THE DROVES
SOLAR FARM

The Droves Solar Farm

Design Approach Document (Part 3)

Prepared by: LDA Design
Date: November 2025
PINS reference: EN0110013
Document reference: APP/5.7 (Original)
APFP Regulation Reg 5(2)(q)
Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Section 6

6. Research

6.1 Design Evolution

6.1.1 This section summarises the design evolution of the Scheme and how the extent of Site and area proposed for development has evolved through the design process.

6.1.2 It explains how the spatial layout of the Scheme has been shaped by the project team brief, vision and Project Principles and has responded to the environmental assessment process, consultation feedback and engagement with stakeholders via an iterative design process.

6.1.3 The design evolution described specifically relates to the operational phase of the Scheme, culminating in the production of the **Concept Masterplan (ES Figure 5.1) [APP/6.3]**. Four distinct stages of design are identified, namely:

- **Design Stage 1:** Project Team Inception up to Non-Statutory Consultation
- **Design Stage 2:** Post Co-Design, leading up to Statutory Consultation
- **Design Stage 3:** Post Statutory Consultation, leading up to targeted consultation; and
- **Design Stage 4:** Post targeted consultation, leading up to submission.

6.1.4 Further information on the consultation process and how it has informed the Scheme is provided in the **Consultation Report Appendices [APP/5.2]**.

6.2 Design Stage 1: Project Team Inception to Non-Statutory (May 2024 to September 2024)

6.2.1 As part of this initial stage, the project team undertook project briefings, site visits and initial appraisals. The intention at this stage of the Scheme was to develop an understanding of the Site, leading up to non-statutory consultation activities, to inform the proposed Order limits. The intention of the design at this stage was that the area would be further refined following surveys and the outcomes of environmental assessment and non-statutory and statutory consultation taking into account the Design Principles, and the mitigation hierarchy which sought to avoid and minimise potential impacts to the local area.

6.2.2 The consultation strategy for the Scheme included a process known as Co:Design. Co:Design is a method for active participation with local community representatives and other key stakeholders during the design process, enabling stakeholders to openly engage with developers to incorporate local knowledge. It facilitates the gathering of high-quality feedback at the non-statutory stage, to ensure the interests of the local community can be better taken into account while also providing a more evidence-led forum for discussion to communicate the Site's constraints.

6.2.3 To feed into the Co:Design process prior to the first set of workshops and meetings with stakeholders, initial studies and preliminary assessments were undertaken to identify the opportunities and constraints of the Site, develop draft Project Principles and identify areas of land that would potentially be suitable for solar development. Analysis was undertaken at a range of scales and included consideration of areas outside the initial site selection area to capture the full range of potential opportunities.

6.2.4 In taking an "environmentally-led" approach to the location of land uses for early engagement, the initial appraisal determined that the localised plateau south of the River Nar valley – an area with a high degree of visual containment due to woodland at the edge of the plateau and along the valley slopes – had the potential to accommodate solar infrastructure. The analysis showed that the break of slope between the plateau and the north facing valley slopes of the River Nar and its valley floor (as set out at section 4.2) marks a transition between landscapes, with the north facing slopes likely to be more susceptible to adverse effects from the Scheme.

6.2.5 Solar Solar infrastructure was therefore located within the plateau landscape where there were no absolute constraints to Solar PV Arrays, BESS or the Customer Substation and National Grid Substation (Principles 2.1, 2.5, 2.7); and through early discussions with the landowner of the Solar PV Site, field parcels on the valley slopes were potentially suitable to accommodate areas for ecological mitigation (Principles 2.1, 3.1).

6.2.6 All existing woodland within the search area were identified for retention (Principle 7.2).

Site Plan

6.2.7 At the end of Design Stage 1, a "Site Plan" was developed based on the findings of the preliminary assessment, which identified the proposed Order limits. The Site plan is shown in Figure 1.18. The "Site Boundary" equated to 1,100 hectares.

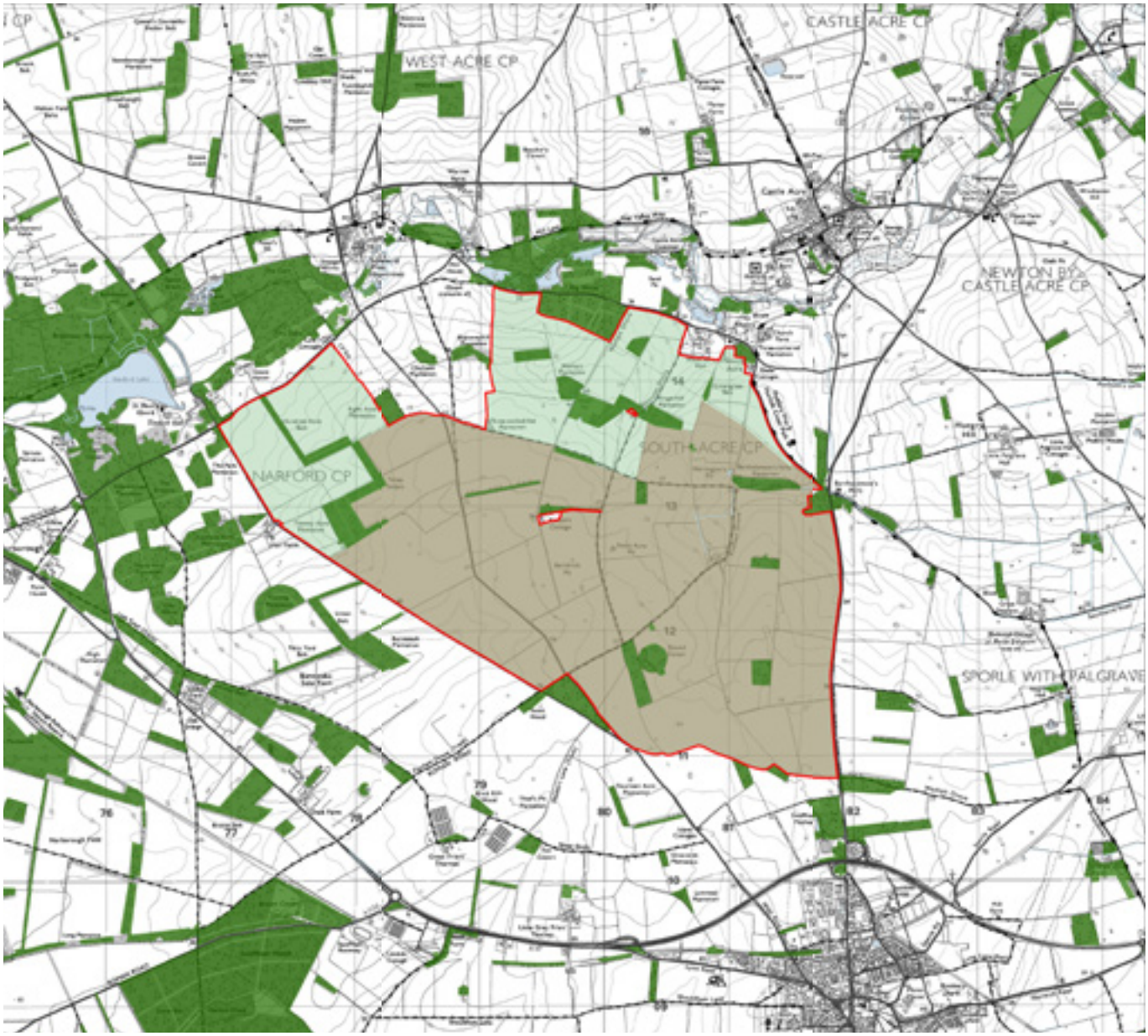


Figure 1.18: Site Plan for Non Statutory Consultation

6.2.8 The Site plan and other supporting information was presented at a series of in-person workshops with local council members and community groups and at a series of virtual technical workshops. Attendees were encouraged to submit their feedback on maps via Post-it notes; by completing feedback forms; and by providing written comments on the print materials.

6.2.9 The key themes that emerged from the Co:Design were as follows:

Design:

6.2.10 Concerns were raised about the scale of the Scheme and the use of agricultural land for Solar PV Arrays, BESS, and associated infrastructure.

Ecology and biodiversity:

6.2.11 Participants recognised the need for a Biodiversity Net Gain and expressed a desire to enhance local habitats both on site and in the surrounding area

6.2.12 Concerns were raised regarding the impact of fencing, panels and the potential displacement of wildlife

6.2.13 Suggestions included planting hedgerows, trees and brambles to create wildlife corridors, as well as measures to enhance existing ecology and restore the land's ecological state prior to intensive farming; and

6.2.14 Participants also highlighted the importance of working with local organisations, such as the Norfolk Wildlife Trust, to support habitat restoration efforts.

Cultural heritage and visual impact

6.2.15 Participants emphasised the importance of preserving local landmarks, such as Castle Acre Priory, and safeguarding the rural character of the area. Suggestions included natural screening and the use of low-profile infrastructure to minimise visual impact.

Transport and access

6.2.16 Concerns were raised about construction traffic on rural roads and seasonal variations in traffic flow. Participants suggested designated routes, pedestrian safety measures, and buffer zones around byways to mitigate potential impact.

6.2.17 A detailed summary of the issues raised during the non-statutory consultation and the Applicant's response is provided in the **Consultation Report Appendices [APP/5.2]**.

6.2.18 The Site plan was also used as the basis of the **Scoping Report (ES Appendix 2.1 [APP/6.4]**) for the Scheme submitted to the Secretary of State on 7 November 2024, with the addition of an area within the Site boundary identifying the potential location for grid connection infrastructure along the 400kV overhead lines, as shown on Figure 1.19. A Scoping Opinion was provided by the Secretary of State on the 18 December 2024.

Figure 1.19: Site Plan for Scoping

6.3 Design Stage 2: Post Non-Statutory Consultation (October 2024 to May 2025)

6.3.1 This stage of design was undertaken following Non-Statutory Consultation to take account of feedback received from attendees, feedback in the Secretary of State's Scoping Opinion, the results of ongoing environmental surveys and assessments being carried out as part of the development of the PEIR, as well as continued engagement with stakeholders and technical requirements of the proposed solar infrastructure.

6.3.2 Throughout Stage 2, the Applicant maintained an interdisciplinary approach to design guided by the Project Principles. This enabled the Applicant to understand the complexities of the Site and identify where the layering of opportunities and constraints had the potential to combine to provide a range of beneficial outcomes. The process involved the development of a set of overarching masterplan strategies and Environmental Opportunities & Constraints Mapping that underpinned a Concept Masterplan and Indicative Masterplan that were taken forward to Statutory Consultation.

Draft Order limits

6.3.3 A key change between Stage 1 and Stage 2 was an alteration to the Site boundary. As ecological surveys were still being undertaken and the requirements for mitigation were not yet known, the area identified for potential mitigation and enhancement in the previous stage was removed from the draft Order limits. In the meantime, it was agreed with the landowner of the Solar PV Site to explore landholding within the wider estate that may also be appropriate for ecological mitigation, and once surveys were completed and requirements understood, to determine the extent of land required for mitigation.

6.3.4 The draft Order limits for this stage of design are shown in Figure 1.20 and cover an area of approximately 825 hectares, and include a small extent of highway land associated with the A1065 / A47 junction north of Swaffham.

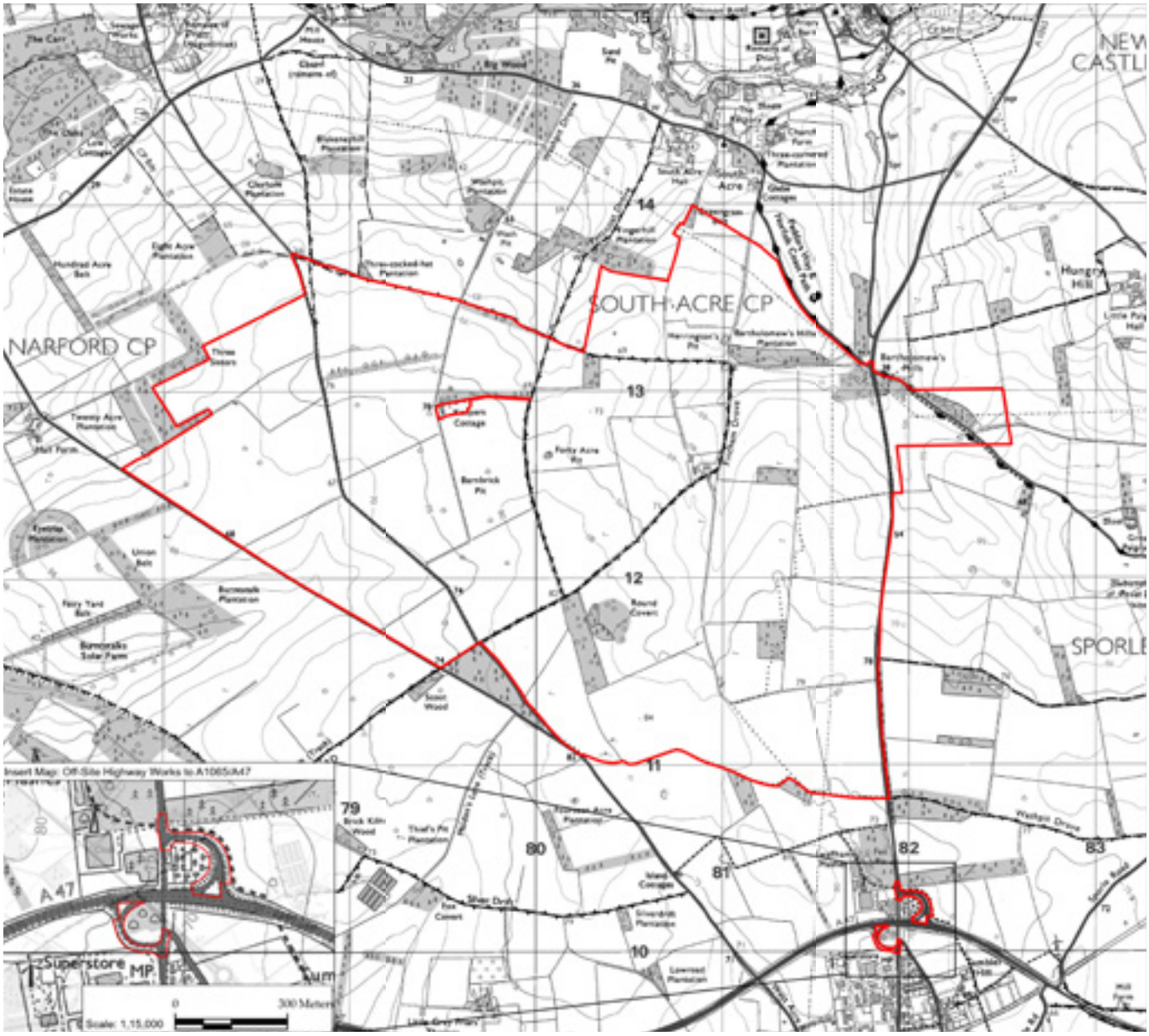


Figure 1.20: Draft Order limits for Statutory Consultation

Masterplan Strategies

6.3.5 Following the initial information gathering stage, a set of overarching, high-level masterplanning strategies were developed to guide the emerging design proposals. The strategies considered the Site in its wider context and focused on three core themes of Place, Movement and Biodiversity.

Place: Reinforcing the character and identity of the local area

6.3.6 As noted above, the central part of the Site is located on a localised plateau, set at the edge of the River Nar valley slopes (shown indicatively on Figure 1.21). The contrast between this higher ground and the surrounding valley continued to shape a design strategy that drew from and reinforced the distinct character of both landscapes (Principle 2.1).

6.3.7 The Valley Slopes and the Nar Valley itself are rich in nature and heritage. The strategy set out to enhance people's experience of the valley corridor from the edge of the plateau by maintaining and directing views to the valley floor, keeping vistas open from key routes and limiting the location of solar infrastructure (Principle 2.8, 2.9).

6.3.8 The Plateau associated with the Site has an enclosed character, contained by woodland, old hedgerows and mature trees; crossed by former droves. Landscape and Visual appraisals confirmed that this area has the capacity to accommodate solar infrastructure, where it can be integrated into the landscape, thereby helping to preserve the sensitivities of the Nar Valley (Principles 2.1, 2.2, 2.5). The strategy sought to reinforce the character of the plateau by strengthening, reinstating and providing new hedgerows and retaining existing blocks of woodland (Principles 2.1, 2.2, 3.1); and ensuring the droves would be maintained and reinterpreted for a new generation (Principles 2.1, 2.9).

