

- Farmsteads and other commercial/industrial buildings.

The Study Area

- 6.37 In accordance with GLVIA3 the study area should include the site itself and the full extent of the wider landscape around it which the proposed development may influence in a perceptual or visual manner. This is typically based on the extent of character areas and landscape resources likely to be significantly affected either directly or indirectly, although this can also be based on the extent of the area from which the development is potentially visible, defined as the Zone of Theoretical Visibility ("ZTV"), or a combination of the two. On this basis, the assessment will consider a 5km study area around the site. This is deemed to be proportionate and appropriate.
- 6.38 Based on initial fieldwork and desktop analysis, 15 representative viewpoints have been selected to assess the effects on visual receptors. The viewpoint locations are described in Table 6.1 below. A viewpoint location plan is located at **Appendix II** which illustrated the position and direction of each representative viewpoint. We invite SLC to confirm that the extent and number of viewpoints is acceptable.

Table 6.1: Proposed Viewpoint Locations

No.	Description	Receptor	Designation / Context	Approx. Distance from the Site
1.	Carlisle Road B7078, at the junction of Candermill Road	Motorists, cyclists and pedestrians	Green Belt	1.4km
2.	Carlisle Road B7078, at the entrance to Dovesdale Farm / W Hamilton	Motorists, cyclists and pedestrians	Green Belt Right of Way	0.47km
3.	Carlisle Road B7078, at the entrance to Whitehill	Motorists, cyclists and pedestrians	Green Belt	0.51 km
4.	Lockhart Street, Stonehouse	Motorists, cyclists and pedestrians	Settlement boundary	1.80km

No.	Description	Receptor	Designation / Context	Approx. Distance from the Site
		Residents of Stonehouse		
5.	Murray Drive, Stonehouse	Motorists, cyclists and pedestrians Residents of Stonehouse	Settlement Boundary	1.83km
6.	Core Path HM/2520/1	Users of core path	Green Belt Core Path Right of Way	0.83km
7.	Spital Road and National Cycle Route 74, opposite Westtown	Motorists, cyclists and pedestrians Residents of Westtown Farm	Green Belt National Cycle Route	1.49km
8.	Access to Dovesdale Farm / W Hamilton and Wider Network Route HM/3658/1	Motorists accessing Dovesdale Farm / W Hamilton Users of Wider Network Route HM/3658/1	Green Belt Wider Network Route	0.81 km
9.	Spital Road and National Cycle Route 74, at the entrance to Spital House	Motorists, cyclists and pedestrians	Green Belt National Cycle Route	0.77km

No.	Description	Receptor	Designation / Context	Approx. Distance from the Site
10.	Spital Road and National Cycle Route 74, opposite Tanhill	Motorists, cyclists and pedestrians Residents of Tanhill Farm	Rural Area National Cycle Route	1.04km
11.	Udston Road and Wider Network Route HM/4342/1	Motorists, cyclists and pedestrians Users of wider network route	Green Belt Right of Way	2.15km
12.	Dykehead Road and Wider Network Route HM/4337/1	Motorists, cyclists and pedestrians Users of wider network route	Green Belt Right of Way	2.62km
13.	Strathaven Road B7086 and Core Path CL/3288/1, opposite Bent Primary School	Motorists, cyclists and pedestrians Users of core path School pupils and staff	Rural Area Core Path	3.24km
14.	Hunterlees Road	Motorists, cyclists and pedestrians	Special Landscape Area	4.2km
15.	Users of Cander Moss SSSI	Visitors and workers of the private wildlife resource	Green Belt	0.49km

6.39 The ZTV mapping indicates that views of the proposed development are theoretically possible over greater distances than 5km based on 'bare earth' mapping. However, given the undulating nature of the surrounding landform and the influence of existing visual barriers such as vegetation and buildings, visibility of the site and proposed development is likely to be far less. Given the nature of the context of the site, which is surrounded by other tall vertical structures, including high voltage overhead powerlines, wind turbines and small wind farms, it is unlikely that the proposed development will have a significant visual effect on views beyond a 5km study area radius. Therefore, the following three long-distance viewpoints are proposed for completeness and due to the sensitive nature of the visual receptor locations:

Table 6.2: Potential Distant Viewpoint Locations

No.	Description	Receptor	Designation	Approx. Distance from the Site
16.	Summit of Black Hill, Lesmahagow	Visitors to Scheduled Monument	Scheduled Monument	5.90km
17.	Nemphlar Moor Road, Carluke	Motorists, cyclists and pedestrians	Border of Lee Castle GDL	7.10km
18.	Monument at site of birthplace of General Roy, Milton Road, Milton Head	Motorists, cyclists and pedestrians Visitors to monument	Local cultural heritage	5.85km

6.40 In accordance with GLVIA3, the production of visualisations (photomontages) can be used to assist in demonstrating the ability of a site to assimilate development and to illustrate the effectiveness of mitigation measures. It is therefore proposed that photomontages will be used to inform and support the LVIA / EIA Chapter.

6.41 The visualisations are to be produced in accordance with the 'TGN 06/19 Visual Representation of development proposals', published by the Landscape Institute and will be based on accurate 3D modelling information supplied by the scheme designers. Strategic mitigation planting will be illustrated as necessary, at years 1 (completion), 5 and year 10.

6.42 It has been judged that a scheme of this scale shall be assessed using x10 AVR level 3 photomontages (photo-real), informed by a verification survey (height data) and professional photography for each visual receptor location. The following viewpoints have been selected as the most suitable and representative locations for the photomontages:

- Viewpoint 1 – Carlisle Road B7078, at the junction of Candermill Road
- Viewpoint 2 – Carlisle Road B7078, at the entrance to Dovesdale Farm / W Hamilton
- Viewpoint 3 – Carlisle Road B7078, at the entrance to Whitehill
- Viewpoint 4 – Lockhart Street, Stonehouse
- Viewpoint 5 – Murray Drive, Stonehouse
- Viewpoint 6 – Core Path HM/2520/1
- Viewpoint 8 – Access to Dovesdale Farm / W Hamilton and Wider Network Route HM/3658/1
- Viewpoint 9 – Spital Road and National Cycle Route 74, at the entrance to Spital House
- Viewpoint 10 – Spital Road and National Cycle Route 74, opposite Tanhill
- Viewpoint 11 - Udston Road and Wider Network Route HM/4342/1

6.43 Allowance has also been made for the production of up to x10 AVR Level 3 night-time photomontages and professional night-time photography.

