Volume 5, Appendix 10.9: Designated Heritage Assets outwith the Outer Study Area) have also been assessed. Tabulated assessments of these are provided in Volume 5, Appendix 10.11: Detailed Assessment of Designated Heritage Assets outwith the Outer Study Area.
- 10.7.7 To aid the assessment of these designated heritage assets, visualisations have been produced to show theoretical views of the Proposed Development from a selection of the designated heritage assets. Those designated heritage assets included as visualisations were identified from initial appraisal of the Actual Tower Height Bare-Earth ZTV, and visualisations were then agreed through consultation with HES and ACAS.
- 10.7.8 A list of the visualisations included within the assessment is provided in Volume 5, Appendix 10.3: Cultural Heritage Viewpoint Information, and references to the relevant supporting visualisations that have been included for specific designated heritage assets have been provided in the final columns of Tables 10.10.1 and 10.11.1 in Volume 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area, and Appendix 10.11: Detailed Assessment of Designated Heritage outwith the Outer Study Area, respectively. The



visualisations have been produced to show theoretical visibility of the Proposed Development, from each asset, based on the actual tower heights provided in **Volume 5**, **Appendix 3.1**: **Tower Schedule**. Further explanation of the method used in generating these visualisations is included within **Volume 5**, **Appendix 9.5**: **LVIA and Visualisations Methodology**, **Section 9**: **Photography and Photomontage**. In addition to the cultural heritage visualisations, cross referece is made to Landscape and Visual Amenity (LVIA) viewpoints (VPs) where appropriate.

- 10.7.9 Consideration was also given to the potential effect of noise resulting from the operation of the Proposed Development on the setting of designated heritage assets within close proximity of the Proposed Development. Overall, it was assessed that effects on the setting of the designated heritage assets from operational noise would be negligible and no significant impacts are anticipated, this is therefore not discussed further. For assessment of the effect of noise from the operation of the Proposed Development see Volume 2, Chapter 15: Noise and Vibration.
- 10.7.10 Out of the 132 designated heritage assets identified within 3 km of the Proposed Alignment which are assessed as having settings that would potentially be affected by the Proposed Development, it has been predicted that there would be potential significant adverse operational effects on the setting of eight Scheduled Monuments:
 - Scheduled Monuments:
 - Balkemback Cottages Stone Circle (SM 2868) (Section A);
 - Law of Baldoukie Barrow (SM 6314) (Section B);
 - Mill of Balrownie Ring Ditch (SM 6472) (Section C);
 - Westside Barrows (SM 6367) (Section C);
 - Westside Unenclosed Settlement (SM 6268) (Section C);
 - East Finnercy Cairn (SM 6076) (Section F);
 - New Wester Echt Stone Circle (SM 6074) (Section F), and
 - South Leylodge Steading Stone Circle (SM 12350) (Section F).
- 10.7.11 No significant effects on the setting of any of the Listed Buildings, GDLs or Conservation Areas has been predicted, and no significant effects have been predicted on the settings of designated heritage outwith the 3 km study area which have been included in the assessment.
- 10.7.12 The following discussion addresses those assets where potentially significant adverse effects have been identified with reference to the detailed assessments presented in **Table 10.10.1** in **Volume 5**, **Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area**.

Section A

Balkemback Cottages Stone Circle (SM 2868)

- 10.7.13 This monument comprises the remains of a Neolithic stone circle, located in an area of farmland to the northwest of Dunian and just north of the South Balluderon to Balkemback public road, as shown on Volume 3, Figure 10.2.1: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the Assessment) of the EIAR. The stone circle consists of four boulders, two of which are upright while the other two are recumbent. One of the stones has around 20 cup marks on its east face. As the remains of a prehistoric stone circle the monument has the potential to provide information on early prehistoric ritual practises. The stone circle is a Scheduled Monument, of heritage value at the national level, and of high sensitivity.
- 10.7.14 The stone circle is located on a gentle south-facing slope within an arable field. Open aspect views are gained from the stone circle in a southern arc, overlooking lower lying farmland. Rising topography and a coniferous shelterbelt to the north and northwest of the stone circle limit visibility in those directions. The stone circle is not a prominent feature in the landscape, best appreciated at close quarters and not visible from any distance. Views to the monument therefore add little to the understanding, appreciation and experience of this monument, and it may be that it was never intended to have been visible from the wider landscape. It is possible that this stone circle was sited to afford visibility of the wider landscape. Those characteristics of the monument's setting that contribute most to the stone circle's significance are its farmland setting and the views gained to the south and southwest over lower lying land.



- 10.7.15 The Actual Tower Height bare-earth ZTV (Volume 3, Figure 10.2.1: Designated Heritage Assets: Outer Study
 Area (and those outwith the Outer Study Area included in the assessment)) indicates that from the stone circle,
 there would be theoretical visibility of 17 towers running from the south to the northeast and passing the stone circle
 on its western side. The nearest proposed tower (Tower S202) being around 60 m to the southwest of the stone
 circle. A photomontage visualisation taken from the stone circle (Volume 4, Figures 10.4f and 10.4j CH VP2
 Balkemback Cottages Stone Circle (SM 2868)) shows that the proposed towers would be visible crossing farmland
 immediately surrounding the stone circle and would be a noticeable addition to the baseline by introducing steel
 lattice towers to the north, west and south of the stone circle, with towers in close proximity to the monument.
- 10.7.16 A proposed new stone access track would be constructed running between Towers S201-S202 and passing the stone circle on its western side, at its closest 70 m from the Scheduled Monument. This access track would be temporary and would be removed following construction of the Proposed Development. The impact of the access track on the setting of the Scheduled Monument, whilst adverse, would be short-term and reversible following its removal.
- 10.7.17 The Proposed Development would introduce modern structures into the immediate farmland surroundings of the monument and the character of the landscape within which the stone circle stands and out over which it looks would be discernibly altered by the presence of the proposed towers. While the setting of the stone circle would be changed by the Proposed Development, the permeable nature of the Proposed Development would still allow the landscape surroundings, and context, of the monument to be appreciated and understood.
- 10.7.18 Overall, it is assessed, drawing on the criteria set out in **Tables 10.2-10.3**, that the impact of the Proposed Development on the setting of the stone circle would be of **medium** magnitude, resulting from the close proximity of the Proposed Development. The resulting effect is assessed, based on professional judgement, to be of **Moderate** adverse significance (**Significant**) as the current farmland setting and key views out from the stone circle would be changed to some degree by the introduction of the Proposed Development. A summary assessment of the impact of the Proposed Development on the setting of the stone circle is provided at page 5 of **Table 10.10.1**, **Volume 5**, **Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area**.
- 10.7.19 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7(h) ii). As noted above, the key contributors to the stone circle's cultural significance are the views to the south and southwest over lower lying land and its relationship with the surrounding farmland. It is considered that the ability to understand, appreciate and experience the siting of this Scheduled Monument and the key aspects of the setting of relevance to the stone circle would be adequately retained such that the integrity of its setting would not be significantly adversely affected.

Section B

Law of Baldoukie Barrow (SM 6314)

- 10.7.20 This monument comprises the poorly preserved remains of an early prehistoric barrow (burial monument) which stands at the edge of an arable field, west of Baldoukie Farm. The barrow has been reduced by ploughing and now survives as a low mound. As the remains of a prehistoric barrow the monument has the potential to provide information on early prehistoric burial practices. The barrow is a Scheduled Monument of heritage value at the national level, and of **high** sensitivity.
- 10.7.21 The barrow stands on undulating ground to the north of the Bog Burn. Open aspect views are gained from the barrow to the surrounding farmland, across the Bog Burn and the River South Esk to the south, and along the Vale of Strathmore. The poorly preserved remains of this barrow are not a prominent feature in the landscape and there is limited visibility of the cairn until in its immediate vicinity. Its position sited on locally high ground above the Bog Burn does suggest that it may have originally been intended to be a prominent feature in the landscape, especially in views from the lower lying land to the south, and views towards the monument are important in the appreciation of its cultural significance.
- 10.7.22 A possibly contemporary barrow site (East Mains of Whitewall, Barrow and Pits (SM 6372)) lies approximately 1.4 km to the south-southeast of the monument on the eastern banks of the River South Esk. No upstanding remains of this



- barrow survive today, the site represented by cropmarks visible on aerial photography. Nevertheless, while the monuments are no longer visible from each other there is intervisibility between the locations of the two monuments and to an extent this relationship can still be appreciated, understood and experienced.
- 10.7.23 Those characteristics of the monument's setting that contribute most to the barrow's significance are its farmland setting, views to the south across the Bog Burn and River South Esk and along the Vale of Strathmore, and its relationship with the likely contemporary barrow site to the south-southeast.
- 10.7.24 The Actual Tower Height bare-earth analysis (Volume 3, Figure 10.2.3: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that, from the barrow, there would be theoretical visibility of up to 37 towers running from the southwest to the northeast and passing the barrow on its southeastern side. The nearest proposed towers (Tower S135) would be located around 180 m to the south of the monument. A photomontage visualisation taken from the barrow (Volume 4, Figures 10.13b, 10.13e and 10.13g CH VP11 Law of Baldoukie, Barrow (SM 6314)) shows that the proposed towers would be visible crossing the farmland immediately surrounding the barrow; proposed towers would be visible in views to the south and northeast from the monument.
- 10.7.25 A proposed new stone access track would be constructed running between Towers S134-S135 passing the barrow on its southern side, and on the opposite side of a field wall to the Scheduled Monument. This access track would be a temporary access track and would be removed following construction of the Proposed Development. The impact of the access track on the setting of the Scheduled Monument, whilst adverse, would be short-term and reversible following its removal.
- 10.7.26 The Proposed Development would be a new element in the immediate landscape of the barrow and would result in a discernible change to its surroundings, such that its baseline would be partly altered. While the setting of the barrow would be changed by the Proposed Development, the permeable nature of the Proposed Development would still allow the landscape surroundings, and context of, the monument to be appreciated, understood and experienced. Intervisibility between the locations of the monument and the likely contemporary barrow site (East Mains of Whitewall, Barrow and Pits (SM 6372)) to the south of the barrow and on the opposite side of the River South Esk would not be interrupted.
- 10.7.27 Overall, it is assessed, drawing on the criteria set out in Tables 10.2-10.3, that the impact of the Proposed Development on the setting of the stone circle would be of medium magnitude, resulting from the close proximity of the Proposed Development. The resulting effect is assessed, based on professional judgement, to be of Moderate adverse significance (Significant) as the current farmland setting and key views out from the barrow would be changed to some degree by the introduction of the Proposed Development. A summary assessment of the impact of the Proposed Development on the barrow is provided at pages 12 to 13 of Table 10.10.1, Volume 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area.
- 10.7.28 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7(h) ii). As noted above, the key contributors to the barrow's cultural significance are the views to the south across the Bog Burn and River South Esk and along the Vale of Strathmore, intervisibility with the location of a likely contemporary barrow site to the south-southeast, and the surrounding farmland. It is considered that the ability to understand, appreciate and experience the siting of this scheduled monument and the key aspects of the setting of relevance to the barrow would be adequately retained such that the integrity of its setting would not be significantly adversely affected.

Section C

Mill of Balrownie Ring Ditch (SM 6472)

10.7.29 This monument comprises the remains of a ring ditch, likely representing a prehistoric round house, visible as cropmarks on aerial photographs. The monument lies within a flat arable field immediately south of the confluence of the Buttery Burn and the Cruick Water and is surrounded by arable farmland. The monument is a Scheduled Monument, of heritage value at the national level, and of **high** sensitivity.



