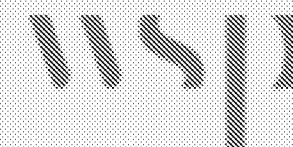


# Lidsey Green Development Sustainability Statement

December 2021

Hallam Land Management Ltd



# Quality assurance

---

*Date* December 2021

*Document reference* WSP-70088068-001

*Prepared by* Bethan Hill and Beth Williams, WSP

*Signature*

*Approved by* Tim Danson, WSP

*Signature*

# Contents

---

|   |                                                              |    |
|---|--------------------------------------------------------------|----|
| 1 | Introduction .....                                           | 1  |
| 2 | Foundations for action on sustainability .....               | 2  |
| 3 | Our vision for sustainability.....                           | 4  |
| 4 | Key themes and evidence .....                                | 5  |
|   | Local distinctiveness, character and identity .....          | 6  |
|   | Cohesive, vibrant and safe neighbourhoods.....               | 8  |
|   | Ease of movement .....                                       | 10 |
|   | Accessibility, inclusion, diversity and integration .....    | 12 |
|   | Adaptability and future needs .....                          | 13 |
|   | Climate change: mitigation .....                             | 14 |
|   | Climate change: resilience .....                             | 16 |
|   | Efficient use of material, including water, resources .....  | 18 |
|   | Efficient use of biodiversity and ecological resources ..... | 20 |
|   | Well-designed and innovative buildings .....                 | 22 |
| 5 | In summary.....                                              | 24 |

# 1 Introduction

Hallam Land Management is committed to “*promoting sustainable developments within the planning framework and contributing to the social and economic growth of communities.*”

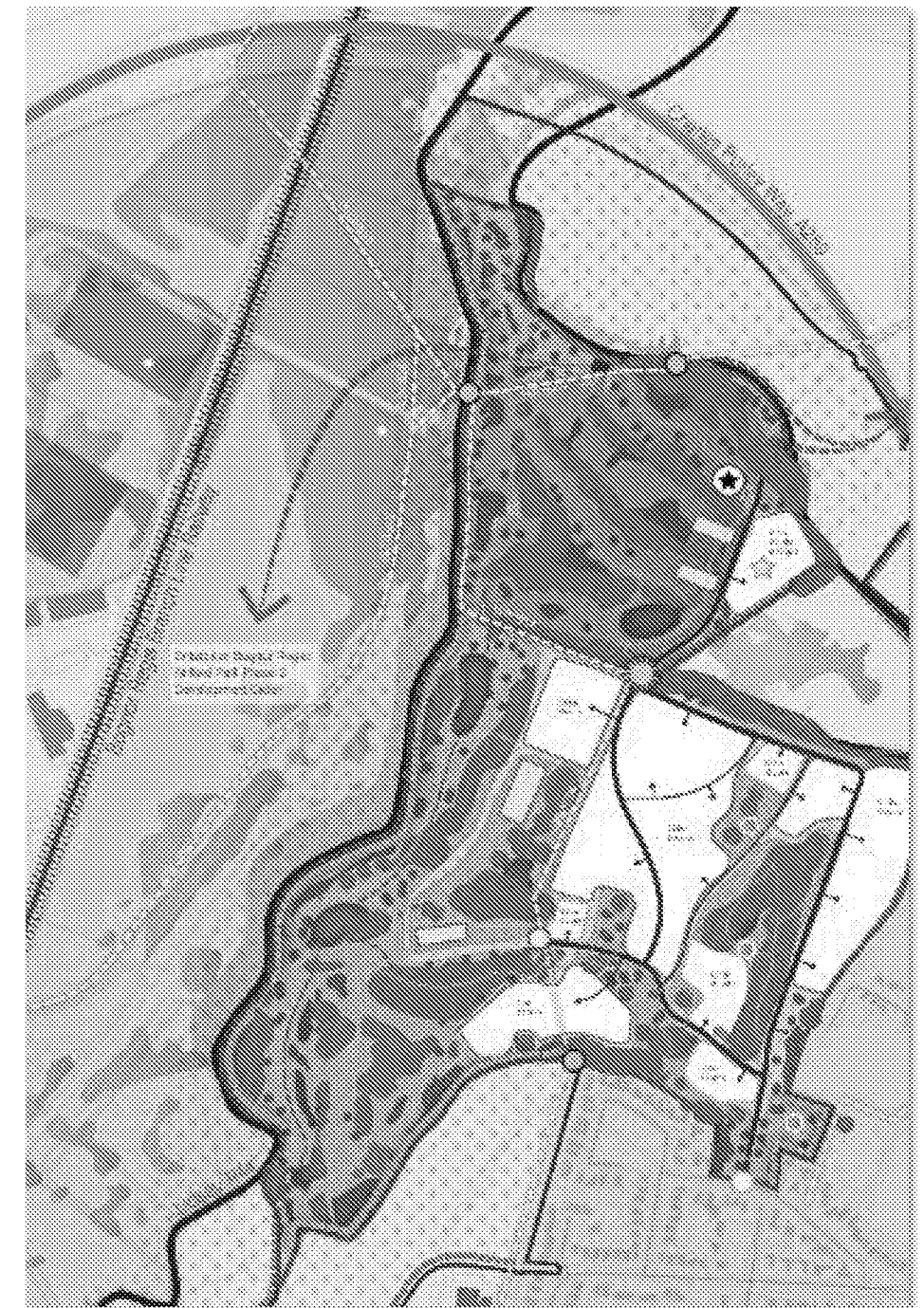
In this context, this Sustainability Statement describes the approaches that have been designed or planned to deliver a highly sustainable residential development on Bognor Golf Course in Felpham, West Sussex.

The proposed residential scheme comprises up to 480 units and is herein referred to as the ‘Lidsey Green Development’; is also referred to as ‘Site A’.

Lidsey Green Development falls within the administrative area of Arun District Council Local Planning Authority (LPA). West Sussex County Council is the strategic authority with responsibility for (*inter alia*) education, highways and waste.

This Statement has been prepared in response to both national and local policy commitments with a particular focus on the requirements set out in the Arun District Design Guide - Supplementary Planning Document [\[link\]](#). The Statement supports the outline planning application for Lidsey Green Development, in the expectation that planning permission will secure relevant provisions and obligations for sustainable design as detailed in a Section 106, Reserved Matters, or similar.

It should be noted that a *separate* proposed development – a new golf course (to *replace* the golf course being overlain with the residential scheme on Site A) – is also being designed as a part of the overall Hallam Land Management project. This new golf course (referred to as ‘Site B’) will also be accompanied by a Sustainability Statement.