Landscape and Visual Assessment of Significance

6.44 Significance indicates the importance or gravity of the effect. Determining the degree of significance of the effect is based upon the assessments of magnitude of effects and sensitivity of the receptor to come to a professional judgement of how important this effect is. This rating is judged as adverse or beneficial as set out below.

- Adverse: The Proposed Development may result in direct loss of physical landscape resources, weaken key characteristics or negatively affect the integrity of a landscape designation or result in a reduction in visual amenity; and
- Beneficial: The Proposed Development may replace poor quality elements of the existing landscape or strengthen existing landscape characteristics or result in improved visual amenity.

6.45 Table 6.3 below indicates how the general relationship between sensitivity and magnitude of change determines the significance of effect. The significance of effect is rated within the range of Major – Major / Moderate – Moderate – Moderate / Minor – Minor – Negligible.

Table 6.3: Significance of Effect

Magnitude	Sensitivity		
	High	Medium	Low
Major	Major	Major / Moderate	Moderate / Minor
Moderate	Major / Moderate	Moderate	Minor
Minor	Moderate / Minor	Minor	Minor
Negligible	Negligible effect	Negligible effect	Negligible effect

6.46 Impacts which are moderate-major and above are considered ‘significant’ in EIA terms (shaded grey in Table 6.3).

6.47 The assessment will be based on the detailed plans submitted as part of the application.

6.48 The assessment will consider effects during construction, upon completion and at 15 years post completion i.e. when landscape treatments have matured. The 15-year post completion assessment represents the residual effects.

Potential Significant Effects

6.49 Table 6.4 sets out the anticipated significant effects on landscape character and visual amenity. This includes an analysis on what aspects can scoped-in or scoped-out of the assessment due to the likelihood for significant environmental effects.

Table 6.4: Initial Landscape and Visual Effects Scoping Review

Topic Component	Construction Effect	Operation Effect	Commentary
LCA 5 'Plateau Farmland – Glasgow & Clyde Valley'	No significant effects anticipated, but as the overall LCT/LCA within which the development is proposed it will be assessed in the EIA.	No significant effects anticipated, but as the overall LCT/LCA within which the development is proposed it will be assessed in the EIA.	In-direct and a small component of change that would not result in the loss of significant characteristic features.
LCA Subtype 5C 'Plateau Farmland Windfarm'	Significant effects are possible but unlikely and will be assessed in the EIA.	Significant effects are possible but unlikely and will be assessed in the EIA.	Direct loss of some features, albeit within a localised landscape that is already subject to change, including the occurrence of vertical windfarm features.
LCT 204 / LCA 2 'Incised River Valleys'	Significant effects are possible but unlikely and will be assessed in the EIA.	Significant effects are possible but unlikely and will be assessed in the EIA.	In-direct and a small component of change that would not result in the loss of significant characteristic features. The adjoining valley is already influenced by development and change.
LCT 219 / LCA Subtype 2A 'Broad Valley Floor'	No significant effects anticipated.	No significant effects anticipated.	No perceived change in character is likely to arise.

Topic Competent	Construction Effect	Operation Effect	Commentary
LCT 213 / LCA 213 'Plateau Moorlands'	Significant effects are possible but unlikely and will be assessed in the EIA.	Significant effects are possible but unlikely and will be assessed in the EIA.	In-direct and a distant component of change that would not result in the loss of significant characteristic features or change to perception of the LCT/LCA.
Stonehouse Townscape (Conservation Area)	No significant effects anticipated, but given potential inter-visibility it will be assessed in the EIA.	No significant effects anticipated, but given potential inter-visibility it will be assessed in the EIA.	In-direct and would not result in the loss of characteristic townscape features or identified key viewpoints.
Site landform and topography	No significant effects anticipated, but given the direct impacts of the development proposed it will be assessed in the EIA.	No significant effects anticipated, but given the direct impacts of the development proposed it will be assessed in the EIA.	Construction and the operational development will result in localised changes to landform, but would not result in the loss of significant characteristic features that define the Plateau Farmland landscape.
Site features / landscape resources and land cover	No significant effects anticipated, but given the direct impacts of the development	No significant effects anticipated, but given the direct impacts of the development	Construction and the operational development will result in localised changes to landform,

Topic Competent	Construction Effect	Operation Effect	Commentary
	proposed it will be assessed in the EIA.	proposed it will be assessed in the EIA.	but would not result in the loss of significant characteristic features. Potential exists for restoration and enhancements.
The Middle Clyde Valley Special Landscape Area (SLA	No significant effects anticipated.	No significant effects anticipated.	No perceived change in character is likely to arise.
Residential (associated with the Stonehouse and Kirkmuirhill settlement edges and other scattered hamlets / properties)	No significant effects anticipated.	Significant effects are possible but unlikely and will be assessed in the EIA.	Potential for distant views for a number of south/south-east facing properties and a small component of visual change within a much wider panorama.
Recreational and leisure users associated with the core paths (HM/2519/1, HM/2522/1, HM/2523/1, HM/2524/1 and HM/2521/1) and other routes.	No significant effects anticipated.	Significant effects are possible but unlikely and will be assessed in the EIA.	Potential for change in transient and sequential view experiences, where the proposed development forms a small component of a much wider panoramic scene and/or where views are filtered by intervening vegetation and landform. Recreational receptors