- 10.7.30 The monument's sensitivity is primarily gained from the intrinsic value for potential archaeological deposits, within and around it, to provide information on late prehistoric/early historic domestic and agricultural practices. As a cropmark feature, this monument survives as subsurface remains, and no above ground remains are visible.
- 10.7.31 Whilst the landscape that surrounds the monument has largely changed to one characterised by enclosed arable fields, the monument gains some value from its setting. The monument has evidently been sited in reference to the confluence of the Buttery Burn and the Cruick Water, and it is surrounded by fertile grazing land the quality of which for agriculture and grazing is likely to have been a determining contribution in the settlement's placement. The sensitivity of this asset is enhanced by the number of possibly contemporary sites in the surrounding area which together may inform our knowledge and understanding of development of the later prehistoric settlement landscape of the area.
- 10.7.32 Open aspect views are gained from the monument to the surrounding farmland in which it is located, and across and along the Buttery Burn and the Cruick Water to the west and east. Key characteristics of the monument's setting are the farmland in which it is located and its relationship with the Buttery Burn and the Cruick Water. A possible contemporary enclosed settlement site (Belliehill Unenclosed Settlement (SM 6514)) lies around 740 m to the northwest of the monument, on the southern bank of the Buttery Burn, and the settlement sites may have been deliberately positioned so as to have intervisibility, however intervening buildings (Mill of Balrownie) stands between the two monuments interrupting the line of sight between them.
- 10.7.33 The Actual Tower Height bare-earth ZTV (Volume 3, Figure 10.2.4: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that, from the monument, there would be theoretical visibility of up to 42 towers running from the southwest to the northeast and passing the monument on its southeast side. The nearest proposed tower (Tower S100) would be located around 110 m to the east of the monument. A proposed new stone access track would be constructed running to the south of the monument, from the public road to Tower S100, at its closest being 120 m from the Scheduled Monument. This access track would be a temporary access track and would be removed following construction of the Proposed Development. The impact of the access track on the setting of the Scheduled Monument, whilst adverse, would be short-term and reversible following its removal.
- 10.7.34 The Proposed Development would introduce modern structures into the immediate farmland surroundings of the monument crossing key views from the monument to the east along the Cruick Water. While the character of the landscape within which the cropmark site is located would be altered by the presence of the proposed towers, the permeable nature of the Proposed Development would still allow the landscape surroundings, and context of, the monument to be appreciated, understood and experienced. The current farmland setting of the monument would be retained and views from the monument along the Buttery Burn would be unaffected.
- 10.7.35 Overall, it is assessed, drawing on the criteria set out in **Tables 10.2-10.3**, that the impact of the Proposed Development on the setting of the settlement site would be of **medium** adverse magnitude, resulting from the close proximity of the Proposed Development. The resulting effect is assessed, based on professional judgement, to be of **Moderate** significance (**Significant**) as the current farmland setting and key views out from the monument's location would be changed to some degree by the introduction of the Proposed Development. A summary of the impact of the Proposed Development on the setting of the ring ditch is provided at page 17 to 18 of **Table 10.10.1, Volume 5**, **Appendix 10:10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area**.
- 10.7.36 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' ((NPF4 Policy 7(h) ii). As noted above, the key contributors to the monuments cultural significance are the views to the west and east along the Buttery Burn and Cruick Water and its relationship with the surrounding farmland. It is considered that the ability to understand, appreciate and experience the siting of this scheduled monument and the key aspects of the setting of relevance to the ring ditch would be adequately retained such that the integrity of its setting would not be significantly adversely affected.



Westside Barrows (SM 6367)

- 10.7.37 This monument comprises the remains of a group of later prehistoric or early historic barrows (burial monuments) visible as cropmarks on aerial photographs. The monument lies within a flat arable field immediately east of the West Water and is surrounded by arable farmland. The barrow site is a Scheduled Monument, of heritage value at the national level, and of **high** sensitivity.
- 10.7.38 The monument's sensitivity is primarily gained from the intrinsic value for potential archaeological deposits within and around it to provide information on late prehistoric and early historic burial practices and barrow cemeteries. As a cropmark feature, this monument survives as subsurface remains, and no above ground remains are visible.
- 10.7.39 Whilst the landscape that surrounds the monument has largely changed to one characterised by enclosed arable fields, the monument gains some value from its setting. The monument has evidently been sited in reference to the West Water and forms part of a number of prehistoric to early historic domestic and funerary sites that survive in this area of the Vale of Strathmore. The sensitivity of the asset is enhanced by the number of possibly contemporary domestic and funerary sites in the surrounding area which together may inform our knowledge and understanding of later prehistoric/early historic, agricultural, domestic, socio-economic, and funerary practices. Open aspect views are gained from the monument to the surrounding farmland in which it is located and along the West Water to the northwest and southeast. Key characteristics of the monument's setting are the farmland in which it is located and its relationship with the West Water.
- 10.7.40 The Actual Tower height bare-earth ZTV (Volume 3, Figure 10.2.5 Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that, from the monument, there would be theoretical visibility of up to 48 towers running from the west to the east and passing the monument on its southern side. The nearest proposed towers (Tower S89) would be located around 40 m to the south of the monument. A proposed new stone access track would be constructed running between Towers S89 and S88 and passing the monument on its southern side, being at its closest 40 m from the Scheduled Monument. This access track would be a temporary access track and would be removed following construction of the Proposed Development. The impact of the access track on the Scheduled Monument, whilst adverse, would be short-term and reversible following its removal.
- 10.7.41 The Proposed Development would introduce modern structures into the immediate farmland surroundings of the monument crossing key views from the monument to the southeast along the West Water. While the character of the landscape within which the cropmark site is located would be discernibly altered by the presence of the proposed towers, the permeable nature of the Proposed Development would still allow the landscape surrounds, and context of, the monument to be appreciated, understood and experienced.
- 10.7.42 Overall, it is assessed, drawing on the criteria set out in **Tables 10.2-10.3**, that the impact of the Proposed Development on the setting of the barrow site would be of **medium** adverse magnitude, resulting from the close proximity of the Proposed Development. The resulting effect is assessed, based on professional judgement, to be of **Moderate** significance (**Significant**) as the current farmland setting and key views out from the monument's location would be changed to some degree by the introduction of the Proposed Development. A summary of the impact of the Proposed Development on the setting of the barrow is provided at page 20 **of Table 10.10.1**, **Volume 5**, **Appendix 10:10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area**.
- 10.7.43 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7(h) ii). As noted above, the key contributors to the monument's cultural significance are the views to the northwest and southeast along the West Water and its relationship with the surrounding farmland. It is considered that the ability to understand, appreciate and experience the siting of this scheduled monument and the key aspects of the setting of relevance to these barrows would be adequately retained such that the integrity of its setting would not be significantly adversely affected.

Westside Unenclosed Settlement (SM 6368)

10.7.44 This monument comprises the remains of an unenclosed settlement of likely prehistoric date visible as cropmarks on aerial photographs. The monument lies within a flat arable field close to the confluence of the West Water and the



- River North Esk and is surrounded by arable farmland. The monument is a Scheduled Monument, of heritage value at the national level, and of **high** sensitivity.
- 10.7.45 The monument's sensitivity is primarily gained from the intrinsic value for potential archaeological deposits, within and around it, to provide information on late prehistoric domestic and agricultural practices. As a cropmark feature, this monument survives as subsurface remains, and no above ground remains are visible.
- 10.7.46 Whilst the landscape that surrounds the monument has largely changed to one characterised by enclosed arable fields, the monument gains some value from its setting. The monument has evidently been sited in reference to the confluence of the West Water and River North Esk, and it is surrounded by fertile grazing land the quality of which for agriculture and grazing is likely to have been a determining contribution in the settlement's placement. The sensitivity of this asset is enhanced by the number of possibly contemporary sites in the surrounding area which together may inform our knowledge and understanding of development of the later prehistoric settlement landscape of the area.
- 10.7.47 Open aspect views are gained from the monument to the surrounding farmland in which it is located and across the Vale of Strathmore to the West Water to the south and the River North Esk to the east. Key characteristics of the monument's setting are the farmland in which it is located, views gained across Strathmore and its relationship with the West Water and the River North Esk.
- 10.7.48 The Actual Tower Height bare-earth ZTV (Volume 3, Figure 10.2.5: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that, from the monument, there would be theoretical visibility of up to 61 towers running from the west to the northeast and passing the monument on its southern side. The nearest proposed tower (Tower S86) would be located around 160 m to the south of the monument. Proposed new stone access tracks would be constructed running between Towers S87 and S84 passing the monument on its south/southeast side, being at its closest 105 m from the Scheduled Monument. These access track would be temporary and would be removed following construction of the Proposed Development. The impact of the access tracks on the Scheduled Monument, whilst adverse, would be short-term and reversible following its removal. Other proposed access tracks within close proximity to the monument would utilise existing farm access tracks.
- 10.7.49 The Proposed Development would introduce modern structures into the immediate farmland surroundings of the monument and would cross key views from the monument across the Vale of Strathmore and related watercourses (West Water and River North Esk). While the character of the landscape within which the cropmark site is located would be altered by the presence of the proposed towers, the permeable nature of the Proposed Development would still allow the landscape surroundings, and context of, the monument to be appreciated, understood and experienced.
- 10.7.50 Overall, it is assessed, drawing on the criteria set out in **Tables 10.2-10.3**, that the impact of the Proposed Development on the setting of the settlement site would be of **medium** adverse magnitude, resulting from the close proximity of the Proposed Development. The resulting effect is assessed, based on professional judgement, to be of **Moderate** significance (**Significant**) as the current farmland setting and key views out from the monument's location would be changed to some degree by the introduction of the Proposed Development. A summary assessment of the impact of the Proposed Development on the setting of the settlement site is provided at pages 21 and 22 of **Table 10.10.1**, **Volume 5**, **Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area**.
- 10.7.51 Whilst the effect on the setting of Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7(h) ii). As noted above, the key contributors to the monument's cultural significance are the views to the West Water, to the south, and the River North Esk, to the east, and its relationship with the surrounding farmland. It is considered that the ability to understand, appreciate and experience the siting of this scheduled monument and the key aspects of the setting of relevance to the settlement would be adequately retained such that the integrity of its setting would not be significantly adversely affected.



Section F

East Finnercy Cairn (SM 6076)