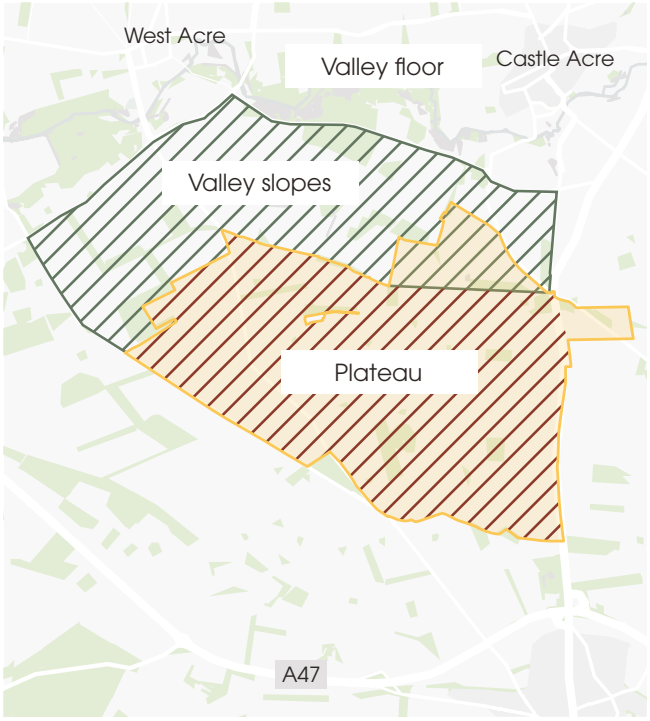


Figure 1.21: Place diagram used in Statutory Consultation material

Movement: Improving access to support active lifestyles

6.3.9 As set out at Section 4, a network of public and permissive routes run along the river corridor and between the Nar Valley villages, including long-distance trails and areas of common land. These well-used paths and treasured links allow people to experience the natural and historic environment of the valley. Some of these routes extend up the valley slopes and across the Site. There is, however, a missing link between the Plateau and Nar Valley path network and Swaffham.

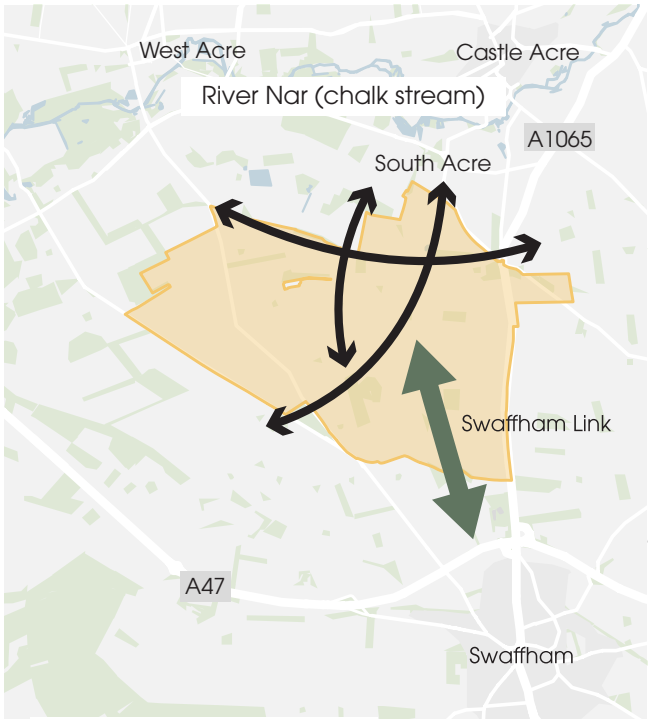


Figure 1.22: Movement diagram used in Statutory Consultation material

Figure 1.23: Biodiversity diagram used in Statutory Consultation material

6.3.10 The movement strategy as shown on Figure 1.22 set out to protect existing paths and introduce new links across the Site, improving access between Swaffham, the Nar Valley, and surrounding villages. All existing PRoW – including the sequence of former droves – were identified for retention and protection throughout the lifetime of the Scheme. To improve access between the town and the valley, the strategy identified the potential for new permissive routes across the Site – a new "Swaffham Link" – creating more direct walking routes for local people and visitors, completing the path network and connecting communities (Principles 2.3, 2.8, 2.9, 5.10, 5.11)

Biodiversity: Supporting nature recovery across the Site and surrounding landscape

6.3.11 To the north of the Site lies the chalk stream valley of the River Nar; to the south the Breckland heath and forest – both recognised as nationally important for their ecology. Within and around the Site itself are smaller areas of biodiversity value, set among predominantly arable farmland.
To support nature recovery, the biodiversity strategy as shown on Figure 1.23 aimed to strengthen the connections between these habitats – creating ecological stepping stones and wildlife corridors to link the area's key biodiversity hotspots. By protecting existing habitats and introducing extensive new areas of grassland, the strategy set out to improve the resilience and connectivity of priority ecological areas across the region (Principles 2.3, 3.1, 3.2, 3.4).

Environmental Opportunities and Constraints Mapping

6.3.12 During early stages of the development of a concept masterplan, a series of topic specific workshops took place, aligning the masterplan strategies with more detailed site opportunities and constraints. This included mapping existing features that should be retained within the Site and, where appropriate, enhanced. Existing hedgerows, trees, woodland, ditches, ponds, marl pits, public rights of way, and farm access tracks were mapped.

6.3.13 Minimum offsets or buffers from existing landscape features, as set out in Table 4, were identified and applied, providing a landscape framework within which solar infrastructure could be located. The buffers provide both sufficient and appropriate offsets from the ecological habitats and provide working areas to maintain habitats within the Scheme, such as hedgerows, without conflict between the operation of the Scheme. The application of buffers was used to deliver a combination of embedded mitigation and enhancement, with the potential to increase buffers to deliver particular outcomes or respond to further constraints as additional survey information or Scheme requirements were brought forward

Example of hedgerow buffer

Table 4: Minimum offsets/buffers from existing landscape features

Landscape feature	Buffer/Offset
Hedgerows **Hedgerows – with trees**	8m 10m
Woodland (Non-ancient)	15m
Ditches	6m
Badger setts **(Badger sett – outlier)**	30m 20m
Individual trees and groups of trees	10m
Ponds	10m

Example of wildflower hedgerow buffer

PEIR Concept Masterplan

6.3.14 A Concept Masterplan, derived from the masterplan strategies and environmental opportunities constraints mapping, was developed to form the basis of the assessment for the PEIR and Statutory Consultation.

6.3.15 The PEIR Concept Masterplan, shown on Figure 1.24, showed potential areas for Solar PV Arrays, BESS, Customer Substation, National Grid Substation, Grid Connection Infrastructure, preferred areas for mitigation and enhancement; and potential on-site permissive routes.

6.3.16 At this stage, work was still underway to determine the specific type of infrastructure and equipment to be used, and where it would be located. Preliminary components of the Scheme and their technical requirements were identified to assist the design and included key components such as:

- PV Panels (fixed arrays or single axis trackers) and their respective maximum heights above ground level (3.5m and 4.5m)
- Initial area for Customer Substation compound (4 hectares) and maximum height for associated electrical infrastructure (13m)
- Initial area for National Grid Substation compound (4 hectares) and maximum height for associated electrical infrastructure (13m); and
- Initial area for BESS compound (up to 10.5 hectares) and typical containers measuring 3.2m in height.

Design Rationale

6.3.17 A summary of the design rationale for the PEIR concept masterplan is provided below.

Siting Zones for Customer Substation, National Grid Substation and BESS

6.3.18 At this stage in the process, a zonal approach was taken for the potential location of National Grid Substation, Customer Substation and BESS infrastructure, to retain flexibility and allow for the results of preliminary assessment work, engagement with NGET and feedback from upcoming statutory consultation to inform preferred locations.

6.3.19 An area to north-east of the Site was identified, adjacent to 400kv overhead lines (OHL). A decision was taken to co-locate the Customer Substation and National Grid Substation with the BESS to prevent environmental impacts extending across a wider area and make the most efficient use of the land in this area of the Site (Principles 2.2, 6.1).

6.3.20 Two potential locations for the National Grid Substation infrastructure were explored within this broad area: one to the north of Bartholomew's Hills Plantation, closer to the 400kV overhead lines; and one to the south of the plantation. These fields were identified as they were in close proximity to the OHL, of sufficient size to allow scope for further design development, including the potential for incorporation of buffers and mitigation measures.

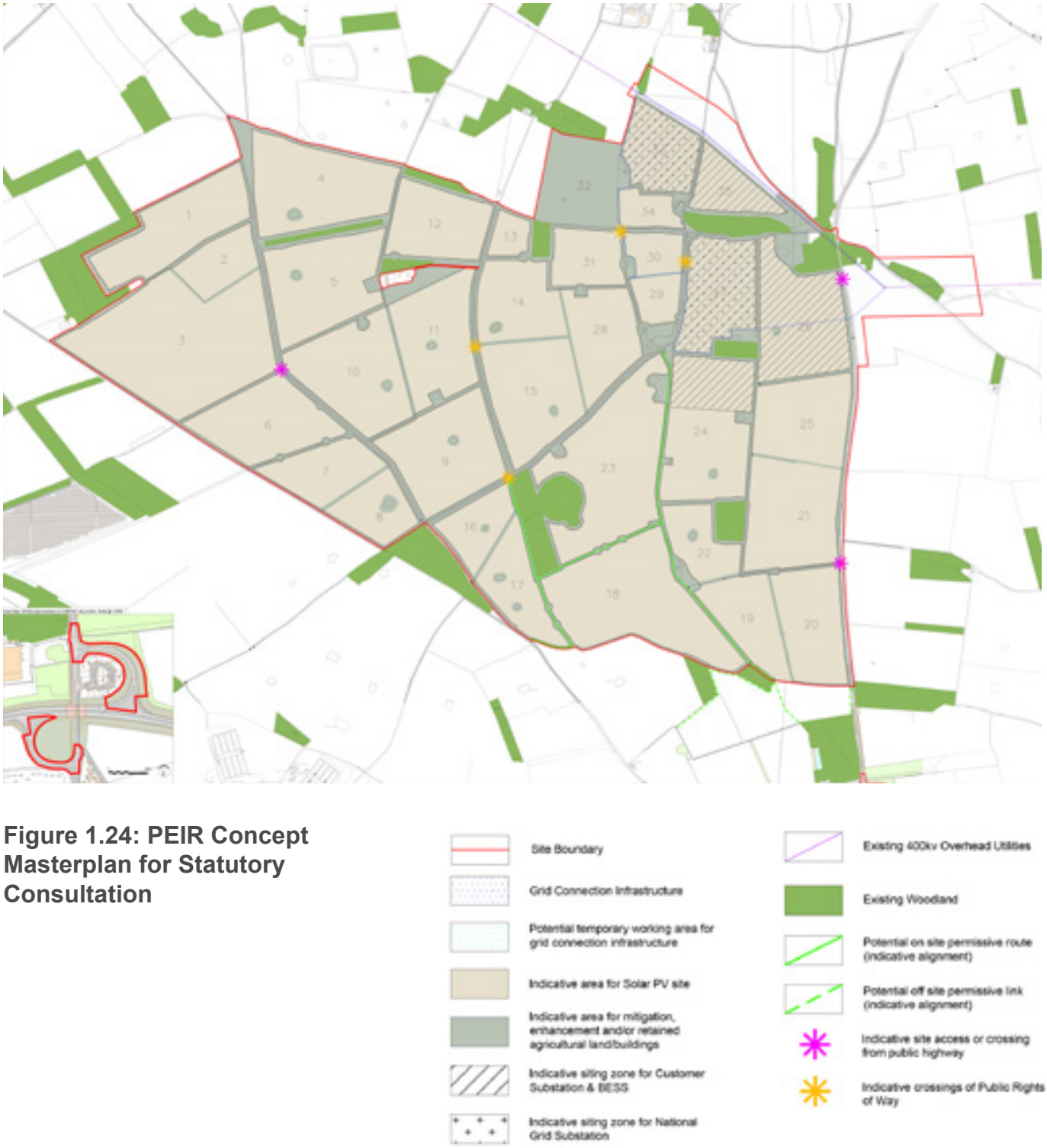


Figure 1.24: PEIR Concept Masterplan for Statutory Consultation

Areas for Solar PV Arrays

6.3.21 Areas for Solar PV Arrays were identified across the majority of the Site, set within a landscape framework defined by environmental offsets, and envisaged to be underplanted with grassland to contribute to biodiversity net gain, improve soil health and carbon sequestration, reduce and slow surface water run-off, and, due to reducing the need for agricultural fertilizer and pesticides and the natural filtration benefits of grassland, improving water quality (Principles 2.4, 3.2, 3.3, 3.4, 4.1, 7.1, 7.3).

6.3.22 To retain flexibility at this stage in the process, Solar PV Arrays were also identified to coincide with the siting zones for the Customer Substation, National Grid Substation and BESS, allowing for the results of assessment work and consultation to influence the final design.

Grid Connection Infrastructure

6.3.23 An area for Grid Connection Infrastructure was identified, encompassing part of Field 26; the majority of Fields 27, 30, 33, 34 and 35; and a portion of the field to the east of the A1065. An area north of the 400kV overhead line and east of the A1065 was identified as a potential temporary working area for grid connection infrastructure.

6.3.24 At this stage of the design, the area for Grid Connection Infrastructure was understood to be required for works to the existing overhead lines and pylons, including new pylons and associated OHL between two existing towers that would enable the OHLs to connect into the National Grid Substation – and covered a broad area to retain flexibility, allowing for further design refinement.

View towards agricultural building adjacent to Keepers Cottage

Areas for Mitigation and Enhancement

6.3.25 Areas defined by environmental offsets, the masterplan strategies and the application of Project Principles, were identified as areas for mitigation and/or enhancement, as follows:

- Corridors defined by linear features, particularly those along the former droves (Principles 2.2, 3.1, 3.2, 3.4)
- Field 32, classified as Grade 1 and 2 agricultural land, was excluded from Solar PV Arrays and identified within the area mitigation and enhancement, to be retained in agricultural use (Principle 2.10)
- Existing marl pits, ponds and tree groups, where near hedgerows or woodland, were incorporated within green infrastructure corridors to expand linked habitats and improve their ecological value (Principles 2.2, 2.3, 2.9, 3.1, 3.2, 3.4)
- A cluster of agricultural buildings off Fincham Drove were identified as being retained; and
- An area to the south of Keepers Cottage was identified for mitigation and enhancement, ensuring the residential amenity of the property is maintained. The area was defined by extending the existing hedgerow, between Fields 5 and 10, and field pattern as far as the access track to the cottage, creating an offset from the property curtilage (Principle 2.2). A block of woodland to the north of the property would screen views of Solar PV Arrays. It was noted that a commitment should be made to ensure any noise sources (i.e. inverters) be located a suitable distance from the property to mitigate effects on residential amenity (Principle 2.7).

6.3.26 All existing woodland within the Order limits were identified for retention, with access retained for management (Principle 7.2).

Access – Transport & Recreation

Transport

6.3.27 An overarching strategy was devised to take access from the A1065 and move construction and operational traffic east-west through the Site, avoiding the use of rural lanes (Principles 2.8, 5.9).

6.3.28 Two points of access were identified along the A1065 to the north and south; and

6.3.29 A single crossing point to River Road was identified to limit the impact to the rural nature of the lane during construction and operation.

Recreation

6.3.30 All existing Public Rights of Way were kept on existing alignments and retained within landscape buffers (Principles 2.9, 5.10).

6.3.31 A strategy was devised to limit crossings of all on-site Public Rights of Way to reduce disruption of their use during construction and operation. Two crossings were identified to Fincham Drove (South Acre RB6); one crossing identified to Petticoat Drove (South Acre RB1); and one crossing identified to Public Right of Way South Acre RB2 (Principles 2.9, 5.10)

6.3.32 Potential on-site permissive routes were identified, located between the Site's south-eastern boundary and Fincham Drove (PRoW South Acre RB6). These were aligned along historic routes and field boundaries. Consultation was undertaken with the High Grove Solar project team to provide additional off-site permissive routes between the Site and existing PRoWs at the edge of Swaffham (Swaffham FP13) (Principles 2.3, 5.4, 5.8, 5.11)