Topic Competent	Construction Effect	Operation Effect	Commentary
			in closer proximity are likely to experience a greater magnitude of change.
Recreational and leisure users associated with the Glasgow to Carlisle National Cycle Route National Cycle Route 74 (Strathclyde Park to Elvanfoot)	No significant effects anticipated.	Significant effects are possible but unlikely and will be assessed in the EIA.	Potential for change in transient and sequential view experiences, where the proposed development forms a small component of a much wider panoramic scene and/or where views are filtered by intervening vegetation and landform.
Highway users associated with the M74, Carlisle Road B7078, the A71, Strathaven Road B7086 and a network of local access roads	No significant effects anticipated.	Significant effects are possible but unlikely and will be assessed in the EIA.	Potential for change in transient and sequential view experiences, where the proposed development forms a small component of a much wider panoramic scene and/or where views are filtered by intervening vegetation and landform. Highway receptors in closer proximity or

Topic Competent	Construction Effect	Operation Effect	Commentary
			moving at slower speeds are likely to experience a greater magnitude of change.
Visitors and users of retail, guesthouses and hotels	No significant effects anticipated.	No significant effects anticipated.	Potential for some properties to obtain views and a small component of visual change within a much wider panorama.
Farmsteads and other commercial/industrial buildings	No significant effects anticipated.	No significant effects anticipated.	Potential for some properties to obtain views and a small component of visual change within a much wider panorama.
Distant visual receptors (beyond the 5km study area)	No significant effects anticipated.	Significant effects are very unlikely but will be assessed in the EIA.	Limited visibility and perception of change as part of a wider landscape setting and visual panorama.

6.50 Based on the above, the following topic areas will be scoped into the assessment due to the likelihood for significant effects:

- The identified South Lanarkshire Landscape Character Types / Landscape Character Areas;
- Site features, landform and topography;
- Residential (associated with the Stonehouse and Kirkmuirhill settlement edges and other scattered hamlets / properties);

- Recreational and leisure users associated with the core paths (HM/2519/1, HM/2522/1, HM/2523/1, HM/2524/1 and HM/2521/1) and other routes;
- Recreational and leisure users associated with the Glasgow to Carlisle National Cycle Route National Cycle Route 74 (Strathclyde Park to Elvanfoot);
- Visitors and workers associated with the private Cander Moss SSSI wildlife resource;
- Highway users associated with the M74, Carlisle Road B7078, the A71, Strathaven Road B7086 and a network of local access roads.

6.51 Whilst significant effects are not deemed to arise in relation to some of the identified character and visual receptors (including distant viewpoints beyond the 5km study area), they have been included for completeness.

6.52 Based on the desktop and fieldwork undertaken, the following receptors have been scoped out of the assessment, due to the limited nature of the effects predicted:

- The Middle Clyde Valley Special Landscape Area (SLA);
- LCT 219 / LCA Subtype 2A ‘Broad Valley Floor’;
- Visitors and users of retail, guesthouses and hotels; and
- Users and occupiers of scattered farmsteads.

Cumulative Effects

6.53 As set out in Chapter 4, a cumulative effects assessment will be undertaken as part of the EIA. The cumulative effects assessment will be presented at the end of the Chapter within the EIA. Table 6.5 sets out the sites which will be scoped-in or scoped-out of the cumulative effects LVIA.

Table 6.5: LVIA Cumulative Sites Review

No.	Planning Ref.	Site Location & Proposal	Distance & Direction	Scoped-in / Scoped-out
1.	P/19/1258	Draffan Road - Wind Turbine	1.6km east	Scoped out - given the consented and characteristic presence of other wind turbines, the in combination or sequential presence of the proposed

No.	Planning Ref.	Site Location & Proposal	Distance & Direction	Scoped-in / Scoped-out
				development is not considered to represent significant cumulative impact for the identified receptors.
2.	P/20/1670	Dovesdale Farm - Landfill time extension	240m north	Scoped in – as the in combination or sequential presence of the proposed development and associated restoration/mitigation measures may result in changes to both local views and the character context, particularly the visual receptors associated with core paths HM/2519/1 and HM/2520/1 and the wider recreational network to the west.
3.	P/18/1515	Stonehouse Hospital – Residential	2.4km west	Scoped out – given the type, location and scale of the development it is not considered to represent a significant cumulative impact for the identified receptors.

7. Ecology

Introduction

- 7.1 This chapter of the EIA will present an assessment of the potential effects of the proposals on ecological receptors, which will be identified through desk-based research, site surveys and consultation with key stakeholders. The approach proposed in this Scoping Report has been informed by the findings of the desk-based and site survey work and published best practice guidance.
- 7.2 The scope has been prepared by Ramboll.

Baseline Conditions

- 7.3 The closest designated site to the proposed development is Cander Moss Site of Special Scientific Interest ("SSSI"). This site is notified as a raised bog and lies to the east of the proposed development, across the M74. The proposed development lies 175 m from Cander Moss at its closest point, where the access track joins the B7078.
- 7.4 The proposed development lies between two of the component parts of the Clyde Valley Woods Special Area of Conservation ("SAC"). Avondale SSSI is located approximately 2.1 km north of the proposed development and Upper Nethan Valley Woods SSSI is located approximately 2.4 km east of the proposed development. Clyde Valley Woods SAC is designated for Mixed woodland on base-rich soils associated with rocky slopes, while the SSSIs are notified for upland mixed ash woodland and, for Upper Nethan Valley only, wet woodland. Avondale SSSI lies approximately 3.1 km downstream of the proposed development along Cander Water.
- 7.5 The closest Special Protection Area ("SPA") to the proposed development is Muirkirk and North Lowther Uplands SPA, which lies approximately 9.5 km south-west of the proposed development. This SPA is classified for:

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

• [REDACTED]

7.6 [REDACTED]

7.7 The habitats within the site boundary are likely to be improved grassland and can be seen to be used as grazing ground for cattle. There are hedgerow field boundaries within the boundary of the site, which appeared to be defunct in some locations and intact in others. These hedgerows are likely to [REDACTED] The site is bounded to the north, east and south by other fields of improved grassland, also used by cattle. To the west of the site the terrain slopes down to Cander Water which lies 40 m west of the proposed development at its closest point. The habitats on this slope are open broadleaved woodland or scrub with flowering hawthorn trees *Crataegus monogyna*, with improved grassland in the gaps.