- 10.7.52 This monument comprises the remains of a Bronze Age burial cairn, which stands in arable farmland just northwest of East Finnercy Farm. The turf-covered cairn which measures approximately 26 m by 22 m has been partially excavated in the past and the investigations suggest that the cairn may have been constructed on the site of previous Neolithic activity. As the well-preserved remains of a prehistoric burial cairn the monument has the potential to provide information on early prehistoric burial practises. The cairn is a Scheduled Monument, of heritage value at the national level, and is assessed as being of **high** sensitivity.
- 10.7.53 The cairn stands on the crest of a ridge on a south-facing slope between the Leuchars Burn and the Gormack Burn valleys, surrounded by improved farmland. The buildings of East Finnercy Farm are around 250 m from to the southwest of the monument. An existing steel lattice OHL (Craigiebuckler to Tarland 132 kV OHL), on an east to west alignment passes within 150 m of the burial cairn on its north side. Views from the burial cairn are concentrated to the south, looking across and along the Gormack Burn valley and to hill peaks beyond, including Meikle Tap to the southwest. The burial cairn stands in a prominent position and can be seen, standing in its current farmland setting, whilst travelling along the public roads that pass on its northwest and southeast. The key characteristics of the monument's setting that contribute most to the burial cairn's significance are its prominent topographical position and the views to and from it.
- 10.7.54 The Actual Tower Height bare-earth ZTV (Volume 3, Figure 10.2.10: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that from the burial cairn, there would be theoretical visibility of 57 towers running from the southeast to the northwest and passing the burial cairn on its southwestern side. The nearest proposed tower (Tower N38) being around 300 m from the burial cairn. A wireline visualisation (Volume 4, Figures 10.34a and 10.34c CH VP32 East Finnercy, Cairn (SM 6076)) showing the bare-earth visibility of the Proposed Development from the burial cairn indicates that the Proposed Development would be visible crossing farmland to the southwest of the monument. The towers would be seen against the skyline where they pass closest to the burial monument and crossing key views from the burial cairn to the south. In views of the burial cairn from the public roads, that pass the monument to its north and south, the proposed towers would be seen together with the burial cairn and the existing Craigiebuckler to Tarland 132 kV steel lattice OHL that passes the monument on its northern side.
- 10.7.55 The Proposed Development would be a discernible new element in the wider landscape surroundings of the cairn, and the introduction of the proposed towers would result in a noticeable alteration to the wider farmland over which the burial cairn looks. The permeable nature of the Proposed Development would, however, still allow the landscape surroundings, and context of, the monument to be appreciated and understood, and views to high peaks (including Meikle Tap) would be retained. It is considered that the presence of the Proposed Development would not affect the ability to understand, appreciate and experience the prominent position of the burial cairn or its relationship with the surrounding landscape.
- 10.7.56 Overall, it is assessed, drawing on the criteria set out in Tables 10.2-10.3, that the impact of the Proposed Development on the setting of the burial cairn would be of medium adverse magnitude, resulting from the changes to the wider surroundings of the monument. The resulting effect is assessed, based on professional judgement, to be of Moderate significance (Significant) as the wider landscape setting of the burial cairn would be changed to some degree by the introduction of the Proposed Development. A summary assessment of the impact of the Proposed Development on the setting of the burial cairn is provided at page 29 of Table 10.10.1, Volume 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area.
- 10.7.57 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7(h) ii). As noted above, the key contributors to the monument's cultural significance are the prominent position of the burial cairn and the views to and from it. These qualities of its setting would be retained such that the integrity of its setting would not be significantly adversely affected, and it would still be possible for any visitor to the monument to understand, appreciate and experience these qualities.



New Wester Echt Stone Circle (SM 6074)

- 10.7.58 This monument comprises the remains of a Neolithic stone circle, located in an area of farmland to the southwest of New Wester Echt Farm. The stone circle which originally consisted of nine stones, now survives as three upright stones standing around 12 m apart around the south- southeast arc of the circle, with a large prostrate stone at the foot of the westernmost upright stone. As the remains of a prehistoric stone circle the monument has the potential to provide information on early prehistoric ritual practise. The stone circle is a Scheduled Monument, of heritage value at the national level, and of **high** sensitivity.
- 10.7.59 The stone circle is located below the crest of a south facing slope within an arable field. Views from the stone circle are concentred to the southeast and south, across lower-lying farmland to high peaks beyond (including Old Echt and Meikle Tap). There are similar contemporary stone circles within the surrounding area, including Sunhoney Stone Circle (SM 44), 3 km to the southwest, and Upper Corskie Stone Circle (SM 675), 1.5 km to the northwest. However, intervisibility between these monuments is screened by intervening topography, indicating that intervisibility is not an important part of their settings. Views of the stone circle can be gained from the summit of Barmekin Hill present around 1.5 km to the southwest of the monument, the stone circle is seen standing in its current farmland setting backdropped by farm buildings. Some glimpses of the stone circle can also be gained whilst traveling along the B977 public road which passes the monument on its eastern side, although these views are generally limited. Those characteristics of the setting that contribute most to the stone circle's significance are its farmland setting, the views obtained towards hills to the south, and its association with related monuments in the surrounding landscape.
- 10.7.60 The Actual Tower Height bare-earth ZTV (Volume 3, Figure 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that, from the monument, there would be theoretical visibility of 36 towers running from the south to the northeast. The Proposed Development would be seen passing the stone circle on its eastern side. The proposed towers being in close proximity to the stone circle; the closet tower (Tower N22) would be located around 180 m to the southeast of the monument. A photomontage visualisation (Volume 4, Figures 10.38b and 10.38e CH VP36 New Wester Echt, Stone Circle (SM 6074)) shows that the proposed towers would be visible crossing farmland following the B977 public road between the monument and the western edge of Dunecht House GDL; proposed towers being visible in views to the northwest, east and south from the stone circle.
- 10.7.61 Access tracks to the proposed towers that pass close to the monument would largely utilise existing farm tracks.

 Where short sections of new access tracks are required, these would be temporary stone access tracks that would be removed following construction of the Proposed Development, and any impact on the setting of the Scheduled Monument, although adverse, would be short-term and reversible following its removal.
- 10.7.62 The Proposed Development would introduce modern structures into the immediate farmland surroundings of the monument and the character of the landscape within which the stone circle stands and which it looks over, would be discernibly altered by the presence of the Proposed Development. The proposed towers would be visible in key views to the south from the Proposed Development, however, they would be largely backclothed against hillslopes in these views and would not interrupt intervisibility between the stone circle and the surrounding high peaks (Volume 4, Figure 10.38e CH VP36 New Wester Echt, Stone Circle (SM 6074). The permeable nature of the Proposed Development would still allow the landscape surroundings, and context of, the monument to be appreciated, understood and experienced.
- 10.7.63 A photomontage visualisation (**Volume 4, Figure 9.40b VP36 Barmekin Hill**) shows that the proposed towers would be seen in the same views as the stone circle in views from the summit of Barmekin Hill. The towers would be seen crossing farmland to the east of the stone circle. The introduction of towers in this view would not substantially detract from the monument, the proposed towers would be offset from the stone circle and visually distinct.
- 10.7.64 Overall, it is assessed, drawing on the criteria set out in **Tables 10.2-10.3**, that the impact of the Proposed Development on the setting of the stone circle would be of **medium** adverse magnitude, resulting from the close proximity of the Proposed Development. The resulting effect is assessed, based on professional judgement, to be of **Moderate** significance (**Significant**) as the current farmland setting and key views out from the stone circle would be changed to some degree by the introduction of the Proposed Development. A summary assessment of the impact of



the Proposed Development on the setting of the settlement site is provided at pages 21 and 22 of **Table 10.10.1**, **Volume 5**, **Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area**.

- 10.7.65 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7(h) ii). As noted above, the key contributors to the stone circles cultural significance are its farmland setting, the views obtained towards hills to the south, and its association with related monuments in the surrounding landscape. It is considered that the ability to understand, appreciate and experience the siting of this scheduled monument and the key aspects of the setting of relevance to the stone circle would be adequately retained such that the integrity of its setting would not be significantly adversely affected.
 - South Leylodge Steading Stone Circle (SM 12350) (Section F)
- 10.7.66 This monument comprises the remains of a recumbent stone circle, of which only three stones, the recumbent stone and two flankers survive in situ. These stones are located at the southwest arc of the stone circle, the remaining stones may survive beneath the present ground surface. As the remains of a prehistoric stone circle the monument has the potential to provide information on early prehistoric ritual practices. The stone circle is a Scheduled Monument, of heritage value at the national level, and of high sensitivity.
- 10.7.67 The stone circle is on relatively level ground at the edge of a broad scarp which rises gently to the north and northwest. It stands in an improved agricultural field, immediately north of the South Leylodge to Bogfold public road. The stone circle is situated in what is presently an open agricultural landscape. Existing steel lattice overhead lines pass to the west (Kintore to Tealing 275 kV OHL) and east (Kintore to Craigiebuckler 132 kV OHL) of the monument, the closest existing tower being c.140 m to the west-southwest of the stone circle.
- 10.7.68 The low-lying position of the stone circle contrasts with the more prominent positions (ie hilltops) of other stone circles in Strathdon, suggesting that placement of the stone circle at the highest point in the local landscape was not an important consideration in its siting. Open views to the surrounding farmland are gained from the stone circle, with long-distant views afforded in a northeast to south arc and these distance views may have been important to its landscape position. Views to the northwest and north are constrained by gentle rising topography, however, the high peak of Mither Tap (Bennachie) is visible in views to the north-northwest of the stone circle. The peak of Mither Tap and the stone circle can be observed in relation to one another, with Mither Tap appearing above the near horizon to the north in views from the stone circle, although these views are currently somewhat obscured by woodland plantation and modern infrastructure.
- 10.7.69 The most distinctive feature of recumbent stone circles is the recumbent setting, formed of a massive stone laid on its side and flanked by two taller stones. The recumbent stone lies on the south-southwest side of the stone circle, and views overlooking the recumbent stone from within the stone circle, are aligned to the southwest. Today views to the southwest, across the recumbent stone are partly obscured by the presence of a residential property which was erected around 2018 and which stands around 60 m from the Scheduled Monument.
- 10.7.70 The stone circle is one of a number of contemporary stone circles surviving within the Strathdon area. A contemporary stone circle, South Fornet Stone Circle (SM 12353), stands in arable farmland around 2.7 km to the southeast of the South Leylodge Steading Stone Circle. South Fornet Stone Circle is located in a more prominent position, and it is likely that there was intended visibility between the two monuments.
- 10.7.71 Those characteristics of the monument's setting that contribute most to the stone circle's significance are its farmland setting, the views to the southwest from within the stone circle overlooking the recumbent stone, and its relationship with other contemporary sites in the surrounding landscape.
- 10.7.72 As part of the Proposed Development the existing Kintore to Craigiebuckler 132 kV overhead line, which currently runs to the east of the stone circle, would be dismantled and replaced with an underground cable, and the existing Kintore to Tealing 275 kV OHL, which currently passes on the western side of the stone circle, will be realigned where it runs to the south of Kintore Substation (between Towers 295 and 298). The closest existing Kintore to Tealing 275 kV OHL Tower (295) is located to the southwest of the stone circle, around 164 m from the monument and on the opposite side of the public road to the monument. This would be replaced with a new proposed tower (295R) which would be located c.120 m from the monument and positioned to the immediate north of the public road,



- although separated from the stone circle by a field wall. Both the proposed Kintore to Tealing 400 kV OHL and the proposed realignment of the Kintore to Tealing 275 kV alignment would be visible running parallel to the west of the stone circle; the Kintore to Tealing 275 kV Tower (295) being the closest proposed tower to the monument (see Volume 2, Heritage Assets: Inner Study Area, Figure 10.1.6 and Volume 5, Appendix 10.12: Stone Circles Mitigation Response, Plate 10.12.4 which show the existing OHL arrangement together with the Proposed Development alignment in proximity to South Leylodge Steading Stone Circle (SM 12350).
- 10.7.73 The Actual Tower Height bare-earth ZTV (Volume 3, Figure 10.2.11: Designated Heritage Assets: Outer Study Area (and those outwith the Outer Study Area included in the assessment)) indicates that from the stone circle, there would be theoretical visibility of 11 towers of the Proposed Development running from the southwest to the northeast, passing the stone circle on its western side. The nearest proposed tower for the Proposed Development (Tower N4) being around 235 m to the west-southwest of the monument, seen beyond the proposed realignment of the Kintore to Tealing 275 kV alignment).
- 10.7.74 A photomontage (Volume 4, Figures 10.42b, and 10.42e CH VP40: South Leylodge Steading Stone Circle) shows that the proposed towers (Proposed Development and the proposed realignment of the Kintore to Tealing 275 kV) would be visible crossing farmland immediately surrounding the stone circle and would be a noticeable addition to the baseline by introducing additional steel lattice towers to the north and southwest of the stone circle, with towers in relatively close proximity to the monument.
- 10.7.75 The proposed towers would be visible in views towards the Scheduled Monument from the public road (**Volume 4**, **Figures 10.42b and 10.42e**, **CH VP40**: **South Leylodge Steading Stone Circle**), although the proposed towers would be offset from the monument and would not interrupt views to the monument. Views across the recumbent stone to the southwest (which includes the presence of a modern residential property) would be unaffected by the Proposed Development. Realignment of the existing Kintore to Tealing 275 kV overhead line, especially Tower 296, would remove the current infrastructure present in views to the northeast from the stone circle looking towards the peak of Mither Tap. A wireline visualisation (**Volume 4**, **Figure 10.41a**, **CH VP39**: **South Fornet Stone Circle**) showing the predicted bare earth view looking towards the stone circle from contemporary South Fornet Stone Circle (SM 12353) shows that the Proposed Development would be visible in these views, however, the proposed towers would be offset from the stone circle and the line of sight between the contemporary stone circles would not be interrupted.
- 10.7.76 The dismantling of the section of existing Kintore to Craigiebuckler 132 kV overhead line, that currently passes the stone circle on its east side, and replacement of this with a proposed underground cable would be beneficial in that it would remove existing towers that lie in close proximity to the monument on its east side. The existing 132 kV OHL passes on a different alignment to the Proposed Development and is present at a greater distance from the monument. It is therefore considered that the removal of the existing 132 kV overhead line would not in combination reduce the effect of the construction of the Proposed Development on the setting of the stone circle.
- 10.7.77 Overall, it is assessed, drawing on the criteria set out in Tables 10.2-10.3, that the impact of the Proposed Development on the setting of the recumbent stone circle would be of medium adverse magnitude, resulting from the introduction of additional electricity infrastructure in the immediate landscapes surroundings of the stone circle. The resulting effect is assessed, based on professional judgement, to be of Moderate adverse significance (Significant). A summary assessment of the impact of the Proposed Development on the setting of the settlement site is provided at page 33 of Table 10.10.1, Volume 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area.
- 10.7.78 Whilst the effect on the setting of the Scheduled Monument is assessed as being **Significant** in EIA terms, it is necessary to consider whether the predicted effect would 'significantly adversely affect the integrity of its setting' (NPF4 Policy 7 (h) ii). As noted above, the contributors to the monument's cultural significant are its farmland setting, the views to the southwest from within the stone circle overlooking the recumbent stone, and its relationship with other contemporary sites in the surrounding landscape. These qualities of its setting would be retained such that its integrity of its setting would not be significantly adversely affected, and it would still be possible for any visitor to the monument to understand, appreciate and experience these qualities.