Existing agricultural access from River Road

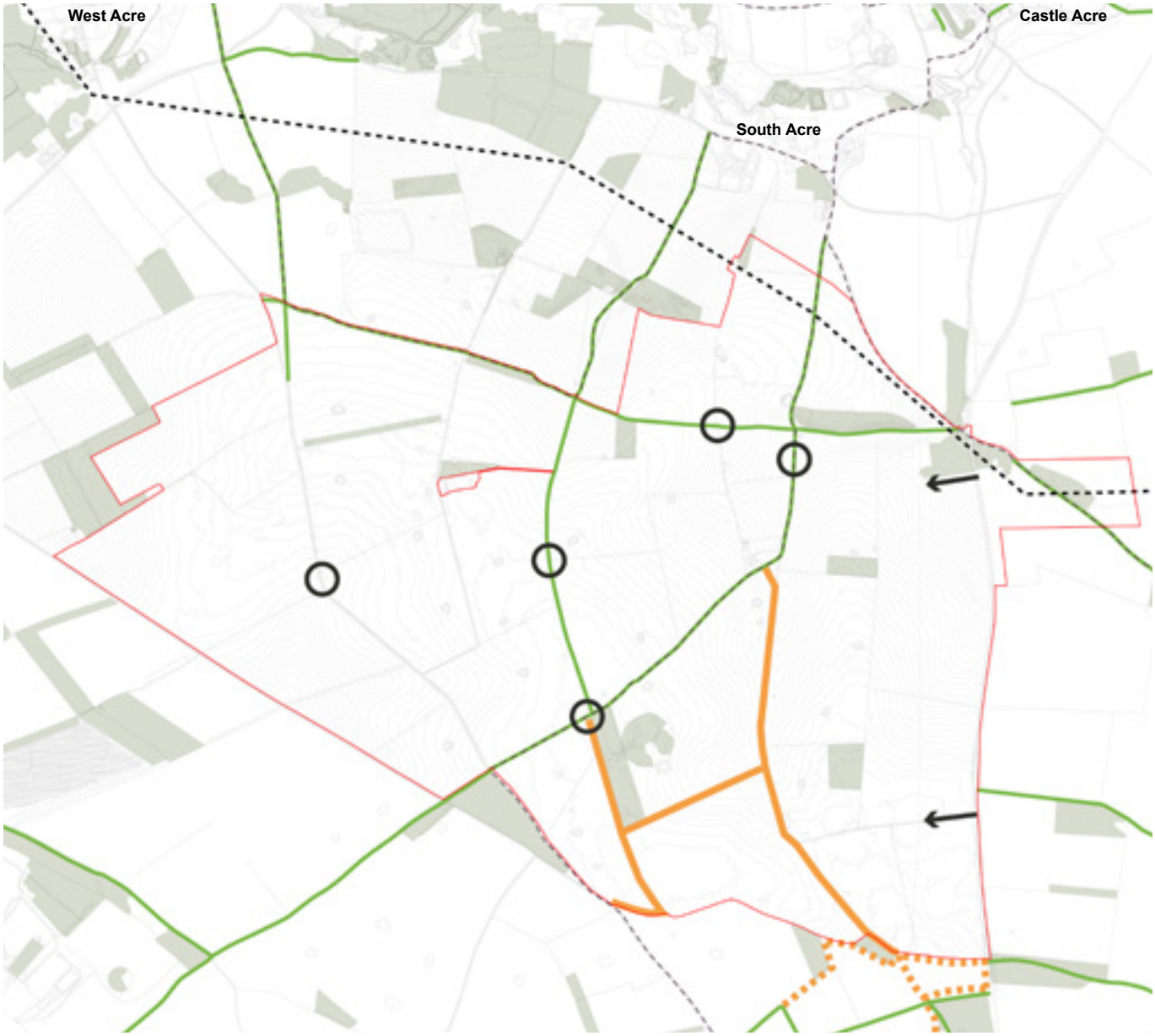


Figure 1.25: Access Strategy for PEIR & Statutory Consultation

LEGEND

- Site boundary
- 400kv Overhead Power Line
- Existing Public Right of Way
- Existing promoted routes including: Castle Acre Circular Walk; Rebellion Way Cyle Route; Peddars Way & Norfolk Coast Path National Trail; Nar Valley Long Distance Trail
- Potential on site permissive route (indicative alignment)
- Potential off site permissive link (indicative alignment)
- Primary access off A1065 (indicative location)
- Key crossing of Public Right of Way and River Road (indicative location)

Sources: Ordnance survey, Natural England; National Forest Inventory, Island Green Power, WSP, Norfolk County Council, National Trails, Cycling UK.

Green Infrastructure Strategy

6.3.33 An overarching Green Infrastructure (GI) strategy (Figure 1.26) was developed to reinforce and reinstate the landscape fabric of the Site by respecting the historic field pattern that remains largely intact and replacing features where lost (Principles 2.1, 2.2, 2.3, 3.1, 3.2, 3.4). Alongside the incorporation of marl pits, ponds and tree groups within GI corridors (as noted above), the strategy included:

- Retention and gapping up / enhancement of existing hedgerows, in particular strengthening hedgerows with hedgerow trees along key routes (such as the former droves) to reinstate their enclosed character
- Reinstatement of lost hedgerows, notably along the alignment of the potential permissive route between Field 18 and 19 and associated with Field 14; and proposals for new hedgerows in key locations, notably to the south of the east-west Public Right of Way (South Acre RB2), also the route of the Castle Acre circular walk, to aid visual screening of Solar PV Arrays, whilst retaining views northwards to the Nar Valley where gaps in existing hedgerows persist; and
- Area identified for publicly accessible amenity space at the edge of the plateau, where River Road descends to the valley floor and views open up across the valley towards West Acre.

Example of gapping up of onsite hedgerows

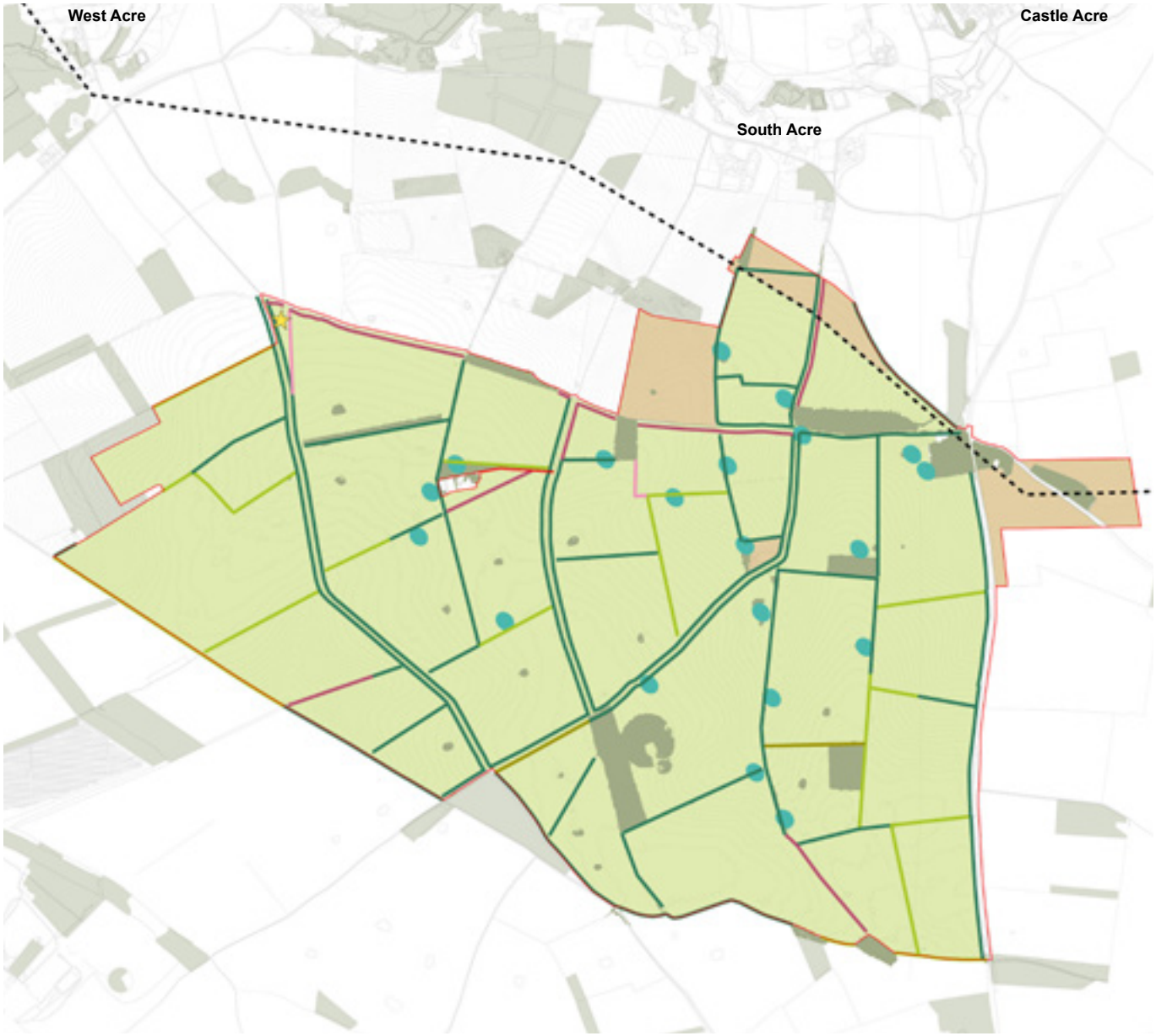


Figure 1.26: Green Infrastructure Strategy for PEIR & Statutory Consultation

Fencing Strategy

6.3.34 Alongside the GI Strategy, an indicative fencing strategy (Figure 1.27) was produced to ensure that, from an early stage, consideration was given to retaining key movement corridors through the Site for people and wildlife. The strategy included:

- Routes to provide continuation of wildlife corridors to hedgerows and woodlands beyond the Site (Principle 3.1).
- Ensure marl pits, ponds and tree groups that are in close proximity to key corridors are connected and are not “fenced-off” – making a distinction between habitats “inside” the fence and within the Solar PV Arrays; and richer habitats located “outside” the fence within mitigation and enhancement areas (Principles 2.2, 3.1); and
- Enable landowner access to woodlands for continued use and maintenance (Principle 7.2).

Encapsulating the Strategies & Design Proposals

6.3.35 To help communicate the Green Infrastructure and Fencing Strategy, and the strategy for restoring and enhancing the droves, material was prepared for Statutory Consultation to illustrate the approach, as shown at Figure 1.28 (Principles 2.6, 5.3, 5.4, 5.7). The consultation material summarised the approach to broadening the margins of the droves, drawing a distinction between the variety of habitats that would exist outside the fence and Solar PV Arrays and the grassland habitat that would exist inside the Solar PV Arrays.

Indicative Masterplan

6.3.36 To accompany the PEIR Concept Masterplan as part of the Statutory Consultation, an Indicative Masterplan was produced to illustrate the principles embedded within the PEIR Concept Masterplan and masterplan strategies. The indicative masterplan was included within the Consultation Information Booklet and is reproduced with the **Consultation Report [APP/5.1].**

Example of retained footpath and access track

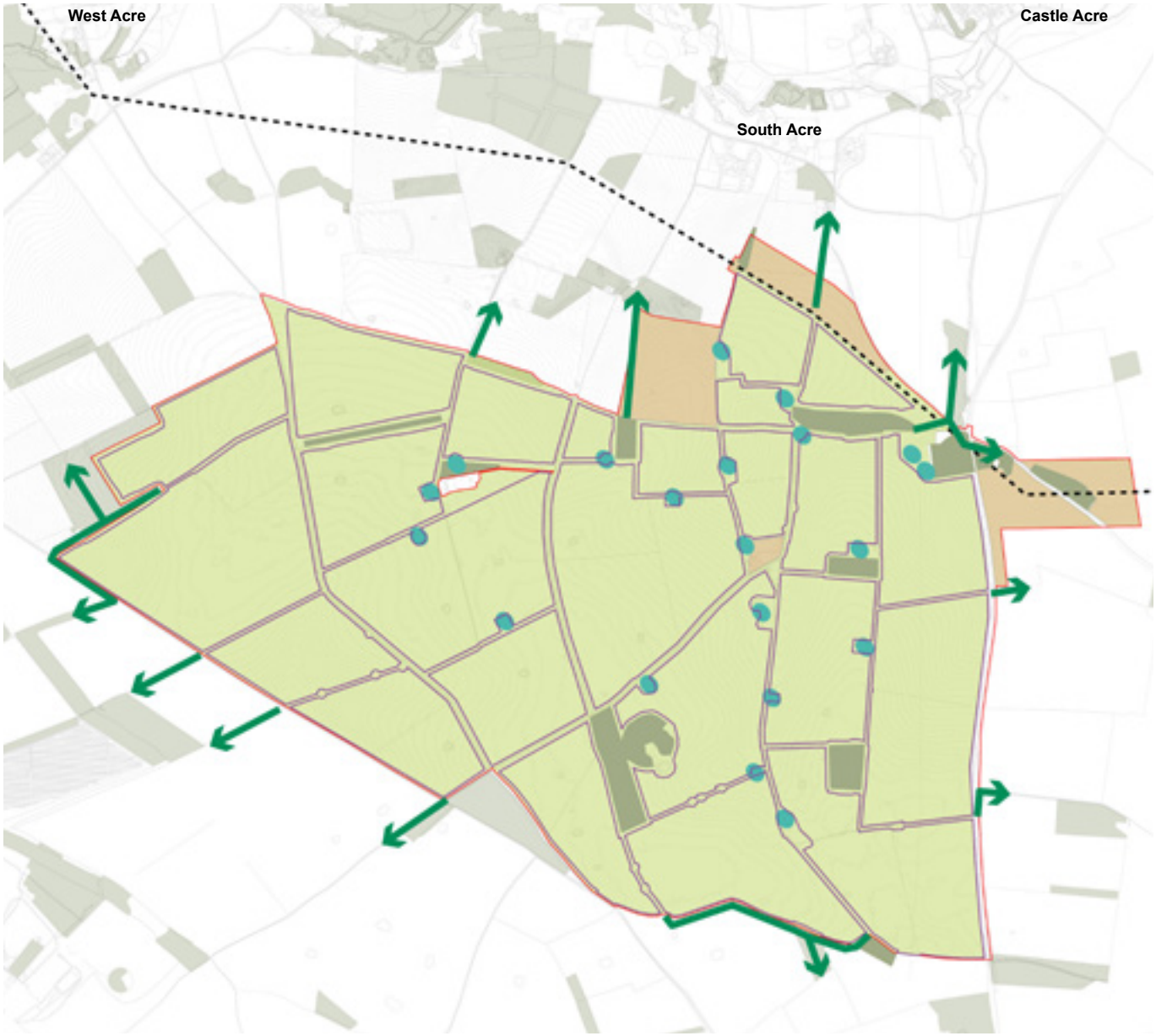


Figure 1.27: Fencing Strategy for PEIR & Statutory Consultation

LEGEND

- Site boundary
- Indicative fence line
- Link to offsite hedgerow and woodland, providing continuation of wildlife corridor beyond the Site boundary
- Existing woodland & tree groups (retained)
- Retained agricultural land / buildings and / or mitigation
- Proposed grassland
- 400kv Overhead Power Line
- Existing marl pit / pond / tree group incorporated within Green Infrastructure corridor

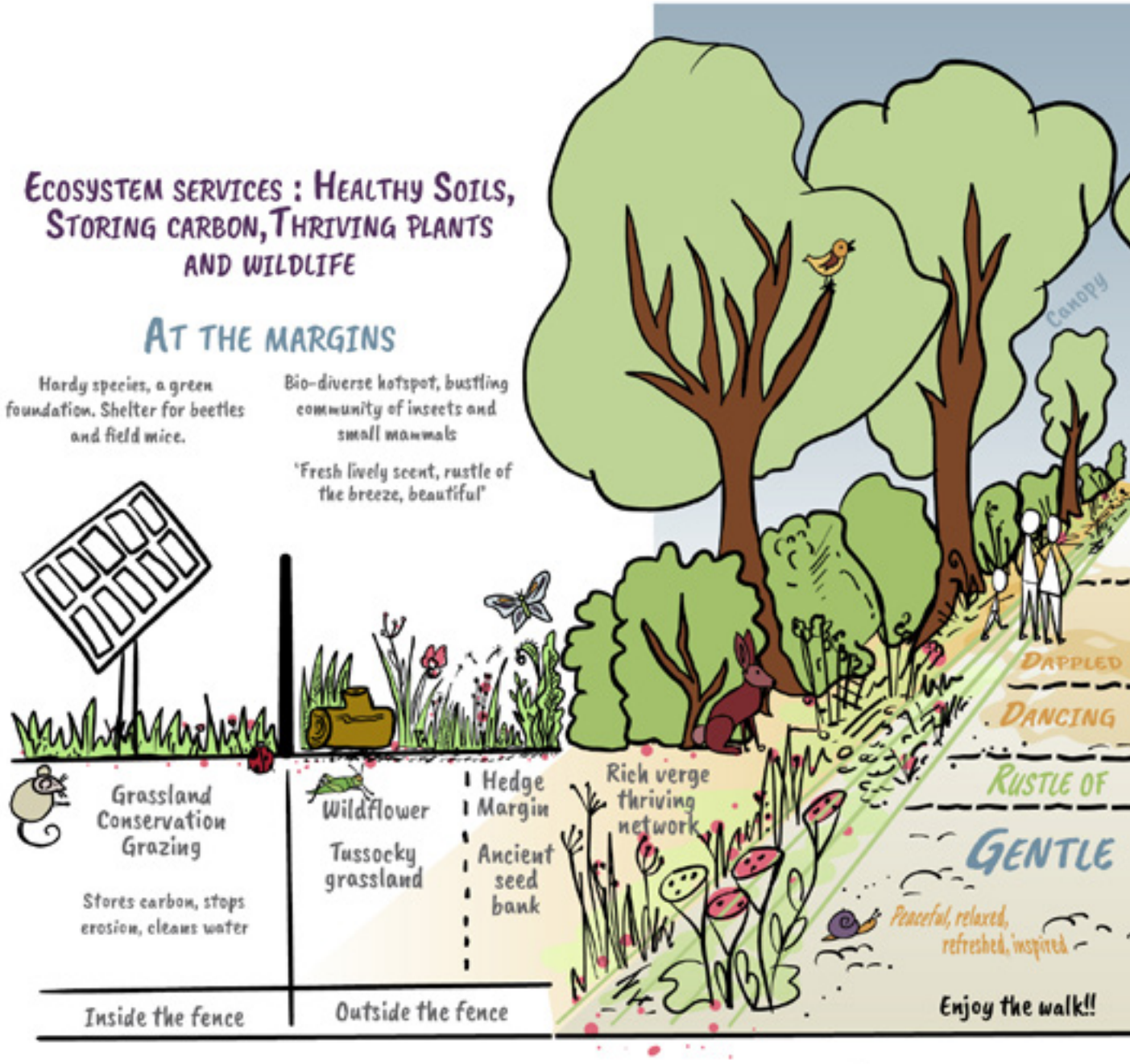
Figure 1.28: Encapsulating the strategies for Statutory Consultation

Broadening the margins
Between the hedgerows that line the droves and the areas set aside for solar PV panels, we would create ecologically rich margins, made up of a variety of habitats.

