

Design and Access Assessment January 2017



HOOK LANE PAGHAM

on behalf of:
Hallam Land Management Ltd



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INTRODUCTION

Our Vision

- 1.1 Our vision is to provide an attractive, high quality new neighbourhood which fits sensitively within its context, respects the landscape of this area and which creates a sustainable development tailored to contribute towards the housing needs of the district.
- 1.2 The development, also referred to in this document as the proposals or the site, will reflect the best qualities of housing found in the area whilst responding to the need to create a 21st century neighbourhood designed to reduce carbon, save energy, conserve water and enhance biodiversity.
- 1.3 The development will deliver between 215 and 300 new homes of different types and sizes, (including affordable housing) and an 80 bed care home. Housing seeks to cater for families, home working, and an increasingly ageing population. In addition the development safeguards land for the construction of a new two form entry primary school and will provide a new D1 Use development for the provision of a health centre and / or childrens day nursery.
- 1.4 The project description is as follows: ***The construction of up to 300 new homes, a care home of up to 80 beds, D1 uses of up to 4,000sq.m including a 2 form entry primary school, the formation of new means of access onto Hook Lane and Pagham Road, new pedestrian and cycle links, the laying out of open space, new strategic landscaping, habitat creation, drainage features and associated ground works and infrastructure.***
- 1.5 The promoter Hallam Land Management Ltd (HLM) is committed to delivering a sustainable development which seeks to respond to current conditions and future needs, with the overall aim of providing a high quality environment in which to live and play.
- 1.6 Housing will respect the sensitive landscape features within the site. Development will be set within a robust Green Infrastructure, which will include the retention of existing trees, hedgerows and ditches, augmented with extensive new tree planting and new habitat creation. An existing watercourse crossing the site will be realigned and reprofiled making this feature more naturalistic in appearance and enhancing its biodiversity potential.
- 1.7 Open space provision is planned to exceed Arun District Council's current open space standards and has been laid out to accord with the Arun Green Infrastructure Study (2012 - by Landuse Consultants) which specifically seeks to create softer more integrated urban - rural interfaces, including 'green wedges' extending into development.

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..... Ensure that new development makes the most efficient use of land in order to meet an identified need for housing (including affordable housing), whilst balancing the need to develop a scheme that is sensitive to its context in terms of scale, density and appearance.

..... Ensure that new development provides an interconnected, useable Green Infrastructure network comprising of open space, habitat creation, structural woodland planting and 'Green Fingers' extending into and through the development.

..... Ensure that access to all parts of the development is safe, legible and promotes pedestrian priority. New footways routed through open space are to provide a network of routes which link both existing and proposed residents to open space.

..... The development will provide employment for local people.

..... The development will provide specialist accommodation for the elderly.

..... Ensure that new development maximises site wide biodiversity enhancement.

..... The development will provide safe access arrangement which conforms to the relevant highway design standards.

..... The development will provide improvements to the local highway infrastructure in terms of additional footway provision and improvements to local bus stops.

“...without ‘context’ there can be no real knowledge, only data. This is the one thing that overarches every field of endeavour and every area of expertise, which is why it remains the Key to Everything.” (Jim Kirwan)

1.8 Open space provision is planned to exceed Arun District Council's current open space standards and has been laid out to accord with the Arun Green Infrastructure Study (2012 - by Landuse Consultants) which specifically seeks to create softer more integrated urban - rural interfaces, including 'green wedges' extending into development.

1.9 In terms of appearance the development will employ the use of an attractive palette of building materials common to the wider area, which in turn will help to integrate development within the landscape and create a distinctive sense of place.

Development Framework

- 1.10 The Development Framework Plan (Figure 1) provides a pictorial explanation of the proposed development. This is the controlling plan which will govern the preparation of subsequent reserved matters applications.

Purpose

- 1.11 This Design and Access Statement accompanies the Outline Planning Application made by Hallam Land Management Ltd (HLM) for the development of land to the west of Hook Lane, Pagham. At this stage detailed approval is sought for the means of access to Pagham Road and to Hook Lane only. All other matters are to be reserved for subsequent approval. This document provides a summary of both the site's physical and policy context, where these elements have influenced and / or guided the design of the development, and explains the design rationale that has been employed to deliver a high quality new development that is sensitive to its setting and which meets local need.

- Site Boundary**
- Housing - Up To 7.2ha**
- Primary School or Housing - 2.4ha:** Two Form Entry School or Housing
- Proposed D1 Use - 0.4ha:** Day Nursery/ Health Centre or Housing
- Care Home or Specialist Housing for the Elderley - 0.55ha**
- Vehicular Access**
- Primary Vehicular Route:** Masterplan Option 1&2
- Potential Vehicular Access:** Not needed if Primary School constructed
- Pedestrian Access:** Proposed footpath connections onto Hook Lane
- Potential Vehicular Route:** Not needed if Primary School constructed
- Area of Interest:** Viewing Mound providing views to the South Downs
- Area of Interest:** Formal Equipped Children's Play Space
- Green Infrastructure - 6.65ha:** Structural planting, open spaces & habitats
- Waterways & Ponds:** Sustainable Drainage Systems Planted for Amenity Benefit

FIGURE 1: DEVELOPMENT FRAMEWORK



Methodology

- 1.12 The National Planning Practice Guidance (PPG) was adopted on 6th March 2014. This document provides guidance on how Design & Access Statements should be written and on what information they should contain. Of particular note is the following:

"A Design and Access Statement is a concise report accompanying certain applications for planning permission and applications for listed building consent. They provide a framework for applicants to explain how the proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users. Design and Access Statements can aid decision-making by enabling local planning authorities and third parties to better understand the analysis that has underpinned the design of a development proposal. The level of detail in a Design and Access Statement should be proportionate to the complexity of the application..." (Paragraph 029 ID:14-029-20140306)

"A Design and Access Statement must:

- explain the design principles and concepts that have been applied to the proposed development; and*
- demonstrate the steps taken to appraise the context of the proposed development, and how the design of the development takes that context into account.*

A development's context refers to the particular characteristics of the application site and its wider setting. These will be specific to the circumstances of an individual application and a Design and Access Statement should be tailored accordingly. Design and Access Statements must also explain the applicant's approach to access and how relevant Local Plan policies have been taken into account. They must detail any consultation undertaken in relation to access issues, and how the outcome of this consultation has informed the proposed development. Applicants must also explain how any specific issues which might affect access to the proposed development have been addressed." (Paragraph: 031 ID:14-031-20140306).

- 1.13 This document should be read in conjunction with the Planning Statement, Transport Assessment, Flood Risk Assessment, Landscape and Visual Impact Appraisal and Ecological Assessment (among others) which accompany the application. This statement includes a Development Framework Plan (Figure 1), underpinning two alternative Illustrative Masterplan Options (Figures 2 and 3) which in turn encapsulate the disposition of land uses, development block structure, building heights, street layout, indicative plot arrangement and landscape structure. The Masterplan Options outline the design principles which will ensure that the development is capable of providing:

- A high quality sustainable environment which accommodates a range of land uses, house types and tenures;
- A scheme which draws upon Pagham's distinctive characteristics to create an appealing place to live;
- A layout which maximises accessibility for all; and
- A development which improves connectivity and enhances the biodiversity of the site with new Green Infrastructure.

- 1.14 The two masterplan options are identical save that Option A includes land for the construction of a new two form entry primary school. As a consequence the number of houses proposed within Option A is reduced by approximately 70 units from circa 300 to circa 230. In addition the number of proposed vehicular access points onto Hook Lane is also reduced from 2 to 1.

- 1.15 Masterplan Option B does not include a primary school, as a consequence in this scenario development would deliver up to 300 houses and two vehicular access points onto Hook Lane.

PLANNING & CONSULTATION

Policy Context

- 2.1 The following policy / guidance documents have informed decision making and influenced the design and access of the proposals. Further information with regard to the development's compliance with identified policy is available in the Planning Statement accompanying the application.