7.8 [REDACTED] Overwood Farm lies immediately to the north-west of the site. From a review of aerial imagery this farm appears to have sheds and other out-buildings [REDACTED] [REDACTED] is noted that these buildings are due to be demolished prior to the submission of the EIA and would therefore not form part of the baseline. The land to the west of the site, with sloping ground down towards Cander Water, [REDACTED] [REDACTED] Cander Water is likely to support a [REDACTED] [REDACTED] From a review of the base mapping and aerial imagery there do not appear to be any ponds [REDACTED] [REDACTED]

Approach and Methodology

7.9 This EIA chapter will initially include an outline of the legislative framework in respect of nature conservation. It will then outline the approach taken to the various desk-based studies and site surveys undertaken and present the findings of these works. With this information, potential effects of the proposed development will be established.

7.10 The desktop study above would be revisited and will go into more detail, including an analysis of purchased biological record data.

- 7.11 Baseline data will be collected in accordance with standard best practice methodologies published by the Chartered Institute of Ecology and Environmental Management ("CIEEM"), NaturalScot and other recognised bodies, as appropriate.
- 7.12 The Ecological Impact Assessment ("EclA") of the proposals upon identified ecological receptors will be undertaken with reference to:
- CIEEM; Guidelines for Ecological Impact Assessment in the UK & Ireland (September 2019);
 - CIEEM; Guidelines for Ecological Report Writing (December 2017);
 - CIEEM; Guidelines for Preliminary Ecological Appraisal (December 2017); and
 - British Standard 42020:2013 Biodiversity – code of practice for planning and development (2013).
- 7.13 An Extended Phase 1 Habitat Survey of the site, in accordance with the standard JNCC (Joint Nature Conservation Committee, 2010) methodology, would be undertaken. This will involve mapping the habitats present by recording the dominant plant species and classifying habitats according to their vegetation types. This information will then be presented in accordance with the standard Phase 1 Habitat Survey format with habitat descriptions and a habitat map with Target Notes to show features of interest. The standard methodology will be extended to include searching for evidence of

Evaluation

- 7.14 The evaluation of habitats and species is defined in accordance with published guidance (CIEEM 2019). The level of importance of specific ecological features is assigned using a geographic frame of reference, with international being most important, then national, regional, county, local and lastly, within the site boundary only.
- 7.15 Evaluation is based on various characteristics that can be used to identify ecological features likely to be important in terms of biodiversity. These include site designations (such as SSSIs), or for undesignated features, the size, conservation status (locally, nationally or internationally), and the quality of the ecological feature. In terms of the latter, quality can refer to habitats (for instance if they

are particularly diverse, or a good example of a specific habitat type), other features









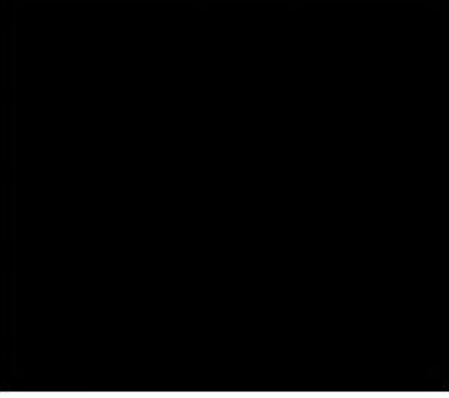

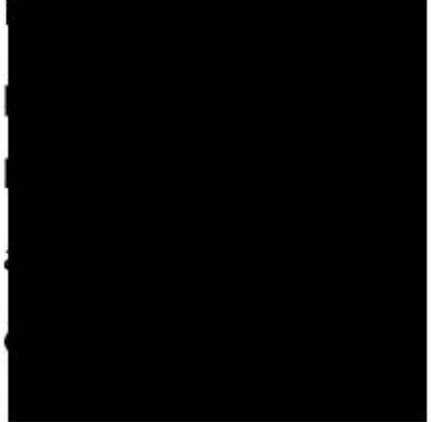
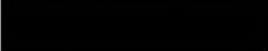
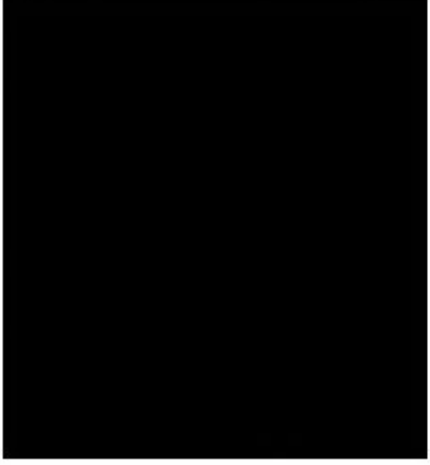

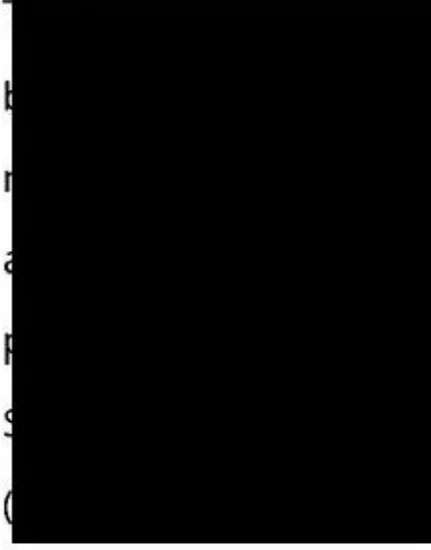
Assessment of Effects and Significance Criteria