Outside the fence
Outside the fence, between the solar PV panels and the hedgerows and trees lining the droves, we would create "biodiversity hotspots". This would involve encouraging ancient seeds in the soil to grow and establishing new wildflower and tussocky grassland. This would attract pollinators, while log piles would provide shelter and nesting sites for various animals, thereby supporting a variety of plant and animal life.

Inside the fence
Inside the fence, where the solar PV panels would be located, we would establish expansive grassland. While not as biodiverse as the areas outside the fence, this grassland would still provide important biodiversity benefits. It would help improve soil health, store carbon, slow rainwater run-off and provide grazing for livestock.

Protecting the droves
As important routes through the Site, the droves would be safeguarded by buffer zones protecting the existing hedgerows and trees that define these routes. Along the droves, there would be minimal crossing points to areas of solar PV panels, helping to maintain the droves' ecological and recreational value.



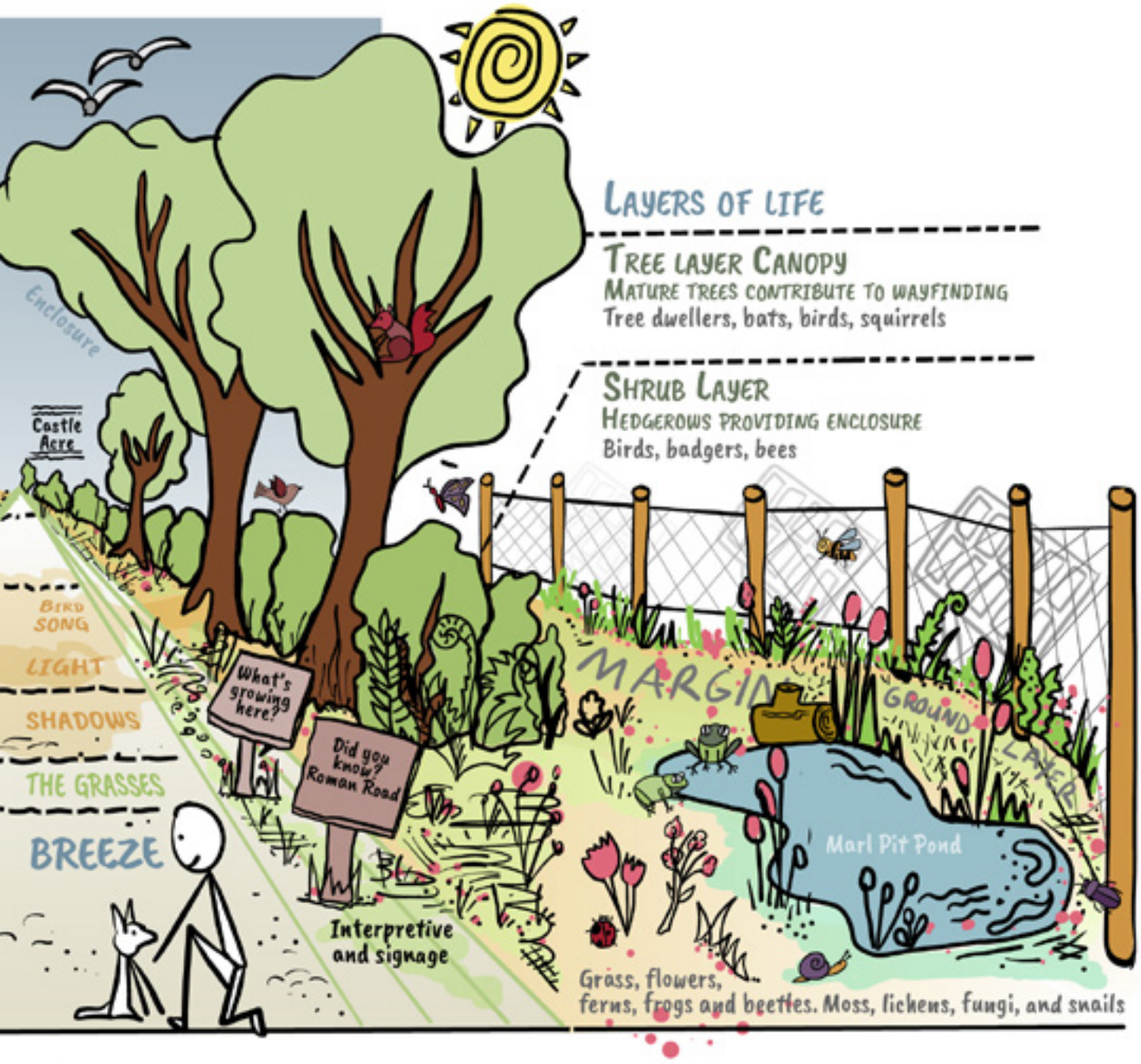
Strengthening the layers

Between the base of the hedgerows and the tops of the tree canopies, various layers would support a wide range of species throughout their lifecycles.

Mature hedgerow trees would be retained, and new trees would be planted replacing those lost over time. These trees would provide important habitats for wildlife, including bats, birds and squirrels, which would be central to the droves' character, and would act as natural waymarks in the landscape.

Below the tree canopy, a dense hedgerow or shrub layer would be established, and any gaps in the existing hedgerow would be filled. This layer would offer habitats for animals such as birds, badgers and bees.

At ground level, alongside grass and flowers, marl pits (extensively dug in the 18th century in Britain to extract clay that was then used to improve soil structure for crops) would be managed to encourage wildlife. This enhances the variety of habitats connected to the droves and supporting wildlife such as mosses, lichens, fungi, frogs, beetles and snails.



Section 7

7. Co-ordinate

7.1 Design Stage 3: Post Statutory Consultation up to DCO submission (July 2025 to October 2025)

7.1.1 This chapter summarises the design evolution of the Scheme shaped by the coordination of Statutory Consultation feedback and updated information provided as part of the environmental assessment process and technical testing. During this stage, the Concept Masterplan went through refinement to ensure design principles and comments made by consultees and the local community were considered and met, where practicable.

7.1.2 Additional information influencing the evolution of the design at this stage included but was not limited to: updated ecology surveys, refinement of the ecological mitigation strategy; noise modelling; technical studies relating to the grid connection infrastructure; and refinement of the access strategy.

7.1.3 The Concept Masterplan, shown on Figure 1.29, underpinned **ES Chapter 5: The Scheme [APP/6.1].**

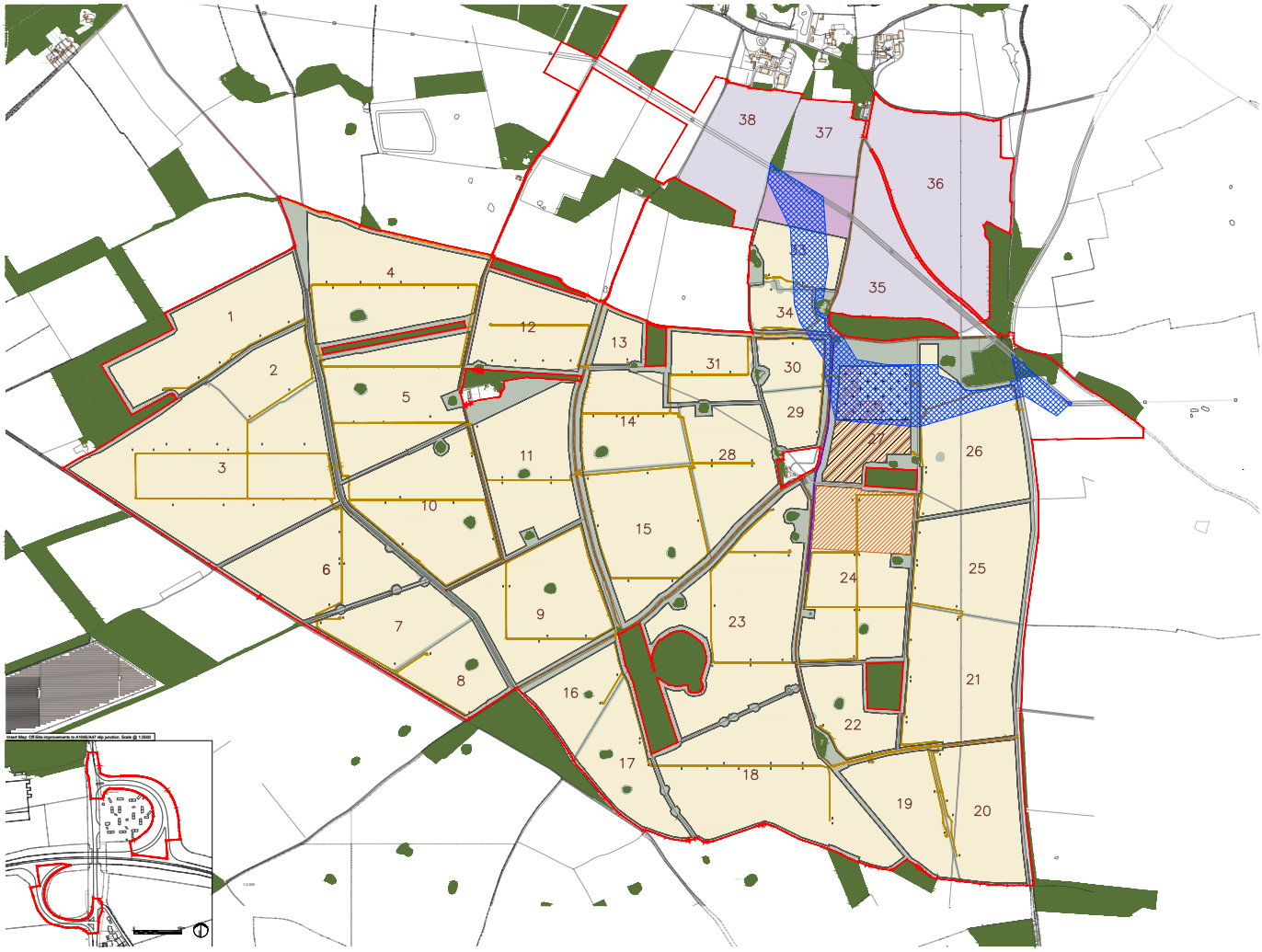


Figure 1.29: Stage 3 Concept Masterplan

Design Change Rationale

7.1.4 A summary of the key design changes, including the change to the Order limits, is provided below with reference to the relevant Project Principles that have guided the design.

Draft Order limits

7.1.5 Changes to the Order limits included the following:

- Removal of Field 32 to enable its continued use by the landowner
- Removal of woodland from the Order limits, other than where there may be works required to facilitate Grid Connection Infrastructure
- Removal of agricultural buildings (south of Field 29) to enable their continued use as part of the landowner's farm operation
- Inclusion of Fields 36, 37 and 38 for skylark and curlew mitigation, following updates to ecological surveys and landowner agreement of available land for mitigation
- Inclusion of land to the west of Field 38 to accommodate potential temporary working areas for grid connection infrastructure. To the east of the A1065 (and South Acre Road), the potential temporary working areas required for grid connection infrastructure was reduced; and
- Inclusion of access tracks between Low Road and Finger Hill Cottage, providing an alternative temporary access to the property if temporary closure to Petticoat Drove is required during construction; including additional land either side of the junction between Washpit Drove and Low Road to accommodate potential hedgerow removal, should this be required to ensure safe visibility for residents using the alternative route during temporary closures.

Siting Zones for Customer Substation, National Grid Substation and BESS

7.1.6 In response to further assessment, feedback from statutory consultees and members of the public, to reduce impacts of the Customer Substation and National Grid Substation infrastructure on landscape receptors and heritage assets to the north of the Site along the Nar Valley, the siting zones for the National Grid Substation, Customer Substation and BESS were removed from fields to the north of Batholomew's Hills Plantation and located to the south of the plantation. The siting zones for the National Grid Substation and the Customer Substation were restricted to Field 27 only, and the siting zone for BESS restricted to part of Field 27 and part of Field 24 (Principles 2.1, 2.5, 5.3).

7.1.7 This approach enabled the extent of infrastructure at the edge of the plateau and valley slopes to be limited and reduced the visibility of these elements from within the Nar Valley, as shown in the **ES Figure 6.5: Zone of Theoretical Visibility (DTM) [APP/6.3**].

7.1.8 Removing Customer Substation infrastructure and BESS from Field 26 and 35 also reduced effects on users of South Acre Road/Peddars Way, the A1065 and receptors further east (Principle 2.1, 2.8).

Areas for Solar PV Arrays

7.1.9 The majority of Solar PV Array areas remained unchanged, other than around the Site's north-eastern corner.

7.1.10 Solar PV Arrays were removed from Field 35 to reduce visibility and effects on heritage assets, allowing the field to accommodate skylark mitigation and be retained in agricultural use (Principles 2.5, 3.4). The extent of Solar PV Arrays was reduced within Field 33, set further back from South Acre to reduce visibility and effects on heritage assets and the sense of proximity to a solar farm for residents of the village (Principles 2.5, 2.7). Where Solar PV Arrays were removed from Field 33 this was replaced with an area of grassland habitat creation for curlew mitigation (Principles 3.1, 3.2, 3.4). The removal and reduction of Solar PV Arrays in these fields reduced the extent of development at the edge of the plateau, retaining the character of the arable landscape where its transitions to the valley slopes of the River Nar (Principle 2.1).

7.1.11 Solar PV Arrays (and Customer Substation, National Grid Substation and BESS infrastructure) was also reduced within Field 27, set back from the northern edge of Field 27 and Fincham Drove to accommodate an area for mitigation and enhancement, as described in further detail below at paragraph 7.1.2.11 (Principle 2.9).

Grid Connection Infrastructure

7.1.12 The area for Grid Connection Infrastructure was refined and reduced, responding to the siting of the National Grid Substation to the south of Batholomew's Hills Plantation within Field 27.

7.1.13 Applicant has developed a concept design that would divert both of the 400kV circuits along the proposed alignment of the new pylons so to allow for a double turn of both circuits into the National Grid Substation, located within Field 27 which is the Applicant's preferred design concept. The existing circuits cannot be 'teed' into the National Grid Substation as both of the existing circuits are three ended (Norwich – Walpole teed Necton). Network design therefore will not allow for additional teed circuits into the National Grid Substation. The Applicant has developed a solution that has allowed both overhead circuits to be connected directly into the National Grid Substation. This enhances the operational efficiency and resilience of the transmission network and delivers long term maintenance benefits (Principle 4.2), whilst also allowing for the decommissioning and removal of the existing section of overhead line, thereby reducing long term visual and environmental impacts on the local area (Principles 2.1, 2.2, 2.5).

View east along Fincham Drove on northern boundary of Field 27

7.1.14 During the course of engagement with NGET, the Applicant shared the evolving design and siting of the proposal which includes connection to the overhead line. Feedback was invited, and received whereby NGET confirmed that there was sufficient space to accommodate the new National Grid Substation. Further details can be found within the **Grid Connection Statement [APP/7.1]**. This solution would enable the decommissioning of up to five existing pylons. Both 400kV circuits would be diverted using the proposed pylons which would increase the distance between the Grid Connection Infrastructure and South Acre / Castle Acre, which would be a benefit of the Scheme (Principles 2.1, 2.5, 2.7). It would also result in the removal of a section of woodland oversailing on the existing OHL alignment in close proximity to where the OHLs cross over the A1065, allowing this area of woodland to grow naturally and remove the need for maintenance with regard to the oversailing OHLs (Principles 2.2, 7.2).

7.1.15 Whilst the Applicant has developed a concept design for a ‘double turn in’ which is its preferred approach, engagement with NGET is ongoing due to the Connection Reform process and 'in the event the Applicant's preferred approach is unable to progress, the Applicant has allowed flexibility. for a ‘single turn in’ where only the southern 400kV circuit (circuit 2) would be diverted into the National Grid Substation. In this scenario, the northern 400kV circuit (circuit 1) would remain on its existing alignment and the existing pylons would not be removed (Principle 4.2). The Environmental Statement has assessed this scenario; further information can be found in **ES Chapter 5: The Scheme [APP/6.1].**

7.1.16 The flexibility within the parameters set out within the **Design Principles, Parameters and Commitments [APP/5.8]** and the **Works Plan [APP/2.3]** allows for either a double turn in of both 400kV circuits or a single turn of one of the 400kV circuits into the National Grid Substation. This is to allow for flexibility at this stage whilst further technical design and configuration work is undertaken (Principle 4.2).

7.1.17 The potential temporary working areas for Grid Connection Infrastructure has been extended to allow for the potential restring of the transmission lines to the west beyond the point of diversion. The potential temporary working area allows for the working areas including pulling zones for the transmission cables, access tracks and laydown areas. This also includes a section of Low Road and Petticoat Road, which has been included within the Order limits, to allow for temporary residential access to Finger Hill Cabin and Keepers Cottage should Washpit Drove require temporary closure to allow for the erection of scaffolding and netting to facilitate the restringing of the transmission cables.