National Planning Practice Guidance 6th March 2014

- 2.2 The National Planning Practice Guidance (NPPG) was published on 6th March 2014. NPPG provides guidance on how Design & Access Statements (DAS) should be written and on what information they should contain. Of particular note is the following:

"A Design and Access Statement is a concise report accompanying certain applications for planning permission and applications for listed building consent. They provide a framework for applicants to explain how the proposed development is a suitable response to the Site and its setting, and demonstrate that it can be adequately accessed by prospective users. Design and Access Statements can aid decision-making by enabling local planning authorities and third parties to better understand the analysis that has underpinned the design of a development proposal.

The level of detail in a Design and Access Statement should be proportionate to the complexity of the application, but should not be long."

(para 029 ID:14-029-20140306)

Local character: "Take into account of site's land form, natural heritage, local heritage resources; use of local materials, building methods and details to enhance local distinctiveness."

(para: 007 ID: 26-007-20140306/06 03 2014)

Network of Greenspaces (including parks) and Public Places: "The benefit of greenspaces will be enhanced if they are integrated into a wider green network of walkways, cycleways, open spaces and natural and river corridors."

(para: 009 ID: 26-009-20140306 / 06 03 2014)

Crime prevention: "Designing out crime and designing in community safety should be central to the planning and delivery of new development..."

(para: 010 ID: 26-010-20140306 / 06 03 2014)

Safe, connected and efficient streets: "Development layouts where buildings and trees frame and enclose streets."

(para: 008 ID: 26-008-20140306 / 06 03 2014)

Consider layout: "Developments that endure have flexible layouts and design. New development should look to respond appropriately to the existing layout of buildings, streets and spaces to ensure that adjacent buildings relate to each other, streets are connected, and spaces complement one another... There should be a clear definition between public and private space. A buffer zone, such as a front garden, can successfully be used between public outdoor space and private internal space to support privacy and security."
(para: 024 ID: 26-024-20140306 / 06 03 2014)

Consider Scale, Details and Material: "Care should be taken to design the form, size and mass of buildings in relation to their surroundings... Consider how detail elements come together to form the whole and to examine the 'joins' between the elements... Materials should be selected which fit harmoniously with its surroundings"
(para: 027 ID: 26-027/28-20140306 / 06 03 2014)

Ensure Safe Access and Egress: "Access considerations should include the voluntary and free movement of people during a 'design flood', as well as the potential for evacuation before a more extreme flood... Wherever possible, safe access routes should be provided that are located above design flood levels and avoiding flow paths..."
(para: 039 ID: 7-039-20140306 / 06 03 2014)

National Planning Policy Framework 2012

- 2.3 Central to the National Planning Policy Framework is a presumption in favour of sustainable development proceeding without delay. Every Planning Authority is required to identify suitable land to provide for five years worth of new housing (on an ongoing basis) against their housing requirements.
- 2.4 The National Planning Policy Framework (NPPF) sets out the Government's policy framework within which local and neighbourhood plans are to be developed. These plans once adopted aim to reflect the needs and priorities of local communities and are to be taken into material consideration in the determination of planning applications that fall within a plan area.
- 2.5 The following section summarises the relevant policies to the design and access components of new development:

Section 4 Promoting Sustainable Transport: "Consider opportunities for sustainable transport and safe and suitable access to site." (para 32)

"Give priority to pedestrian and cycle movements; create safe and secure layouts and consider the needs to people with disabilities" (para 35)

Section 6 Delivering a Wide Choice of High Quality Homes: "Plan for a high quality mix of housing based on current and future needs of the community." (para 50)

Section 7 Requiring good design: "To seek to promote or reinforce local distinctiveness." (para 60)

"Integration of new development into the natural, built and historic environment." (para 61)

"Take account of the views of the community." (para 66)

Policy Context Cntd.

The Emerging Local Plan

- 2.6 The Emerging Local Plan - Arun local plan 2011-2031 was published in October 2014 and sets out the Council's vision for the development up to 2031. The emerging plan contains strategic and development management planning policies aimed at shaping the future of the area and for use in the consideration of planning applications.

Design

"It is important that new housing developments are well designed to provide attractive living environments, which are safe, environmentally friendly and encourage healthy lifestyles with good access to employment, shops, schools, health centres, green space, and other community facilities." (para 3.38 page 26)

- 2.7 Arun's Local Plan strategic objectives for Design are:

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

"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." (page 177)

"Policy objectives are to:

Promote development which is of high quality. Create locally distinctive sustainable and functional development that works ecologically, socially and aesthetically to positively enrich the environment." (para 13.1.4 page 177)

"Proposals should seek to provide a clear and coherent design framework that incorporates the design objectives of Policy D SP1 and provides a higher quality development in the surrounding area. With large scale developments, in addition to a Design and Access Statement, a context appraisal, context plan and analysis of the site will also be required." (para 13.1.6 page 178)

- 2.8 Arun District Council expects a high standard of design in all planning applications. To achieve this, applicants shall ensure that:

"A comprehensive design process has been carried out including: a site and context appraisal and assessment of relevant policies; involvement with the local authority and local community; evaluation of collected information; and the design of the development scheme based on assessment, involvement, and evaluation of information collected; In the design of the development scheme there should be clear evidence that design principles based on sustainable development objectives and established urban/rural design principles have been followed, understood and integrated within the constraints of the development proposal; and

Where necessary, a Design and Access Statement has been completed and accompanies the application." (para 13.2.5 page 179)

"To achieve high quality design, there are several intrinsic sustainable development objectives that should be understood by applicants to inform the design of a new development scheme. These are to

- Respect, improve and enhance the existing surrounding environment;*
- Be attractive in appearance, responding to the local context but receptive to original design and innovation in construction techniques, design and technologies;*
- Be usable, in terms of accessibility, legibility and be well-connected;*
- Be adaptable and flexible to the needs of the occupiers now and in the future;*
- Be socially inclusive, catering for the current and changing needs of the District;*
- Discourage crime and anti-social behaviour;*
- Encourage health and well-being; and*
- Incorporate measures to mitigate and adapt against the effects of climate change."* (para 13.2.7 page 180)

Character

"A development scheme based on sensitive understanding of site and context, can exhibit a distinct character and identity, while also belonging to the wider locality. Therefore successful development should respond to locally distinctive patterns of development, building methods and detailing, landscape, history and culture, or where this is absent, use strong ideas absorbed from contemporary society and culture". (para 13.2.8 page 180)

Scale

"When designing to the local character of building forms, patterns of development and the natural environment, the scale of new development should:

- Avoid obscuring public views, vistas and skylines;*
- Ensure the height and massing does not interrupt or debase the rhythm of an existing building/roof line and overall streetscape, or detract from the local and wider area's character;*
- Respect the existing scale in the detailing and composition of elements such as windows, doors etc;*
- Have regard for the principal users of development schemes – people;*
- So that buildings and infrastructure are scaled for their maximum benefit and enhance*
- their experience of the space; and*
- Taller buildings are more suited to key locations such as on corners, along principal routes, the end of vistas or around parks but this would be more site specific."* (para 13.2.12 page 181)

Density

"A design led approach to density can optimise the use of a site, achieve efficient use of land and ensure high quality development sympathetic to the surrounding area." (para 13.2.14 page 181)

"The density of proposals should be sympathetic to the site and its surroundings. Within large sites the density should vary to guard against uniformity." (para 13.2.15 page 182)

Policy Context Cntd.

