TECHNICAL APPENDIX 5.4: VIEWPOINT ANALYSIS

Introduction

1. A viewpoint assessment has been carried out from a selection of key representative viewpoint locations to inform the assessment of the likely magnitude and significance of landscape and visual effects arising as a result of the Proposed Development.

2. 6 viewpoints were identified, and consulted upon with Angus Council, as part of the design process. Following desk-top analysis and site survey work, 7 viewpoint locations were selected to represent the main landscape and visual receptors found in the study area.

3. The locations of the selected viewpoints are shown on **Figures 5.1 – 5.4**. Details for each viewpoint are provided below. Panoramic photographs, wireline diagrams and photomontages (in most cases) are provided to illustrate the existing view at each viewpoint location and the likely extent of the Proposed Development within the view (**see Figures 5.6 – 5.12: V**i**ewpoints 1-7** in Volume 2b of the EIA Report). A summary of the viewpoint analysis is provided in **Table 5.5** in the main LVIA (see **Chapter 5**).

4. This viewpoint assessment considers the nature of the predicted view and the scale of change. The wider extent of the effect (beyond the individual viewpoint considered), and its duration, are not captured in the viewpoint analysis (as a single viewpoint cannot capture extent or duration), and are considered in the main body of the assessment (see **Chapter 5**). Extent and duration are factors in the overall judgement on magnitude of change, therefore judgements on magnitude of change and overall level of effect and significance are also provided in the main assessment.

5. The method of assessment used for the viewpoint analysis, which is described in **Technical Appendix 5.1**, accords with current best-practice guidance for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management, 2013). Observations are made of the baseline landscape and visual characteristics at each of the representative viewpoints. Observations, computer modelling and professional judgement are applied to determine the scale of change attributable to the Proposed Development **(Large, Medium, Small and Negligible**) upon landscape character and visual amenity at each individual viewpoint in order to determine the scale of effect.

6. The visual assessment takes into account the screening effect of intervening landform, vegetation and built form and the potential for changes to those baseline features. It assumes excellent clear weather conditions; although the influence of different seasons, weather, sunlight and visibility conditions have been considered, where relevant.

VP	Location	Key features of existing view	Predicted Visual Change	Predicted Change to Landscape Character
1	**Core Path 272, north of Site** (located on the public footpath, 0.21 km north of Site boundary) LCT 384: Broad Valley Lowlands - Tayside	Primary outlook from this location is open to the south over open fields to the Sidlaw Hills rising above Strathmore. Open views are also available northeast off the Core Path open fields with dispersed groups of trees and boundary vegetation and undulating horizon with intermittent tree cover. Trees and shrub along the Core Path filter views along the path to the southeast and northwest. Partial views of the Grampian Mountains are available to the north. The southwest and western outlook is across open fields though is shortened by woodland at the Glamis Castle GDL. Residential property at Haugh of Cossans is visible to the southeast across the fields of the Site.	Panels on the Solar array would be visible across the southern and southeastern outlook, covering a broad area of adjacent fields below the viewpoint in front of the Sidlaw Hills. Views would mainly be to the sides of panels, though some panel tops would be visible to the east further into the array. Mitigation planting beside the core path would mature to screen the panel arrays across the southern views, though some partial views to distant panel tops may remain to the east.	The panel array would cover a large extent of agricultural land as viewed from this location, resulting in an elemental change to landscape characteristic elements of the Broad Valley Lowlands LCT to the south and east of the viewpoint. Key open outlooks across Strathmore to the Sidlaw Hills would remain open, though the Proposed Development would introduce new manmade elements into the landscape. Mitigation panting would mature to extent woodland at Glamis Castle GDL and strengthen hedgerow and tree belt characteristics in the area, but would obscure the outlook in all directions in the long term.

2	**Core Path 272, east of Site** (located on the public footpath on the Site entrance) LCT 384: Broad Valley Lowlands - Tayside	Key outlooks from this location are the southwest across the open fields of the Site to the partially forested Sidlaw Hills in the distance, and to the north over agricultural fields and boundary vegetation to the Grampian Mountains. Views to the west are channeled by tree belt along the Core Path, with further Land rises to the south of the viewpoint to shorten views, with tree cover and settlement screening the eastern outlook at Nether Drumgley. There is a residential property to the northeast of the Core Path.	Panels at the eastern end of the array would be visible at close range in front of the viewpoint to the southwest. Views would mainly be to panel sides, with some glimpses of panel top above. The BESS facility would be visible in the distance to the south of the Core Path, and would be partially screened by tree belt beside the path. Panels would also appear in the distance to the west over the Core Path, though would be filtered by intervening tree belt. Mitigation planting would mature to screen the development, through would also screen the southwestern outlook to the Sidlaw Hills in the long term. Open views to the north would remain unchanged.	Agricultural land to the southwest of the viewpoint would be lost to a change in use to solar energy generation, introducing a new typology of mad made feature into the Broad Valley Lowlands as visible from this viewpoint. The solar arrays would impact key intervisibility with the Sidlaw Hills to the southwest, but not the Grampian Mountains to the north. Mitigation Planting would grow to screen the Proposed Development, strengthening woodland, hedgerow and tree belt characteristics, though would screen the southwestern outlook to intervisible landscapes in the long term.