- 7.16 The potential impacts will be determined through understanding how each feature responds to the various impacts associated with the proposed development. The significance of the potential effects on each feature will be determined by considering the value of each nature conservation interest and the degree to which it may be affected (the 'effect magnitude').
- 7.17 In accordance with the CIEEM published guidance and terminology (CIEEM 2019), a significant effect, in ecological terms, is defined as an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific, broad, or more wide-ranging, and can be considered at a range of geographical scales, including cumulative effects. Insignificant effects are those that would not result in such changes.
- 7.18 Once any impacts have been assessed and defined using the geographical frame of reference advocated by CIEEM, using professional judgement each impact will be transposed into the standard terminology used throughout the EIAr.
- 7.19 Mitigation will be devised to avoid any significant impacts associated with the construction and operation of the proposed development on ecological features. Any other mitigation or enhancement considered appropriate would also be set out. Once the appropriate mitigation measures have been proposed, the impacts remaining once they are taken into account will be identified (the 'residual impact').

Potential Significant Effects

- 7.20 Table 7.1 sets out the anticipated significant effects on ecological receptors. This includes an analysis on what aspects can be scoped-in or scoped-out of the assessment due to the likelihood for significant environmental effects.

Table 7.1: Initial Ecology Effects Scoping Review

Topic Component	Construction Effect	Operation Effect	Commentary
Designated sites (Clyde Valley Woods SAC)	Potential pollution events from construction flowing downstream along Cander Water.	Pollution from operation of proposed development.	Potential pollution events could impact the designating features of the SAC. 
		None	
	Potential disturbance 	None	
			
	 	None	

Topic Competent	Construction Effect	Operation Effect	Commentary

7.21 As discussed above, the following impacts will be scoped into the assessment:

- Pollution impacts on Clyde Valley Woods SAC;
- [Redacted]
- [Redacted]

7.22 These impacts shall be assessed as part of the EIA, with any required mitigation stated.

7.23 Impacts on other ornithological features are to be scoped out, including impacts on Muirkirk and North Lowther Uplands SPA [Redacted] It is likely that the absence of any suitable ponds in the area surrounding the proposed development [Redacted]

7.24 Based on the above, the following topic areas will be scoped out of the assessment due to the likelihood for significant effects being low:

- Ornithological features, including Muirkirk and North Lowther Uplands SPA [Redacted]
- Impacts on Cander Moss SSSI; and
- [Redacted]

Cumulative Effects

7.25 As set out in Chapter 4, a cumulative effects assessment will be undertaken as part of the EIA. The cumulative effects assessment will be presented at the end of the Chapter within the EIAr. Table 7.2 sets out the sites which will be scoped-in or scoped-out of the LVIA cumulative effects assessment.

Table 7.2: Ecology Cumulative Sites Review

No.	Planning Ref.	Site Name and Location	Distance & Direction	Scoped-in / Scoped-out
1.	P/19/1258	Draffan Road – Wind Turbine	1.6km east	Scoped out due to lack of similar effects.
2.	P/20/1670	Dovesdale Farm – Landfill time extension	240m north	[REDACTED]
3.	P/18/1515	Stonehouse Hospital – Residential	2.4km west	[REDACTED]

8. Archaeology and Cultural Heritage

Introduction

- 8.1 This chapter of the EIA will present an assessment of the potential effects of the proposed development on archaeology and cultural heritage interests. The assessment will be informed through desk-based research, site visits and consultation with key stakeholders and will consider the potential for direct effects on features of archaeological and cultural heritage interest within the Site, arising from construction activities, and effects on the settings of cultural heritage assets with statutory and non-statutory designations in the wider landscape.
- 8.2 The Scope has been prepared by CFA Archaeology.

Baseline Conditions

Study Areas

- 8.3 Two study areas (**Appendix III**) will be used for the assessment. The extent of these will be agreed following receipt of Scoping Responses and through any further necessary dialogue with consultees. It is proposed that the study areas to be adopted comprise:
- The Inner Study Area ("ISA") corresponding to the Site and a 1 km buffer extending from a centre point within the Site boundary (but excluding the proposed access track): will be used for the identification of cultural heritage assets that could receive direct impacts arising from the construction of the proposed development within the Site, and to inform a judgement of the archaeological potential of the area in general; and
 - The Outer Study Area ("OSA") extending 5km from a centre point within the Site boundary (but excluding the proposed access track): will be used for the identification of cultural heritage assets whose settings might be affected by the proposed development, and to inform a judgement of the archaeological potential of the Inner Study Area.

Data Sources

- 8.4 The following sources will be consulted to establish the baseline:

- Historic Environment Scotland's Spatial Warehouse Database²: for details of the locations and extents of World Heritage Sites, Scheduled Monuments, Listed Buildings, Inventory Gardens and Designed Landscapes, Conservation Areas, and Inventory Historic Battlefields;
- The South Lanarkshire Historic Environment Record ("HER") maintained by the West of Scotland Archaeology Service ("WoSAS"): for information on the character and condition of known archaeological sites and features within the Study Areas. Due to working restrictions imposed by the Covid-19 pandemic, WoSAS are currently unable to provide digital extracts from the HER, therefore, to inform this Scoping Report, a study has been made of the HER data available via the Pastmap³ website. This freely available data is not as accurate or up to date as the full HER, and whilst informative, it can only provide a partial cultural heritage baseline and sense of the archaeological potential of the ISA and OSA;
- National Record of the Historic Environment ("NRHE")⁴: for any information additional to that provided in the HER. To inform this Scoping Report, a study has been made of the NRHE data available via the Pastmap website and the online Canmore database;
- Historic maps held by the Map Library of the National Library of Scotland⁵: to provide information on sites of potential archaeological significance and on historic land-use development;
- Bibliographic references where relevant to provide background and historical information;
- The Historic Land-Use Assessment Map for Scotland⁶ ("HLA" Map): for information on the historic land use character of the Site and its surroundings;
- Modern Aerial Photographic imagery (Google Earth⁷, Bing Maps⁸ and ESRI World Imagery⁹): for the identification of features of potential archaeological interest; and,
- Lidar data available through the Scottish Remote Sensing Portal¹⁰: for the identification of features of potential archaeological interest.