## 2 Foundations for action on sustainability

### UN Sustainable Development Goals

Throughout this document, reference to the way in which the Lidsey Green Development aligns with UN Sustainable Development Goals (SDGs) [\[link\]](#), has been made. This ensures the content can be interpreted in an international context for sustainability, as well as that which is relevant to the UK.

### National planning policy

National Planning Policy Framework (NPPF) (updated July 2021) necessitates a “*presumption in favour of sustainable development*”. The development and associated infrastructure at Site A will therefore:

- a) Support the national planning objectives across social, environmental and economic themes; and
- b) accord (unless there are material considerations that can otherwise be justified), with local planning requirements for sustainable development, as specific to the area in which they are to be delivered.

This document demonstrates alignment with the ambitions of the NPPF, whilst balancing the social and environment requirements set down in local planning policy.



## Local planning policy

As well as responding to international and national priorities for sustainability, this Statement actively responds to the content and requirements of the following local planning documents. In particular, the Arun District Design Guide SPD has been used as the framework through which our 'Key Themes and Evidence' has been presented.

- Adopted Arun Local Plan (2018);
- Arun District Design Guide Supplementary Planning Document (SPD, 2021);
- Arun Carbon Neutral Strategy (2021); and
- (the commitments in) the Arun Biodiversity Action Plan (2000), in alignment with the UK Biodiversity Plan.

Both Felpham and Yapton Parish Council have in place Neighbourhood Plans. As the overwhelming majority of the proposed housing on Site A is within Felpham, the Parish Council's Neighbourhood Plan [\[link\]](#) (incorporating a 2018 Design Guide [\[link\]](#)) is therefore a material consideration in the context of the development. In this, the following two statements from the Neighbourhood Plan demonstrate that policies contained within are aligned with the Arun Local Plan, thereby validating the approach herein to use the (2021) Arun District Design Guide SPD as a basis for action:

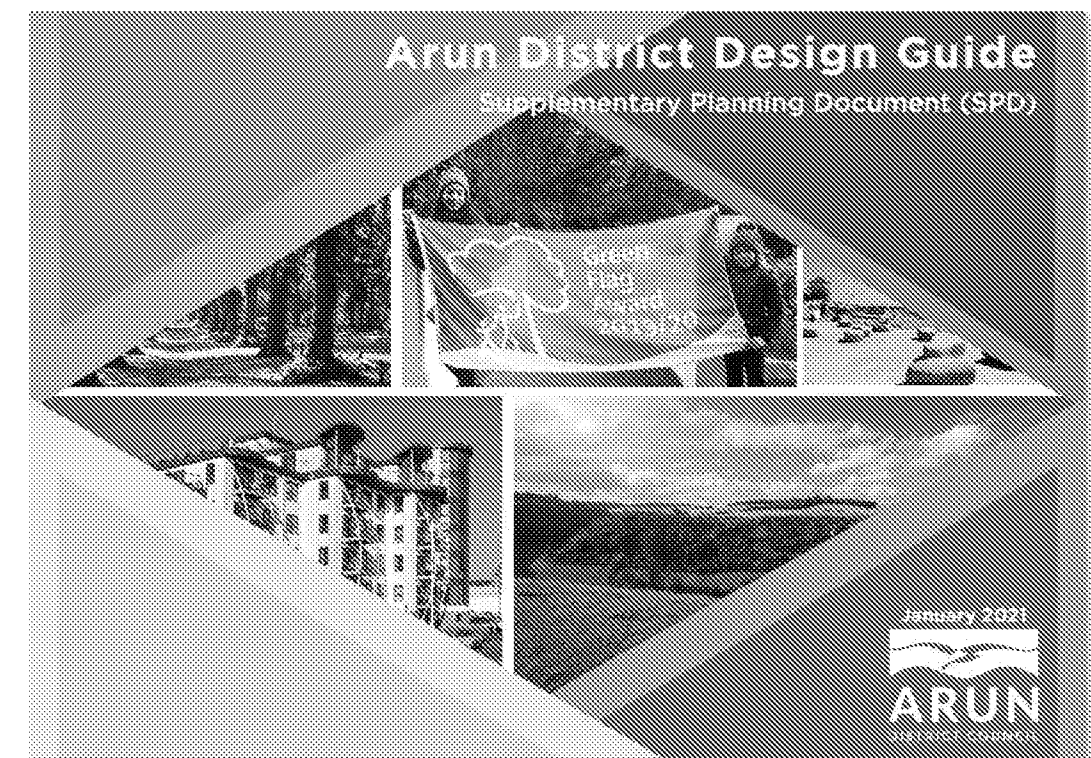
*"The policies accorded with higher level planning policy principally the National Planning Policy Framework (NPPF) and the Arun District Council Local Plan 2003 as well as the Draft Arun District Local Plan 2011-2031, as required by the Localism Act."*

*"The adoption of the Arun District Local Plan 2018 required a review and where appropriate amendment of the Felpham Neighbourhood Plan to ensure the two documents are in alignment and reflect the new policies."*

## Other referenced documents

Additional documents that are also relevant to the content of this Statement include:

- Arun Air Quality Action Plan: Breathing Better (2020); and
- Arun Community Infrastructure Levy (CIL) Charging Schedule (2020).



# 3 Our vision for sustainability

Our vision for sustainability across the Lidsey Green Development is to deliver a scheme that responds directly to the strategic objectives of the Arun Local Plan, such as:

*“To strengthen Arun’s economic base and provide local job opportunities by increasing, diversifying and improving the quality of employment within the District through the provision of appropriate employment sites, better infrastructure including road access, quality affordable accommodation and the development of business support and partnerships;*

*To reduce the need to travel and promote sustainable forms of transport;*

*To plan for climate change; to work in harmony with the environment to conserve natural resources and increase biodiversity;*

*To plan and deliver a range of housing mix and types in locations with good access to employment, services and facilities to meet the District’s housing requirements and the needs of Arun’s residents and communities both urban and rural, ensuring that issues of affordability and the provision of appropriate levels of affordable housing are addressed while supporting the creation of integrated communities;*

*To protect and enhance Arun’s outstanding landscape, countryside, coastline, historic, built and archaeological environment, as well as the setting of the South Downs National Park, thereby reinforcing local character and identity;*

*To create vibrant, attractive, safe and accessible towns and villages that build upon their unique characters to provide a wide range of uses and which are a focus for quality shopping, entertainment, leisure, tourism and cultural activities; and*