Layout

"It is important that layouts are configured in such a way that they are easy to understand, are well-connected, inclusive, feel safe, and have clearly defined public and private spaces. Principles of permeable and legible layouts should be followed." (para 13.2.17 page 182)

Permeability

The key to a development's success is often related to its quality of connections. Layouts should have a variety of well-connected routes and spaces that link with new and existing movement flows to and from residential areas, amenity spaces, employment and commercial zones. Ease of movement especially via walking or cycling to these zones should be an integral part of their design, encouraging a more active and environmentally friendly lifestyle. (page 182)

Legibility

"Clear and legible layouts will feel safe and pleasant to use, encouraging public use by foot and bicycle and decrease the need for unnecessary vehicle use. Methods to improve the legibility of layouts include:

- A well-structured layout of buildings, routes and spaces; Landmarks, focal points and key views;*
- A variety of building types with distinctive forms (corner buildings are good points of orientation, distinctive design aids legibility);*
- Richness of detail in the building materials that make up the built environment;*
- Street furniture (seats, waste bins, bicycle security etc). Too much street furniture can make a place look cluttered, careful consideration to quantity and positioning is necessary to ensure efficient street furniture layouts; Strategic locations of signage ensuring suitability of positioning and clarity of design; and*
- Effective lighting of buildings and spaces." (page 182)*

Public realm

"For places to work and foster sustainable communities it is important that the public realm is of high quality, feels safe, is inclusive to all social groups, and adaptable to the changing needs of the community. This is achievable through:

- The quality of hard landscaping (paving, kerbs, walls etc); Planting (trees, grassed areas, flowers) mindful of the sensory benefits of smell, sound and touch they bring and its appropriateness at the proposed locations;*
- Green space and green corridors should be retained, enhanced and integrated into the design of a development scheme. This will reinforce the quality and character of a place, increase biodiversity and deliver a wide range of environmental benefits;*
- Lighting needs to be integral to the design, so that it is designed in and not added at the end; Incorporating inclusive design features that benefit everyone in the community eg. play areas; and Public amenity space. This should be of a high standard and an adequate size for the development and needs of the community. Private and public space should be considered in the process of designing buildings and places. This prevents non-specific, unused and anti-social spaces being created." (para 13.2.18 page 183)*

Crime and security

"Various measures can be designed into development schemes that can assist in discouraging crime... Such measures include: Places with well-defined interconnected routes and spaces; Public and private spaces that are clearly defined. When people view public space as their own they are more likely to take responsibility and maintain it; Natural surveillance, by fronting buildings e.g. play areas onto the public realm; Ensuring places and buildings have necessary well designed security features, that are not offensive in appearance and integrate into the public realm; and Strategically placed effective lighting." (para 13.2.19 page 183)

Policy D DM1 - Aspects of form and design quality

External space standards "All dwellings should be provided with adequate private or at least, semi-private outdoor space in the form of a garden, terrace or balcony. A private outdoor space is one which is not overlooked from the street or other public place." (para 13.3.8 page 193)

Secured by Design

"Secured by Design principles should be incorporated in the design of all private outdoor spaces. For example, fences and balconies (as well as communal bins and cycle stores) should be designed so as not to provide climbing aids to gain access into a property." (para 13.3.10 page 193)

Housing developments (excluding apartments)

"In the case of private gardens attached to a house a minimum depth of 10 metres provides a very modestly sized garden.....in circumstances where this cannot be achieved it may be necessary to compensate for the loss of width by extending the length of the garden." (para 13.3.13 page 193)

Parking

"Proposals should reflect best practice as set out in national guidance, such as "Manual for Streets", to ensure high quality design of parking provision. Additional guidance regarding the design of parking provision will be provided as part of a design guide." (para 13.3.30 page 196)

Sustainable Urban Drainage Systems

"SUDS should be designed into the landscape of all new development and should be included as part of a District wide approach to improve water quality and provide flood mitigation. SUDS should also be identified as part of a Green Infrastructure network to improve the landscape quality, recreation and biodiversity offered in Arun." (para 18.4.2 page 294)

Existing Local Plan

2.9 The Arun District Local Plan (2003-2011) provides a statement of the Council's planning policies, albeit these were framed by the development requirements that existed within that plan period and the planning policies that existed at the time of its preparation. It can not make provision for development needs past 2011. It follows that its policies relating to matters of design and access cannot be considered to be relevant now that the end date of the Local Plan has passed. Despite its relevance the schemes design has considered the following proposals:

- GEN7: concerns the form of new development and requires new development to adhere to high quality design principles.
- GEN8: requires new infrastructure necessary to support new development to be provided alongside new development.
- GEN14: supports improvements to public transport services and facilities.
- GEN13: encourages development of safe and cycle and footpath networks within the site and a surrounding area.
- GEN20: specifies public open space standards that should be incorporated into new development.
- GEN32: requires mitigation measures to be provided in the event noise pollution is at an acceptable level.
- GEN33 and 34: seek to avoid light and air pollution.

Policy Context Cntd.

Neighbourhood Plan

2.10 The Neighbourhood Plan was published as a Submission Plan in October 2015.

2.11 Of relevance to matters of Design and Access is the following:

"The purpose of this plan is to set out specific policy proposals for the parish and to consult statutory stakeholders and the local community." (para 1.4 page 7)

Policy 3: Housing Design

"The Neighbourhood Plan requires the scale, density, massing, height, landscape design, layout and materials of all development proposals, including alterations to existing buildings, to reflect and enhance the architectural and historic character and scale of the surrounding buildings and landscape, as defined in the adopted Pagham Village Design Statement (VDS)." (page 31)

"This policy requires the design of all housing schemes to reflect and enhance the local character of different parts of the parish by responding positively to the relevant guidance in the adopted 2007 Pagham Village Design Statement." (para 4.30 page 31)

"The Statement defines distinct character areas across the parish by way of their dominant built form, historic character and/or landscape character. The local community has stressed the importance of the PNP retaining these essential characteristics that collectively distinguish the village from its neighbours." (para 4.31 page 31)

"More generally, all new housing development should be environmentally led, having close ties and links to the natural environment, must be of a high quality design, with a mixture of traditional and modern style...." (para 4.32 page 31)
"A significant proportion of any major development should have a feeling of space and a sense of place in the wider landscape rather than be an extension of urban sprawl." (para 4.33 page 31)

"New developments should be characterised by being substantially of high quality, low density residential areas that meet or surpass 'Building for Life' and VDS criteria, are sympathetically landscaped, in keeping with the natural environment. Proposals should, for example, provide for hedgerows against close boarded fencing, with native trees rather than ornamental and wild flower meadows and natural corridors for wildlife and biodiversity enhancement, over featureless grass swathes." (para 4.34 page 31)

"Proposals for new housing development, including windfall redevelopment schemes within the village, should clearly demonstrate they have used the Statement to understand the design context of the scheme and to inform their design proposals." (para 4.35 page 31)

Village Design Statement

- 2.12 The Pagham Village Design Statement was published in 2007 by Pagham Parish Council. Written to provide local people with a guide to house extensions and to form a material consideration in the determination of planning applications for the Parish, this statement identifies those features and qualities of Pagham that are valued by local residents and provides design and access criteria to inform change.
- 2.13 The site falls between two areas identified as Pagham Road and Nyetimber. For the Pagham Road area residents identified that views over open fields, trees and verges and a 'village community feeling' were important. Development criteria identify the need for the 'highest quality layout and design', the exclusion of development within open spaces and the preservation of village character. Of particular note are the use of traditional materials where appropriate, maintaining setbacks and density, the preservation of boundary walls, trees and hedges and the fact that front boundaries should contribute to the overall street scene.
- 2.14 Within the Nyetimber area residents identified the variety of house, bungalow and chalet design, trees and verges, open frontages, rural aspect and open spaces as important features of the area. Development criteria identify the need for development to consider scale, height and design which is sympathetic to setting, the retention of amenity spaces, the desire to maintain open field views and countryside at Hook Lane. Of particular note are the use of boundary treatments that do not compromise the areas open character and the avoidance of 'cramped, un-neighbourly proximity'. The Village Design Statement also notes that comparatively higher densities should be considered to prevent the loss of privacy.
- 2.15 With regard to 'Environment and Conservation' the Village Design Statement notes the following:

- Concern relating to the speed of vehicles along Pagham Road and other residential roads (Hook Lane) and a desire to introduce traffic calming and pedestrian crossings.
- Concern relating to the safety of the South Coast Cycle Route.
- The need to care for and preserve trees and hedges.
- The need to protect roadside verges from parked vehicles
- A desire to maintain the character of private roads
- Support for public transport.
- The creation of new rights of way as part of the development process

2.16 Under 'Open Spaces' the Parish Council make a commitment, subject to exceptional circumstances, to oppose any development within strategic gaps outside the built-up area. Any individual consent for such development or change of use should not make adjacent areas less defensible against further encroachment. The Village Design Statement goes on to note the following:

- Desire to preserve existing open spaces, particularly those which contribute to the countryside aspect, as far as possible. Including the retention of significant views over sea or open land .
- Desire to preserve flora and fauna.