² Historic Environment Scotland Spatial Data Warehouse [online GIS downloader]. Available at: <http://portal.historicenvironment.scot/spatialdownloads>

³ <http://pastmap.org.uk/>

⁴ Historic Environment Scotland, Canmore [online], available at: <http://pastmap.org.uk/>

⁵ <https://maps.nls.uk/>

⁶ Historic Environment Scotland, Historic Land-Use Assessment for Scotland (HLAMap) [online], available at: <http://hlamap.org.uk/>

⁷ <https://www.google.com/earth/versions/#download-pro>

⁸ <https://www.bing.com/maps/aerial>

⁹ <https://www.esri.com/en-us/arcgis/products/imagery-remote-sensing/capabilities/>

¹⁰ <https://remotesensingdata.gov.scot/>

- 8.5 A Site visit (including visits to designated heritage assets to assess their setting) will be carried out as part of the impact assessment in order to assess the likelihood and significance of potential direct and/or setting effects.

The Inner Study Area

- 8.6 There are no designated heritage assets within the ISA. Four entries are recorded in the SLC/WoSAS HER and the Canmore database within the ISA. One of these (WoSAS 5320) is an event record that relates to an archaeological investigation at Dovesdale Farm, during which no archaeological deposits were identified. WoSAS 5320 is not considered to be a heritage asset.
- 8.7 There are three recorded non-designated heritage assets within 1km of the Site. All three are outside, and to the south of, the Site boundary and are considered to be of Low sensitivity. They comprise, to the south-east, a partial circular earthwork enclosing a ridgetop at Cairncockle (WoSAS 9692), and the remains of a colliery, operational between 1937 and 1955, at Overwood Mine (WoSAS 41019). The course of the Loch Wood to Bushelhead Roman road (WoSAS 51691) has been traced through field walking and survey, and it runs from east to west, crossing the Cander Water approximately 320m south of the Site.
- 8.8 Historic Ordnance Survey maps record two field boundaries crossing (and intersecting within) the ISA – both field boundaries are still extant and visible in aerial photography. Neither field boundary is considered to be of more than Low sensitivity.

The Outer Study Area

- 8.9 There are 23 Listed Buildings, two Scheduled Monuments and two Conservation Areas within the OSA. The Listed Buildings comprise one Category A (LB 6452 Canderside Bridge) of High sensitivity, 14 Category B buildings of Medium sensitivity, and eight Category C buildings of Low sensitivity. The Scheduled Monuments comprise SM 2627 Cot Castle motte, on the Avon Water west of Stonehouse and SM 90083 Craignethan Castle, on the River Nethan west of Crossford. Craignethan Castle (SM 90083) is also a Property in the Care of Scottish Ministers (PiC) and is a publicly accessible visitor attraction. The Conservation Areas, also of Medium sensitivity, encompass the historic centre of Stonehouse village (CA 366) and Glassford village (CA 402). Both Stonehouse Conservation Area and Glassford Conservation Area each include one Listed Building within them: the Category B LB 43686 St Ninian's Parish Church and the Category C LB 13343 8 Jackson Street respectively.
- 8.10 There are no World Heritage Sites, Inventory Gardens and Designed Landscapes, or Inventory Historic Battlefields within the OSA.

Archaeological Potential of the Site

- 8.11 Based on the results of the initial desk-based study, and taking account of current land-use, it is considered that there is low potential for the presence of hitherto undiscovered, buried archaeological remains within the Site. Although the Site has not been subject to intensive arable cultivation (with attendant ground disturbance), archaeological investigations (WoSAS 5320), in the form of a series of evaluation trenches, at Dovesdale Farm, 300m to the north-east, identified no archaeological features or deposits. The HER does not record any chance finds of deposits or artefacts during the operational lifespan of the quarry to the north-west of the Site, and the archaeological baseline of the ISA and OSA does not indicate a high likelihood for evidence of prehistoric activity and/or occupation within or within the immediate vicinity of the Site.

Approach and Methodology

Assessment of Significance

- 8.12 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 its laws and policies.
- 8.13 Table 8.1 summarises the relative sensitivity of key cultural heritage assets (and their settings) relevant to the proposed development (excluding, in this instance, World Heritage Sites and Marine Resources).

Table 8.1: Sensitivity of Heritage Assets

Sensitivity of Asset	Definition/Criteria
High	Assets valued at an international or national level, including: Scheduled Monuments; Category A Listed Buildings; Inventory Gardens and Designed Landscapes; Inventory Historic Battlefields; and Non-designated assets that meet the relevant criteria for designation.
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

Sensitivity of Asset	Definition/Criteria
	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.g. quarries and gravel pits, dilapidated sheepfolds, etc).

Assessment of Effects on Setting

8.14 Historic Environment Scotland’s guidance document, ‘Managing Change in the Historic Environment: Setting’, 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”.

8.15 The 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”.

8.16 The guidance 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 negative impacts can be mitigated.

8.17 Following this approach, the proposed development ZTV will be used to identify those designated heritage assets from which there would be theoretical visibility of the proposed development.

Criteria for Assessing the Significance of Effects

8.18 The magnitude of impact (adverse or beneficial) will be assessed in the categories, high, medium, low and negligible and described in Table 8.2.