*To promote strong, well integrated and cohesive communities, through the promotion of healthy lifestyles, provision of good quality accessible community facilities and a safe environment, which delivers an enhanced quality of life to all. This includes meeting the needs of a growing elderly population.”*

Within the scale and nature of the Lidsey Green Development, our proposals will:



*Support local economic growth and employment, both during construction and operation of the Proposed Development.*



*Respond to the local demography to ensure a carefully selected mix of quality and affordable homes and buildings, that are also future proofed –particularly in terms of energy performance.*



*Create environments in which healthy, active lifestyles can be pursued, and where sustainable transport modes are accessible and prioritised.*



*Identify ways and means to improve resilience and adaptability to long term changes in climate.*



*Maximise biodiversity value and facilitate access for local residents to enjoy that value.*



*Integrate into local surroundings, whilst ensuring that the character of the buildings are both ‘of their time’ and appropriately distinctive in the context of the Felpham area.*



*Ensure easy access to nearby community facilities and destinations, through a network of public rights of way.*

Within this statement, it is acknowledged that ownership of and input to many of the commitments laid down will need to transcend the design, planning, procurement and construction phases. Where in this statement it has *not* been possible to present evidence to demonstrate current compliance with these pledges, it is expected that future commitments will be secured through planning.

## 4 Key themes and evidence

This is the main section of our Sustainability Statement for Lidsey Green Development. It provides evidence and plans for delivering sustainable outcomes across Site A, as relevant to the scale and nature of the scheme, and as proportionate to an outline planning submission.

Our Statement should also be read alongside the following documents, which provide further detail on Site A, and the information provided herein:

- Environmental statement
- Affordable housing statement
- Draft Heads of Terms and CIL statement
- Biodiversity survey and report
- Flood risk assessment
- Surface water drainage statement
- Land contamination assessment
- Heritage statement
- Tree survey and arboricultural report
- Landscaping strategy
- Noise assessment
- Transport assessment
- Travel plan



# Local distinctiveness, character and identity

## Key policy ambitions and commitments

- ✓ *Design within Built Up Area Boundaries;*
- ✓ *Enable development that recognises historical character;*
- ✓ *Positively contribute to the quality of the environment;*
- ✓ *Ensure high quality longevity of the development;*
- ✓ *Ensure better management of the rural-urban fringe through early consideration to landscape and biodiversity enhancement, woodland management, recreation provision and access routes;*
- ✓ *Consider opportunities for recreation and amenity including parks, open spaces and sports and leisure facilities; and local needs and deficiencies in these community facilities;*
- ✓ *Incorporate high quality, well connected green spaces, planting within main streets and biodiversity rich open spaces.*

## Key policy deliverables

- ✓ *Develop a Management & Maintenance Plan*
- ✓ *Ensure the existing features and natural resources of the site are incorporated into a Landscaping Strategy*

## Evidence

### Site location

The proposed location of the Lidsey Green Development accords with Arun District Council's *Housing and Economic Land Availability Assessment* [\[link\]](#) which has identified the site as potentially suitable for residential development.

The Site is located adjacent to a Built Up Area Boundary (BUAB), and thus is considered a natural extension of the existing urban areas in the locale.

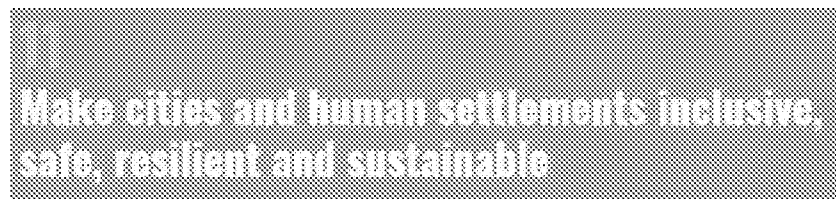
The proposed development area is bounded to the west by the Lidsey Rife and by the A259 to the north, and to the east are the existing residential areas of Felpham. These features make the site location a 'natural infill' development, especially considering the extent to which the designs respond to and accommodate local ecological features.

Whilst it sits outside the fringes of Felpham's BUAB, the Lidsey Green Development has been designed to relate to the existing edge of the settlement and preserve the natural corridor along the Lidsey Rife. The new residential units will *not* utilise land that is previously undeveloped or unmanaged.

A review of the National Heritage List for England confirmed that there are no designated heritage assets within the application site; as such no resources will be directly impacted by the proposed development. Whilst the site has moderate potential for archaeological findings or features (from Prehistoric and Roman periods), overall the review conducted confirms that archaeology is not anticipated to be a design constraint.

The selection of the site for the Lidsey Green Development has therefore closely considered the social and environmental potential of the site, whilst also responding to local policy ambitions and commitments.

Further detail on the way in which Site A works with the character of the local area, and how it maximises green space provision, is now provided.



## The character of the area

The Lidsey Green Development will be designed to achieve its own character: a contemporary housing style that both integrates and celebrates the features of the surrounding landscape. The Development will respect and work in harmony with ecosystems within and adjacent to the Rife, which is designated as a ‘*Biodiversity Opportunity Area*’ in the Arun Local Plan and a ‘*Local Green Space*’ in the Felpham Neighbourhood Plan; this will be achieved through sensitive integration of existing trees (retaining all but one Category A tree) and vegetation, and the commitment to develop only on previously managed land.

The design of Lidsey Green Development will incorporate a balanced palette of construction and landscape material choices to reflect the local character of the area, whilst also considering the selection of sustainable resources that also offer ‘future-proofing’ qualities.

The Site is neither part of, nor does it accommodate, any of the following statutory designations. Taking into consideration the character-based commitments made in this section, this further reduces the already limited potential of the design to adversely impact local character.

- |                                                |                                          |
|------------------------------------------------|------------------------------------------|
| * Scheduled Monuments;                         | * Registered Battlefields;               |
| * Listed Buildings;                            | * Registered Historic Parks and Gardens; |
| * Areas of Outstanding Natural Beauty (AONB);  | * Special Areas of Conservation (SAC);   |
| * Sites of Special Scientific Interest (SSSI); | * Special Protection Areas (SPA); or     |
| * National Parks;                              | * Ramsar Sites.                          |

## Green space provision

Throughout the Lidsey Green Development, any open areas which are not urbanised will be retained as public open spaces – each connected to key community destinations (for example, local pre- and primary schools, Felpham Community College and the town’s shopping facilities) through the preserved public rights of way. Green spaces will balance recreation provision and access routes, with good management of the landscape, including biodiversity enhancement and habitat creation. In this context, a Landscape and Ecological Management Plan will be prepared for the site, as part of the detailed design phase.