Existing agricultural access track

Areas for Mitigation and Enhancement

7.1.18 The majority of areas defined for mitigation and enhancement remained unchanged from Stage 2 design. Changes to the areas are as follows:

- Field 32, as noted above in relation to the changes to the Order limits, was removed from the area for mitigation and enhancement (being classified as Grade 1 and 2 agricultural land) to enable its continued use by the landowner and substituted with fields for skylark and curlew mitigation to the east and north-east. An additional benefit of the field's removal from the Scheme is to retain views across the field to the Nar valley landscape from Public Footpath South Acre RB2 (Principles 2.1, 2.9, 2.10).
- Additional areas for mitigation and enhancement were included at the northern, eastern and western edges of Field 27 in response to the location of Customer Substation, National Grid Substation and BESS, requiring infrastructure to be set back from Fincham Drove to address potential impacts on users of the Public Right of Way (Principle 2.9); to accommodate the potential need for an acoustic barrier, along the western edge of Field 27 and part of Field 24, as shown on the Concept Masterplan (Principle 2.9); to incorporate potential requirements for surface water attenuation at the foot of the slope, north of the National Grid Substation (Principles 3.3, 4.3); and incorporate planting around the Customer Substation and National Grid Substation infrastructure to limit its wider visual influence (Principles 2.1, 2.2); and

- Environmental offsets associated with Fincham Drove and Petticoat Drove (and respective Public Rights of Way South Acre RB6 and RB1) were increased from a total of approximately 30m to 50m, amplifying their role as key green infrastructure corridors running through the Site and reinforcing their legibility (Principles 2.2, 2.3, 2.9, 3.1).

Additional land to accommodate Skylark and Curlew Mitigation

7.1.19 Following updates to ecological surveys which recorded the presence of breeding Skylark and Curlew, approximately 80 hectares of land to the north of the Site was identified that is suitable for Skylark mitigation, and 8.8 hectares that is suitable for Curlew mitigation.

7.1.20 The land is proposed to be used only for the provision of suitable habitat to support the birds, whilst still allowing agricultural use in the case of the skylark plots (Principles 3.1, 3.2, 3.4, 7.3).

Access

7.1.21 Access locations shown off A1065 and crossings to Public Rights of way and River Road remained as per the Stage 2 Design, albeit small refinements were made to respond to topographical survey data, speed data and requirements for greater flexibility within the Scheme.

7.1.22 Additional access points and / or crossings were included as follows:

- The inclusion of a temporary access point on the eastern boundary of the A1065 to provide access to the area identified for grid connection infrastructure works. This allows flexibility in the construction stage to minimise potential effects on users of South Acre Road (Principle 2.8)

- An additional crossing to Petticoat Drove (PRoW South Acre RB) between Field 12 and 13 to provide resilience during all phase should one crossing point become impassible either for the Applicant or emergency services in the case of an emergency (Principle 5.11); and

- The crossing of River Road has been located further north by approximately 150m to reduce the amount of vegetation clearance required for the crossing visibility splays (Principle 2.2).

7.1.23 Internal access tracks were included within the Concept Masterplan, demonstrating use of proposed access points and crossings and existing access tracks, field access points and gaps within hedgerows, alongside indicative inverter locations, distributed to limit effects on the amenity of receptors including Keeper's Cottage and Public Rights of Way (Principles 2.7, 2.9).

7.1.24 The fencing strategy was amended to enable the landowner's continued use of the existing agricultural tracks during construction and operation, allowing access to woodland removed from the Order limits (Principle 7.2).

Green Infrastructure

7.1.25 The Green Infrastructure Parameter Plan was refined, as shown at Figure 1.30, and included within **Appendix 1 of the outline Landscape and Ecological Management Plan [APP/7.11]**. The refinement to the GI strategy included:

- A distinction between areas of open grassland and margins incorporating existing marl pits, ponds and tree groups; and areas of grassland under Solar PV Arrays (Principle 2.2)
- Inclusion of proposed woodland belts to the east and west of Field 27 to mitigate visual effects of Customer Substation and National Grid Substation infrastructure (Principles 2.2, 2.5, 2.8, 2.9, 3.1)
- Area for grassland, scrub, copse planting and attenuation within Field 27 and 26 (Principles 2.2, 2.5, 2.9, 3.1)
- Inclusion of areas for curlew and skylark mitigation (Principles 3.1, 3.2, 3.4, 7.3)
- Potential locations for interpretation boards within the area identified for publicly accessible amenity space; and along existing Public Rights of Way and proposed on-site Permissive Routes – demonstrating different facets of the Scheme, such as the role of the droves as historic routes and wildlife corridors (South Acre RB6), where views open up to Castle Acre and the Nar valley floor along Field 35 (South Acre RB7); and revealing the workings of the solar farm along the proposed permissive route in the southern part of the site (Principle 5.7); and
- Identification of permanent areas for Green Infrastructure required to mitigate the National Grid Substation (Principle 2.2).

Area for proposed grassland, scrub, copse and attenuation in Field 27

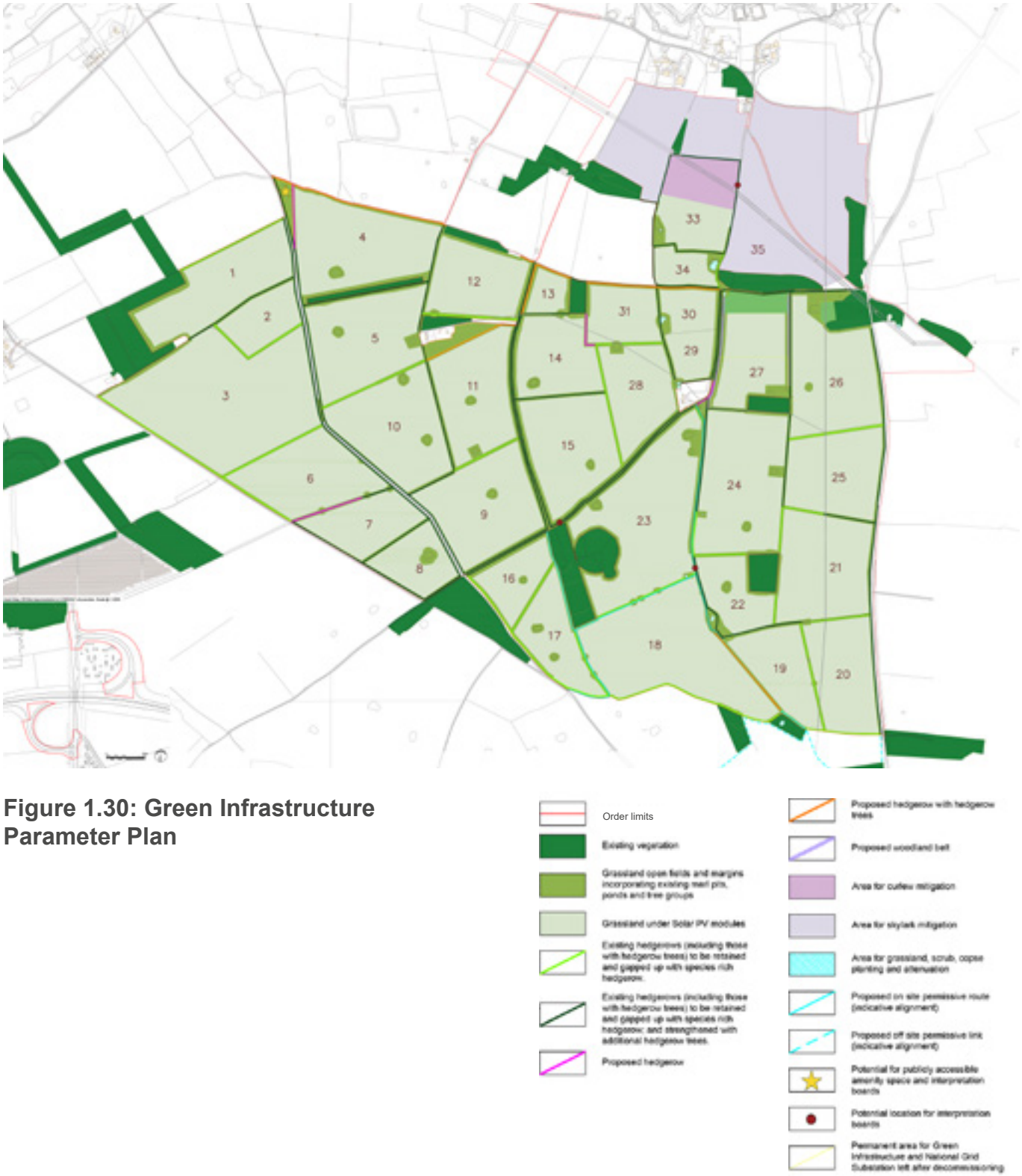


Figure 1.30: Green Infrastructure Parameter Plan

7.2 Design Stage 4:Targeted Consultation

7.2.1 Through September 2025, a targeted consultation was held to set out the changes made to the Order limits as described above, which are summarised below:

- **Update 1** – Refinement of BESS, Customer Substation and, National Grid Substation locations. The BESS, National Grid Substation, and Customer Substation are proposed within Fields 24 and 27, which have been identified as the most suitable locations. This included removing the second option for the National Grid Substation in Field 33
- **Update 2** – Removal of Field 32. Field 32 is no longer being considered for Solar PV Arrays or mitigation and has been removed from the Site; and
- **Update 3** – Refinement of indicative alignment of overhead line. To connect into the National Grid Substation, we will be required to carry out works to the existing overhead line and pylons. This will allow us to restring and divert the line and connect it safely into the new National Grid Substation
- **Change 1** – The inclusion of Fields 36, 37 and 38 to accommodate Skylark Curlew Mitigation. Approximately 80 hectares of land to the north of the Site that is suitable for Skylark mitigation, and 8.8 hectares that is suitable for Curlew mitigation was identified. This land is proposed to be used only for the provision of suitable habitat to support the birds, whilst still allowing agricultural use in the case of the skylark plots. No solar development is proposed in these fields
- **Change 2** - Western extension of the Order limits to the west of Field 38. Additional land was included to provide adequate space in which to safely carry out works to the existing overhead line
- **Changes 3 & 4** - Addition of land (Low Road and Petticoat Drove) for safe visibility and temporary alternative access to residential property. To safely carry out the western extent of the overhead line works (see Change 2), temporary closures to public rights of way and residential access along Washpit Drove and Petticoat Drove may be required. If this happens, alternative access to the affected residential property will be provided via a temporary route. Additional land was also included either side of the junction between Washpit Drove and Low Road to accommodate potential hedgerow removal, should this be required to ensure safe visibility for residents using the alternative route during temporary closures. Some hedges may need to be cut back for safety, and any affected hedgerows will be replanted, if required, once construction is complete.

7.2.2 The targeted consultation did not result in any further changes to the design of the Scheme.

Hedgerow replacement
along River Road

Section 8

8. Securing Good Design

8.1 Introduction

8.1.1 The DCO Application for the Scheme includes a draft **DCO [APP/3.1]** that will secure the design of the Scheme through various mechanisms, which are described below.

8.1.2 Schedule 1 of the **draft DCO [APP/3.1]** describes the authorised development as a set of numbered works. Article 3(2) of the **draft DCO [APP/3.1]** requires that the numbered works authorised by the made Order are located in the corresponding areas shown on the **Works Plan [APP/2.3]**. This secures the location and layout of the components of the Scheme design.

8.1.3 Schedule 2 of the **draft DCO [APP/3.1]** sets out the Requirements that the Scheme must comply with. Article 3(1) of the **draft DCO [APP/3.1]** states that consent for the Scheme is only given subject to compliance with these Requirements. Each Requirement sets out the details and documents that the Scheme must legally comply with.

8.1.4 With respect to detailed design, Requirement 5 of the **draft DCO [APP/3.1]** sets out that the development must be carried out in accordance with the relevant tables set out within **Design Principles, Parameters and Commitments [APP/5.8]** and relevant Control Documents as referenced within this section of the DAD. This approach is taken to ensure suitable flexibility in the design of the Scheme, so that the latest technology can be used, while ensuring that good design will be embedded in the final design and that the impacts of the Scheme will not differ from those set out in the **ES [APP/6.1 – 6.5].**

8.1.5 The documents and management plans that set out the Scheme's design commitments at this stage, and which will inform detailed documents secured by the Requirements in the **draft DCO [APP/3.1]**, are:

- **Design Principles, Parameters and Commitments [APP/5.8],** secured under Requirement 5 of the **draft DCO [APP/3.1]** sets out the Design Principles, parameters and commitments for the Scheme.
- **outline Construction Environmental Management Plan (oCEMP) [APP/7.6**] secured under Requirement 13 of the **draft DCO [APP/3.1]** details the measures that will be in place to minimise the environmental impact of the Scheme during construction.
- **outline Construction Traffic Management Plan (oCTMP) [APP/7.7]** secured under Requirement 15 of the **draft DCO [APP/3.1]** outlines the traffic management measures that will be implemented to ensure safety and minimise disruption from traffic during the construction of the Scheme.
- **outline Operational Environmental Management Plan (oOEMP) [APP/7.8]** secured under Requirement 14 of the **draft DCO [APP/3.1]** details the measures that will be in place to minimise the environmental impacts of the Scheme during operation.
- **outline Operational Traffic Management Plan (oOTMP) [APP/7.9]** secured under Requirement 8 of the **draft DCO [APP/3.1]** outlines the traffic management measures that will be implemented to ensure safety and minimise disruption from traffic during the operation of the Scheme.
- **outline Decommissioning Strategy (oDS) [APP/7.10]** secured under Requirement 20 of the **draft DCO [APP/3.1]** details the measures that will be in place to minimise the environmental impacts of the Scheme during decommissioning.
- **outline Landscape and Ecological Management Plan (oLEMP) [APP/7.11]** secured under Requirement 7 of the **draft DCO [APP/3.1]** provides a framework for the landscape strategy and ecological mitigation for the Scheme..
- **outline Public Right of Way and Permissive Path Management Plan (oPRoWPPMP) [APP/7.12]** secured under Requirement 16 of the **draft DCO [APP/3.1]** details how PRoW will be managed during the Scheme in terms of both safety and accessibility.

Example of Fixed South Facing Solar © Ben Osbourne Photography

- **outline Soil Management Plan (oSMP) [APP/7.13]** secured under Requirement 17 of the **draft DCO [APP/3.1]** sets out the good practice mitigation principles and procedures that will be applied to specific soil types for the handling, storage and reinstatement of soils used for the Scheme.
- **outline Battery Safety Management Plan (oBSMP) [APP/7.14]** secured under Requirement 6 of the **draft DCO [APP/3.1]**, sets out the safety and property protection fire safety risks associated with BESS. It demonstrates that the Scheme does not give rise to a significant increase in fire risk and risks can be addressed.
- **outline Employment, Skills and Supply Chain Strategy [APP/7.15]** secured under Requirement 18 of the **draft DCO [APP/3.1]** details the potential opportunities created by the Scheme for economic benefits, supply chain and employment.

8.1.6 These documents and management plans set out the design commitments and embedded mitigation the Scheme proposes, such as buffers, ecological and landscaping enhancement measures and location of infrastructure. These documents and management plans are referred to as 'outline' documents, and will be finalised post consent under the relevant requirements, and approved by the relevant planning authority. The requirements in the Draft DCO state that the detailed versions of these documents and management plans must be substantially in accordance with the outline documents and management plans.

8.1.7 The following section provides a summary of the operational design of the Scheme and demonstrates how it has responded to each of the Project Principles presented in Section 5 (Design Framework).

8.2 Decarbonisation & energy security

Principle 1.1: Reduce carbon emissions during all phases of the Scheme

8.2.1 The minimisation of carbon emissions throughout the Scheme lifecycle will be achieved through adherence to best practice guidelines in-place throughout the lifespan of the Scheme for all applicable aspects of construction (including maintenance and replacement), operation, and decommissioning. This includes:

- Implementing measures to decrease fuel use by maximising energy efficiencies, for example, to ensure all vehicles switch off engines when stationary and ensure vehicles are well maintained and conform to current emissions standards
- Promoting the use of sustainable fuels in construction vehicles, and where possible making use of electric or battery powered equipment where practicable
- Liaising with construction staff to minimise GHG emissions associated with their commute to the Site, including encouraging travel to the site via lower carbon modes of transport and sustainable travel, where practicable. Measures may include the provision of a shuttle bus and a car sharing scheme, identifying and communicating local bus connections and pedestrian and cycle access routes to/ from the Scheme to all construction staff, and providing appropriate facilities for the safe storage of cycles
- Using locally sourced and/or produced materials. The use of recycled materials where practicable
- Promoting the recycling of materials by segregating construction waste to be re-used and recycled where practical; and
- Regular planned maintenance of the Scheme will be conducted to optimise the efficiency of the Scheme infrastructure.

8.3 Environmentally led design

Principle 2.1: Respond to the character of the Site, informed by the Breckland Local Landscape Character Assessment.

8.3.1 The Applicant has developed the design of the Scheme to respond to the local character of the Site. This has formed part of the iterative design and EIA process and is assessed in **ES Chapter 6: Landscape and Visual [APP/6.2]**.