Table 8.2: Magnitude of Change

Magnitude of Impact	Criteria	
	Adverse	Beneficial
High	<p>Changes to the fabric or setting of a heritage asset resulting in the complete or near complete loss of the asset’s cultural significance.</p> <p>Changes that substantially detract from how a heritage asset is understood, appreciated and experienced.</p>	<p>Preservation of a heritage asset in situ where it would otherwise be completely or almost completely lost.</p> <p>Changes that appreciably enhance the cultural significance of a heritage asset and how it is understood, appreciated and experienced.</p>
Medium	<p>Changes to those elements of the fabric or setting of a heritage asset that contribute to its cultural significance such that this quality is appreciably altered.</p> <p>Changes that appreciably detract from how a heritage asset is understood, appreciated and experienced.</p>	<p>Changes to important elements of a heritage asset’s fabric or setting, resulting in its cultural significance being preserved (where this would otherwise be lost) or restored.</p> <p>Changes that improve the way in which the heritage asset is understood, appreciated and experienced.</p>
Low	<p>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.</p> <p>Changes that slightly detract from how a heritage asset is understood, appreciated and experienced.</p>	<p>Changes that result in elements of a heritage asset’s fabric or setting detracting from its cultural significance being removed. Changes that result in a slight improvement in the way a heritage asset is</p>

Magnitude of Impact	Criteria	
	Adverse	Beneficial
Negligible		understood, appreciated and experienced.
	Changes to fabric or setting of a heritage asset that leave its cultural significance unchanged and do not affect how it is understood, appreciated and experienced.	

8.19 The sensitivity of the asset (Table 8.1) and the magnitude of the predicted impact (Table 8.2) will be used to inform the professional judgement of the potential significance of the resultant effect. Table 8.3 summarises the criteria for assigning significance of effect.

Table 8.3: Significance of Effect

Magnitude of Impact	Sensitivity of Asset			
	High	Medium	Low	Negligible
High	Major	Major / Moderate	Moderate / Minor	Minor
Medium	Major / Moderate	Moderate	Minor	Minor / Negligible
Low	Moderate / Minor	Minor	Minor / Negligible	Minor / Negligible
Negligible	Minor	Minor / Negligible	Minor / Negligible	Negligible

8.20 Where two outcomes are possible through application of the matrix, professional judgement supported by reasoned justification, will be employed to determine the level of significance of the resulting effect. Major and Moderate effects are considered to be ‘significant’ in the context of Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (EIA Regulations). Minor and Negligible effects are considered to be ‘not significant’.

8.21 In respect of the effects of the proposed development on heritage assets, there is some potential for interactions that may arise from landscape changes where this has an effect on the setting of heritage assets. However, the effects of the proposed development on the surrounding landscape and on the setting of key heritage assets are recognisably different in nature; the first is an effect on the landscape character and how the effects are perceived by people, while the second is an effect on the cultural heritage setting of individual assets or groups of assets and how that affects their cultural significance.

8.22 The approach to dealing with landscape aspects are described in Chapter 6: Landscape and Visual.

8.23 Measures will be recommended to minimise the impact of the proposed development on cultural heritage.

Potential Significant Effects

8.24 Table 8.4 sets out the anticipated significant effects on archaeology and cultural heritage. This includes an analysis on what aspects can be scoped-in or scoped-out of the assessment due to the likelihood for significant environmental effects.

Table 8.4: Initial Archaeology and Cultural Heritage Effects Scoping Review

Topic Component	Construction Effect	Operation Effect	Commentary
Scheduled Monuments	No impacts.	Significant effects are possible but unlikely and will be assessed in the EIA.	<p>The presence of the proposed development in views from or towards the Scheduled Monuments within 5km of the Site is not anticipated to alter any appreciation or understanding of their cultural significance.</p> <p>There are no Scheduled Monuments within the construction footprint, and construction effects upon Scheduled Monuments can therefore be scoped out of the assessment.</p>
Listed Buildings	No impacts.	Significant effects are possible but unlikely and will be assessed in the EIA.	<p>The presence of the proposed development in views from or towards the Listed Buildings within 5km of the Site is not anticipated to alter any appreciation or understanding of their cultural significance.</p> <p>No Listed buildings are within the construction footprint, and construction effects upon Listed buildings can therefore be scoped out of the assessment.</p>
Conservation Areas	No impacts.	No significant effects anticipated.	The presence of the proposed development in views from or across either Stonehouse or Glassford Conservation Area is not anticipated to alter their character or any appreciation or

Topic Component	Construction Effect	Operation Effect	Commentary
			<p>understanding of their cultural significance.</p> <p>No part of either of the Conservation Areas is within the construction footprint, and construction effects upon these can therefore be scoped out of the assessment.</p>
Other Designated Heritage assets	No impacts.	No impacts.	There are no World Heritage Sites, Inventory Gardens and Designed Landscapes, or Inventory Historic Battlefields within 5km of the Site.
Non-Designated Heritage Assets	No impacts.	Significant effects are possible but unlikely and will be assessed in the EIA.	<p>There are no known non-designated heritage assets within the Site.</p> <p>The presence of the proposed development in views from or across non-designated heritage assets is not anticipated to alter any appreciation or understanding of the cultural significance of any heritage asset within the ISA or OSA.</p>
Previously unknown archaeological deposits.	Potential for direct impacts on any buried archaeological remains that may be present within the Site.	No impacts.	The Site is considered to be of low archaeological potential. Although direct adverse impacts on buried archaeological remains from construction cannot be ruled out they are be unlikely to be significant subject to an appropriate level of offset mitigation.

8.25 Based on the above, the following topic areas will be scoped-in to the assessment:

- Potential construction effects upon previously unknown archaeological deposits; and
- Potential operational (setting) effects upon Scheduled Monuments, Listed Buildings and Conservation Areas within 5km of the Site, including cumulative effects.