Across Site A, there are five green infrastructure ‘character areas’ planned; three of which are designed specifically for community recreation provision and will have a “country park” feel. A semi-natural green space, a naturalised play space, and a community growing space will also be featured. These features will link to the local existing movement network (owned and operated by Arun District Council) and encourage both north-south (along the Rife), and east-west, accessibility.

3  
**Ensure healthy lives and promote well-being for all at all ages**

15  
**Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

# Cohesive, vibrant and safe neighbourhoods

## Key policy ambitions and commitments

- ✓ *Design to maximise strong, well-integrated and cohesive communities, through the promotion of healthy lifestyles and communities, provision of good quality accessible community facilities and a safe environment, which delivers an enhanced quality of life to all*
- ✓ *Plan and deliver a range of housing mix and types in locations with good access to employment, services and facilities to meet the District's housing requirements*
- ✓ *Design for a mix of dwelling types and sizes, to include affordable housing units*
- ✓ *Provide or contribute to the necessary infrastructure to encourage physical exercise and health*
- ✓ *Create a network of streets and open spaces that have a clear purpose and are open to a wide range of users to rest, meet and gather*
- ✓ *Encourage the development of allotments*
- ✓ *Incorporate the Sport England & Public Health England Active Design Principles*
- ✓ *Design open space provision in accordance with the guidance set out in the Open Space Study*
- ✓ *Design safe spaces and routes that reduce the likelihood of crime and antisocial behaviour, and positively contribute to a sense of security and well-being*
- ✓ *Incorporate high quality, well connected green spaces, planting within main streets and biodiversity-rich open spaces*
- ✓ *Provide private and communal residential outdoor amenity spaces that are of a high quality and can be safely and conveniently accessed by all residents*
- ✓ *Consider the focal points, layout and form of spaces, boundaries and the interfaces between public and private realms*
- ✓ *Design for the hierarchy and accessibility of, and connections provided by streets, routes, spaces and entrances, and the connection with wider transport networks.*

3  
**Ensure healthy lives and promote well-being for all at all ages**

11  
**Make cities and human settlements inclusive, safe, resilient and sustainable**

## Evidence

### Well-being and exercise

In accordance with the requirements of the Arun Open Space SPD [\[link\]](#), the Lidsey Green Development will incorporate recreation as well as community growing spaces. These spaces will provide opportunity for healthy activity, mindfulness, contemplation and relaxation. Furthermore, the growing spaces will provide a welcome alternative to traditional 'allotments', offering a more accessible, naturalised and 'boundary-free' opportunity for residents to engage with nature and the movement towards nutritional self-sufficiency.

The **Ease of Movement** section in this Statement provides further detail on the provision and facilitation of physical activity for the community (for example, through prioritised pedestrian and cycle access accompanied by cycle parking and sheltered bike stores), and how this aligns with Sport England Active Design Principles.

A mix of housing types will be provided within the Lidsey Green Development, including a range of tenure types, and affordable housing. Affordable housing provision is further detailed in **Accessibility, inclusion, diversity and integration** section of this document.

With regard to local prosperity and wellbeing, the Population and Human Health chapter of the Lidsey Green Development Environmental Statement provides particular detail in this context. In summary, the provision of residential housing on Site A will have a major beneficial effect on meeting the identified housing need of the District. During the construction stage, the economic effects of jobs and skills provision are forecast to be moderately beneficial; on occupation of the development, increased local expenditure will also have a moderate beneficial effect.

*Financial contributions from developers in support of community facilities*

The heart of the Site A has been designed to afford a denser occupation of land with buildings of a grander scale than the peripheries; this creates a natural centre to the development that will encourage community cohesion. The edges of the scheme (particularly to the west and north) will be generally lower in height and more sparsely distributed, to also ensure a more sensitive integration with the existing natural boundary treatments. The Design and Access Statement for Site A sets out the expected density parameters, and primary and secondary routes within the development.

The Lidsey Green Development aims to provide both public and private outdoor spaces, with a clear distinction between the two. It will achieve this through clear boundary lines and subtle demarcations (e.g. planting) between key areas, to help both residents and 'passers through' naturally navigate the site.

To promote community safety on the Lidsey Green Development, Secured By Design (SBD, Homes 2019 Guide [[link](#)]) principles will be embedded throughout the evolving design. Clear dwelling boundaries, layout and lighting, natural surveillance opportunities and clear lines of sight, and the avoidance of features that could offer 'hiding places', will all be considered in the emerging design.

Furthermore, the Lidsey Green Development will not incorporate interconnected loops to the existing road network. Aside from the central loop through the Site, this is expected to reduce traffic speeds across the majority of development. A focus on providing pedestrian and cycling routes, and using design to promote a sense of residential ownership and pride, will support the creation of an overall 'safe feel' of the site.

A dedicated emergency vehicle access route into Site A will also be designed to the west of the existing golf clubhouse. The access route will allow fast and efficient access for the fire, ambulance, and police services to the site (particularly in the case of road blockages) to ensure the safety of residents and others that access the site.

Arun District Council operates a Community Infrastructure Levy (CIL), through which developers in the area are required to contribute towards local infrastructure. The accepted rates for the CIL, for residential development in the location of Site A, is set at £100 per m<sup>2</sup> (noting that social housing development can offer relief for the charge).

The monies raised through CIL from Site A are expected to be used to provide, for example:

- Public transport services;
- Education contributions;
- Leisure and recreation projects;
- Green infrastructure priority projects;
- Waste management projects;
- Emergency service provision; and / or
- Strategic flood alleviation schemes and flood prevention measures.



## Ease of movement

### Key policy ambitions and commitments

- ✓ *Ensure ease of movement, prioritising safe pedestrian and cycle access to the green infrastructure network and access to public transport and community transport services*
- ✓ *Design to reduce the need to travel and promote sustainable forms of transport*
- ✓ *Integrate with surrounding communities*
- ✓ *Make provision for cycling and pedestrian facilities to meet the County Council Parking Standards, including cycle storage, convenient and secure cycle parking in association with retail and educational uses and sufficient secure parking*
- ✓ *Provide appropriate levels of cycle parking according to the Arun District Parking Standards SPG and West Sussex County Council Parking Guidance*
- ✓ *Make provision for cycling and pedestrian facilities to meet the County Council Parking Standards*

### Key policy deliverables

- ✓ *Transport Assessments, Statements and Travel Plans should ensure that they cover the Strategic Road Network where appropriate, incorporating appropriate traffic modelling and analysis, and must be provided as per ADC's Local Validation Checklist*
- ✓ *Prepare a plan showing cycle parking including access from streets or cycle paths*
- ✓ *Prepare a plan illustrating the provision of electric vehicle infrastructure*
- ✓ *A Movement Strategy should set out the movement network and hierarchy, explaining how this connects to existing routes and encourages healthy, sustainable and pleasant travel*

**11**  
Make cities and human settlements inclusive, safe, resilient and sustainable

**3**  
Ensure healthy lives and promote well-being for all at all ages

## Evidence

### *Sustainable transport*

The Lidsey Green Development will focus on, and prioritise, pedestrian and cycle access to the natural and other community spaces on site, and to the existing wider green infrastructure network.