Increase in Tower Height within vertical LOD

- 10.7.79 The Proposed Development would be subject to a maximum vertical LOD of 9 m increase on the proposed tower height as set out in Volume 5, Appendix 3.1: Tower Schedule. This allows for any alteration of required heights of towers necessary to maintain statutory ground clearance following further engineering analysis at the detailed design stage (see Volume 1, Chapter 3 Project Description for further details). The maximum vertical LOD (9 m increase) is shown on the cultural heritage visualisations (Volume 4, Figures 10.3-10.42) indicated as a red marker above each tower.
- 10.7.80 Based on the maximum vertical LOD shown on the cultural heritage visualisations, it is assessed that any increase in the height of the proposed towers within the vertical LOD would not result in an increase in level of effect, on the setting of the designated heritage assets identified within the outer study area or those identified outwith the study area and included in this assessment, that is greater than that predicted for the actual tower heights set out in **Volume 5, Appendix 3.1: Tower Schedule**.
- 10.7.81 The change in appearance of the Proposed Development from the potential increase in height of the proposed towers would not be so apparent as to result in an appreciable change in visibility and would not result in a significant change to the assessment of effects on the settings of heritage assets set out in Volume 5, Appendix 10.10:
 Detailed Assessment of Designated Heritage Assets in the Outer Study Area and Appendix 10.11: Detailed Assessment of Designated Heritage Assets outwith the Outer Study Area and detailed above in this Section.

Additional Mitigation

- 10.7.82 No additional mitigation is possible to offset the impact of the Proposed Development on the settings of these assets.
- 10.7.83 Information on the technical constraints in proximity to Balkemback Cottages Stone Circle (SM 2686), New Wester Echt Stone Circle (SM 6074) and South Cottage Steading Circle (SM 12350) is provided in Volume 5, Appendix 10.12: Stone Circles Mitigation Response.

Residual Operational Effects

- 10.7.84 During its operational lifetime, the residual effect of the Proposed Development on the settings of the heritage assets in the outer study area, and those specifically addressed in the wider landscape, would be the same as the predicted impacts presented above.
- 10.7.85 Residual effects, on the setting of the following eight Scheduled Monuments, have been assessed as being of **Moderate** adverse significance (**Significant** in EIA terms):
 - Balkemback Cottages Stone Circle (SM 2868) (Section A);
 - Law of Baldoukie Barrow (SM 6314) (Section B);
 - Mill of Balrownie Ring Ditch (SM 6472) (Section C);
 - Westside Barrows (SM 6367) (Section C)
 - Westside Unenclosed Settlement (SM 6368) (Section C);
 - East Finnercy Cairn (SM 6076) (Section F);
 - New Wester Echt Stone Circle (SM 6074) (Section F), and
 - South Leylodge Steading Stone Circle (SM 12350) (Section F).
- 10.7.86 It is assessed that the setting of these designated heritage assets would be changed to some degree by the introduction of the Proposed Development, however, the key contributors to the monuments would be retained and it would still be possible to understand, appreciate and experience these qualities. As such, the integrity of the setting of the monuments and their capacity to inform and convey their cultural significance, would be unhindered and the impact of the Proposed Development would not amount to a significant adverse effect on the integrity of their settings (NPF Policy 7 (h)).
- 10.7.87 No further mitigation is possible to offset the impact on these assets and the residual effect will remain one of **Moderate** adverse significance (**Significant** in EIA terms).



10.7.88 All other impacts, affecting the settings of designated heritage assets in the outer study area, and those additional designated assets identified beyond 3 km for inclusion in the assessment (see Volume 5, Appendix 10.9:
Designated Heritage Assets outwith the Outer Study Area for details), would give rise to effects that are either of Minor or Negligible significance (Not Significant in EIA terms). A summary of these predicted residual effects is

provided below by geographical section (A-F) and detailed assessment on a site-by-site basis is provided in **Volume** 5, Appendix 10.10: Detailed Assessment of Designated Heritage Assets in the Outer Study Area and Volume 5, Appendix 10.11: Detailed Assessment of Designated Heritage Assets outwith the Outer Study Area.

- Section A:
 - Minor significant residual effects are predicted on ten Scheduled Monuments (SM 159, SM 6145, SM 6562, SM 389, SM 6423, SM 6070, SM 151, SM 6420, SM 6047 and SM 90270).
 - Negligible significant residual effects are predicted on three Scheduled Monuments (SM 6422, SM 3038 and SM 6449), one Category A Listed Building (LB 11701), six Category B Listed Buildings (LB 6480, LB 17459, LB 12070, LB 45686, LB 12074 and LB 45675), one Inventory Garden and Designed Landscape (GDL 189), and one Conservation Area (CA 533).

Section B:

- Minor significant residual effects are predicted on ten Scheduled Monuments (SM 6354, SM 5911, SM 162, SM 6372, SM 4734, SM 115, SM 6390, SM 3375, SM 6647 and SM 123), one Category B Listed Building (LB 13778),
- Negligible significant residual effects are predicted on 13 Scheduled Monuments (SM 6311, SM 7234, SM 2308, SM 6349, SM 6348, SM 6355, SM 6356, SM 4015, SM 135, SM 6360, SM 6391, SM 139 and SM 90069), two Category A Listed Building (LB 4656 and LB 5011), six Category B Listed Buildings (LB 11689, LB 13778, LB 17676, LB 18027, LB 18029 and LB 12333), one Inventory Garden and Designed Landscape (GDL 70, which also partly lies within Section C) and one Conservation Area (CA 539).

Section C:

- Minor significant residual effects are predicted on seven Scheduled Monuments (SM 6514, SM 6374, SM 6373, SM 2829, SM 6366, SM 4444 and SM 4823) one Category A Listed Buildings (LB 17803), five Category B Listed Buildings (LB 17705, LB 17736, LB 17789, LB 16287 and LB 16295) and two Category C Listed Buildings (LB 17799 and LB 11263).
- Negligible significant residual effects are predicted on nine Scheduled Monuments (SM 4755, SM 2303, SM 6364, SM 13613, SM 137, SM 4823, SM 4961, SM 988, SM 90136), five Category A Listed Buildings (LB 17804, LB 9495, LB 6754, LB 9646 and LB 9503), four Category B Listed Buildings (LB 5007, LB 5047, LB 5053 and, LB 9507), three Inventory Garden and Designed Landscape (GDL 178, GDL 169 and GDL 70, which also partly lies in Section B) and one Conservation Area (CA 439).

Section D:

- Minor significant residual effects are predicted on two Scheduled Monuments (SM 2231 and SM 4778) and one Category B Listed Buildings (LB 9652),
- Negligible significant residual effects are predicted on three Scheduled Monuments (SM 5168, SM 4509 and SM 4968), two Category B Listed Buildings (LB 2842 and LB 9333), one Inventory Garden and Designed Landscape (GDL 194) and two Conservation Areas (CA 658 and CA 656).

Section E:

- Minor significant residual effects are predicted on four Scheduled Monuments (SM 4892, SM 974, SM 4910 and SM 4713) and one GDL (GDL 309, which also partly lies within Section F).
- Negligible significant residual effects are predicted on four Scheduled Monuments (SM 972, SM 6086, SM 6082 and SM 1016), one Category B Listed Building (LB 2976), one GDL (GDL 119, which also partly lies within Section F).

Section F:

 Minor significant residual effects are predicted on five Scheduled Monuments (SM 12161, SM 57, SM 6075, SM 12120, SM 12353), two Category A Listed Buildings (LB 3152 and LB 3133), one Category B Listed



- Building (LB 2980) and two Inventory Garden and Designed Landscapes (GDL 309, which also partly lies within Section E, and GDL 153).
- Negligible significant residual effects are predicted on seven Scheduled Monuments (SM 12351, SM 90088, SM 44, SM 12111, SM 12121, SM 92 and SM 2478), three Category A Listed Buildings (LB 3103, LB 3113 and LB 16530), three Inventory Garden and Designed Landscapes (GDL 119, which also partly lies within Section E, GDL 141 and GDL 91) and one Conservation Area (CA 435).
- 10.7.89 All operational effects identified would be fully reversible upon decommissioning of the Proposed Development.

10.8 Assessment of Likely Significant Effects - Decommissioning

- 10.8.1 There are no heritage assets within the required OHL operational corridor which would be likely to receive a direct effect during decommissioning of the Proposed Development as decommissioning works would be expected to predominantly use the as-built tracks and infrastructure installed for construction to facilitate decommissioning activities.
- 10.8.2 It may be necessary to upgrade existing access tracks to facilitate removal of redundant components of the Proposed Development or construct temporary access tracks, but the mitigation proposed for the construction phase (see above **Section 10.5**) would apply equally to the decommissioning phase. Taking this into consideration any effects arising from the decommissioning of the Proposed Development would be of no more than **Minor** magnitude (**Not Significant**).
- 10.8.3 Decommissioning of the Proposed Development (see Volume 5, Appendix 3.6: Outline Decommissioning Mitigation Strategy). would have predicted beneficial effects in some areas from the permanent removal of infrastructure, particularly OHL towers and conductors. It is predicted that these works would effectively remove the predicted adverse operational effects on the setting of heritage assets in the outer study area identified in Section 10.7.