8.3.2 Opportunities to conserve and enhance the character of the landscape set out in the Breckland Landscape Character Assessment, were identified as follows:

- Retention of woodland blocks which provide an important focus in the landscape; and planting of additional woodland to reinforce existing farm woodlands (providing continuity of tree cover) whilst, overall, retaining the openness and historic field structure of the arable landscape
- Conservation of the well treed hedgerows concentrated on the network of rural roads and lanes, in addition to localised enclosed lanes, which impart a historic character to the landscape and provide evidence of the former landcover pattern. This extends to the droves as important routes (now restricted byways) that cross the Site
- Succession planting of new hedgerow trees and reinforcement of field boundary hedgerows, particularly where field boundaries are degraded or have been lost due to agricultural intensification, improving the integrity of the landscape and strengthening character
- Retention and conservation of mature / veteran trees which have significant landscape, biodiversity and amenity value
- Enhancement of field margins, improving habitat connectivity
- Consideration of the effect of tall or vertical structures on the landscape; and
- Opportunities to celebrate views to adjacent landscapes and character areas.

8.3.3 These opportunities have been embedded within and secured through measures set out in the **oLEMP [APP/7.11]** and the green infrastructure strategy set out at **Appendix 1 of the oLEMP [APP/7.11].**

8.3.4 The plateau associated with the Site has an enclosed character, contained by woodland, old hedgerows and mature trees; crossed by former droves. Landscape and Visual appraisals confirmed that this area has the capacity to accommodate solar infrastructure, where it can be integrated into the landscape, thereby helping to preserve the sensitivities of the Nar Valley. The character of the plateau would be reinforced by strengthening, reinstating and providing new hedgerows along field boundaries, lanes and roads and the routes of the former droves, reinforcing their legibility and improving ecological connectivity. Customer Substation and National Grid Substation infrastructure would be set against the backdrop or behind woodland associated with the Site (namely Bartholomew's Hills Plantation), such that taller elements of the Customer Substation and National Grid Substation become visually integrated. New woodland planting would be used sparingly, retaining the discernible field pattern of the plateau, but serving to further screen the Customer Substation and the National Grid Substation. The Grid Connection Infrastructure, including new pylons, would be located near existing grid infrastructure, its co-location with the Customer Substation and the National Grid Substation limiting environmental impacts extending across a wider area.

8.3.5 The contrast between the higher ground of the plateau, set at the edge of the River Nar valley, shaped a design strategy that drew from and reinforced the distinct character of both landscapes. To maintain and, where possible, enhance people's experience of the valley from the edge of the plateau, vistas would be maintained and directed to the valley floor by restricting the extent of new hedgerows and woodland and limiting the location of solar infrastructure where it would most impact views from within and across the valley corridor. The removal of Customer Substation, National Grid Substation, BESS, and Solar PV Arrays from Field 35, Field 32 and part of Field 33 helps preserve the transition between the plateau and valley landscapes. Opportunities would be taken to provide interpretation of the landscape of the Site and surroundings, locating information boards at key locations to allow an appreciation of the plateau features and views across the Nar Valley.

8.3.6 **The Design Principles, Parameters and Commitments [APP/5.8]** commits the Applicant to externally finish elements of the Scheme to be in keeping with the prevailing surrounding environment. The exact colour will be subject to manufacturer specifications and agreed with the relevant planning authority prior to construction but will be carefully selected in subdued, non-reflective tones to sit as discreetly as possible within the landscape.

Principle 2.2: Retain and enhance existing vegetation wherever possible to retain the fabric of the Site and aid integration of the Scheme into its context

8.3.7 The Applicant is committed to the retention of existing vegetation within the Order limits wherever reasonably possible to retain the fabric of the Site and aid assimilation of development into its context.

8.3.8 Existing vegetation will be protected by the provision of minimum offsets derived from a combination of guidance, good practice, precedence set by other NSIP solar schemes and professional judgement from technical specialists of the project team. They include minimum offsets associated with existing woodland, hedgerows, hedgerows with hedgerow trees, individual trees or tree groups, veteran or ancient trees and ponds. Some exceptions for hedgerows are provided where access points, access tracks and/or cable route crossings are required; however, these would be kept to a minimum and restored where practicable. The offsets are secured by the **Design Principles, Parameters and Commitments [APP/5.8]** and the spatial extents shown on the **Works Plan [APP/2.3].**

8.3.9 The detailed design of the BESS, Customer Substation and National Grid Substation, where practicable, will consider opportunities through the layout and configuration to integrate the development into its context, as set out within the **oLEMP [APP/7.11]**.

8.3.10 During the operation of the Scheme, existing vegetation within the Order limits will be managed and maintained in accordance with the **oLEMP [APP/7.11]**. This includes repairing and/or improving existing hedgerows adjoining areas for Solar PV Arrays, Customer Substation and National Grid Substation and BESS. Where appropriate, hedgerows would be allowed to grow out more fully and managed for visual screening and biodiversity benefits.

8.3.11 In addition to the retention of existing vegetation, the Scheme includes proposals for new planting as shown by the Green Infrastructure Parameters presented in Appendix 1 of the **oLEMP [APP/7.11]**. This would include approximately 4.3km of new hedgerow planting and 1.1 ha of new tree belt/ woodlands, which would exceed the amount removed during construction.

Principle 2.3: Support objectives of Norfolk's Green Infrastructure Strategy

8.3.12 BC has worked collectively with other Local Planning Authorities in Norfolk, seeking improved connectivity across the county and beyond. Building on the Norfolk Green Infrastructure mapping project undertaken in 2018, the Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (GIRAMS, 2021) was commissioned with the aim of mitigating the effects of increased recreational pressure on protected Habitats Sites (such as the Breckland SPA) due to housing growth, whilst meeting the GI & nature needs of residents and visitors to Norfolk. With growth predicted at Swaffham and its proximity to the Breckland SPA, the Site has the potential to contribute to the delivery of improved recreation connectivity between Swaffham and the Nar valley, diverting and deflecting residents and visitors away from the sensitive Habitats Sites and their rare species to avoid adverse effects on the integrity of these sites; and enhance ecological connectivity by acting as a stepping-stone habitat between key green infrastructure corridors. In addition, there are opportunities for wayfinding and educational material at existing locations and routes within the Site, to enhance the experience of passing through the landscape to the Nar valley.

8.3.13 Many proposals of the Scheme support the objectives of Norfolk's GI Strategy, and are captured by Principles 2.1, 2.2, 2.4, 2.6, 2.9, 3.1, and 5.11.

8.3.14 Further detail on how these principles are secured, as well as overlapping themes contained within the draft Local Nature Recovery Strategy, are set out in the **oLEMP [APP/7.11]**. The provision for new permissive paths is set out in the **Works Plan [APP/2.3]** and the **oPRoWPPMP [APP/7.12].**

Onsite hedgerow replanting

Principle 2.4: Improve soil health during the lifetime of the Scheme

8.3.15 The potential benefits for the Site's soil health and quality are set out in **ES Chapter 11: Soils and Agriculture [APP/6.2].** The assessment notes that the majority of land within the Order limits is currently arable land fertilised with inorganic fertiliser, as well as spread with farmyard manure and liquid slurry. Livestock (pigs, poultry and sheep) are kept on rotation.

8.3.16 The British Society of Soil Science identify that "significant long-term land use change (eg. conversion of arable land to grassland or woodland) has by far the biggest impact on soil organic carbon (SOC)", and that soils with a higher rate of SOC are less prone to runoff and erosion, have greater water infiltration and retention, increased biological activity and improved nutrient supply.

8.3.17 For the majority of land within the Order limits, the land will be sown to grassland and managed, including potentially by being grazed with sheep, for the duration of the Operational Phase. This is expected to have a significant benefit for soils, albeit these benefits would potentially be reduced or lost if arable farming activities recommence following decommissioning. Further information on how soils will be managed is set out within the **oSMP [APP/7.13]**.

8.3.18 The Applicant has committed to micro-siting of the integrated Conversion Units / 33kV Sub-distribution Switch Rooms and/or Standalon Conversion Units to avoid BMV where practicable, as set out within the **Design Principles, Parameters and Commitments [APP/5.8].**

Example of managed grassland underneath Solar PV Arrays

Principle 2.5: Respect setting of heritage assets along the Nar Valley

8.3.19 The Applicant has developed the design of the Scheme to respect the heritage assets along the Nar valley. This has formed part of the iterative design and EIA process and is assessed in **ES Chapter 8: Heritage [APP/6.2]**. A summary of how the design of the Scheme responds to local heritage assets is provided as follows and would be secured by the spatial extents shown on the **Works Plan [APP/2.3]** and the Green Infrastructure Parameters presented in Appendix 1 of the **oLEMP [APP/7.11]**.

8.3.20 To limit effects from heritage assets associated with the Nar Valley, including Castle Acre Castle and Castle Acre Priory, Solar PV Arrays, Customer Substation and National Grid Substation and BESS infrastructure would be omitted from Field 35 and partially omitted from Field 33 and 26. Field 35 would be remain in agricultural production, and part of Field 33 would be converted to grassland habitat, maintaining the agrarian setting of the Nar valley. Customer Substation and National Grid infrastructure would be located to the south of Bartholomew's Hills Plantation, restricted to Field 27. Woodland planting would be located along the western and eastern boundaries of Field 27 to further reduce visual effects. Planting including trees would be located within the northern parts of Field 26 to reduce views towards Solar PV Arrays.

8.3.21 The **oOEMP [APP/7.8]** requires the Applicant to consider at the detailed design stage, opportunities to better reveal or enhance the significance of the heritage assets affected.

Example of fencing and CCTV

Principle 2.6: Protect and support engagement and understanding of local heritage assets.

8.3.22 In addition to the measures included to respect the setting of heritage assets along the Nar Valley (Principle 2.5), the Applicant has developed measures to conserve non-designated heritage assets within the Site. This has formed part of the iterative design and EIA process and is assessed in **ES Chapter 8: Heritage [APP/6.2]**. A summary of how the design of the Scheme responds to local heritage assets is provided as follows and would be secured by the spatial extents shown on the **Works Plan [APP/2.3]** and the Green Infrastructure Parameters presented in Appendix 1 of the **oLEMP [APP/7.11]**.

8.3.23 For the purposes of the Scheme, archaeological remains (both those identified by the HER and those identified by archaeological fieldwork undertaken to inform the study) are considered as potential non-designated heritage assets. The Scheme has sought to protect these assets as follows:

- **Historic landscape:** Reinstatement of lost hedgerows, notably along the alignment of the potential permissive route between Field 18 and 19 and associated with Field 14; and the management and enhancement of existing hedgerows within the site that form part of its historic fabric
- **Buildings:** The retention of a concrete bunker associated with a World War II bombing decoy that would be incorporated within environmental buffers; and
- **Archaeological and Historical Context of the Site** (including underground archaeology and the current route of Fincham Drove): Provision for archaeological excavation where required.

8.3.24 The Scheme would provide education and interpretation of the Solar PV Site, as set out in Principle 5.7, that would include material to aid understanding of local heritage assets within the Site and beyond within the Nar Valley. This includes a potential area for publicly accessible amenity space, including information boards and seating, in the north-west corner of Field 4, which affords views out across the Nar Valley and associated heritage assets.

8.3.25 The **oOEMP [APP/7.8]** requires the Applicant to consider at the detailed design stage, opportunities to better reveal or enhance the significance of the heritage assets affected.

Principle 2.7: Respect residential amenity.

8.3.26 From the start of the Scheme, the Applicant developed the design of the Scheme to incorporate appropriate offsets to local settlements and dwellings. Decisions were taken as part of the Site selection process, where the landholding brought forward for the Scheme was located in an area with few settlements and individual dwellings.

8.3.27 The principle to respect residential amenity formed part of the iterative design and EIA process and is assessed in **ES Chapter 6: Landscape and Visual [APP/6.2], ES Appendix 6.7: Residential Visual Amenity Assessment (RVAA) [APP/6.4] and, ES Chapter 10: Noise and Vibration [APP/6.2]**.

8.3.28 As a result of the layout of the PV Arrays and commitment that Standalone Conversion Units and/ or Integrated Conversion Units will be located at least 250m away from residential properties, the Scheme would not impact the residential amenity of properties within South Acre (the closest village to the Site), nor would the residential amenity of individual dwellings near the Order limits, namely Keeper's Cottage and Fingerhill Cottage, to such an extent that any property would be rendered an unattractive place in which to live.

8.3.29 Offsets to local settlements and dwellings would be secured by the spatial extents shown on the **Works Plan [APP/2.3]**.

8.3.30 The **oOEMP [APP/7.8] and oLEMP [APP/7.11]** requires the Applicant to consider the residential amenity (of Keepers Cottage) at the detailed design stage of the PV Arrays, location of the Standalone Conversion Units, Integrated Conversion Units / 33kV Sub-distribution Switch Rooms, Fencing / lighting & Security, BESS layout and the Customer Substation and National Grid Substation.

Principle 2.8: Consider experience of people travelling along adjacent roads, including the A1065, South Acre Road, River Road and Narford Lane.

8.3.31 The Applicant has developed the design of the Scheme to reduce impacts on users of the road network and, where appropriate, enhance the experience of people using roads running adjacent to the Site. This has formed part of the iterative design and EIA process and includes provision of offsets and screening which would be secured by the spatial extents shown on the **Works Plan [APP/2.3]** and the Green Infrastructure Parameters presented in Appendix 1 of the **oLEMP [APP/7.11].**

8.3.32 The principle applied to local roads South Acre Road, River Road and Narford Lane is to minimize their disruption during construction and operation and limit vegetation/ hedgerow removal and reinstatement. No access to the Scheme would be required off Narford Lane; a single crossing to River Road would be required to gain access to Solar PV Arrays west of the road; and one access point would be required off South Acre Road which would be temporary to facilitate construction of the Grid Connection Infrastructure. Low Road is also identified as a temporary point of access during construction for the provision of an alternative access to Finger Hill Cabin and Keepers Cottage. This access will not be used for construction traffic, which will be routed internally through the Site from the A1065.

8.3.33 The principle applied to A1065 is to locate primary points of access to the Site for construction and operation at or adjacent to existing field accesses, and to propose T-junction arrangements to limit impacts to the character of the road.

8.3.34 A general principle is applied to ensure the rural character of all these roads is retained and enhanced where practicable to do so. Hedgerows mark the roadsides and where they coincide with the Site, the hedgerows are offset by a minimum of 8m, and where the hedgerows include hedgerow trees they are offset by a minimum of 10m. Where hedgerows are in poor condition with gaps, particularly along parts of the A1065, these are reinstated with hedgerows and hedgerow trees, serving to limit views of Solar PV Arrays and enhance the enclosed rural character of the roads.

8.3.35 Advanced planting during the winter of 2025/2026 will take place along the eastern boundary of the A1065 and around the perimeter of Field 27. The advanced planting will gap up the existing hedgerows and allow six years growth prior to the start of the construction period.

8.3.36 An assessment of potential effects on local road users is set out within **ES Chapter 6: Landscape and Visual [APP/6.2].**

Principle 2.9: Consider experience of people using the Public Rights of Way

8.3.37 Mitigation measures are proposed to minimise the level of visual change for PRoW users and ensure that PRoWs can continue to be used in a similar manner as pre-development of the Site. This included the following:

- Minimum 15m offset to Solar PV Arrays (including security fencing) from all PRoW
- Protecting the droves: As important routes through the Site, the droves would be safeguarded by buffer zones protecting the existing hedgerows and trees that define these routes. Along Fincham Drove and Petticoat Drove, there would be a maximum of two crossing points per drove, helping to maintain the droves' ecological and recreational value
- Offsets associated with Fincham Drove and Petticoat Drove (and respective Public Rights of Way South Acre RB6 and RB1) were increased, creating 50m wide routes through the Site, amplifying their role as key green infrastructure corridors and reinforcing their legibility
- Where South Acre RB6 (associated with Fincham Drove) passes to the west and north of the Customer Substation and National Grid Substation and BESS infrastructure, additional mitigation measures are proposed which include the inclusion of a noise barrier along the western edge of Field 27 and part of Field 24, the inclusion of a tree belt along the western boundary of Field 27 to screen taller elements of Customer Substation and National Grid Substation infrastructure; and the inclusion of an area for additional planting to the north of National Grid Substation in Field 27, ensuring infrastructure is back from Fincham Drove
- A general strategy for the strengthening and gapping up of hedgerows along PRoW. Proposals for new hedgerow with hedgerow trees to the south of the east-west Public Right of Way (South Acre RB2), also the route of the Castle Acre circular walk, to aid visual screening of solar structure, whilst retaining views northwards to the Nar Valley where gaps in existing hedgerows persist
- Limiting crossings of all on-site Public Rights of Way to reduce disruption of their use during construction and operation
- No cable runs or construction access along the Droves; and
- A minimum of a 15m offset from Standalone Conversion Units and Integrated Conversion Units / 33kV Sub-distribution Switch Rooms to PRoWs.

8.3.38 These offsets and mitigation measures are secured by the **Design Principles, Parameters and Commitments [APP/5.8]**, the spatial extents shown on the **Works Plan [APP/2.3], the oOEMP [APP/7.8] and the oLEMP [APP/7.11].**

8.3.39 The **oOEMP [APP/7.8]** and the **oPRoWPPMP [APP/7.12]** requires the Applicant at the detailed design stage to further consider the experience of people using the Public Rights of Way with respect to**:**

- layout of the PV Arrays within the individual fields
- the location of Standalone Conversion Units and Integrated Conversion Units / 33kV Sub-distribution Switch Rooms
- the alignment of fencing
- the final location of the BESS Compound and layout of the BESS Containers; and
- the final location of the Customer Substation layout the final location of the National Grid Substation layout.