Supplementary Planning Documents (SPD)

2.17 The following SPDs have been referenced:

- Arun District Council - Car Parking Standards (October 2000) - refer to paragraph 5.5-5.9 of the Design and Access Statement.
- Arun District Council - Open Space Standards (October 2000) - refer to paragraph 4.35 of the Design and Access Statement.

Consultation

2.18 Prior to the submission of the planning application the applicant's design team has undertaken a comprehensive pre-application consultation process with Arun District Council and other key stakeholders, as well as a community engagement exercise.

2.19 The most recent public consultation for the development was undertaken via a dedicated website (see below), which ran for a 5 week period between the 7th November to the 9th December 2016. The website was accompanied by a public exhibition held in the village hall on 14th November at which members of the design team were available to answer questions and to explain the proposals.

Website: www.hooklanepagham.com

2.20 The exhibition and consultation website were advertised by leaflet which was delivered to all of the properties within close proximity to the site. Material was also given to the Parish Council to display on their noticeboards in the Parish and on their website.

2.21 A 'Statement of Community Involvement (SCI)' accompanying the application provides further detail regarding the manner, extent and results of the consultation we have undertaken during the development of the proposals. The SCI also provides a discussion with regard to how the comments have been addressed.

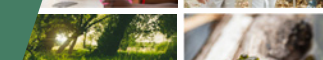
2.22 The key issues raised can be summarised as follows:

- Masterplan Options: Of the two masterplan options presented there was a preference for Masterplan Option A, i.e. with the two Form entry primary school;
- Traffic concerns: Over 80% of respondents raised concerns regarding the impact of additional traffic. Many respondents felt that local roads are already extremely busy at peak times, therefore were concerned about the increase in cars using the local roads.
- Flooding, drainage and sewerage: Just over 40% of respondents raised concerns regarding flooding, drainage or sewerage. Of those, many felt that the area already floods and therefore were concerned that the development would cause further flooding.
- Capacity of doctors surgeries/ health care centres: Over 35% of respondents were concerned about the capacity of local doctors surgeries and health care centres. Some of those were also concerned that if a care home was included within the proposal, further strain would be put on local nurses and GPs.
- Impact on the character of Pagham: Just under 30% of respondents felt that the proposal would impact on the character of Pagham. Many explained that they lived in Pagham for its rural nature and were concerned that the proposal would change the nature of the settlement.
- Amount of housing proposed: Just over 20% of respondents felt that too many houses were being proposed in the area.

2.23 Other less common responses included:

- Loss of farmland;
- Loss of view;
- Lack of dentist and shops;
- Need for Secondary School;
- Impact on wildlife;
- A request for a green buffer along Hook Lane Road;
- A request for social housing to look the same as market housing; and
- A request for smaller dwellings rather than 5 bedroomed houses

2.24 Section 5 of the SCI details the design response that the team have adopted in response to consultation. These include but are not limited to:



Key Benefits:

- 1. **High Quality Building Standards** The programs include both 2003 and 2006 International Green Building Codes, which will encourage a high level of sustainability and will include both private ownership and rental properties. The programs will also include a variety of incentives to encourage the use of green building practices. The programs will also include a variety of incentives to encourage the use of green building practices.
- 2. **Reduced and Renewed Penalties** The programs include a variety of incentives to encourage the use of green building practices. The programs will also include a variety of incentives to encourage the use of green building practices.
- 3. **Renewable Energy for the Industry** The programs include a variety of incentives to encourage the use of green building practices. The programs will also include a variety of incentives to encourage the use of green building practices.
- 4. **Greenstar Pilot Program** The programs include a variety of incentives to encourage the use of green building practices. The programs will also include a variety of incentives to encourage the use of green building practices.
- 5. **Local Food Production** The programs include a variety of incentives to encourage the use of green building practices. The programs will also include a variety of incentives to encourage the use of green building practices.



SITE BACKGROUND

The Statutory Development Plan

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in line with the statutory development plan, unless material considerations indicate otherwise.

The statutory development plan comprises the saved policies of the Arundel District Local Plan adopted in 2003 and which covered the period from 1996 to 2011.

Its policies and proposals were framed by development requirements that ended up to 2011 and the planning policies that existed at the time of its preparation. It does not make provision for present and future development needs. The Local Plan is out of date and its settlement and housing policies cannot be considered to be up to date.

Material Considerations

Government policy in the NPPF is an important material consideration in the determination of the application. As the Local Plan's policies are out of date and there is an identified shortage of housing land in the District, the presumption in favour of sustainable development in paragraph 14 of the NPPF is engaged. Accordingly, planning permission should be granted as there is no demonstrable or significant adverse impact of doing so that outweigh the benefits of additional housing provision in this location and there are no specific policies that indicate development should be

The Council's work on the new Local Plan is also relevant. Future housing requirements are substantially greater than were planned for and additional sites are needed to meet this. The application site is one of three sites at Paghman that the Council are considering to meet future housing needs.

The 17.5ha site is located immediately adjoining the settlement boundary and the urban edge at Pugham. Hook Lane forms the eastern and south eastern boundary with existing residential development at Drif Lane and the wider estate beyond. The site is well contained on the northern and western boundary by Saffer Lane and Pugham Road respectively. The site comprises arable land with periphery hedgerows and tree groups. There is a small change in topography from 5m Above Ordnance Datum (AOD) at the eastern boundary to 4-4.5m AOD at the western boundary.

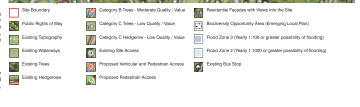
Local Facilities

The site benefits from its accessibility to the main village services located at Nydherry which are approximately 1.5km from the site. Other community infrastructure in close proximity to the site include Rose Green Infant Junior School, Aylford Park, Grove House Surgery and Willowvale Library.

The site is well related to local services and facilities by sustainable modes of travel. The number 62 bus service includes stops on Hook Lane directly opposite the site and the number 60, 602 and 660 stop on Riphon Lane towards the south of the site. These services provide links to Chichester, Midhurst, Bognor and beyond. Moreover the development offers the opportunity to incorporate a new local centre for convenience shopping.

Site Constraints

As illustrated on the accompanying Constraints Plan there are few environmental constraints to the site's development. Development will incorporate and enhance existing landscape features such as hedgerows, hedgerow trees and the watercourse where practicable.



MASTERPLAN OPTION B

- A** Hook Lane - Vehicles (between Hook Lane and Highway 101) to be retained and repaved.
- B** Hook Lane - Pedestrians (between Hook Lane and Highway 101) to be retained and repaved.
- C** Payson Road - Vehicles (between Payson Road and Highway 101) to be retained and repaved.
- D** Gore Home / Specialty Frame Shop to be demolished or alternative specialized.
- E** Gas Nursery: A proposed new parking lot.
- F** High Quality Housings: 10 new units.

Access: Two vehicular access points are practicable the existing boundary fence encirclement.

Bike Access: Dedicated pedestrian / cycle path will provide direct access between the site housing to the east.

Car Access: One vehicular access point is south of the site.

Housing for the Elderly: A proposed new build housing up-lift and included a accommodation for the over 65.

New day nursery: Includes public realm

Up to 300 high quality homes in a mix of

Greek Meadows' 70-acre outdoor life center and restores that area and Program Road.

Western Boulder is planning a new 20-acre facility with a new feature will be provided.

Play Space: A new play space is planned.