Cumulative Effects

- 8.26 As set out in Chapter 4, a cumulative effects assessment will be undertaken as part of the EIA.
- 8.27 The assessment of cumulative effects on heritage assets will be based upon consideration of the effects of the proposed development, on the settings of assets with statutory designations and non-statutory designations within 5km of the Site, in addition to the likely effects of other developments that are consented but not yet built and those that are currently at the application stage (and for which sufficient detail is available upon which to develop an assessment).
- 8.28 Existing developments, and those that are under construction, are considered to be part of the baseline and will be taken as such in the assessment of potential effects on the settings of designated heritage assets within the OSA.
- 8.29 The schemes to be included in the cumulative effects assessment will be those listed below in Table 8.5 identified through the LVIA consultations with statutory consultees and will follow the approach set out in Chapter 4.

Table 8.5: Cultural Heritage Cumulative Sites Review

No.	Planning Ref.	Site Name and Location	Distance & Direction	Scoped-in / Scoped-out
1	P/19/1258	Draffan Road – Wind Turbine	1.6km east	Scoped-in – The site has been scoped-in to the cumulative effects assessment because of its potential, in combination with the proposed development, to affect the settings of cultural heritage assets in the OSA.
2	P/20/1670	Dovesdale Farm – Extension to existing infill site and amendment to extend the infill period including phased restoration	240m north	Scoped-in – The site has been scoped-in to the cumulative effects assessment because, although there is an existing development at Dovesdale Farm which is part of the existing baseline, the proposed southerly extension of the existing landfill may have potential to affect the settings of cultural heritage assets within the OSA.
3	P/18/1515	Stonehouse Hospital – Residential	2.4km west	Scoped-in – The site has been scoped-in to the cumulative effects assessment because of its potential, in combination with the proposed development, to affect the settings of cultural heritage assets in the OSA.

9. Traffic and Transport

Introduction

- 9.1 The proposed development will lead to increased traffic on the local road network during the construction and operational phases of the Proposed Development, which has the potential to lead to associated effects on receptors located within the study area. This chapter of the EIA will assess the potential impacts of the development on the local and strategic road network in the surrounding area to the site.
- 9.2 The Scope has been prepared by Pell Frischmann Consultants Limited.

Baseline Conditions

- 9.3 The proposed development will be directly accessed from the B7078 Carlisle Road. A detailed access review is being undertaken to develop a suitable access junction layout for the site and consultation with SLC will be held once design options have advanced further.
- 9.4 The access junction will provide the sole access to the site for construction material deliveries and the ongoing site operation traffic.
- 9.5 The B7078 in the vicinity of the site access and along the site frontage is a 60mph distributor road that provides local and non-motorway connection between the A71 and Blackwood. The road is operated by SLC and features no pedestrian or dedicated cycle facilities in the vicinity of the site access.
- 9.6 To the north of the site, the A71 provides east – west district distributor road functions. The road is operated and maintained by SLC and would provide strategic connections for the site to the wider Lanarkshire and Ayrshire regions.
- 9.7 The M74 is located to the east of the site and forms part of the strategic trunk road network between west central Scotland the rest of the United Kingdom. Access to the M74 is possible at Junction 8 to the north of the site, via the A71 / B7078 Canderside Toll Roundabout.
- 9.8 All direction access to the M74 is also possible to the south of Blackwood at Junction 10. Access for M74 southbound only traffic onto the B7078 is also possible from Junction 9.

Study Area

- 9.9 The assessment will be informed by a comprehensive site review, the aim of which will be to gather baseline traffic data, accident statistics and review existing levels of infrastructure for all modes of transport.
- 9.10 Development trip rates will be developed from first principles for the construction and operational phases of the Proposed Development. Using construction material estimates and the construction programme, trip estimates will be developed to undertake the construction phase impact review. A similar process will be undertaken for the operational phase using material import estimates based upon the capacity of the facility and the likely staffing levels.
- 9.11 Details of the traffic generation estimates will be agreed with SLC and Transport Scotland ("TS") and these flows will then be used to establish the peak traffic conditions for the two phases of the development on the assessment study area.
- 9.12 The proposed study area for the assessment will include the following links:
- The B7078 between Larkhall and Junction 10 of the M74;
 - The A71 between Strathaven and Garrion Bridge; and
 - The M74 between Junction 9 and 10.
- 9.13 Within the study area, the following key junctions will be reviewed within the operational phase assessment within the Transport Assessment ("TA"):
- The proposed site access junction;
 - The A71 / B7078 Canderside Toll Roundabout;
 - The A71 / M74 Junction 9 Southbound Slip Road priority junctions; and
 - The B7078 / M74 Southbound sliproad junction.
- 9.14 These junctions will then be assessed for future operation. The results of these assessments will inform the need for any potential mitigation measures.

Approach and Methodology

- 9.15 The traffic impact associated with the proposed development will be assessed in a TA. The impact assessment will be summarised in the EIAR which will also examine the impact upon affected receptors.
- 9.16 The TA will be provided to review the impact of transport related matters associated with the proposed development. This will be appended to the EIAR and will be summarised into a Transport and Access Chapter.
- 9.17 The following policy and guidance documents will be used to inform the Transport & Access Chapter:
- Transport Assessment Guidance (Transport Scotland, 2012);
 - The Guidelines for the Environmental Assessment of Road Traffic (Institute of Environmental Assessment (IEA), 1993); and
 - SPP (Scottish Government, 2014).
- 9.18 The Guidelines for the Environmental Assessment of Road Traffic (IEMA 1993) sets out a methodology for assessing potentially significant environmental effects. In accordance with this guidance, the scope of assessment will focus on:
- Potential impacts (of changes in traffic flows) on local roads and the users of those roads; and
 - Potential impacts (of changes in traffic flows) on land uses and environmental resources fronting these roads, including the relevant occupiers and users.
- 9.19 The assessment would include an evaluation of the traffic generated by all pertinent consented developments in the vicinity of the site. This would ensure that the EIA appropriately evaluates the cumulative impacts of the scheme in conjunction with other potential developments.
- 9.20 For the purposes of the EIA chapter, the IEA guidelines recommend that the environmental effects listed in Table 2.1 of the guidance be considered important when considering traffic from an individual development. These effects include:
- Noise;
 - Vibration;
 - Visual Impact;