3	**Minor road west of Mains of Ballindarg** (located on the roadside to the west of settlement, 1.12 km north of Site boundary) LCT 384: Broad Valley Lowlands - Tayside	Open views are available to the north and south from this roadside viewpoint. Outlook to the south is into largely flat agricultural land, with patchwork fields and overlapping boundary hedgerow and trees extending to the base of the Sidlaw Hills. Landform rises in the background to form a gently rolling and partially forested horizon which drops behind mature trees at field boundaries. Outlook to the north is similarly open though topography in this area forms subtle rolling fields with distant hills on the horizon to the northwest. Dense vegetation shortening views slightly to the northeast. Views along the road to the east and west are shortened by topography and further filtered vegetation both at the roadside and at nearby field boundaries.	The Proposed Development would be visible across the southern outlook behind hedgerow across the field form the viewpoint. The panels would be seen low in the agricultural landscape, partially obscured by tree belt to the eastern end and overhelping hedgerow in the centre. The western panel arrays would be clearly visible in open ground in front of woodland at the Glamis Castle GDL. The Proposed Development would appear in view with the Sidlaw Hills, which are a key visual element from the viewpoint, though would have limited influence over the views to the south due to south due to screening and intervening distance. Mitigation planting would grow to screen the panel arrays, with new hedgerow and tree belts strengthening existing tree belt at the eastern end of the Site, and new hedgerow and woodland proposed for the central and western extents.	The Proposed Development would result in the change of a broad area of agricultural land to solar power generation, with new man-made features visible between boundary vegetation across the southern outlook. Though a new landscape element, the Proposed Development would have limited influence over the agricultural quality of the visible landscape due to distance and would not impact intervisibility with the Sidlaw Hills to the south. Mitigation planting would mature to compliment and enhance the layered boundary vegetation seen to the south, strengthening tree belt and woodland characteristics.

4	**A94, West Ingliston** (located on the side of the A94 at the property entrance to West Ingliston, 1.80 km south of Site boundary) LCT 386: Low Moorland Hills	Broad, expansive views are available to the north from this roadside viewpoint, with land sloping away from the viewpoint across open fields with low hedgerow boundaries. Key outlook is to the south toward the Angus Glens and Grampian Mountains. Dispersed residential property and agricultural buildings are seen below the viewpoint to the north at West and Easter Ingliston, with few mature trees within curtilages. Trees and small blocks of woodland are dispersed throughout the landscape in the distance beyond the open fields next to the viewpoint, with woodland covering a large area to the northwest around Glamis. Views are open along the road to the northeast and southwest, with land rising to the south of the road to shorten views.	The Proposed Development would be visible in the northern outlook, appearing in open fields either side of Ingliston. Clear views to the panel arrays at the eastern end of the Site would be available, while the centre of the array would be screened and filtered by intervening tree cover. The western end of the array would be screened by woodland. Though visible Proposed Development would have little influence over norther views toward the Grampian Mountains due to distance and screening. Mitigation planting would mature to screen panel sides at the southern edge of the Site and some panel tops in the centre and east of the arrays.	The Proposed Development would result in a change from agricultural land to solar power generation in the adjacent LCT though the broader agricultural context of Strathmore and Landscape character at the viewpoint would remain unchanged. The panel arrays and BESS would introduce new manmade features, though these would be seen in the context of medium scale agricultural buildings which are visible to the northwest. Mitigation planting would mature to compliment and strengthen landscape patterns and features in the adjacent Broad Valley Lowlands LCT, with new woodland, trees and hedgerow visible across the northern outlook. The proposed panel arrays, infrastructure and mitigation planting would not impact key intervisibility to the Grampian Mountains.