Donor's Choice: The proposed plan for the new 20-acre facility will be provided.

to the south of the site a small green gravel area for the proposed car hire, informal car development, and bus coach stop. The junction of the site with the western boundary is a grassed area. This will retain existing grass and is proposed to be landscaped with trees and shrubs to suit the position of the bus conveniently. Fencing to accommodate the proposed new children's play area will be within the existing fence line.

On the south of the site a large area of open grassed area, which is used for informal recreation. The existing watercourse (the River) is to be realigned and a new stream is proposed to be created. An existing tree-lined area is to be landscaped and set within a

K The existing wall topped with a profiled roof designed to drain rainwater into the pools. [Open park](#)

L **Selfie Meadows** informal but planned garden. [Open park](#)

M **Northers Sound** premium 20m x 10m hedge planting a green space for a enclosed within the north. [Open park](#)

because running through the site currently is and generated alignment. This watercourse is to be widened and deepened to improve its meandering path and opened up to increase its carrying and water-side seating.

ii. To the north of the site a wide open space is to be created for recreation, games, picnics and dog walking.

iii. Along the site's northern boundary a new walkway is proposed. This will retain existing trees and be reinforced with new landscaping along the east of the Muck Lane (Aberth Road) junction. The walkway will be developed to provide a gateway into the site.

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TYPICAL AERIAL VIEW

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CONTEXT

Existing Situation

- 3.1 The application site comprises a total of 17.2ha / 42.5 acres, located to the north east of Pagham centre immediately adjacent the settlement boundary and the existing urban edge. The site is enclosed on all sides by roads, to the north by Sefter Road, to the south east by Hook Lane and to the west by Pagham Road. All three roads see regular vehicular usage, with Pagham Road receiving the heaviest traffic, providing an important road connection between Pagham and Chichester.
- 3.2 The site currently comprises arable land with periphery hedgerows and tree groups. There is a small change in topography from 6.7m Above Ordnance Datum (AOD) at the eastern boundary to 4-4.5m AOD at the western boundary.
- 3.3 The site's wider context is formed by the existing urban area of Pagham (Rose Green) to the south and east and open countryside punctuated by small villages and farmsteads to the north and west. The existing urban area to the east is largely characterised by a mix of low rise housing developments, including bungalows and two-storey detached properties. Housing predominantly includes small front gardens and private driveways often defined by small hedgerows.
- 3.4 Land to the north and west comprises predominantly of arable farmland. Fields are irregular in size and shape and are typically defined by native hedgerows punctuated with hedgerow trees. Of note is the Pagham Rife to the west of the site which flows north to south towards Pagham Harbour.



TOP: Corner of Hook Lane & Pagham Road, looking northeast



MIDDLE: Pagham Riad Site access, looking east



LEFT: Internal Site view along existing watercourse, looking east

Local Facilities

3.5 Manual for Streets notes at para 4.4.1 that: *“Walkable neighbourhoods are typically characterised by having a range of facilities within 10 minutes (up to about 800m) walking distance of residential areas which residents may access comfortably on foot.”*

3.6 As can be seen here the local facilities noted below - including bus stops, schools, retail and health services are either within walking or easy cycle distance of the site.

3.7 Local Facilities within 800m (10 minute walk) of the site are:

- Rose Green Infant School accessed from Hawkins Close
- Rose Green Primary School accessed from Raleigh Road
- A variety of provisions centred around Rose Green Road including a petrol station, pharmacy, two convenience stores, fruit and veg shop, butchers and fishmongers, post office, hardware store, florist and a number of food take aways
- A variety of provisions to the south of the site located along Pagham Road including two convenience stores, a post office and a variety of restaurants, take aways and public houses.
- Pagham Reformed Church on Pagham Road.

3.8 The site is therefore considered in a sustainable location which is supported by a variety of local services within a 10 minute walk.





Landscape

3.9 At a regional level the site falls within NCA 126: The South Coastal Plain. Key characteristics of this area include coastal inlets and 'harbours', a diverse landscape of narrow tidal creeks, mudflats, shingle beaches, dunes, grazing marshes and paddocks.

3.10 At a local level the Strategy for West Sussex (2005) identifies that all new development should be of a good quality, be well designed and at varying density in order to fit sympathetically within the landscape. This strategy goes on to note that development on the edge of settlements should prioritise landscape enhancement and encourage the planting of new woodlands and hedgerows in order to reinforce landscape character and wildlife habitats.

3.11 The Arun Landscape Study - Landscape and Visual Amenity Aspects of Development Choices in Arun District (2006 - 2026) defines the site and its wider landscape as Character Area 6 - Rose Green Coastal Plain. This area is identified as having a high landscape capacity for development on the basis that it is of low sensitivity and value.

3.12 The Arun Green Infrastructure Study (2012) reinforces the need to use a robust Green Infrastructure network to enhance biodiversity and to soften the transition between urban and rural areas. This study also promotes the use of green wedges or features extending into and through development.



TOP: Internal view, looking east

MIDDLE: Hook Lane, looking north

BELOW: Sefter Road looking south east



PLEASE REFER TO LANDSCAPE & VISUAL IMPACT APPRAISAL 2017 BY URBAN WILDERNESS

Site Boundary

L1b: Large Scale Open Arable

L2: Medium-Small Scale Arable

L14: Paddock

L5a: Medium-Large Scale Rife Landscape

Visual

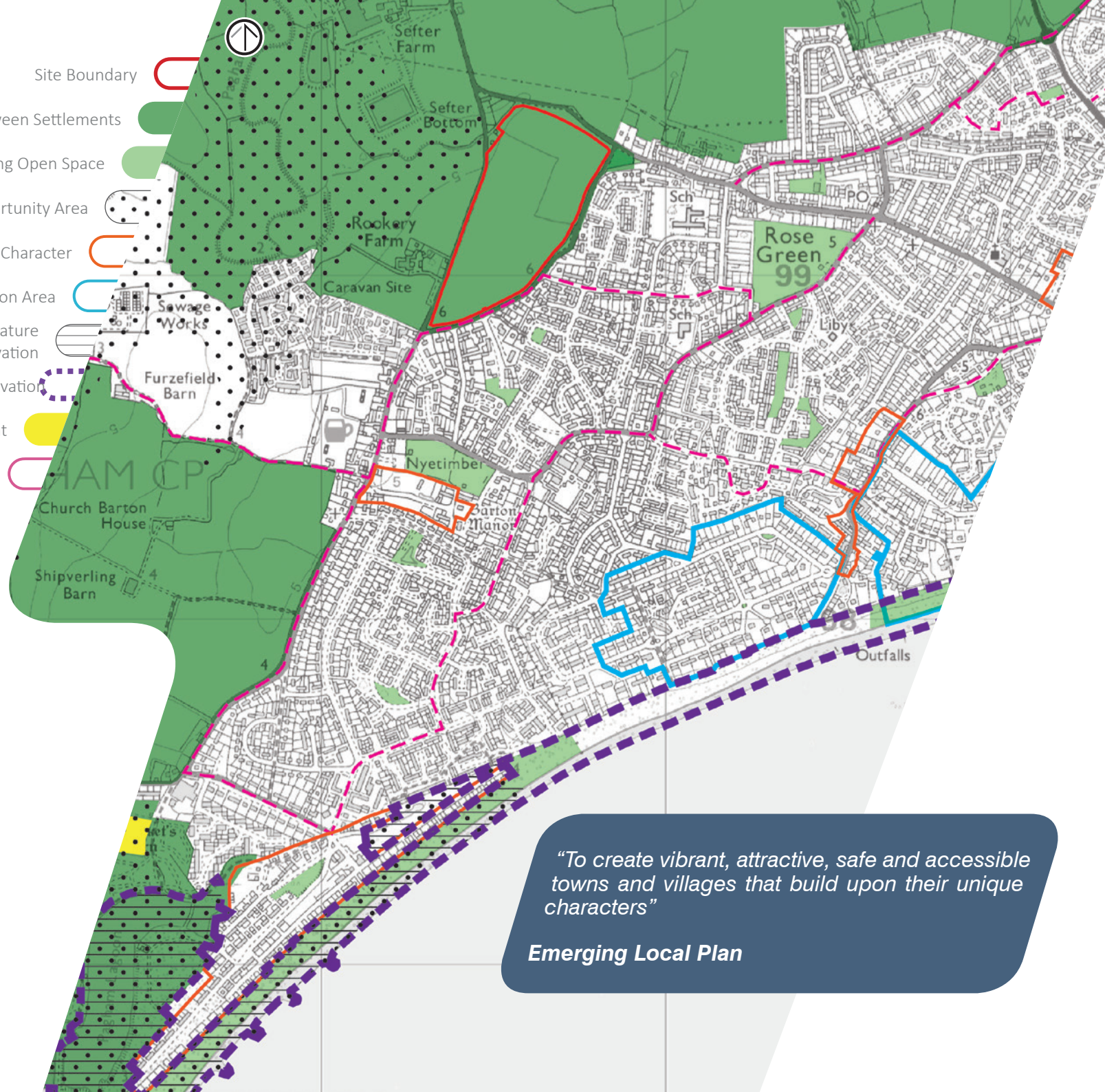
3.13 The majority of the site is well contained by existing mature boundary hedge planting along Pagham Road and Sefter Road. This planting effectively screens the site from the wider countryside to the north and west. The development proposals should seek to reinforce existing boundary planting to the north and west in order to increase its screening effects.