10.9 Assessment of Likely Cumulative Effects

- 10.9.1 The assessment of cumulative effects on heritage assets is based upon consideration of the effects of the Proposed Development on the heritage assets that were identified within the inner study area and on the settings of assets with statutory and non-statutory designations within the outer study area (which includes the inner study area), in addition to the likely effects of cumulative developments.
- 10.9.2 Operational and under construction developments and existing grid infrastructure elements, are considered as part of the baseline and taken to be such for the assessment of effects on the setting of heritage assets.
- 10.9.3 For assessment of the potential cumulative effects on designated heritage assets, cumulative developments with footprints situated within or overlapping with the 3 km outer study area are considered.
- 10.9.4 The assessment takes into account the nature and relative scales of the various cumulative development proposals, their distance from the affected assets, and the potential degree of visibility from the assets of the various developments.
- 10.9.5 The relevant cumulative developments for consideration in the EIA are listed in **Volume 2, Chapter 16: Cumulative Effects.** Professional judgment has been applied to determine those most likely to have adverse cumulative impacts on cultural heritage interests.
- 10.9.6 **Table 10.7: Cumulative Assessment: Intra (Associated) Developments** provides a cumulative assessment of the Proposed Development with the Intra (Associated) Developments that are required to connect the Proposed Development as detailed in **Volume 2, Chapter 16: Cumulative Effects**. These are the substation proposals at Emmock and Hurlie which would be directly connected with the Proposed Development.
- 10.9.7 Table 10.8: Cumulative Assessment: Inter Developments (Other SSEN Transmission Projects and Third Party Developments) provides a cumulative assessment of the Proposed Development and Intra (Associated)
 Developments with other reasonably foreseeable SSEN Transmission developments and other third party



developments (collectively, referred to as Inter Developments) detailed in **Volume 2, Chapter 16: Cumulative Effects**.

10.9.8 A brief commentary is provided following Table 10.8: Cumulative Assessment: Inter Developments (Other SSEN Transmission Projects and Third Party Developments) on the predicted cumulative effects of the Proposed Development in combination with the Intra and Inter projects considered in the assessment.



Table 10.7: Cumulative Assessment: Intra (Associated) Developments

Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
Emmock 400 kV substation	It is predicted that drystone dykes (HA001), of negligible sensitivity, which would be affected by the Proposed Development would also be directly affected by construction works relating to the proposed Emmock substation where the Proposed Development converges with the proposed substation. Given the limited land take required for the Proposed Development, it is predicted that there would be limited direct impact on small sections of the drystone dykes during construction. It is therefore concluded that the cumulative (construction) effect would only result in a potential direct impact to small sections of the drystone dykes, and the cumulative direct (construction) effect would not be significant.	The EIA for the proposed Emmock substation ¹¹ concludes that the proposed substation would unlikely give rise to any significant adverse effects on the settings of designated heritage assets. There is limited predicted visibility of the proposed Emmock substation from any of the heritage assets within the outer study area for the Proposed Development. Screening provided by existing woodland and landscaping/woodland planting proposed as part of the landscape design for the substation, would largely, if not completely, screen views of the substation from the heritage assets. Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with the proposed Emmock substation on the setting of designated heritage assets would not be significant.
Hurlie 400 kV substation	It is predicted that two sections of former trackway (NO78NE0056 and NO78NE0058) which would be affected by the Proposed Development would also be directly impacted by the construction works relating to the proposed Hurlie substation where the Proposed Development converges with the proposed substation. The trackways and grouse butts are assessed as being of little intrinsic value and negligible sensitivity and a cumulative direct (construction) effect on the trackway remains would be not significant.	The EIA for the proposed Hurlie substation 12 concludes that the proposed substation would be unlikely to give rise to any significant adverse effects on the settings of designated heritage assets. The Proposed Development would be seen in combination with the proposed Hurlie substation, where the Proposed Development converges with the substation. Given the distance from the designated heritage assets where the Proposed Development would be seen in combination with the Hurlie substation, the cumulative developments would not be prominent in the surrounding landscape. Overall, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the proposed Hurlie substation on the settings of designated heritage assets would not be significant.
Overall Intra Cumulative Assessment Summary	The Proposed Development is not predicted to give rise to significant cumulative construction effects when combined with the Intra Developments during its construction phase.	The Proposed Development is not predicted to give rise to significant cumulative effects when combined with the Intra-Developments during its operational phase.

Kintore to Tealing 400 kV OHL Connection: EIAR Volume 2, Chapter 10: Cultural Heritage

¹¹ SSEN Transmission, 2024, 'Emmock 400 kV Substation, Environmental Impact Assessment Report, Volume 2, Chapter 8: Cultural Heritage'.

¹² SSEN Transmission, 2024, 'Hurlie 400 kV Substation, Environmental Impact Assessment Report, Volume 2, Chapter 9: Cultural Heritage'.



Table 10.8: Cumulative Assessment: Inter Developments (Other SSEN Transmission Projects and Third Party Developments)

Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
Emmock and Tealing Overhead Line Tie-Ins and Tie-Backs	Tie-in-of (existing; upgraded) Alyth to Tealing 275 kV OHL to Emmock substation	Tie-in-of (existing; upgraded) Alyth to Tealing 275 kV OHL to Emmock substation
	It is predicted that drystone dykes (HA001), of negligible sensitivity which would be affected by the Proposed Development would also be directly impacted by the construction woks relating to the proposed Alyth to Tealing Tie-in.	The proposed Alyth to Tealing Tie-in would run parallel with the southern end of the Proposed Development and would be seen in combination with the Proposed Development where they would converge with the proposed Emmock substation.
	Given the limited land take required for each development, it is predicted that there would be limited direct impact on small sections of the drystone dykes during construction. In addition, there is potential for an enclosure (N033NE0020), visible as cropmarks on aerial photographs, to be potentially affected by both	It has been concluded that the introduction of the Proposed Development would result in a significant adverse effect on the setting of one Scheduled Monument (Balkemback Cottage Stone Circle (SM 2868)) at the southern end of the Proposed Development (Section A), resulting from the introduction of the proposed towers in close proximity to the Scheduled
	the Proposed Development, if Tower S201 is moved southeast, and	Monument.
	the proposed Alyth to Tealing Tie-in. Groundbreaking works for both schemes could potentially expose and disturb any buried remains that may survive.	In views from the Scheduled Monument the proposed Alyth to Tealing Tie- in would be visible beyond and at a greater distance from the monument than the Proposed Development. The Proposed Development would be
	Following the implementation of Additional Mitigation, any surviving buried remains would have been investigated and, if necessary, excavated and recorded in detail, ensuring preservation by record.	visible in close proximity to the monument; the nearest proposed tower standing around 60 m of the monument and would exert the greater effect on the setting of the monument.
	Accordingly, the cumulative direct (construction) effect of the Proposed Development with the Alyth to Tealing Tie-in on any surviving buried remains of enclosure (N033NW0020) would not be significant.	Taking this into consideration, it is assessed that the cumulative effect of the addition of the Proposed Development to, and in combination, with the proposed Alyth to Tealing Tie-in on the setting of Balkemback Stone Circle (SM 2868) would be no different from that of the Proposed Development
	Other Tie-in/Tie-backs	alone. The Proposed Development contributing the greater effect to the cumulative impact.
	The development footprint for the other proposed Tealing to Westfield Tie-in and Emmock to Tealing Tie-backs would not lie within, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed grid connect works. Accordingly, there is no likely significant cumulative direct	Overall, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Alyth to Tealing Tie-in would be no different from that of the Proposed Development alone, an impact of Moderate significance (significant in EIA terms). The Proposed Development contributing the greater effect to the cumulative impact.
	(construction) effect predicted from the Proposed Development and the other Tie-in/Tie-backs.	Other Tie-in/Tie-backs
	TIO OTIOI TIO-III/ TIO-DAONS.	The proposed Tealing to Westfield Tie-in involves a short section of new OHL to the Proposed Emmock substation and Emmock to Tealing Tie-backs involve the installation of two new short sections of parallel 275 kV OHL between the proposed Emmock substation and the existing Tealing Substation. The addition of the proposed new steel lattice towers to the existing electricity infrastructure would result in no more than a slight change to the character of the landscape surrounding the designated heritage assets.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
		Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the proposed Tealing to Westfield Tie-in and Emmock to Tealing Tie-Backs on the setting of designated heritage assets would not be significant.
Alyth to Tealing 275 kV OHL Upgrade (to 400 kV)	The upgrade project involves the reconductoring of the OHL between the existing towers. No new towers would require to be erected as part of the proposed works and there would be no requirement for any groundbreaking works. Therefore, there are no predicted direct effects on heritage assets within the inner study area for the Proposed Development from the upgrade of the existing Alyth to Tealing 275 kV OHL. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Alyth to Tealing 275 kV OHL Upgrade.	The upgrade project involves the reconductoring of the OHL between towers, and no new towers would require to be erected as part of the proposed works. The proposed reconductoring works would only involve a slight change in the existing baseline conditions and therefore there would be no perceptible change to the setting of heritage assets located close to the existing OHL. Accordingly, there is no cumulative operational effect predicted from the Proposed Development and the Alyth to Tealing 275 kV OHL Upgrade.
Tealing to Westfield 275 kV OHL Upgrade (to 400 kV)	The upgrade project involves the reconductoring of the OHL between the existing towers. No new towers would require to be erected as part of the proposed works and there would be no requirement for any groundbreaking works. Therefore, there are no predicted direct effects on heritage assets within the inner study area for the Proposed Development from the upgrade of the existing Tealing to Westfield 275 kV OHL. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Tealing to Westfield 275 kV OHL Upgrade.	The upgrade project involves the reconductoring of the OHL between towers, and no new towers would require to be erected as part of the proposed works. The proposed reconductoring works would only involve a slight change in the existing baseline conditions and therefore there would be no perceptible change to the setting of heritage assets located close to the existing OHL. Accordingly, there is no cumulative operational effect predicted from the Proposed Development and the Tealing to Westfield 275 kV OHL Upgrade.
Fithie Energy Park	The development footprint for the proposed Fithie Energy Park does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed Fithie Energy Park. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Fithie Energy Park.	The request for screening opinion for the Fithie Energy Park states, "Given the distance, and the proposals for landscape and visual mitigation, it is not considered likely that significant adverse effects would arise on any designated assets." Taking this into consideration, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Fithie Energy Park on the setting of designated heritage assets would not be significant.
Balnuith Battery Energy Storage System (BESS)	The development footprint for the proposed Balnuith BESS does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed BESS. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Balnuith BESS.	The Planning, Design and Access Statement for the Balnuith BESS states "Due to the significant distance between the application site and () heritage assets, the proposed development would not result in any significant harm to their setting. Moreover, appropriate natural screening will be planted around the periphery of the site, thereby minimising any visual impacts associated with the proposed facility. Long distance views would see the Site within the context of the existing sub-station and polytunnel cultivation, and the significant built features within a generally



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
		rural area ensure that there are unlikely to be any significant impacts on any of the heritage designations within the wider area." With the information available at present, it is consideration that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Balnuith BESS on the setting of designated heritage assets would be not significant.
Myreton BESS	The development footprint for the proposed Myreton BESS does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed BESS. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Myreton BESS.	Information provided by the applicant for Myreton BESS in the public consultation held in March 2025 ¹³ states that "The proposed Myreton BESS landscape design aims to effectively screen the site" and notes that a comprehensive landscape scheme, which includes denser and more mature plantings has been developed to better screen the proposed BESS from surrounding views. With the information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Myreton BESS on the setting of designated heritage assets would be not significant.
Ark Hill Wind Farm Extension	The development footprint for the proposed Wind Farm does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed Wind Farm. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Ark Hill Wind Farm Extension.	The EIA for the Wind Farm Extension ¹⁴ concludes that the proposed Wind Farm Extension would not result in any significant effects on the setting of designated heritage assets. The ZTV provided in the EIA for the scheme indicates that there would be limited visibility of the proposed wind farm extension from designated heritage assets identified within the outer study area for the Proposed Development. The proposed Wind Farm Extension would be at its closest c.1.8 km from the nearest designated heritage asset within the outer study area predicted to have visibility of the Proposed Development. Where visible from the heritage assets the Wind Farm Extension would be seen together with the existing Ark Hill Wind Farm, as one group of turbines, and visible in a different arc of view to the Proposed Development.
		Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Ark Hill Wind Farm Extension on the setting of heritage assets within the outer study area would not be significant.
Glendye Wind Farm	The development footprint for the proposed Wind Farm does not lie in, or extend into, the inner study area for the Proposed Development.	The consented Glendye Wind Farm is located to the northwest of Fasque. The proposed turbines would be over 4 km from the nearest heritage assets identified within the outer study area for the Proposed Development