Extensive routes for walking and cycling are provided both from east to west across the site, and north to south along the Rife, which connect to the wider accessibility network. By seeking to design generous and unconstrained active routes, these assets will inherently accommodate extensions and modifications in the future, following adoption by Arun District Council. The focus paid to these active travel routes aligns with Sport England Active Design Principles, specifically:

- Activity for all neighbourhoods;
- Walkable communities;
- Connected walking and cycling routes;
- Networks of multifunctional open space; and
- High quality streets and spaces.

Whilst enhancement of existing bus services remains outside Hallam's design control, facilitating future service provision and identifying where improvements to the bus routes (for example, to the south of the Site) could be made, have informed our considerations for the boundary treatment. For example, whilst the nearest bus stop to the site is only a short walk (5 minutes) from the centre of the site, it is currently a 2hr service; more frequent services are available from B2259, a 10-15 minute walk away. Initial discussions with West Sussex County Council indicate that upgrading other local bus stops (including the two on the B2259) will be more beneficial than upgrading the local service that is closest to the site.

To support Arun's wider policy commitments to sustainable forms of transport, considerations such as local highway junction upgrades have been made to accommodate potential future expansions of the local bus network.

As stated previously, there is also the potential that the CIL fund could be used to support delivery of new and enhanced facilities, as to be determined in conjunction with Arun District Council.

EV parking, visitor car parking and cycle parking has been designed to comply with Arun District's Parking Standards Supplementary Planning Guidance (SPG), West Sussex County Council's Parking Guidance, and West Sussex County Council's Parking Standards: EV parking on the Lidsey Green Development will include one charging point per house, where a garage or driveway is required.

Site A will also incorporate cycle space provision across all residential units, whilst retaining for community use the car park (circa 30 spaces) to the west of the existing golf clubhouse.



# Accessibility, inclusion, diversity and integration

## Key policy ambitions and commitments

- ✓ *Plan and deliver a range of housing mix and types with good access to employment, services and facilities to meet the housing requirements and needs of residents and communities, both urban and rural*
- ✓ *Ensure issues of affordability and the provision of appropriate levels of affordable housing are addressed while supporting the creation of integrated communities*
- ✓ *Design internal spaces to be an appropriate size to meet the requirements of all occupants and their changing needs*
- ✓ *Create streets, spaces and buildings that are usable and accessible for all, following the principles of inclusive design*
- ✓ *Ensure places can be easily understood*
- ✓ *Streets and spaces should not be overlooked to create positive relationships between front and backs of buildings, with clearly defined public and private spaces*
- ✓ *The Council will seek a mix of dwelling types and sizes, to include affordable housing units, that adhere to the latest Homes and Communities Agency design guidance*
- ✓ *For developments of 11 units or more the Council shall require a balanced mix of market and affordable dwelling sizes including family sized accommodation based on the most up to date SHMA recommendations*
- ✓ *For all developments of 11 residential units or more the Council will require a minimum 30% of the total number of units proposed on site to be provided as affordable housing on the same site in the first instance*
- ✓ *Complies with current Building Regulations with regards to accessibility (Part M).*

## Key policy deliverables

- ✓ *Design and Access Statements should demonstrate that a scheme is able to be adequately accessed by all users, and report on any consultation undertaken in relation to access issues.*

## Evidence

In addition to the evidence provided previously in this Statement, the following information is provided to respond to the adjacent policy ambitions.

### *Affordable housing*

The Lidsey Green Development will afford a mix of housing and tenure types. Of the 480 residential units, at least 30% will be affordable homes, and there will be opportunities for self-build.

An Affordable Housing Statement has been produced to quantify how the Lidsey Green Development delivers a suitable mix of housing types, and that also meets the needs of the local community whilst supporting social integration. The housing mix reflects the broad conclusions of the Strategic Housing Market Assessment [\[link\]](#) and the need to provide - primarily - family housing. The Design and Access Statement for Lidsey Green provides more detail in this context.

### *Access to employment, services and facilities*

The location of Site A been selected so that it is no more than 1km from Felpham, where a range of community facilities and services (convenience stores, grocers, pharmacies and restaurants) are available. Connections to these facilities will prioritise walking and cycling, and (as stated previously) may be enhanced in the future through augmented bus facilities and services.

# Adaptability and future needs

## Key policy ambitions and commitments

- ✓ Internal spaces are designed to meet the requirements of all occupants and their changing needs
- ✓ Utilise a design-led approach which ensures the development is suitable for residents now and in the future.

## Evidence

### Adaptability

The size of the internal spacing of the housing units will be determined at the detailed design stage. It is expected that residential properties at Site A will not only meet the requirements of the occupants, but take into account their changing needs.

This will be achieved by adopting the Lifetime Homes Standards, using the following example criteria to ensure accommodation can be adapted for use, with minimal additional investment:

- Giving space to widen parking capacity;
- Minimising dwelling distance, gradients from parking spaces;
- Open and adaptable approaches to all entrances;
- Easily altered and widened entranceways, and handles;
- Freely accessible and acquiescent circulation space;
- Prioritising entrance level living, bedroom and WC / shower spaces Easily adapted (e.g. partition) WC and bathroom walls; and
- Structural systems that do not preclude the future fitting of hoists.

### Responding to regional demographics

Arun has an ageing population. To help respond to this, residential developments on Site A will comply with the housing mix set out by Arun; the exact mix will be secured through Reserved Matters following outline planning. Features such as use of gentle gradients across the site and adherence with Secured by Design principles, will support the provision of family housing that caters for the needs of the less able and elderly.