3.14 In contrast views from the east from properties fronting Hook Lane and pedestrians and road users along Hook Lane are largely open and unrestricted as a result of a low and gappy

hedge along this boundary. As a consequence existing residents fronting Hook Lane and pedestrians and road users will experience a change in their view from open field to an urban area. Impacts on the visual amenity of people who will experience this change are to be mitigated by supplementing existing boundary planting with additional hedge and tree planting to soften views towards the development.

3.15 In addition the development is to actively front Hook Lane so as to avoid views towards bland garden fences, with development set back from the site's boundary a minimum of 10m. Where practicable this buffer is to comprise robust native planting as noted above.

- Site Boundary
- Gaps Between Settlements
- Existing Open Space
- Biodiversity Opportunity Area
- Area of Special Character
- Conservation Area
- Sites of International Importance for Nature Conservation
- Sites of National Importance for Nature Conservation
- Scheduled Ancient Monument
- Aspirational Cycle Route



"To create vibrant, attractive, safe and accessible towns and villages that build upon their unique characters"

Emerging Local Plan

Townscape

3.16 The context of the site varies in character, appearance, density and street layout largely reflecting the settlements growth pattern at various periods.

- To the south and east development largely consists of residential estates which can broadly be defined as:
- Post war semi-detached brick bungalows and 2 storey homes in cul-de-sac formations
- One and two storey residential estates with detached homes of varied styles and sizes.
- Modern two storey, small scale residential homes developed within small infill sites.

3.17 Beyond Pagham Road to the north and west lies large scale agricultural fields. Here development is limited to agricultural buildings, greenhouses and a small residential estate which can be defined as:

- Two storey homes in cul-de-sac formations
- Occasional farm house dwellings with traditional half hipped roofs
- A number of traditional farm buildings with thatched roofs some of which have been converted into hotel / public house / restaurant development.

3.18 Densities across Pagham range considerably from 10 to over 40 dwellings per hectare (dph), the mean density therefore equates to 26 dwellings per hectare. The Neighbourhood Plan broadly advocates development up to 28 dph whilst the Village Design Statement notes that higher densities may be explored to 'prevent the loss of privacy'. At a national level the NPPF advocates higher densities in order to ensure that developments make the most efficient use of land. The proposals reflect the desire to balance efficiency with local character.



TOTAL MEDIAN: 26 DPH



Site Boundary

Flood Zone 3 - Yearly 1:200 or greater Sea Flood Possibility
Yearly 1:100 or greater River Flood Possibility

Flood Zone 2 - Up 1:1000 possibility of extreme
Sea or River Flooding

Drainage & Hydrology

- 3.19 Reference to the Environment Agency mapping confirms the site lies in Flood Zone 1 (land assessed as having a less than 1 in 1,000 annual probability of river or sea flooding). Additionally, this mapping also confirms the site lies outside the 1 in 100 year extreme coastal flooding extent and therefore in an area at low risk of flooding.
- 3.20 An existing watercourse passes through the site, flowing generally east to west towards the Pagham Rife further to the west of the site on the other side of Pagham Road. In its current form, this water feature is heavily engineered and therefore, as part of the site development, it is proposed to naturalise this watercourse, providing bends and meanders whilst slackening the side slopes and creating a more sensitive area with landscape and biodiversity benefits.

Nature Conservation & Ecology

- 3.21 The Ecological Appraisal which was prepared by FPCR Environment and Design Ltd provides the results of an Extended Phase 1 Habitat and Preliminary Protected Species survey undertaken during September 2015 with subsequent specific species surveys undertaken in 2015 and 2016.
- 3.22 The site is located 1.6km north east from Pagham Harbour which is a European designated site (also commonly referred to as Natura 2000 site); such sites are protected under the Conservation of Habitats and Species Regulation 2010 (the 'Habitats Regulations'). This site is also listed as a Wetland of International Importance and is a RAMSAR site and is also of national importance as a Site of Special Scientific Interest (SSSI).
- 3.23 The cultivated arable habitats, which comprise the majority of the site, were found to be of low intrinsic and conservation importance, with no rare or notable species were recorded.

- 3.24 The survey did, however, record a good population of common lizard, widespread bat species and evidence of water vole and West European Hedgehog.
- 3.25 With regard to reptiles mitigation for the loss of habitat on site should be carried out in two phases and will involve creation of a receptor site within the application site in the north-western extents and, subsequently a trapping and translocation exercise.
- 3.26 To minimise impacts on bats, proposals will adopt a sensitive external lighting scheme which will be designed to minimise light spill on retained and proposed habitats of value to commuting and foraging bats. A 20m buffer from the adjacent road carriageways along the northern and western boundaries will distance the residential units away from more natural habitats, where dark corridors will be maintained.
- 3.27 The enhancement of the existing ditch and incorporation of additional ditches and water bodies will increase the potential for water voles in the future, therefore having a potential beneficial effect at local level.
- 3.28 During the desk study, three records of West European hedgehog were returned within 2km of the site and two hedgehogs were observed within the application site during the 26th July bat survey. Hedgehogs require large areas of contiguous habitat and development will result in a loss of habitat, reduced habitat quality, and habitat fragmentation. Residential garden fences should include small holes at their base in order to keep connectivity and enable free movement for this species. The remaining hedgerows within the application site will be enhanced and buffered providing high quality habitat for hedgehogs to utilise.

- 3.29 The area of GI within the southern and north-western extent of the site should contain suitable hibernaculum for this species, including log piles and patches of brush, which will allow hedgehogs to safely hibernate over winter as well as providing important habitat for insects during the warmer months which hedgehogs can feed on.
- 3.30 No badger setts were found on the application site or within the immediate surrounding area with no observation of any other signs of use or occupation. Badgers therefore pose no constraints to the development.
- 3.31 No evidence of dormouse or GCN was recorded. Therefore neither are considered to be a constraint to development.
- 3.32 During winter bird surveys, 40 species were recorded within the application site, all of which are fairly common to abundant birds in Sussex and the UK, therefore the application site is considered to have little value to any of the species. Six notable bird species of medium or high conservation concern were recorded within the application site during the breeding bird surveys.
- 3.33 The retention of existing vegetation and provision of new areas of habitat creation along with a new resource of residential gardens, will provide some compensation for the loss of suitable winter habitats for many of the recorded species of wintering birds. The GI will increase the degree of usable habitat across the site for a number of urban edge species, along with providing corridors for movement.
- 3.34 The retention of the majority of features present within the site suitable for breeding birds will ensure continued use of the site by local bird populations. Hedgerow enhancements through supplementary standard native tree planting, green open space and SUDS features will provide and increase in foraging and nesting resources

available for local bird populations. In addition, residential gardens and provision of a range of nest boxes within appropriate locations across the site will provide further enhancements.