Principle 2.10: Retain fields comprising entirely Grade 1 and fields comprising entirely of Grade 1 and 2 in agricultural use where practicable

8.3.40 Following ALC surveys, it was revealed that no fields proposed for Solar PV Arrays within the Order limits comprised of entirely Grade 1 land. One field (Field 32) was surveyed as entirely Grade 1 and 2. During stage 2 design Field 32 was identified as an area for mitigation and enhancement, and at Stage 3 it was removed from the Order limits to enable its continued agricultural use by the landowner.

8.4 Biodiversity net gain & nature recovery

Principle 3.1: Integrate the Scheme into the local environment and allow the movement of wildlife through the Site.

8.4.1 The Applicant has developed the design of the Scheme to create a mosaic of habitats in keeping with the character of the local environment to support a range of species and improve ecological connectivity within and through the Site. **ES Chapter 7: Ecology and Biodiversity [APP/6.2]** sets out the embedded mitigation measures that have been incorporated into the Scheme's design, and concludes that there is anticipated to be an overall significant beneficial effect due to the Site's Green Infrastructure proposals, secured by the **oLEMP [APP/7.11]**.

8.4.2 The Scheme has been designed to incorporate the retention of valuable habitats and ecological features, including those identified to be of importance for protected species. This would be achieved by implementing appropriate environmental offsets from onsite features, which would remain in-situ and undeveloped for the lifetime of the Scheme. The offsets would create a network of connected wildlife corridors across the Order limits, ranging from a minimum width of 16m (associated with hedgerows) up to 50m associated with the droves.

8.4.3 The corridors would include the creation of new grassland margins, tree belts and hedgerows providing new habitat for invertebrates, reptiles, amphibians, small mammals and birds. The corridors would also incorporate existing marl pits, ponds and tree groups, expanding the variety of habitats connected to the corridors and improving their ecological value.

8.4.4 The Applicant has committed to design fences to integrate with the local environment, allow for the movement of wildlife and meet the functional requirements of the Scheme. This is set out in the **oLEMP [APP/7.11]**. The fencing would be designed to permit the passage of wildlife, either through a clearance at ground level or via mammal gates, and would not be constructed through existing hedgerows wherever practicable. Perimeter fencing around the Solar PV Arrays would likely comprise wooden post and wire mesh fencing to minimise visual impact on the local environment.

8.4.5 Perimeter fencing around other elements of the Scheme, such as the National Grid Substation and Customer Substation and BESS, would comprise metal palisade fencing or metal mesh with pulse monitoring to meet the safety and security requirements.

Principle 3.2: Review and incorporate initiatives set out in the Local Nature Recovery Strategy where practicable

8.4.6 The draft Norfolk Local Nature Recovery Strategy (LNRS) was published by NCC for public consultation between April and June 2025, with final publication to Defra anticipated in Autumn 2025.

8.4.7 The aim of LNRS is to provide information in relation to opportunities and priorities for nature recovery and restoration across the associated LNRS area, including the production of a local habitat map showing the location of key habitats for nature recovery actions and a written statement of biodiversity priorities for the area.

8.4.8 The draft LNRS principles, where appropriate, have informed the approach to biodiversity enhancements across the Site. The **oLEMP [APP/7.11]** sets out specific strategies and priorities identified in the draft LNRS, of relevance to the Site, and how these have been incorporated into the Scheme. Once finalised, the LNRS will be reviewed and will inform future detailed Landscape and Ecology Management Plans.

Example of a mammal gate

Principe 3.3: Reduce the impact of water runoff on the Nar Valley

8.4.9 As set out within **ES Chapter 12: Water Resources [APP/6.2]**, the River Nar SSSI is hydrologically linked to the Site via chalk aquifer baseflow and near-surface water supplies which drain into the River Nar SSSI, with the main source of leached nitrate within the River Nar SSSI arising from agricultural pollution. The Site supports a number of individual ditches, of which all but one was recorded to be dry at the time of initial survey, however these do not appear to represent a connected network leading to the River Nar. Accordingly, no potential surface water flow pathways to the River Nar SSSI are present, and rainwater is anticipated to infiltrate rapidly rather than generate substantial run-off.

8.4.10 In addition, there would be the creation of expansive areas of grassland associated with the Solar PV Arrays areas, which would likely decrease surface water runoff rates. Furthermore, the cessation of intensive arable production would result in reduced physical disturbance through lack of ploughing, seeding and harvesting of crops and reduction in application of pesticides (including insecticides and herbicides) along with reduced nutrient input due to removal of fertiliser which would likely result in increased ecological diversity and reduced pollution and leaching to offsite areas and transferring into the wider hydrological catchment.

8.4.11 Measures to manage surface water runoff are outlined in the **oCEMP [APP/7.6] and oOEMP [APP/7.8]**.

Principle 3.4: Deliver a Biodiversity Net Gain of at least 10%

8.4.12 The combination of measures detailed in the **oLEMP [APP/7.11]** results in the Scheme delivering biodiversity net gains in habitat and hedgerow units of at least 10%. This has been assessed through the **Biodiversity Net Gain Report [APP/7.4]** and is based on the Department for Environment, Food and Rural Affairs (DEFRA) Biodiversity Metric **[REF 14]**. Updates to the BNG calculation will be undertaken as part of the detailed design and LEMP(s) to ensure a minimum of 10% BNG is delivered.

Principle 3.5: Engage with Westacre Estate to explore opportunities to compliment rewilding project objectives

8.4.13 Consultation was undertaken with Westacre Estate during the early information gathering stage of the Scheme to understand the ambitions of the rewilding project and determine whether the Scheme could complement their objectives to kick start nature recover in the region.

8.4.14 Whilst the Scheme would not increase areas of rewilded farmland, it can serve to improve ecological connections between the Nar valley and new and improved on-site habitats. As a result of consultation with the estate, Green Infrastructure corridors along the droves were increased to amplify their ecological connectivity.

Example of tree /scrub planting and habitat enhancement of field margins

8.5 Design flexibility

Principle 4.1: Design for resilience and adaptation to future climate change

8.5.1 One of the major risks posed to new developments regarding climate change is flood risk. During the site selection process, the Applicant considered the Site on that basis that fluvial flood risk across the whole Site is considered to be 'very low'. Small areas of surface water flood risk have been avoided and Customer Substation, National Grid Substation and BESS infrastructure would be situated away from areas of flood risk. The Applicant has committed that Integrated Conversion Units / 33kV Sub-distribution Switch Rooms and Standalone Conversion Units will not be located within areas of surface water flooding, as set out in the **oOEMP [APP/7.8]**. Further information on the extent of design measures implemented to minimise flood risk can be found in **ES Appendix 12.2: Flood Risk Assessment [APP/6.4]**.

8.5.2 Proposed planting will also be cognisant of future climate change and species that are drought tolerant and/or require relatively less watering will be favoured, as set in the **oLEMP [APP/7.11].**

Principle 4.2: Provide flexibility in design parameters to allow for technological advancement to maximise energy production

8.5.3 The DCO seeks consent for the spatial extents, design parameters, management measures and commitments for the Scheme, which have been informed by good design, consultation and environmental assessments. This approach has set the design envelope for the detailed design. The final selection of the component parts of the Scheme will be made at the detailed design stage, the details of which will be submitted to the relevant authorities in accordance with Requirement 5 of the **draft DCO [APP/3.1]**. This approach allows for technological advancement between the point of DCO Application and construction to be incorporated within the Scheme which will optimize generation and export capacity of the Scheme.

Principle 4.3: Ensure the Scheme is resilient to flooding and does not increase flooding elsewhere

8.5.4 An outline Surface Water Drainage Strategy (which forms part the **ES Appendix 12.2, Flood Risk Assessment [APP/6.4]**) sets out that all surface water ultimately drains to an infiltration basin via a piped network and tank, the details of which are secured within the **oOEMP [APP/7.8]**. The tank would be dual purpose, to provide surface water attenuation for the BESS, Customer Substation and National Grid Substation and provide sufficient capacity for fire suppression water in the event of a fire. This will ensure flood risk is not exacerbated as a result of the Scheme. The **oCEMP [APP/7.6]** requires the Applicant to produce a detailed Surface Water Drainage Strategy prior to construction

8.5.5 In addition, grassland and other habitats associated with Solar PV Site and areas for mitigation would act to bind soils, slow surface water and increase water quality.

8.5.6 The **oOEMP [APP/7.8]** commits the Applicant to locate elements of the Scheme outside areas of surface water flooding along with further measures including design standards for Sustainable Urban Drainage Systems for the Scheme at the detailed design stage.

Example of establish of grassland to slow surface water runoff

8.6 Social value & community benefits

Principle 5.1: Support the objectives set out in the Future Breckland programme

8.6.1 The Future Breckland programme sets out a comprehensive set of plans, co-designed with residents, businesses/ public sector agencies and town council partners, to transition Breckland for the future. This has informed measures set out within the **outline Employment, Skills and Supply Chain Strategy (oESSCS) [APP/7.15].**

Principle 5.2: Provide opportunities to boost local and regional economies

8.6.2 The Applicant has an established record of adding legacy value through supply chains and has committed to promoting the delivery of economic benefits generated by the Scheme to residents and business. This includes opening up opportunities for enhanced business growth and productivity through winning contracts on the Scheme and catalysing increased capabilities and specialisms in green construction and manufacturing across Norfolk. This is set out within the **oESSCS [APP/7.15]** and would likely include the following:

8.6.3 Due to the Scheme's nationally significant scale, it will create a considerable number of employment and economic opportunities during construction. These will be a result of direct construction-sector employment, indirect uplifts to supply chains for site equipment, machinery and related skills such as earth working and security, and through induced spending in the wider economy.

8.6.4 The Scheme will support a range of supply chain opportunities to local businesses. It is expected that the Scheme will use the local supply chain to source some materials and components, create partnerships between suppliers, manufacturers, and distributors, and as such will stimulate economic activity within the local area.

Principle 5.2: Provide opportunities to boost local and regional economies

Contined

8.6.5 Apprenticeships will be used as a tool to both address skill shortages and provide local residents with pathways into meaningful employment, representing an opportunity to build on existing apprenticeship strength while helping address local gaps. The Applicant will work with local further and higher education providers, as well as established initiatives such as Apprenticeships Norfolk, Breckland Skills Assembly and Careers Hub, to support the design and delivery of apprenticeships. Apprenticeship opportunities will be promoted throughout construction and operation, aligned with the Scheme's skills needs.

8.6.6 The Applicant will also consider other partnerships to support the training of employees and workers on the Scheme. Promotion of transferable skillsets shall be explored by the Applicant where practicable to aid workers displaced by the Scheme to transition to adjacent or similar careers, this may include helping agricultural workers transition to land management and site maintenance on the Scheme.

8.6.7 The Applicant will explore collaboration with FE colleges (e.g., College of West Anglia, City College Norwich, and East Coast College (Yarmouth)) to expand capacity in green skills, including potential short courses in solar installation and renewable energy construction. This would upskill individuals, enhance career prospects and employment opportunities

8.6.8 The Applicant will explore opportunities to work with schools, colleges and local authorities to deliver outreach programmes on renewable energy and STEM careers, including talks, curriculum-linked workshops, and participation in existing initiatives such as the Breckland Skills Assembly and the King’s Lynn & West Norfolk and Breckland Boost Programmes.

8.6.9 The Applicant will work with established local networks to support recruitment for the Scheme, beginning with Breckland. This will include engaging with BC’s Skills Service and other relevant local initiatives.

Principle 5.3: Engage openly, transparently and meaningfully with stakeholders, using feedback to inform the Scheme

8.6.10 The Applicant has engaged widely on the Scheme to ensure that landowners, the local community and stakeholders have been able to engage with the design of the project. This has included formal consultation, focused workshops with residents, site visits, and technical meetings with statutory consultees comprising: Breckland Council; Norfolk County Council; Relevant Parish Councils; Historic England; Natural England; Environment Agency; National Highways; Norfolk Wildlife Trust; and Norfolk Fire and Rescue.

8.6.11 Formal consultation included non-statutory, statutory and targeted phases of consultation to provide consultees with the opportunity to understand and share feedback on the emerging proposals. At each phase of consultation, the Applicant ensured that a range of engagement techniques were used, that materials were available in different formats and at appropriate levels and that the consultation was widely publicised. The Applicant has had regard to responses received to consultation in finalising the Scheme. These changes, along with details of the ways in which the Applicant has complied with legislation, guidance and advice notes on pre-application consultation are explained in the **Consultation Report [APP/5.1]**.

8.6.12 The Applicant has also committed to continue to engage with High Grove during the detailed design stage of the Scheme as set out within **Design Principles, Parameters and Commitments [APP/5.8].**

Principle 5.4: Identify opportunities for wider community benefits in consultation with local stakeholders

8.6.13 The Applicant is committed to providing benefits to the local community that respond to the policies in NPS EN-1 and EN-3 in relation to green infrastructure, open space or recreational spaces, permissive paths and public rights of way, and go beyond the construction and operation of a solar farm for energy generation. These benefits have been identified through consultation and include proposed enhancements and improvements to the local footpath network, 3.5km of new permissive paths and an area identified for publicly accessible amenity space at the edge of the plateau. The amenity space is secured via the **oLEMP [APP/7.11]**.

Principle 5.5: Behave as a considerate neighbour through all phases of the project

8.6.14 Measures which ensure this principle is appropriately implemented are included and secured in the **oCEMP [APP/7.6], oDS [APP/7.10], oOEMP [APP/7.8], and oCTMP [APP/7.7]** which support the DCO Application.

Principle 5.6: Provide clear lines of communication between the developer and the local community

8.6.15 In addition to the Pre-Application consultation undertaken by the Applicant, should the Scheme be granted consent, a Consultation Liaison Manager (CLM) would be established prior to construction commencing, and last through the construction and operational phase of the Scheme. This would provide a forum for discussion throughout the construction period, to act as a point of contact should there be any queries outside of the forum.

8.6.16 Duringlong-term general operation and maintenance activities, a full-time member of the Scheme's operation and maintenance team should also be in dedicated 'community contact' position whereby they are responsible for monitoring community interaction to ensure community concerns are heard, responded to and suitably addressed throughout the duration of the Scheme's operation and maintenance phase. Details of the Community Liaison Manager within the operation and maintenance team should be made available to members of the public through elected representatives or online, and kept up-to-date at all times. The role of the CLM is secured by the **oCEMP [APP/7.6] and oOEMP [APP/7.8].**

Principe 5.7: Provide education and interpretation of the Scheme and Site

8.6.17 The Scheme would be designed to provide education and interpretation of the solar farm site as set out within the **oLEMP [APP/7.11]**. Opportunities for the local community to engage with and learn about the natural environment will be provided. This will include the provision of informal, low-key interpretation boards at appropriate, strategic points across the Order limits that would allow the community to learn and engage with the local history of the Site and Nar Valley, and the Site's ecology. Information will also be provided on the solar farm, climate change and the benefits of renewable energy.

Principle 5.8: Collaborate with High Grove Solar Farm

8.6.18 The Applicant has continually engaged with the applicant of the High Grove Solar Farm during the pre-application stage and has committed to engage with them post application should the Scheme be granted consent as set out in the **oCEMP [APP/7.6], oLEMP [APP/7.11], and oCTMP [APP/7.7].**

Principle 5.9: Route construction away from local villages and Swaffham town centre

8.6.19 An overarching strategy was devised to take access from the A1065 and move construction and operational traffic east-west through the Site, avoiding the use of rural lanes and directing traffic away from local villages and Swaffham town centre.

8.6.20 The routes to the Scheme have been identified through a review of the Local Road Network (LRN) to identify suitable locations in highway safety terms, including being sufficient to accommodate HGVs and the provision of appropriate visibility splays. The routes to the Scheme will be secured by way of the **oCTMP [APP/7.7]**.

8.6.21 The strategy includes the use of internal construction compounds for the Scheme where deliveries can be made from the strategic road network, directly from the A1065. From the compounds, deliveries will be distributed out via smaller, local vehicles to the area of works where possible. The construction compound locations are presented on the **Works Plan [APP/2.3]** and the strategy for consolidation is detailed in the **oCTMP [APP/7.7].**

Principle 5.10: Retain all PRoWs on the existing alignment during the operational phase

8.6.22 The Applicant has developed the design of the Scheme to retain all existing PRoW within the Order limits in their existing alignment during operation and secured a minimum 15m offset from the PRoW to the fencing as set out on the **Works Plan [APP/2.3]** and **Design Principles, Parameters and Commitments [APP/5.8]**. Further information on how the design of the Scheme would respond to existing PRoW is provided in Principles 2.9 and 5.11 and within the **oPRoWPPMP [APP/7.12].**

Principle 5.11: Improve connectivity and accessibility through the Site.

8.6.23 The Applicant has developed the design of the Scheme to improve connectivity and accessibility through the Site and contribute to the delivery of objectives set out in Norfolk's Green Infrastructure Strategy.