# Climate change: mitigation

## Key policy ambitions and commitments

- ✓ *Design for maximising energy efficiency and minimising whole life carbon*
- ✓ *Incorporating decentralised, renewable and low carbon energy supply systems, consider passive solar design, renewable energy generation or rainwater collection*
- ✓ *Provide designated parking bays and charging points for ultra-low emission vehicles to promote and support their uptake*
- ✓ *Prepare a report that considers the maintenance of low and zero energy technologies, adaptive capacity and flexibility to integrate more efficient systems and new technologies in future*
- ✓ *Set targets for energy and carbon reductions beyond the relevant Part L Building Regulations*
- ✓ *Provide designated parking bays and charging points for ultra-low emission vehicles to promote and support their uptake*
- ✓ *Maximise energy efficiency and minimise whole life carbon. Approaches to design must demonstrate that each step of the energy hierarchy has been followed.*

## Key policy deliverables

- ✓ *Feasibility studies should be carried out to explore a range of passive design measures and low and zero carbon technologies appropriate to the site, to reduce energy consumption to a minimum*
- ✓ *Once carbon savings have been achieved through passive design, all major developments must produce 10 % of the total predicted energy requirements from renewable or low carbon energy generation on site.*
- ✓ *Prepare a report that considers the maintenance of low and zero energy technologies, adaptive capacity and flexibility to integrate more efficient systems and new technologies in future.*

## Evidence

### *Energy efficiency and low carbon design*

With the Future Homes Standard likely to come into effect in 2025 (requiring all new residential developments to be 'future-proofed' with low carbon heating and energy efficiency measures), the Lidsey Green Development residential units are being designed to meet the objectives in line with anticipated changes in building regulations.

In order to reduce carbon emissions from the Site, the following energy hierarchy continues to be applied throughout the design of the buildings and landscape:

- preventing unnecessary energy usage;
- reducing demand;
- improving energy efficiency; and
- using low and zero carbon sources.

Ensure access to affordable, reliable, sustainable and modern energy for all

13  
Take urgent action to combat climate change and its impacts

### Renewables and low energy design

The Site will be designed to maximise the number of houses with south facing gardens, allowing the residences to utilise passive solar design.

Additionally, the development will comply with Policy ECC SP2 from Arun District Council's Local Plan, that *"major developments must produce 10 % of the total predicted energy requirements from renewable or low carbon energy generation on site"*. This is expected to be achieved through on-site PV installation. Details of the final sources of on-site energy will be investigated and confirmed during detailed design.

Maximising the incidence of south facing roofing will also allow residents to retrofit photovoltaic (PV) panels across the site, cognisant that the PVs are generally accepted to operate at 90%+ efficiency at 40° either side of south, presuming a pitch angle of less than 65 degrees.

It is noted that PV panels have the potential to cause glare for flight paths (particularly cognisant of the Bognor Regis Gliding Club), and therefore this will need careful consideration in our developing plans.

Importantly, the Site will also be designed to accommodate future zero energy technologies. For example, space provision, careful selection of transformers, and easy access to utilities will allow for the integration of low carbon systems, such as ground or air source heat pumps, are all part of the advancing designs.

Supporting these assertions, the chapter on Greenhouse Gases in the Environmental Statement produced for the site has assessed that GHG emissions generated during both the construction and operational phase of Lidsey Green are anticipated to have only a minor adverse effect.

### Electric vehicles

As stated in the **Ease of Movement** section of this Statement, EV parking will be installed to comply with Arun District Parking Standards Supplementary Planning Guidance (SPG), West Sussex County Council Parking Guidance, and West Sussex County Council Parking Standards.

As well as affording one charging point per house, where a garage or driveway is required, parking bays for flats will, as appropriate, be marked out for use by EV only, with charging infrastructure and cabling installed.



# Climate change: resilience

## Key policy ambitions and commitments

- ✓ *Design for climate change and adaptation of impacts from climate change by taking account of long-term issues including the probability of tidal and fluvial flooding; water stress; health impacts as a result of extreme temperatures and a decline in the quality of habitats and richness of biodiversity*
- ✓ *Ensure material selection is adequate for projected climate change*
- ✓ *Integrate adaptive capacity (or potential for it) into the design and resilience measures*
- ✓ *Design to account for flood risk and capacity of drainage systems*
- ✓ *Incorporate Sustainable Drainage Systems (SuDS) and other measures to mitigate flood risk*
- ✓ *Demonstrate the ability to cope with rising temperatures for a projected climate change scenario as per UKCP 2018.*

## Key policy requirements

- ✓ *All applications in Flood Zones 2 and 3, and schemes in Zone 1 of a hectare or more must prepare a Flood Risk Assessment. The FRA should make an allowance for climate change; demonstrates flood resilience for a 1/100 year event, in line with BREEAM 2018 Pol 03*
- ✓ *Proposals should be informed by a climate change adaptation strategy appraisal in line with BREEAM 2018 issue WST 05, and Functional adaptation strategy in line with WST 06*
- ✓ *An Emergency Plan (EP) should be provided if relevant pedestrian and/or vehicular access and escape routes of a proposed development would be affected during a design flood from any source.*

## Evidence

### Planning for change

The Lidsey Green Development design will be informed by an ongoing appraisal of climate change adaptation risks and opportunities, which responds to (for example) good practice approaches set out in BREEAM 2018 (WST05 Adaptation to Climate Change). The appraisal will also continue to be informed by the Climate Change Environmental Statement chapter, produced in December 2021.

A more detailed articulation of the measures adopted in this context will be prepared as the design evolves, and as specifications for both buildings and assets emerge.

### Water stress and flooding

Flood modelling outputs (including an exceptions test) have shown that Site A does not need a Flood Warning & Evacuation Plan to be produced. Evidence of this conclusion can be found within the Flood Risk Assessment (FRA) for the site, into which the Environment Agency, and Arun and West Sussex Councils, have provided seminal input.

The FRA prepared aligns with the requirements set out in BREEAM 2018 (POL03 Surface Water Run Off), ensuring a good practice approach that aligns with Arun Design Guide policy expectations. Furthermore, the FRA has considered the potential to achieve surface water management in accordance with a 100 year flood event +25% for climate allowance.

Accordingly, the Lidsey Green Development will be designed to practicably reduce flood risk in a number of other ways, including enhancing the existing drainage network capacity (as well as current storage) through the installation of swales and Sustainable Drainage Systems (SUDS) e.g. attenuation basins.



### *Responding to the threat of increasing temperatures*

UKCP18 data shows that across the UK, but particularly in the south of England, hotter summers can be predicted. Without effective management, an increasing risk of buildings overheating is therefore forecast.

Alongside traditional measures for cooling residential buildings (good use of thermal mass and natural ventilation), tree planting will be deployed extensively throughout the Site to provide screening and shading for properties.

As planting is specified for Site A in later design stages, it will incorporate a mix of native and non-native species, selected with the changing climate in mind; species will be chosen based on the fact they require less water, but are also more resilient to drought.