- 3.35 The arable margins present are considered to be of negligible conservation value due to the species-poor character of these, the lack of regular management and their widespread and common occurrence.
- 3.36 The network of hedgerows within the application site provides connectivity between habitats both within the application site and within the wider landscape with a range of conservation values from moderate to high. Much of the hedgerow is to be retained and buffered as part of the proposals with only small sections removed for pedestrian and vehicular access. Hedgerow improvement will include additional planting and buffering ensuring that the small amount of hedgerow loss is compensated for.
- 3.37 All of the mature trees present within the site provide potential habitats for invertebrates, nesting birds and other wildlife and will be retained where possible. These will be protected from damage and from soil compaction during works by erecting and maintaining fenced Root Protection Areas (RPAs).



Access & Movement

Site Access

- 3.38 Access to the site is currently available via two field gates, one to the north west off Pagham Road and the second to the north off Sefter Road.

Existing Road Network

- 3.39 Pagham Road runs to the west of the proposed residential site on a broadly north / south alignment between the junction with Sea Lane to the south and the junction with the B2166 Lower Bognor Road to the north. Pagham Road is subject to the national speed limit to the west of the site and is a predominantly rural in character road with no footway or street lighting provision. Pagham Road reverts to a 30mph speed limit just to the north of the priority junction with Hook Lane at the south western corner of the site. Bus stops are also provided on both sides of the carriageway in the vicinity of the junction with Hook Lane.
- 3.40 Pagham Road provides access to a parade of local shops and Pagham village to the south of the site. To the north Pagham Road connects to the B2166 that in turn leads to the B2145 and the A27 Chichester Bypass.
- 3.41 Sefter Road runs on an east - west alignment to the north of the site, between the priority junction with Pagham Road to the west and the priority junction with Hook Lane to the east. Sefter Road is subject to the national speed limit to the north of the site and is a rural in character with no footways or street light provision.

- 3.42 Hook Lane runs on a southwest to northeast alignment to the east of the site, between the priority junction with Pagham Road to the south west and priority junction with Sefter Road to the north east. Hook Lane is subject to a 30mph speed limit, albeit this speed limit is often exceeded. Hook Lane also benefits from the provision of a system of street lighting. Footways are provided on both sides of the carriageway to the south of the junction with Lodsworth Road. To the north of Lodsworth Road a footway is only provided on the eastern side of the carriageway which connects to Sefter Road / Rose Green Road to the north.

Footpaths and Cycleways

- 3.43 Besides the South Coast Cycle Route along Sefter Road, a recreational route promoted by West Sussex County Council, there are no cycle routes or cycle facilities between the site and Pagham. Local roads to the east and south of the site are relatively lightly trafficked and are considered to be suitable for cycle on road enabling access to all local facilities within an easy cycling distance.

Public Transport

- 3.44 The nearest bus stops to the site are located on Pagham Road and Hook Lane to the west and east of the site respectively.
- 3.45 The Pagham Road bus stops are located at the south west corner of the site in the vicinity of the priority junction with Hook Lane. The south bound bus stop is located immediately to the north of the junction with Hook Lane. The north bound bus stop and shelter is located opposite the junction with Hook Lane. The bus stops are within 400m walking distance from the centre of the site.
- 3.46 A bus stop is also located on the eastern side of Hook Lane adjacent to Hook Close to the North West corner of the site and on Lodsworth Road close to its junction with Hook Lane. These bus stops are also within 400m walking distance from the centre of the site.



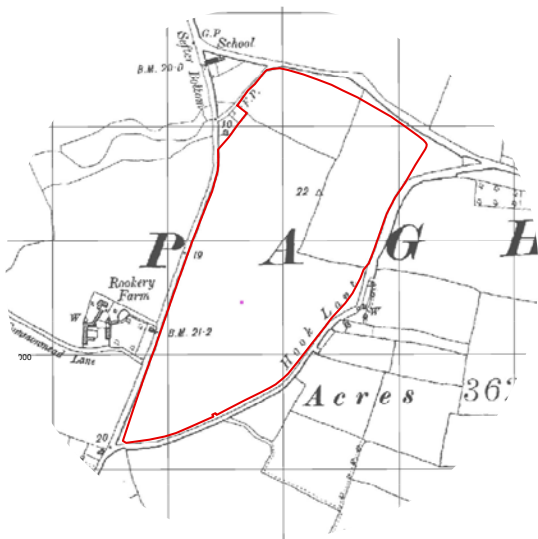
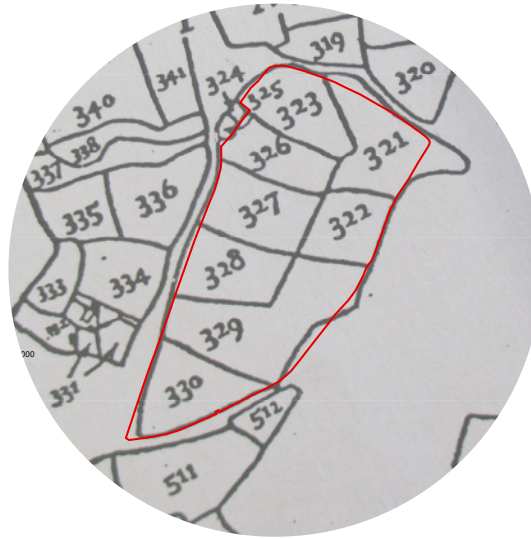
Site Boundary