 $^{^{13}\} https://fpedevelopments.com/wp-content/uploads/2025/02/FPE-2nd-Exhibition-Boards.pdf$

¹⁴ Greencat Renewables, 2021, Ark Hill Wind Farm Extension, EIAR Chapter 9 Cultural Heritage.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
	Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed Wind Farm.	and a ZTV for the proposed wind farm provided in the EIAR ¹⁵ indicates that there would be limited visibility of the wind farm from these heritage assets.
	Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Glendye Wind Farm.	The EIAR for the wind farm identifies one significant residual effect on the setting of Scheduled Monument, Cairn o'Mount, cairns (SM 4968) from the proposed wind farm. No other significant residual effects on designated heritage assets in the wider area are identified.
		The Proposed Development lies over 8 km from Cairn o'Mount, cairns (SM 4968) and would only be perceptible as a distant minor addition to the wider landscape surrounding this Scheduled Monument. Taking this into consideration there would be no greater effect on the setting of Cairn o'Mount, cairns from adding the Proposed Development to a baseline including the consented Glendye Wind Farm and the Proposed Development.
		Overall, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with Glendye Wind Farm on the setting of designated heritage assets would not be significant.
Laurencekirk Residential Development	The development footprint for the proposed residential development does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed residential development. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Laurencekirk Residential Development.	With the information available at present, it is considered that the proposed Laurencekirk Residential Development is unlikely to have an adverse effect on the setting of designated heritage assets.
		The residential development would be located on the northern edge of Laurencekirk town and would be a minor additional feature in the wider landscape. Existing woodland/shelterbelts and intervening buildings are likely to largely screen views of the residential development from many of the heritage assets within the outer study area for the Proposed Development.
		Overall, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Laurencekirk Residential Development on the setting of designated heritage assets would not be significant.
Glendye Wind Farm Grid Connection	This development involves the construction of an approximately 20 km 132 kV OHL between the Glendye Wind Farm and the existing Fetteresso Substation. There is no information available at present on where the final alignment of the would be but the search area that is available indicates that the final alignment could potentially intersect with the inner study area for the Proposed Development.	The Scoping Report ¹⁶ submitted for the grid connection indicates that there are relatively few designated heritage assets in the surrounding area that may potentially have their setting affected by the grid connection. Taking account of the scale of the grid connection, a 132 kV steel trident pole, which would run from Glendye Wind Farm to tie into the Fetteresso Substation from the west, it is considered that the grid connection would

¹⁵ Coriolis Energy Ltd, 2018, 'Glendye Wind Farm EIA Report: Chapter 10: Cultural Heritage'.

¹⁶ SSEN Transmission, 2024, 'Glendye Wind Farm Overhead Line Grid Connection, Environmental Impact Assessment: Scoping Report'.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
	None of the heritage assets identified within this area of the inner study area, at Fetteresso Forest, are predicted to be directly affected by construction of the Proposed Development. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Glendye Wind Farm Grid Connection.	likely be largely, if not entirely, screened in views from the heritage assets within the wider area by intervening topography. With the information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the proposed grid connection on the setting of designated heritage assets would not be significant.
Fetteresso Wind Farm Grid Connection and Access Corridor	The land take required by the Fetteresso Wind Farm Grid Connection and Access Corridor in combination with the Proposed Development is confined to a shared access corridor to the north of Fetteresso Forestry around Hill of Three Stones. The Proposed Development is not predicted to result in significant direct impacts upon heritage assets that survive along this shared access corridor. A cultural heritage assessment undertaken for the Fetteresso Wind Farm ¹⁷ predicted possible significant impacts upon heritage assets located along the proposed access corridor resulting from access track upgrades. However, following the adoption of mitigation measures to avoid or reduce these predicted effects, no significant residual effects were predicted. Accordingly, the cumulative direct (construction) effect of the Proposed Development with the Fetteresso Wind Farm on the heritage assets would not be significant.	A cultural heritage assessment undertaken for the Fetteresso Wind Farm ¹⁷ indicates that visibility of the scheme would be largely, if not entirely, screened in views from designated heritage assets within the surrounding area by intervening topography, and it is concluded that there would be no significant effects on the settings of designated heritage assets. Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Fetteresso Wind Farm Grid Connection on the setting of designated heritage assets would not be significant.
Glenbervie BESS	The development footprint for the proposed Glenbervie BESS, provided in the available Pre-Application Notice (PAN) does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed BESS. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Glenbervie BESS.	This project is just at the Pre-Application Notice (PAN) stage and therefore very limited information is available in the public domain other than a location drawing that shows the red line boundary for the project. Given the relatively small scale of the proposed BESS, it is considered that it would be a minor additional feature in the wider landscape surroundings of the designated heritage assets. Existing woodland/shelterbelts are likely to largely screen views of the proposed BESS from many of the heritage assets within the wider area and any landscaping proposals (such as tree planting) would further reduce visibility of the proposed BESS from designated heritage assets. With the limited information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Glenbervie BESS on the setting of designated heritage assets would not be significant.

¹⁷ Fred Olsen Renweables, 2019, 'Chapter 9: Cultural Heritage', in Fetteresso Wind Farm Environmental Impact Assessment.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
Quithel BESS	The Screening Request ¹⁸ for the proposed BESS states that "there are no cultural heritage assets located within or adjacent to the Site, therefore no direct effects of the Proposed Development are expected to occur". Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Quithel BESS.	The Screening Request for the proposed Quithel BESS concludes that the proposed BESS would likely be largely screened by intervening topography from designated heritage assets in the wider landscape. With the information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Quithel BESS on the setting of designated heritage assets would not be significant.
Network Rail Drumlithie	This is a SSEN Transmission reasonably foreseeable development involving installation of new transformers at the existing Fetteresso Substation and cable connections near the railway line. There is no information available at present on where the final alignment of the project would be but the search area that is available indicates that the final alignment could potentially intersect with the inner study area for the Proposed Development between Tannachie and the existing Fetteresso Substation. None of the heritage assets identified within this area of the inner study area are predicted to be directly affected by construction of the Proposed Development. Accordingly, with the limited information available at present it is considered that there is no cumulative direct (construction) effect predicted from the Proposed Development and Network Rail Drumlithie.	The scheme would comprise the installation of two new transformers at Fetteresso Substation and two cable connections to the rail feeder stations near the railway line. There is no information available at present on the scale of the proposed new transformers, however, these would be seen in combination with the existing Fetteresso Substation and likely to result in no more than a slight change to the character of the landscape surrounding the designated heritage assets within the wider area. With the information, available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, Network Rail Drumlithie on the setting of designated heritage assets would not be significant.
Fiddes 132 kV Grid Replacement	This is a SSEN Transmission reasonably foreseeable development located near to Fetteresso Forest and has not been subject to a screening or scoping. There is a possible requirement to install a new double circuit 132 kV connection from the existing Fiddes Substation to the existing/upgraded Fetteresso Substation. There is no information available at present on where the final alignment of the project would be but the search area that is available indicates that the final alignment could potentially intersect with the inner study area for the Proposed Development between Tannachie and the existing Fetteresso Substation. None of the heritage assets identified within this area of the inner study area are predicted to be directly affected by construction of the Proposed Development.	The scheme would comprise erection of a double circuit 132 kV grid connection running from the existing Fiddes Substation in the south to the existing/upgraded Fetteresso Substation. There is no information available at present on the alignment of the proposed grid connection, however, given the likely scale of the 132 kV grid connection it is considered that the scheme would likely be largely, if not entirely screened in views from the heritage assets identified within the wider landscape by intervening topography. With the information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with the grid replacement on the setting of designated heritage assets would not be significant.

¹⁸ tnei, 2023, 'Screening Request for Battery Energy Storage System (BESS) under the Electricty Works (EIA) Scotland Regulations 2017, E Grid Services.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
	Accordingly, with the limited information available at present it is considered that there is no cumulative direct (construction) effect predicted from the Proposed Development and the Fiddes 132 kV Grid Replacement.	
SSEN Transmission offshore grids project	This is a SSEN Transmission reasonably foreseeable development located within Fetteresso Forest and has not been subject to a screening or scoping. The project would likely involve an onshore HVDC converter station and underground cables from the coast to the HVDC converter station. There is no information available at present on where the final	The scheme would likely comprise the erection of a HVDC convertor station at Fetteresso Forest, at a location close to the proposed Hurlie substation, and an underground cable route. The indicative search area for the proposed HVDC convertor station is located south of Clachanshiels within Fetteresso Forest and east of the Proposed Development. With the limited information available at this stage, it is considered that the
	alignment of the project would be but the indicative search area that is available indicates that the final alignment and HVDC converter station are likely to lie outside the inner study area for the Proposed Development. Accordingly, with the limited information available at present it is considered that there is no cumulative direct (construction) effect predicted from the Proposed Development and the SSEN Transmission offshore grids project.	HVDC control building has the potential, on worst case assumptions, to result in a significant adverse impact on the setting of one Scheduled Monument, Clochanshiels, Cairns, Houses and Feld Systems (SM 4857) resulting from the introduction of the proposed HVDC convertor station in close proximity to this monument. The Proposed Development would likely be seen in combination with the proposed HVDC convertor station where the two developments converge at Fetteresso Forest. The Proposed Development would, however, likely be seen beyond the proposed HVDC convertor station, partially screened by intervening topography, and at a greater distance than the HVDC convertor station from the Clochanshiels, Cairns, Houses and Field Systems (SM 4857). The proposed HVDC convertor station would be visible in close proximity to the monument and would exert the greater effect on the setting of the monument.
Possible Future Wind Farm Connection	This is a SSEN Transmission reasonably foreseeable development located within Fetteresso Forest and has not been subject to a screening or scoping. The scheme would likely involve a 132 kV OHL connecting to the existing Fetteresso Substation from the north, with a section of underground cable on the approach to the substation. There is no information available at present on where the final alignment of the project would be but the search area that is available indicates that the final alignment could potentially intersect with the inner study area for the Proposed Development around Hill of Trusta. None of the heritage assets identified within this area of the inner study area are predicted to be directly affected by construction of the Proposed Development. Accordingly, with the limited information available at present it is considered that there is no cumulative direct (construction) effect predicted from the Proposed Development and the Possible Future Wind Farm Connection.	The scheme would likely comprise erection of a single circuit 132 kV OHL connecting to the existing Fetteresso Substation from the north. There is no information available at present on the alignment of the grid connection, however given the likely scale of the 132 kV grid connection (similar to that proposed for Glendye Wind Farm Grid Connection) it is considered that the scheme would likely be largely, if not entirely screened in views from the heritage assets identified within the wider landscape by intervening topography. With the limited information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Possible Future Wind Farm Connection on the setting of designated heritage assets would not be significant.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
Onshore Transmission for Bowdun Offshore Wind Farm	Within the scoping report ¹⁹ for the proposed scheme, it states in Section 11.11 that the EIAR for the development will consider the likely significant effects of the development upon heritage assets. There is no information available at present on where the final alignment of the project would be but the search area that is available indicates that the final alignment could potentially intersect with the inner study are for the Proposed Development between Glenbervie and Fetteresso Forestry. Embedded mitigation in regards impact on heritage assets from the onshore transmission scheme are set out in Section 11.6 of the scoping report. These measures state that the development will avoid physical impacts upon designated heritage assets and that the proposed development will avoid, as far as reasonably practicable, physical impacts upon non-designated heritage assets, for example through fencing off heritage assets. Taking into consideration the adoption of mitigation measures to avoid or reduce any likely impacts on heritage assets from the onshore transmission development it is reasonable to assume that there would not be significant cumulative direct (construction) effect predicted from the Proposed Development and the Onshore Transmission for Bowdun Offshore Wind Farm.	The scheme would likely comprise the erection of a HDVC convertor station at Fetteresso Forest, at a location close to the proposed Hurlie substation, and an underground cable route. The indicative search area for the proposed HVDC convertor station is located south of Clachanshiels within Fetteresso Forest and east of the Proposed Development. With the limited information available at this stage, it is considered that the HVDC control building has the potential, on worst case assumptions, to result in a significant adverse impact on the setting of one Scheduled Monument, Clochanshiels, Cairns, Houses and Feld Systems (SM 4857) resulting from the introduction of the proposed HVDC convertor station in close proximity to this monument. The Proposed Development would likely be seen in combination with the proposed HVDC convertor station where the two developments converge at Fetteresso Forest. The Proposed Development would, however, likely be seen beyond the proposed HVDC convertor station, partially screened by intervening topography, and at a greater distance then the HVDC convertor station from the Clochanshiels, Cairns, Houses and Field Systems (SM 4857). The proposed HVDC convertor station would be visible in close proximity to the monument and would exert the greater effect on the setting of the monument.
Craigneil Wind Farm	This development involves the construction of and operation of up to seven wind turbines at Craigneil Hill. There is little information available in the public domain for this proposed wind farm. However, the information that is available shows that the proposed wind farm would extent across Craigneil Hill and likely converge with the inner study area for the Proposed Development. Information provided by the applicant for the proposed wind farm in the public consultation held in September 2024 indicates that the proposed infrastructure for the wind farm would not directly affect any of the heritage assets identified in the inner study area for the Proposed Development, where the two developments converge. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Craigneil Wind Farm.	There is little information available in the public domain for this proposed wind farm. However, the information that is available indicates that the proposed wind farm development would be located to the north of Fetteresso Forestry and would be seen in combination with the Proposed Development, where it crosses Craigneil Hill. The Proposed Development would pass through the western end of the proposed wind farm site, and the proposed towers for the Proposed Development would likely be seen together with the Craigneil Wind Farm turbines. Given the scale of the proposed turbines (180 m to tip) the wind farm would likely be more prominent than the Proposed Development and would contribute the greater effect to any cumulative effect on the setting of heritage assets in the wider area than the Proposed Development on the setting of designated heritage assets would not be significant.