Extreme temperatures can also increase the risk of buildings and infrastructure becoming stranded assets, i.e. they are no longer functional or useable as a result of uncontrollable externalities. The possibility of the existing golf clubhouse becoming a stranded asset due to rising atmospheric temperatures has been investigated, and it is expected that any concerns will be overcome as part of the asset's refurbishment as a community facility, in accordance with the mitigation measures set out in the accompanying Environmental Statement.

The Climate Resilience chapter of the Environmental Statement also notes that following the incorporation of good practice mitigation measures in a Construction Environmental Management Plan (CEMP), and adoption of the wider design approaches proposed in this statement, no residual significant adverse effects are anticipated.

### *Managing cascade risks*

As the Lidsey Green Development progresses into the detailed design phase, cascade (or 'interdependent') risks from climate change will be taken into account, to assure the site is able to function under a range of climate scenarios in operation. For example, engagement with local utility suppliers and the emergency services to agree emergency procedures in the case of infrastructure (power supply) failure, will be instrumental in this context.

## Efficient use of material, including water, resources

### Key policy ambitions and commitments

- ✓ *Encourage water efficiency measures in order to protect the District's water resources and enhance the quality of the water environment*
- ✓ *Design for sufficient water supplies and water quality*
- ✓ *Reduce, re-use and recover materials and protect the District's water resources, by following the water hierarchy*
- ✓ *Where possible targets potable water consumption of <110 l/person/day through the incorporation of high efficiency fixtures and fittings and grey and rainwater harvesting systems to reduce demand on local water supplies*
- ✓ *Design to circular economy principles and the Waste Hierarchy*
- ✓ *Maximise re-use and recovery of materials, and minimise off-site disposal*
- ✓ *Proposals for development anticipated to cost over £300,000 must identify the volume and type of materials to be demolished and/or excavated as part of the development.*

### Key policy deliverables

- ✓ *Proposals for all buildings, hard surfacing or extensions should submit a Foul and Surface Water Drainage Statement, or have standard drainage conditions attached. Applicants should also complete the Arun Surface Water Drainage Proposal Checklist*
- ✓ *Consider the production of a Circular Economy Statement to demonstrate how design and construction will enable materials and components to be re-used at the end of their useful life, applying a life cycle approach*
- ✓ *Prepare a Site Waste Management Plan to outline appropriate storage and segregation facilities.*

### Water efficiency

Local and regional water scarcity continues to be considered within the design of the Proposed Development. In particular, the following good practice water management principles will continue to be central to considerations to date:

- eliminate water consumption where practicable;
- reduce water use and increase efficiency; and
- substitute fresh and potable sources, with non-potable or recovered / recycled water.

These principles will be met through natural irrigation (directing surface water drainage to lower lying land to the west and south of the site, where attenuation at greenfield rates will be achieved through the installation of swales, ditches, rain gardens and attenuation ponds) and research into the potential for rainwater harvesting at site. Additionally, residential units on the Lidsey Green Development will be policy-compliant for water consumption, and will be designed to achieve (at least) the potable water consumption target of <110 l/person/day.

Supporting the approach to good water management, the Water chapter in the accompanying Environmental Statement confirms that beyond the measures adopted and planned in the design to date, no additional mitigation is required for either potable or foul water.

12

**Ensure sustainable consumption and production patterns**

### *Circular economy (including sustainable resource and waste management)*

The design of Site A will follow the principles of the Waste Hierarchy, seeking to prevent the generation and disposal of waste as a first principle. For example, as a primary mitigation, the existing clubhouse building to the South of the current site will be retained for reuse, and thus prevent the generation of waste to landfill.

A Construction Environmental Management Plan (CEMP) will be conditioned and which is expected to include a Site Waste Management Plan (SWMP). The SWMP will be used to demonstrate a best practice approach to resource efficiency during construction, and to capture the following benefits:

- Arisings generated in the ground preparation and excavations for the site will be reused within the Lidsey Green Development. For example, soil arisings from the excavations for piling and flood management will be reincorporated into the planned landscaping and non-structural works. Additionally, the design will make good use of felled timber: options include the production of street furniture, and use in other high value applications e.g. play areas and insect homes. Opportunities to use site-won timber as part of future art strategies, will also be explored.
- The Lidsey Green Development aims to achieve a neutral cut and fill balance across the site, with the target of achieving 'self-containment'. Where beneficial, opportunities to achieve this target in conjunction with Site B, will also be explored.

To support a minimal waste approach in operation, and in accordance with best practice principles (e.g. BREEAM 2018 WST03, Operational Waste) space provision will be secured for source-segregated waste collection bins and sorting equipment within each residential units. The potential for a community recycling space, in a central location for collection of household recyclates, will also be investigated.

Circular economy opportunities (such as local material sharing, lean and modular assets, and design for deconstruction) will continue to be considered, with further details expected to be available at detailed design.

The material palette for the buildings and landscapes will be reviewed on an ongoing basis, to ensure resources used maximise on sustainability credentials, and are mindful of safety, quality and lifetime cost.

Compounding the evidence presented in this Statement, the Material Assets & Waste chapter of the Environmental Statement prepared for Site A confirms that the impacts and effects of consuming materials, and generation and disposal of waste to landfill will not –subject to the adoption of the measures set out in this document – be significant.

# Biodiversity and efficient use of ecological resources

## Key policy ambitions and commitments

- ✓ *Identify and mitigate for protected species. Minimise disturbance to habitats*
- ✓ *Seek to achieve a net gain in biodiversity and protect existing habitats on site*
- ✓ *Retain and sympathetically incorporate locally valued and important habitats, including wildlife corridors and stepping stones*
- ✓ *Incorporate elements of biodiversity including green walls, roofs, bat and bird boxes, as well as landscape features that minimise adverse impacts to existing habitats*
- ✓ *Work in harmony with the environment to conserve natural resources and increase biodiversity. Design to protect and enhance existing Green Infrastructure assets, and the connections between them*
- ✓ *Encourage and promote the preservation, restoration and enhancement of biodiversity and the natural environment*
- ✓ *Provide a net gain in biodiversity*
- ✓ *Designated sites - development will be permitted where it protects sites listed in Tables 17.1-17.7 that are recognised for the species and habitats contained within them*
- ✓ *Conduct appropriate surveys and impact assessments*
- ✓ *Within Biodiversity Opportunity Areas (BOAs) identified on the Policies Maps or where likely to have an impact on species or habitats within the BOAs, any application for planning permission shall include a properly conducted survey of the presence of that species and habitat and impact(s) that development may have on the BOA*
- ✓ *All developments shall have regard to Natural England's standing advice for protected species.*

## Key policy deliverables

- ✓ *Complete a detailed Arboricultural Report. Where there are existing trees on or adjacent to a development site, developers shall be required to provide an arboricultural impact assessment to include a tree protection plan and arboricultural method statement*
- ✓ *Develop site-specific Arboricultural Method Statements*
- ✓ *For sites with trees - a management plan shall be provided as part of a planning application in accordance with BS5837 (2012)*
- ✓ *All applicants must complete the Arun Biodiversity Checklist.*

## Evidence

### No Net Loss

The approach on Site A is to ensure 'biodiversity net gain'. This will be achieved by the site including a wide range of trees and hedgerows, a ditch network and ponds, and open grass areas. These habitats are considered suitable to support badgers, bats, breeding birds, dormice, reptiles, and riparian mammals.