8.6.24 Approximately 3.5km of permissive paths are proposed, located between the Site's south-eastern boundary and Fincham Drove (PRoW South Acre RB6) aligned along historic routes and field boundaries. The alignment of the permissive routes is secured by the Works Plan [APP/2.3] along with the management requirements within the **oPRoWPPMP [APP/7.12]**. Consultation was undertaken with members of the High Grove Solar project team to provide additional off-site permissive routes between the Site and existing Public Rights of Way at the edge of Swaffham (Swaffham FP13) but should these routes not come forward, then the on-site permissive routes link to West Acre Road, part of the Rebellion Way cycle route that connects with Swaffham.

8.6.25 All paths would be managed in accordance with the **oPRoWPPMP [APP/7.12].**

8.7 Efficient infrastructure & ethical supply chain

Principle 6.1: Optimise generation and export capacity of the Scheme within the constraints of the Site to make the most efficient use of land and available grid connection.

8.7.1 The Applicant has developed the design of the Scheme to optimize the generation and export capacity of the Scheme within the constraints of the Site. This is needed to help meet the urgent need for home grown, secure, renewable energy that is required by Government policy to address climate change and energy security. **The Statement of Need [APP/5.4]**, which supports the DCO Application, provides further detail on the need for the Scheme. Optimisation of the design has included the siting of the Scheme to make use of existing and available grid infrastructure, incorporation of BESS technology to provide grid balancing services, and allowance for future technological innovation and improvements within the provisions of the **draft DCO [APP/3.1]**.

8.7.2 The Scheme, including Grid Connection Infrastructure & land for Skylark and Curlew mitigation, equates to an output of approximately 1MW per 3.4 acres which represents an efficient use of the land for solar and associated infrastructure within the range identified at paragraph 2.10.17 of NPS EN-3. **The ES [APP/6.1-6.5]** provides a detailed assessment of the constraints of the Site and provides detail of the embedded mitigation to reduce the impacts of the Scheme.

8.8 Sustainability, durability & reversibility

Principle 7.1: Prioritise sustainable resource management and techniques during all phases of the Scheme

8.8.1 Measures which ensure this principle is appropriately implemented can be found throughout multiple additional documents submitted in support of the DCO Application, including the **oCEMP [APP/7.6], oDS [APP/7.10], and oOEMP [APP/7.8].**

Principle 7.2: Allow existing woodland blocks to continue to be managed sustainably

8.8.2 The Green Infrastructure Strategy includes information on the fencing alignments to ensure that key movement corridors linking woodland blocks within the Site would be retained as movement corridors for wildlife and provide access, enabling existing woodland blocks to continue to be managed sustainably.

8.8.3 The **oCEMP [APP/7.6] and oLEMP [APP/7.11]** commit the Applicant to allow for the landowner's continued use of existing agricultural access tracks during construction and operation, allowing access to woodland.

Principle 7.3: Allow for dual use of land where possible

8.8.4 Dual use of land may be possible where Solar PV Arrays are proposed by allowing low intensity grazing to be employed throughout the year, in line with the ecological objectives of the Scheme. With a low enough stocking density to ensure a varied sward establishes, however, a diverse grassland can still develop under this management, which will benefit birds and invertebrates.

8.8.5 The **oLEMP [APP/7.11]** sets out appropriate management prescriptions that could apply to all areas of the Site where Solar PV Arrays are proposed.

Establishment of grassland beneath Solar PV Arrays allows for grazing

Section 9

9. Conclusion

9.8.1 This DAD demonstrates how the Scheme has been shaped by, and will be delivered, taking into account the following:

- The principles of good design set out in the NSIPs: Advice on Good Design (set out in Annex A of this DAD)Policy requirements of NPS EN-1, EN-3 and EN-5, local planning policy and design guidance (set out in section 2,2 of this DAD)
- The project team brief, set out in Section 3.1 of this DAD, to sensitively design and deliver the construction, operation and maintenance, and decommissioning of a solar PV electricity generating station with a total capacity exceeding 50 megawatts (MW) and 'associated development' including BESS, Customer Substation and National Grid Substation, grid connection infrastructure and other infrastructure, taking account of the local and surrounding context and applying the mitigation hierarchy, to provide urgently needed renewable and low carbon energy; and
- The Design Vision (set out in Section 5.2 of this DAD) and the Design Principles which include the IGP company-wide global design principles and the Project Principles for the Scheme.

9.8.2 This DAD also demonstrates how the design of the Scheme has evolved in response to stakeholder engagement, consultation feedback, and technical studies, and how the Design Vision and Design Principles have guided the design to minimise adverse impacts, enhance opportunities, and balance flexibility and certainty in the DCO Application.

9.8.3 Through carefully developing the design in response to the constraints and opportunities identified within the local area (see Section 6 and 7 of this DAD), the Applicant has achieved a design that responds positively to place, minimises impacts on heritage, delivers ecological and social benefits, avoids or minimises negative impacts as far as possible and makes valuable enhancements to the local area.

9.8.4 The securing mechanisms are set out, ensuring that the good Design Principles that have influenced the design will be delivered.

9.8.5 **The Planning Statement [APP/5.5]** and **Policy Compliance Document [APP/5.6]** demonstrate how the Applicant has complied with the requirement to achieve good design, as set out in NPS EN-1, NPS EN-3 and NPS EN-5.

10. References

Ref 1 Department for Energy Security and Net Zero Overarching National Policy Statement for energy (EN-1) (2023). Available at: Overarching National Policy Statement for Energy (EN-1) - GOV.UK

Ref 2 The Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations (2009). Available at https://www.legislation.gov.uk/uksi/2009/2264/contents/made

Ref 3 Department for Energy Security and Net Zero, Overarching National Policy Statement for energy (EN-3) (2023). Available at: National Policy Statement for renewable energy infrastructure (EN-3) - GOV.UK

Ref 4 Department for Energy Security and Net Zero Overarching, National Policy Statement for energy (EN-5) (2023). Available at: National Policy Statements for energy infrastructure - GOV.UK

Ref 5 Planning Inspectorate, Nationally Significant Infrastructure Projects: Advice on Good Design (2025). Available at Nationally Significant Infrastructure Projects: Advice on Good Design - GOV.UK

Ref 6 National Infrastructure Commission, Design Principles for National Infrastructure (2020). Available at https://majorprojects.org/wp-content/uploads/2024/10/NIC-Design-Principles.pdf

Ref 7 National Infrastructure Commission, Project Level Design Principles (2024)

Ref 8 Breckland Council, Breckland Local Plan (2023). Available at https://www.breckland.gov.uk/media/16659/Adopted-Breckland-Local-Plan/pdf/Appendix_4_-_Breckland_District_Council_Local_Plan.pdf?m=1704795365193

Ref 9 Breckland Council, Breckland Design Guide (2024). Available at https://www.breckland.gov.uk/media/21514/Adopted-Interactive-Breckland-Design-Guide/pdf/5861_Breckland_Design_Guide_Adopted_Interactive.pdf?m=1713798795327

Ref 10 National Grid Group, NGC Substation and the Environment: Guidelines on Siting and Design. Available at https://www.nationalgrid.com/document/346731/download

Ref 11 Norfolk County Council, Norfolk Green Infrastructure Mapping Project Report (2018). Available at https://www.north-norfolk.gov.uk/media/5037/norfolk-green-infrastructure-mapping-project-july_18_v4.pdf

Ref 12 Place Services, Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (2021). Available at https://www.north-norfolk.gov.uk/media/7417/girams_strategy_march-_2021.pdf

Ref 13 – Norfolk County Council, draft Norfolk Local Nature Recovery Strategy (LNRS) (2025) Available at https://www.norfolk.gov.uk/media/43123/Norfolk-LNRS-Public-Consultation-Report/pdf/9jNorfolk_LNRS_PublicConsultation_Report.pdf?m=1756286379887

Ref 14 - Department for Environment, Food and Rural Affairs, Biodiversity Metric (2025) Available at https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides

11. Appendix A

Consideration of the Planning Inspectorate's guidance 'Nationally Significant Infrastructure Projects: Advice on Good Design'

11.1 Consideration of Planning Inspectorate's guidance overview

11.1.1 On 23 October 2024, the Planning Inspectorate published a new Advice Page providing guidance on 'Good Design' for Nationally Significant Infrastructure Projects (NSIPs). This advice explains why good design in NSIP schemes is important and how it might be delivered in applications for development consent.

11.1.2 Annex A of the Inspectorate's Advice Page on Good Design sets out 'good design issues to consider'. The Inspectorate sets out that applicants should consider the content of Annex A before submitting a DCO Application for an NSIP.

11.1.3 The content of Annex A has been extracted from the Inspectorate's Advice Page on Good Design and is set out below in Table A-1. The purpose of this document is to consider if and how the good design issues are being addressed within the application documentation for the Scheme.

Issue	Considerations	Project consideration of issue
Design Approach Document (DAD)	**Is a DAD provided?**	Yes.
	Does the DAD address the brief, the design process, the design principles, and beneficial outcomes?	Yes, this DAD addresses these points and is structured using these headings.
	If a DAD is not provided, where are the design process and design principles set out?	N/A

Issue	Considerations	Project consideration of issue
Analysis, Research	**How has the development site been analysed to inform a good design approach?** **What are the main conclusions from this analysis that inform the design at this stage and as it develops?**	Section 4. Assemble: Site Context of this DAD sets out how the location of the Scheme has been analysed to inform a good design approach. Section 4. Assemble: Site Context of this DAD sets out the constraints and opportunities identified as part of this analysis.
Response	**What are the main significant adverse effects of the proposed development and how are they addressed to enable good design?**	Section 6. Research and Section 7. Co-ordinate of this DAD explain how the design provides mitigation for the adverse impacts of the Scheme.
Vision	**What is the vision for the completed development and its surroundings?** **Where is it set out?** **Set out the narrative, how the vision will achieve sustainability, create a new place and hold the design together.**	Section 5. Assemble: Design Framework and Section 5.2. Project Vision Statement of this DAD sets out the vision for the Scheme and accompanying commentary.
Skills	**What professional disciplines and skill sets are being and will be working on the design of the project?** **Is there a design champion designated for this project, and if so, who is it and what are their skills?**	Section 3.2. Design Champion and Team of this DAD sets out the professional disciplines involved in the design and their skill sets. Section 3.2. Design Champion and Team of this DAD explains the role of the Board Level Design Champion and the project level Design Champion.

Issue	Considerations	Project consideration of issue
Developing the design	**Describe the approach to good design and explain how the design has (and will continue) to evolve.**	Section 6. Research, Section 7. Co-ordinate and Section 8. Securing Good Design of this DAD describes the approach to good design, and how the design has and will continue to evolve.
	How is any required flexibility being addressed?	Section 8. Securing Good Design of this DAD explains how the Scheme addresses flexibility. **The Planning Statement [APP/5.5]** provide details on how flexibility will be achieved.
	What design choices have (and will be) made?	Section 6. Research and Section 7. Co-ordinate of this DAD sets out the key design choices that have been made in the design of the Scheme. Section 8. Securing Good Design sets out how design choices will be made in the future.
	What are the emerging design principles and how have the principles directly informed decision making?	Section 5.3. Project Level Design Principles of this DAD sets out the design principles for the Scheme. Section 6. Research and Section 7. Co-ordinate illustrate how the design principles have informed decision making.
	Is there a hierarchical approach to elements of the proposal (for example in designing major and less important bridges in a highways scheme)?	No, due to the technical requirements of a solar scheme and the interrelationship of the infrastructure.

Issue	Considerations	Project consideration of issue
Developing the design	**Have digital techniques, including algorithms and AI been used in design development? If so, explain the tools and data used.**	AI has not been used in the design development of the Scheme. The only digital tools used in the design development have included desk-based assessment of constraints using best available online data, and Geographic Information System (GIS) data.
Independent design review	**Has the design development been the subject of an independent design review?**	The Scheme has not been subject of an independent design review. The project design team is very experienced in developing solar projects so an independent review was not considered necessary.
	If so, what were the main comments and how has the design responded to them?	N/A
	Is it the intention to include design reviews post-consent? If so, how are these secured?	N/A
Delivery	**How will the final design be delivered? Will there be a design management plan, a design guide or a design code? If not, why are they not required?**	Section 8. Securing Good Design of this DAD sets out how the final design will be delivered, through Requirements in the made DCO which will secure various documents and management plans. **The Design Principles, Parameters and Commitments [APP/5.8]** sets out the relevant design principles, parameters and commitments that will need to be considered at the detailed design stage. Therefore a separate design management plan, design guide or design code will not be required.

Issue	Considerations	Project consideration of issue
Delivery (continued)	**Is there a design consultation plan to engage the community following consent of the DCO?**	As set in Section 8.6. Social value & community benefits of this DAD, following the grant of the DCO, a community liaison manager would be in place to facilitate liaison with the local community as set out within the **oCEMP [APP/7.8]**.
	Is there an agreed process for post consent decisions with local planning authorities and others, where required?	The relevant local planning authorities will be the discharging authorities for the Requirements in the DCO.
Place	**How is placemaking being addressed?**	Section 6. Research of this DAD sets out the placemaking approach for the Scheme. Section 8. Securing Good Design sets out how the Scheme is sensitive to place and provides positive outcomes for the local area.
	How will this be a distinctive place and how will the community benefit from it?	Section 4. Assemble: Site Context sets out the project team's understanding of the distinctive aspects of the Site and its surroundings. Section 6. Research, Section 7. Co-odinate and Section 8. Securing Good Design describe how this understanding has shaped the Scheme, ensuring the character and identity of the Site and local area, in particular the treatment of the droves, delivering of the 'Swaffham Link' has been embedded in the Scheme design, benefiting the natural environment and the community through the provision of ecological and landscape enhancements, biodiversity net gain and the provision of new permissive paths as set out in Section 8. Securing Good Design of this DAD.

Issue	Considerations	Project consideration of issue
Place (continued)	**Describe what the quality of place outcome will be, how this relates to the vision and how it will be secured?**	Section 8. Securing Good Design of this DAD describes what the quality of place will be, and how this relates to the design vision set out in Section 5.2. Scheme Vision Statement of this DAD and explains how this will be secured.
People	**What consultation has taken place with statutory and local authorities, communities and people with an interest in the land?**	Section 6. Research and Section 7. Co-ordinate of this DAD set out what consultation has taken place with statutory and local authorities, communities and people with an interest in the land, and how the design evolved as a result of this consultation. **The Consultation Report [APP/5.1]** sets out more detail on what consultation has been undertaken as part of the Scheme.
	How will their views be incorporated in the design evolution and where will this be set out?	Section 6. Research and Section 7. Co-ordinate of this DAD sets out how key views from consultations have been incorporated into the design evolution. The **Consultation Report [APP/5.1]** also sets out in more detail what views have been raised by consultees and how these have affected the Scheme design.
Integrated design approach	**Explain how an integrated, holistic approach to the project's design will be achieved.**	This DAD explains how an integrated holistic approach to the Scheme design has been achieved and **ES Figure 5.1 Concept Masterplan [APP/6.3]** illustrates the outcome.

Issue	Considerations	Project consideration of issue
Integrated design approach (continued)	**Where is it shown in the documentation? Is there a masterplan?**	The Concept Masterplan is shown on Figure 1.29 of this DAD and **ES Figure 5.1 Concept Masterplan [APP/6.3**]. The principles of the Concept Masterplan are secured through the **Works Plan [APP/2.3]** and the **Design Principles, Parameters and Commitments [APP/5.8]** and the **oOEMP [APP/7.8], oLEMP [APP/7.11]** and **oPROWPPMP [APP/7.12]** as referenced in Requirement 5 of the **draft DCO [APP/3.1]**.
	How will this be secured?	Section 8. Securing Good Design of this DAD explains how the design of the Scheme will be secured.
National Policy Statements (NPSs)	**How have the requirements for good design in the relevant NPS (or NPSs) been met?**	Section 2.2. Policy Context of this DAD sets out how the requirements for good design in the relevant NPSs have been considered. Section 6. Research, Section 7. Coordinate and Section 8. Securing Good Design demonstrate how these requirements have been met. Additionally, the **Planning Statement [APP/5.5]** including the associated annexes an the **Policy Compliance Document [APP/5.6]** demonstrate how the Scheme complies with the good design policies of NPS EN-1, NPS EN-3 and NPS EN-5 and local planning policy.
Design Principles	**Set out the good design principles being applied to the project.**	Section 5.3. Project Level Design Principles of this DAD sets out the good design principles that have been applied to the Scheme.
	Are the design principles structured or grouped logically?	Yes, the Project Level Design Principles have been developed in line with key themes identified within national and local policy requirements and the Applicant's corporate requirements.

Issue	Considerations	Project consideration of issue
Design Principles (continued)	**How will they be developed prior to consent?**	The Project Level Design Principles, as set out within this DAD, were developed from the Applicant's Global Design Principles and were consulted upon as part of the Statutory Consultation process. The consultation process did not result in any changes to the design principles and will not be amended prior to consent, as they reflect the vision and goals of the Scheme.
	How will they be illustrated and secured?	Section 8. Securing Good Design of this DAD sets out how the design of the Scheme, which has been informed by the design principles, will be secured.
National Infrastructure Commission (NIC) 'principles'	**Is there a response to the NIC's four principles of good design?**	Yes, the Design Principles have been developed in line with national and local policy requirements, including the four key principles of good design set out in the NIC's guidance.
	If not, what design principles have been adopted?	N/A
	What process has been used to develop and embed project level design principles?	The Applicant sought to establish good design at an early stage of the Scheme development process, as demonstrated within the DAD.

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