Kintore to Tealing 400 kV OHL Connection: EIAR Volume 2, Chapter 10: Cultural Heritage

¹⁹ Thistle Wind Partners, 2024, 'Bowdun Offshore Wind Farm Onshore Scoping Report'.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
Kintore to Craigiebuckler 132 kV OHL (existing) realignment (undergrounding)	The land take required by the proposed underground cable in combination with the Proposed Development is confined to a small area to the south of Leylodge. There are no predicted direct impacts on heritage assets present within this shared land take area from the Proposed Development. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Kintore to Craigiebuckler 132 kV OHL (existing) realignment (undergrounding).	The existing Kintore to Craigiebuckler 132 kV OHL would be replaced with an underground cable route. No above ground elements are required to be constructed for the proposed underground cable development and the underground cable route would not give rise to any operational effects on the setting of heritage assets located within the wider landscape. Accordingly, there is no cumulative operational effect predicted from the Proposed Development and the Kintore to Craigiebuckler 132 kV OHL (existing) realignment (undergrounding).
Hill of Fare Wind Farm	The development footprint for the proposed wind farm does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed wind farm. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Hill of Fare Wind Farm.	The proposed Hill of Fare Wind Farm is located to the southwest of Dunecht and the proposed turbines would be over 2.5 km from the nearest heritage asset, within the outer study area for the Proposed Development, predicted to have visibility of the Proposed Development. There could potentially be cumulative effects on the setting of a number of heritage assets located around Echt and located between Garlogie and Drumoak. In views from those heritage assets around Echt (including Barmekin Hillfort (SM 57), Sunhoney Stone Circle (SM 44) and a cluster of Listed Buildings in and surrounding Echt village), the proposed Hill of Fare Wind Farm would be seen at a greater distance from the monuments to that of the Proposed Development and in a different arc of view. The proposed Hill of Fare Wind Farm seen to the southwest, separate and distinct from the Proposed Development and would not interact cumulatively with the Proposed Development in the same view. In views from those heritage assets between Garlogie and Drumock (including Scheduled Monuments East Finnercy Cairn (SM 6076) and Cullerlie Stone Circle (SM 90088)), the proposed Hill of Fare Wind Farm would be seen in combination with and beyond the Proposed Development. At over 6 km away from the nearest Scheduled Monument the proposed Hill of Fare Wind Farm would not be prominent in the surrounding landscape and would be less visible in views to the west of the designated heritage assets. It has been concluded that the introduction of the Proposed Development would result in a significant adverse effect on the setting of one Scheduled Monument, East Finnercy Cairn (Section F), to the southwest of Echt, resulting from the introduction of proposed towers in close proximity to the Scheduled Monument. In views from this Scheduled Monument the Hill of Fare Wind Farm would be visible beyond and at a greater distance from the monument than the Proposed Development. The Proposed Development would be visible in close proximity to the monument and would exert the greater



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
		Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination, with Hare of Fare Wind Farm on the setting of East Finnercy Cairn (SM 6076) would be no different from that of the Proposed Development alone, an impact of Moderate significance (significant in EIA terms). The Proposed Development contributing the greater effect to the cumulative impact.
South Leylodge Farm BESS	The planning statement ²⁰ for the proposed BESS states that "There are no designated or non-designated heritage assets located within or adjacent to the Applicant Site that could be physically impacted by the Proposed Development. As such, no direct effects will occur on any recorded designated or non-designated assets".	The information submitted for the planning application ²⁰ for the proposed BESS concludes that effects on the setting of "surrounding heritage assets has been assessed as overall Low, in the worst case" and there would be no significant effects on the settings of designated heritage assets within the wider area.
	Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the South Leylodge Farm BESS.	Taking this into account, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the South Leylodge Farm BESS on the setting of designated heritage assets within the outer study area would not be significant.
Kintore Substation BESS	This proposed BESS does not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on heritage assets within the inner study area from the proposed BESS. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Kintore Substation BESS.	The Historic Environment Assessment Report ²¹ for the proposed BESS states that the proposed BESS "would be viewed at a distance and in the context of the existing substation and overhead lines. There would be no change to the general character of the area and no visual competition between the proposed development and the heritage assets within the study area. Further screening is proposed by the landscape strip included in the development proposals. The proposed development is therefore assessed to result in a neutral effect on the settings and significance of the heritage assets within the study area."
		Accordingly, there is no cumulative operational effect predicted from the Proposed Development and the Kintore Substation BESS.
Kintore Hydrogen Production Facility	The proposed hydrogen production facility requires a parcel of land to the south west of the existing Kintore substation as well as a network or narrow corridors and the footprint of the proposed would lie within	The EIA for the proposed hydrogen production facility ²² concludes that the development would not result in any significant adverse effects on the designated heritage assets within the wider area.
	the inner study area for the Proposed Development. The EIA for the hydrogen production facility identifies two heritage assets that lie within both the hydrogen production facility development footprint and the inner study for the Proposed	The proposed hydrogen facility would introduce new buildings into the agricultural fields immediately west of the existing Kintore Substation and would be seen in combination with the Proposed Development, where the Proposed Development converges with the existing Kintore Substation.

²⁰ neo Environmental, 2022, 'Volume 1: Planning Statement, Kintore Battery Energy Storage Facility'.

Heritage Archaeology, 2023, 'Historic Environment Assessment Report, Erection of a 49.9 MW Battery Storage Facility at Land to the East of the Kintore Sub Station, Aberdeenshire, AB51 OXY'.

Kintore Hydrogen A Stratera Company, 2024, 'Kintore Hydrogen Plant, Environmental Impact Assessment Report, Chapter 7: Archaeology and Cultural Heritage'.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
	Development that would be directly affected by the hydrogen facility. Neither of these heritage assets would be directly affected by the Proposed Development following implementation of mitigation measures. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Kintore Hydrogen Production Facility.	It has been concluded that the introduction of the Proposed Development would result in a significant adverse effect on the setting of one Scheduled Monument (South Leylodge Stone Circle (SM 12350) at the northern end of the Proposed Development (Section F), resulting from the introduction of proposed towers in close proximity to the Scheduled Monument. In views from the Scheduled Monument the Kintore Hydrogen Production Facility would be visible beyond and at a greater distance from the monument than the Proposed Development. The Proposed Development would be visible in close proximity to the monument and would exert the greater effect on the setting of the monument. Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination, with Kintore Hydrogen Production Facility on the setting of South Leylodge Stone Circle (SM 12350) would be no different from that of the Proposed Development alone, an impact of Moderate significance (significant in EIA terms). The Proposed Development contributing the greater effect to the cumulative impact.
Kintore South Solar Array and BESS	The development footprint for the proposed Kintore South Solar Array and BESS would not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on the heritage assets within the inner study area from the proposed solar array and BESS. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Kintore South Solar Array and BESS.	The development includes a co-located solar photovoltaic (PV) array and BESS. There is limited information available in the public domain for the project. The redline boundary of the development is set out in the screening report for the development. No details are provided on the layout of the proposed solar arrays or BESS. The development would introduce modern structures into the agricultural fields around Aquherton. The closest Scheduled Monument, South Leylodge Stone Circle (SM 1250) lies around 1 km from the redline boundary of the development. Taking into consideration intervening topography, the built environs of Kintore, and surrounding woodland/shelterbelts it is considered likely that the development would be largely screened in views from designated heritage assets within the wider landscape. Any landscaping proposals (such as tree planting) for the development would also likely further reduce visibility of the development from designated heritage assets. With the limited information available at present, it is considered that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the Kintore South Solar Array and BESS on the setting of designated heritage assets would not be significant.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
Womblehill Farm BESS	The development footprint for the proposed BESS would not lie in, or extend into, the inner study area for the Proposed Development. Therefore, there are no predicted direct effects on the heritage assets within the inner study area from the proposed BESS. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Womblehill Farm BESS.	A historic environmental desk-based assessment ²³ undertaken for the proposed BESS concludes that the proposals are not anticipated to impact any designated heritage assets in the vicinity through changes to setting. Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination with, the proposed Womblehill Farm BESS on the setting of designated heritage assets would not be significant.
Cossans Solar & BESS	The land take required by the Cossans Solar & BESS development in combination with the Proposed Development is confined to a shared access corridor from Sparrowmuir to Haughs of Cossans. There are no predicted direct effects on the heritage assets within this shared access corridor from the Proposed Development. Accordingly, there is no likely significant cumulative direct (construction) effect predicted from the Proposed Development and the Cossans Solar & BESS.	The development comprises a solar photovoltaic (PC) array and associated infrastructure at Haughs of Cossan. The EIAR for the solar array identified a significant (Moderate) effect on the setting of the setting of one Scheduled Monument, St Orland's Stone (SM 90270) (Section A) from the development. The Proposed Development would converge with the solar array to the east of Haughs of Cossan, where the Proposed Development crosses agricultural fields to the southeast of St Orland's Stone (SM 90270). Where visible from the Scheduled Monument the Proposed Development would be seen beyond the solar array, where it passes the eastern edge of the development, and visible at a greater distance from the monument. The proposed solar array would be visible in close proximity to the monument and would exert the greater effect on the setting of the monument. Taking this into consideration, it is assessed that the cumulative operational effect of the addition of the Proposed Development to, and in combination, with the Cossans Solar & BESS on the setting of St Orland's Stone (SM 90270) would be significant. The combined effect of the Proposed Development and the proposed Cossan Solar Array and BESS would, however, be no greater than that assessed for the proposed solar array alone, an impact of Moderate significance.
Overall Inter Cumulative Assessment Summary	Overall, it is concluded that the Proposed Development is not predicted to give rise to significant cumulative effects when combined with the Inter Developments during its construction phase.	Overall, it is concluded that the Proposed Development is predicted to give rise to significant operational cumulative effects when combined with the Inter Developments. Significant cumulative operational effects of Moderate significance are concluded on the setting of four Scheduled Monuments: Balkemback Cottage Stone Circle (SM 2868) (Section A), St Orland's Stone (SM 90270) (Section A), East Finnercy Cairn (SM 6067) and South Leylodge (SM 12350). A potential cumulative operational effect is also concluded on the setting of one additional Scheduled Monument, Clochanshiels Cairns, House and Field Systems (SM 4857) at Fetteresso Forest (Section E) from the

²³ Headland Archaeology Ltd, 2025, 'South Kintore BESS, Aberdeenshire, Historic Environment Desk-Based Assessment'.