As the Lidsey Rife is designated as a 'Biodiversity Opportunity Area' in the Arun Local Plan and a 'Local Green Space' in the Felpham Neighbourhood Plan, the design is fully committed to sensitively managing these areas. For example, by protecting existing water edge habitats, the Lidsey Green Development offers several opportunities to improve the biodiversity at Site A, not least the potential to encourage water voles to occupy the Rife's banks. Bird and bat boxes on constructed units will also be used to enhance faunal value at site. Flat roofs, including garages and the residential home, offer great potential for green roofing – this will be explored in more detail over time.

These strategies will not only support biodiversity but also increase access and proximity to nature for the community and add to the individual character of the Lidsey Green Development.

Additional strategies to improve biodiversity will continue to be considered throughout the planning and design stages, to maximise potential without causing a maintenance burden.

The Biodiversity chapter of the Lidsey Green Development Environmental Statement provides additional detail in the context of this statement: in summary, the habitats created will achieve a biodiversity net gain that exceeds the 10% requirement under the current Environmental Act. Habitats planned will also benefit a number of protected and notable species, for which specific mitigation measures have been adopted where needed. These measures will result in an overall minor beneficial effect in the long-term, at a local level.

## Tree management

As part of the evolving development, a Tree Management Plan will be prepared in accordance with BS 5837 (2012) and will be submitted as part of the full planning application. It will mandate (*inter alia*) that a detailed Arboricultural Method Statement is prepared prior to any on-site works. For every tree removed, a commitment to replant two has been made.

15

**Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

## Well-designed and innovative buildings

### Key policy ambitions and commitments

- ✓ *Design to the Lifetime Homes Standard*
- ✓ *Align design with key BREEAM credits and WELL Building Standard principles*
- ✓ *Design for connection to high quality communications infrastructure*
- ✓ *Undertake noise exposure category (NEC) assessment and design to ensure that residents will not be adversely affected by noise*
- ✓ *Assess the likely impacts of the development on light pollution and air quality and mitigate any negative impacts.*
- ✓ *Incorporate air, noise and light pollution mitigation*
- ✓ *Provide a high standard of amenity for residents, visitors and all building users by minimising the impacts of noise and loss of daylight*
- ✓ *Modern methods of construction will be used, particularly where these deliver high quality design*
- ✓ *Ensure the Green Infrastructure Network is protected from light pollution*
- ✓ *Use a palette of materials and incorporate details which are simple, robust and in keeping with local design vernacular*

### Key policy deliverables

- ✓ *Daylight Modelling, Noise Calculations, and the Thermal Modelling and the control strategy should demonstrate compliance with best practice standards.*

**3**  
Ensure healthy lives and promote well-being for all at all ages

**8**  
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

## Evidence

### Healthy homes

As stated in the **Accessibility, inclusion, diversity and integration** section of this Statement, the Scheme designs will continue to be advanced in accordance with the Lifetime Homes Standard.

Residential units will also (where appropriate) be designed to align with principles and guidance set out in (for example) the WELL Building Standard, to ensure the site accord with industry-accepted standards for healthier for all. Details on the extent to which alignment with the ethos such standards will emerge as the design evolves.

### Noise, air and light pollution

The Noise Assessment for the development shows that the homes will be set far enough back from the main road that residents are unlikely to be affected by noise pollution or nuisance during either construction or operation. Furthermore, no other major sources noise pollution were identified close to the Site.

Similarly, light pollution is not considered to be an issue for the Lidsey Green Development. As Site A is not currently a dark rural site; the introduction of different light sources in this area is not anticipated to cause any issues, with the potential exception disruption to bat flight paths. The impact on bat flight paths will be further investigated post outline planning, and (where required) bat corridors will be included in the design. A policy of using restricted or timed lighting on all secondary routes, to minimise light spill, is also being pursued.

The chapters on **Noise** and **Air Quality** in the Environmental Statement (ES) provide additional detail in this context. For example:

- adverse effects as a result of the operation of Site A are unlikely to occur; the mitigations to be used during construction also mean that any temporary adverse noise effects will be practicably minimised; and
- there are not expected to be any long-term air quality issues associated with the residential units. During construction, some increase in particulate matter and dust soiling impacts are forecast, however these will be short-term effects without residual effect.

### Telecoms provision and internet access

To ensure that the needs of future residents to connect to the internet do not (in accordance with Policy TEL SP1 of the Arun Local Plan) necessarily entail engineering works to an otherwise finished and high quality living environment, the proposal will ensure that communications infrastructure at Site A is installed early in the construction phase and allows for the provision of fibre optic connection, prior to occupation.

To ensure a robust approach is taken in this context, and prior to the commencement of site works, a strategy for the provision of broadband provision to

future occupants of Lidsey Green will be submitted to (and approved in writing by) Arun District Council. The strategy will seek to ensure that upon occupation of a dwelling, either a landline or ducting to facilitate the provision of a broadband service to that dwelling from a site-wide network, is in place. Services will be delivered as part of the initial highway works and in the construction of frontage thresholds to dwellings that abut the highway.

## 5 In summary

---

The evidence provided in this Statement supports the Outline Planning Application to be submitted to Arun District Council, for the Lidsey Green Development, close to Felpham; it details plans for delivering sustainable outcomes through design work for the site.

Building on a detailed review of international, national and local policy, evidence collated during workshops and design team engagements, and by reviewing documents exchanged with members of the delivery team, it has been shown that a range of positive and proportionate steps to achieving sustainable outcomes across the Lidsey Green Development lifecycle have been taken into account and will continue to be pursued.

Any further refinement of the design and delivery of the Lidsey Green Development will be expected to progress in accordance with the commitments and intent set out in this Statement. Evidence of outcomes achieved in this context will remain valuable in demonstrating a full response to local planning policy requirements for sustainability and good design.