5	**Douglastown** (located at a bus stop on the northern side of the A94 to the north of Douglastown, 2.17 km south of Site boundary) LCT 384: Broad Valley Lowlands - Tayside	The primary outlook from this location is to the northwest, into low lying agricultural land with hedgerow boundaries and occasional trees which overlap into the distance below a gently undulating horizon of landform at the Angus Glens and the Grampian Mountains beyond. Landform slopes very gently away from the viewpoint to the north across Strathmore, increasing the visible extents of the landscape, which is largely horizontal in character. This outlook is channeled – to a degree – by adjacent property to the west and roadside vegetation to the north. Landform rises both to the northeast and southwest above to the course of the road to shorten view, with the southern outlook largely screened by roadside vegetation and residential properties opposite the viewpoint.	The Proposed Development would be visible to the north, Panels at the eastern end and in the centre of the Site would be visible between small blocks of woodland The western end of the array would be screened by woodland. Though visible Proposed Development would have little influence over norther views toward the Grampian Mountains due to distance and screening. Mitigation planting would mature to screen panel sides at the southern edge of the Site and some panel tops in the centre and east of the arrays.	The Proposed Development would result in a change from agricultural land to solar power generation within the Site, though the broader agricultural context of Strathmore would remain unchanged. The panel arrays and BESS would introduce new manmade features, though it would occupy a small portion of the visible landscape, aligning to existing field and would not have influence over intervisibility with the Grampian Mountains to the north due to distance from the viewpoint. Boundaries. Mitigation planting would mature to extend woodland, hedgerow and tree belt features across Strathmore, whilst integrating the panel arrays and infrastructure into the landscape.

6	**Mains of Glamis** (located at the boundary of the Glamis Castle and Designed Landscape, on the A94). LCT 384: Broad Valley Lowlands – Tayside and LCT 382: Lowland Hill Ranges	Key outlook from this location is to the northeast in Strathmore over open fields with low hedgerow boundaries and occasional trees, with the Grampian Mountains rising in the background to the north beyond the Angus Glens. Woodland and tree cover is intermittent within the visible agricultural landscape, though is more concentrated to the northwest toward the Glamis Castle GDL Roadside trees screen views to the east, with woodland and topography screening the southern outlook.	The Proposed Development would be visible in the northeastern, occupying agricultural fields extending to the east. Small woodland features would screen the centre of the arrays, with panels at the eastern and western end visible in the open. The Proposed Development would be discernible, though distant, and would have very limited influence over views across the strath and to the Grampian Mountains beyond. Mitigation planting would mature to screen panel sides at the southern edge of the Site, with new woodland intermittently screening panel tops across the Site, providing further visual breaks in the scheme as visible form this location.	The Proposed Development would represent a change in use form agricultural land to solar power generation within agricultural landscape patterns visible in this part of the Broad Valley Lowlands LCT. The panel arrays would introduce new man-made features, though would not have influence over the broader agricultural character or patterns present in Strathmore. There would be no influence on key intervisibility to the Grampian Mountains to the north. Mitigation planting would mature to obscure parts of the Proposed Development and complement existing woodland, hedgerow and tree belt features present in the landscape.

7	**Forfar- Dundee Road** (located at a field entrance on the western side of the A932 (Dundee Road) opposite an intersection on the southern fringe of Forfar) LCT 384: Broad Valley Lowlands – Tayside	Broad, long-distance views over Strathmore are available to the west from this viewpoint, which is the primary outlook from this location. Landform slopes away from the viewpoint in this direction across open fields delineated by boundary vegetation ranging from mature hedgerows to large shelterbelt tree planting. This pattern extends into the distance in the west and northwest, lapping behind nearby residential properties in front of the viewpoint. Gentle hills rise in the distance to form a rolling horizon to the northwest. Horizon landform is visible to the north, though residential properties occupy the foreground. Views from the northeast round to southeast are truncated by rising ground and residential properties beside the road. Southern views are similarly shortened by rising landform though are partially open along the road, with nearby tree belts shortening views to the southwest	The Proposed Development would be partially visible from this location between foreground boundary vegetation and woodland in the broader landscape. Panel arrays at the eastern end would be discernible, though would not influence views across Strathmore and the fringes of Forfar from this location. Panels at the western end would be largely screened by woodland, with intervening distance reducing visibility where available. The Proposed Development would be seen low in the landscape to the west of key views toward the Angus Glens and Grampian Mountains. Mitigation planting would mature to screen the panel arrays, with only glimpse views remaining available long term form this location.	The Proposed Development would represent a small change in land use from agricultural fields to solar power generation across a few partially visible fields in the distance. Boundary vegetation, tree belt and woodland elements are prominent from this location, which provide some separation between the viewpoint and the open fields in Strathmore. The Proposed Development would not have influence over landscape characteristics in the Broad Valley Lowlands LCT from this location. Mitigation planting would mature to complement existing boundary and woodland features and would integrate the panel arrays into the landscape in the long term.