Cumulative Development	Cumulative Construction Effects	Cumulative Operational Effects
		introduction of the proposed HVDC convertor stations for both the proposed Onshore Transmission for Bowdun offshore Wind Farm and the SSEN Transmission offshore grids project. The cumulative effect potentially arising on the setting of the Scheduled Monument where the Proposed Development and the HDVC convertor stations converge north of the proposed Hurlie substation.



10.10 Summary of Total Intra and Inter Cumulative Effects

Cumulative Construction Effects

- 10.10.1 The Proposed Development is not predicted to give rise to significant construction effects on heritage assets identified within the inner study area when combined with the Intra and Inter Developments.
- 10.10.2 The majority of the Intra and Inter Developments do not fall within the same development footprint as the Proposed Development and therefore will not affect the heritage assets identified within the inner study area (LOD) for the Proposed Development.
- 10.10.3 Where Intra and Inter Developments do intersect with the inner study area for the Proposed Development, particularly at or around Tealing, Fetteresso Forest, and Kintore, where the Intra and Inter Developments would tie into the proposed Emmock and Hurlie substations and the existing Kintore substation, there is some potential for further loss of identified heritage assets. However, taking into consideration adoption of good practice mitigation measures to avoid or reduce any likely impacts on heritage assets from the Intra and Inter Developments it is reasonable to assume that there would be no significant cumulative construction effects.

Cumulative Operational Effects

- 10.10.4 Taking into consideration both the Intra and Inter developments listed above, and adopted as a worst-case scenario, it is concluded that the addition of the Proposed Development to, and in combination, with the Intra and Inter Developments would give rise to significant cumulative operational effects on three Scheduled Monuments, Balkemback Cottage Stone Circle (SM 2868) (in Section A), East Finnercy Cairn (SM 6076) (in Section F) and South Leylodge Stone Circle (SM 12350) (in Section F). In all cases the combined effect of the Proposed Development and the Inter Developments would be no greater than that assessed for the Proposed Development alone.
- 10.10.5 It is also concluded that the Proposed Development would give rise to a significant cumulative operational effect on the setting of one additional Scheduled Monument, St Orland's Stone (SM 90270) (in Section A), in combination with the proposed Cossans Solar & BESS development. The Proposed Development would lie at a greater distance from the monument and the proposed solar array would exert the greater effect on the setting of the monument.
- 10.10.6 A potential cumulative operational effect is also assessed on the setting of one additional Scheduled Monument, Clochanshiels, Cairns, Houses and Field Systems (SM 4857) from the introduction of the Proposed Development in combination with the proposed HVDC convertor stations for the proposed Onshore Transmission for Bowdun offshore Wind Farm and the SSEN Transmission offshore grids project at Fetteresso Forest. Little information is available at present on these developments. It is however considered, on worst-case assumptions, that there is potential for the proposed HVDC convertor stations to result in a significant effect on the setting of Clochanshiels, Cairns, Houses and Field Systems (SM 4857), resulting from the introduction of the HVDC convertor stations in close proximity to the Scheduled Monument. A cumulative effect could, therefore, potentially arise from the Proposed Development in combination with the Inter Developments, where they converge southeast of the Scheduled Monument. Where the developments converge, the Proposed Development would likely be seen beyond the HVDC convertor stations, partially screened by intervening topography, and at a greater distance from the Scheduled Monument. It is, therefore, concluded that the proposed HVDC convertor stations would likely exert the greater effect on the setting of the monument.

10.11 Summary of Significant Effects

10.11.1 **Table 10.10: Summary of Significant Effects** below summarises the predicted residual significant effects of the Proposed Development on cultural heritage (by geographical Section (A-F)) prior to and following to application of Additional Mitigation.



Table 10.10: Summary of Significant Effects

Predicted Effects	Significance Prior to Additional Mitigation	Additional Mitigation	Significance of Residual Effects Following Additional Mitigation
Section A			
Construction			
Direct effects on four non-designated heritage assets, former cists burials (NO33NE0017), a souterrain (NO33NE0019) and two cropmark sites (NO44NW0021 and NO44NW0092/HA038), where buried archaeological remains may survive and which could potentially be encountered and disturbed during construction works.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect.
Direct effects on the upstanding remains of a clearance cairn (HA013).	Moderate adverse	Archaeological investigation and recording of the cairn prior to construction works carried out, to a specification and standard agreed in consultation with ACAS. If significant discoveries are made during any required archaeological monitoring, and preservation in situ of any sites or features is not possible, provision would be made for an appropriate amount of investigation and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Potential significant direct effects on three heritage asset, two former enclosures (NO33NE0020 and 134404) and a former building and enclosure (HA039), if the proposed towers or proposed access tracks were to be relocated in the LOD. No above ground remains survive of the heritage assets, however there is potential that buried remains may survive.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS	Minor adverse residual effect
Operation			
Effect on the setting of one Scheduled Monument, Balkemback Cottages Stone Circle (SM 2868).	Moderate adverse	None proposed.	Moderate adverse residual effect
Cumulative			
Cumulative effect on the setting of Balkemback Cottages Stone Circle (SM 2868) and St Orland's Stone (SM 90270).	Moderate adverse	None proposed.	Moderate adverse residual effect
Section B			
Construction			



Predicted Effects	Significance Prior to Additional Mitigation	Additional Mitigation	Significance of Residual Effects Following Additional Mitigation
Direct effects on four heritage assets, a former farmstead (NO45SW0079) the site of a former building and well (HA042), the site of a former building (HA045), and the remains of a settlement (NO56SE0070), where buried archaeological remains may survive and could potentially be encountered and disturbed during construction works.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect.
Potential direct effects on two heritage assets, the site of two former buildings, (HA046 and HA048), if the proposed towers or proposed access tracks were to be relocated in the LOD. No above ground remains survive of the heritage assets, however there is potential that buried remains may survive.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Potential direct impact on any hitherto unknown archaeological remains. It is assessed that there is a moderate to high potential for as yet undetected, buried archaeological remains to survive within this section of the inner study area.	Major adverse	Archaeological planning condition. The scope of works would be agreed through consultation with ACAS and detailed in a WSI.	Minor adverse residual effect
Operation			
Effects on the setting of one Scheduled Monument, Law of Baldoukie Ring Ditch (SM 6314).	Moderate adverse	None proposed.	Moderate adverse residual effect.
Section C			
Construction			
Potential direct effects on five heritage assets, former settlement remains and other remains including enclosures and a pit alignment (331549, NO66NW0065, 263639, NO66NW0080 and NO67SE0012), and the sites of two former buildings (HA062 and HA071), where buried archaeological remains may survive and could potentially be encountered and disturbed during construction works.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Potential direct effects on nine heritage assets, the site of former burial cist (NO56SE0010), site of former burial cairn (NO56SE0002), site of building and enclosures	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible,	Minor adverse residual effect



Predicted Effects	Significance Prior to Additional Mitigation	Additional Mitigation	Significance of Residual Effects Following Additional Mitigation
(HA055) a possible earthwork (34983), site of a former spinning mill (NO66NW0087), and rig and furrow/enclosure cropmark remains (NO66NW0042), the sites of two former buildings (HA063 and NO67SE0022)), site of a former enclosure (NO67SE0064), if the proposed towers or proposed access tracks were to be relocated in the LOD. No above ground remains survive of the heritage assets, however there is potential that buried remains may survive.		provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	
Operation			
Effects on the setting of three Scheduled Monuments, Mill of Balrownie, Ring Ditch (SM 6472), Westside Barrows (SM 6367) and Westside Unenclosed Settlement (SM 6368).	Moderate adverse	None proposed.	Moderate adverse residual effect.
Section D			
Construction			
Potential direct effects on seven heritage assets, a former field boundary (305995/HA077), the site of a former garden (HA078), the cropmark sites of ring-ditches (NO77NW0032 and NO77NW0024), an unenclosed settlement (NO77NW0026), and ring-ditches and souterrain (NO77NE0031), a former burial cist (NO77NW0009), where buried archaeological remains may survive and could potentially be encountered and disturbed during construction works.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Potential direct effects on four heritage assets, the site of former croft (NO78SE0048), two former buildings (NO78SE0064, HA090), and the site of a former smithy (NO78SE0045), if the proposed towers or proposed access tracks were to be relocated in the LOD. No above ground remains survive of the heritage assets, however there is potential that buried remains may survive.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect



Predicted Effects	Significance Prior to Additional Mitigation	Additional Mitigation	Significance of Residual Effects Following Additional Mitigation
Potential direct impact on any possible surviving remains of Second World War military aircraft crash sites around Tannachie. It is assessed that there is a negligible potential for such remains to survive within this	Major adverse	Archaeological planning condition. The scope of works would be agreed through consultation with ACAS and detailed in a WSI.	Minor adverse residual effect
section of the inner study area. Section E			
Construction			
Potential direct effects on one heritage asset, the site of a stone cist (NO79NE0003), where buried archaeological remains may survive and could potentially be encountered and disturbed during construction works.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Potential direct impact on any possible surviving remains of Second World War military aircraft crash sites at Fetteresso Forestry. It is assessed that there is a negligible potential for such remains to survive within this section of the inner study area.	Major adverse	Archaeological planning condition. The scope of works would be agreed through consultation with ACAS and detailed in a WSI.	Minor adverse residual effect
Section F			
Construction			
Potential direct effects on six heritage assets, the sites of two former building (NJ70NW0088, NJ71SW0147), three former crofts (NJ70SE0114, NJ70NW0135, NJ71SW0146), and a former farmstead (NJ70NW0057), where buried archaeological remains may survive and could potentially be encountered and disturbed during construction works.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Potential direct effects on two former buildings (NO79NE0087) and (HA112), if the proposed towers or proposed access tracks were to be relocated in the LOD. No above ground remains survive of the heritage assets, however there is potential that buried remains may survive.	Moderate adverse	Archaeological watching briefs to be carried out during any groundbreaking works in archaeological sensitive areas. If significant discoveries are made during the watching brief, and preservation in situ is not possible, provision would be made for any appropriate amount of investigations and recording to be agreed in writing with ACAS.	Minor adverse residual effect
Operation			



Predicted Effects	Significance Prior to Additional Mitigation	Additional Mitigation	Significance of Residual Effects Following Additional Mitigation	
Effects on the setting of three Scheduled Monuments, East Finnercy Cairn (SM 6076), New Wester Echt Stone Circle (SM 6074) and South Leylodge Steading Stone Circle (SM 12350).	Moderate adverse	None proposed.	Moderate adverse residual effect.	
Cumulative				
Cumulative effect on the setting of South Leylodge Steading Stone Circle (SM12350) and East Finnercy Cairn (SM 6076).	Moderate adverse	None proposed.	Moderate adverse residual effect	