Public Right of Way

Existing Site Access

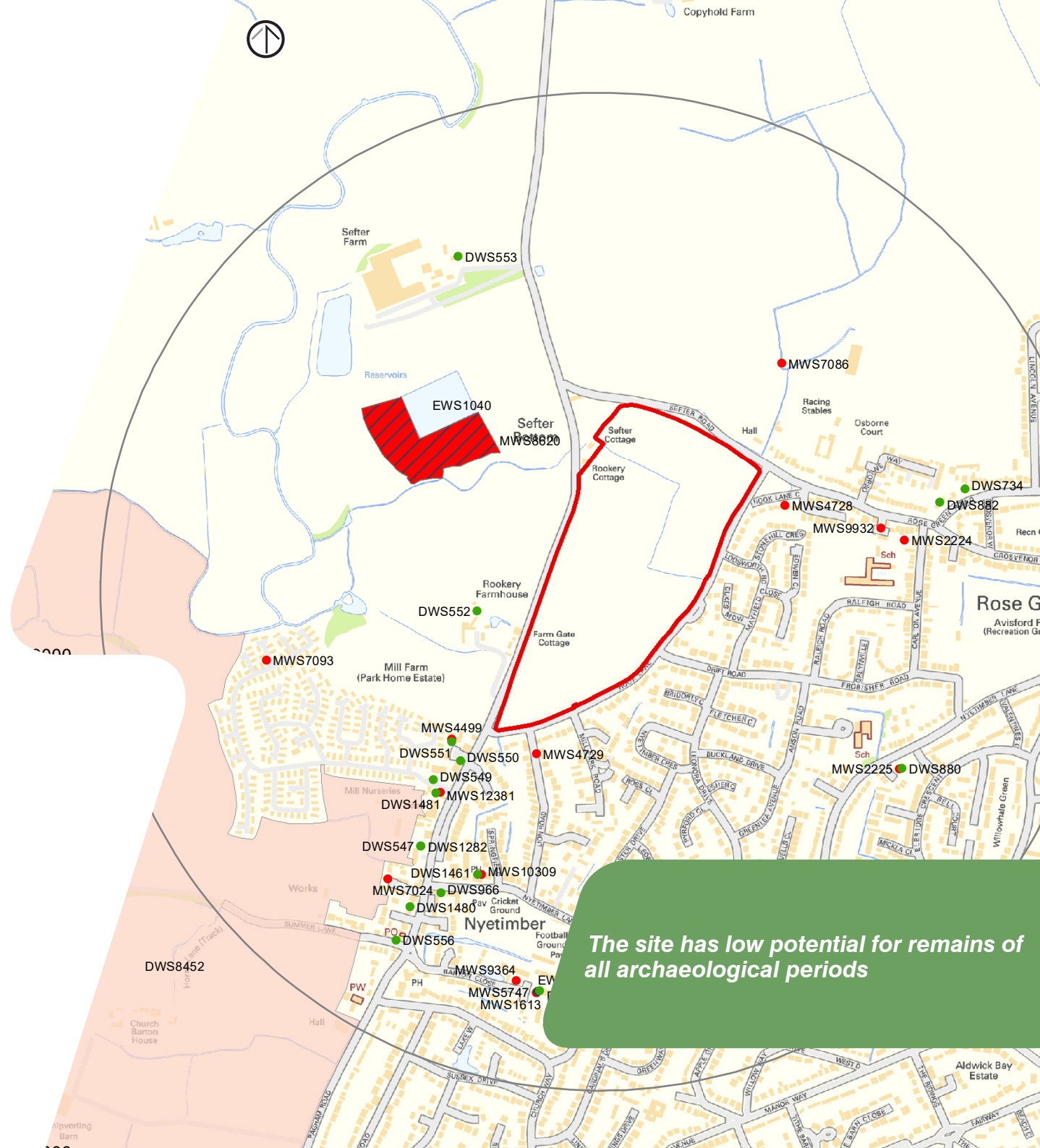
Existing Bus Stops

ACCESS PLAN



Heritage

- 3.47 A Heritage Desk Based Assessment has been prepared by Orion Heritage (October 2015). This assessment considers the potential effects on the historic environment of the proposed development of land at Hook Lane, Pagham and concludes that archaeology is not a development/design constraint.
- 3.48 The report notes that on the basis of the available evidence, the site has low potential for remains of all archaeological periods. The assessment considers that the presence of archaeological remains of local significance, (prehistoric and Roman in particular), cannot be ruled out and as such it is anticipated that an archaeological evaluation will be required as a future planning application is progressed.
- 3.49 The assessment also concludes that the proposed development is considered to have no impacts on designated heritage assets in the vicinity of the study site due to a lack of intervisibility with identified assets.



The site has low potential for remains of all archaeological periods

Noise

- 3.50 A Noise Assessment has been prepared by Brookbanks Consulting Ltd (December 2016) which updates a previous assessment undertaken by RPS. Following detailed measurements undertaken within the proposed development site the assessment concludes the following:
- 3.51 Traffic noise from Hook Lane, Pagham Road and Sefter Road is the most significant noise source. The assessment illustrates that the site lies mostly within acceptable limits i.e within 55Db for daytime noise levels and 30Db for internal night time noise levels. The assessment concludes therefore that the local noise environment would not preclude the development of the site.
- 3.52 Internal noise levels inside the proposed dwellings can be provided within acceptable limits through the provision of passive ventilation systems and standard double glazing for those residential properties fronting Hook Lane, Pagham Road and Sefter Road. The internal layout of properties is also to consider the location of lounge and bedroom areas to avoid sight lines towards Hook Lane, Pagham Road and Sefter Road. Finally the site layout is to consider the orientation of residential buildings to reduce sight lines onto Hook Lane, Pagham Road and Sefter Road.
- 3.53 The Assessment demonstrates that the Proposed Development will not be significantly affected by the noise levels in the immediate vicinity. It is also anticipated from this that noise impacts arising out of the proposed development are negligible. The maximum internal noise level with the inclusion of window glazing is 22.7 dB during the daytime and 17.6 Db at night which achieves the required standards as set by BS 8233.

Site Boundary

2016 Noise Levels

2035 Noise Levels



NOISE PLAN



CONTEXT EVALUATION

Environmental Considerations

3.54 The Site has very few physical constraints to development of the type proposed. Those that do exert an influence are as follows:

Physical and Environmental

- Drainage - Whilst the site does not fall within Floodzone 1, both photographic evidence and anecdotal evidence provided during consultation indicate that due to the Site's low lying topography it often experiences periods of excessive waterlogging. As a result the development is to include a Sustainable Drainage Network designed to regulate surface water runoff from the site to an acceptable rate and in doing so to ensure that areas which are currently subject to waterlogging are actively drained.
- Noise - Internal noise levels inside the proposed dwellings can be provided within acceptable limits through the provision of passive ventilation systems and standard double glazing for those residential properties fronting Hook Lane, Pagham Road and Sefter Road. The internal layout of properties is also to consider the location of lounge and bedroom areas to avoid sight lines towards Hook Lane, Pagham Road and Sefter Road. Finally the site layout is to consider the orientation of residential buildings to reduce sight lines onto Hook Lane, Pagham Road and Sefter Road.
- Ecology - The proposals should include habitat creation to the north of the site for reptiles and West European Hedgehog. This should feature log piles, hibernacula and patches of brush. In addition residential garden fences should include small holes at their base in order to keep connectivity and enable free movement for these species. A 20m buffer from adjacent road carriageways along the northern and western boundaries should be provided to maintain dark corridors for bats.

- The enhancement of the existing ditch and incorporation of additional SuDS features will increase the potential for water voles. The network of hedgerows within the application site provides connectivity between habitats both within the application site and within the wider landscape with a range of conservation values from moderate to high. Much of the hedgerow is to be retained and buffered as part of the proposals with only small sections removed for pedestrian and vehicular access. Hedgerow improvement will include additional planting and buffering ensuring that the small amount of hedgerow loss is compensated for. In addition mature trees will be protected from damage and from soil compaction during works by erecting and maintaining fenced Root Protection Areas (RPAs).
- Heritage - it is anticipated that an archaeological evaluation will be required as a future planning application is progressed.

Access

- Vehicular access may be obtained from both Pagham Road and Hook Lane. In both cases small sections of hedgerow will need to be removed to facilitate access.
- Pagham Road – provides a key arterial link between Pagham and Chichester and the wider road network to the north. An access into the development from Pagham Road must prevent this route from being obstructed.
- Hook Lane – Whilst the speed limit along Hook Lane is 30mph survey results indicate that this is often exceeded. Development should explore opportunities for traffic calming along Hook Lane to control speeds.

- The local road network has been assessed to ensure that the traffic associated with the development does not result in greater unacceptable delay. Where an impact is identified mitigation measures will be provided.
- No Public Rights of Way cross the site. Development proposals can extend the local network of routes in order to provide both existing and proposed residents with access to open space and car free recreational routes.

Social

- Visibility of the site is generally well contained by existing boundary planting, with the exception of views from Hook Lane to the east. Boundary planting along Hook Lane is low and often gappy permitting residents fronting Hook Lane, and passing pedestrians and motorists, open views across the site. Development should ensure that it is set back from the boundary of the Site, it should actively front Hook Lane and should include new structural tree and hedge planting to increase screening in order to soften and partially screen views of development from the east.



DESIGN

Design Objectives

- 4.1 The following objectives are a direct result of the evaluation of baseline data, the site's context, constraints and opportunities and as a result of consultation responses.

By Design:

- Ensure development provides a soft, green transition from the urban edge to wider countryside.
- Ensure the development provides a selection of high quality housing in a mix of tenures, sizes and styles to meet market demand, 30% will comprise affordable housing.
- To promote the highest quality sustainable design, creating a 'place' which is both safe and attractive and which establishes a desirable setting, enhancing quality of life, health and social well-being, and provides adaptable homes for the elderly;
- To make the most efficient and effective use of land which is well related to its surroundings and which does not compromise the amenity of existing residents or the integrity of nearby sites of ecological importance such as Pagham Harbour;
- To respond to the architectural distinctiveness associated with the local vernacular of Pagham and its environs.
- To actively drain waterlogged parts of the site and to attenuate surface water runoff from the site to an acceptable level.

Through Access:

- The development will provide safe access arrangement which conforms to the relevant highway design standards.
- The development will provide improvements to the local highway infrastructure in terms of additional footway provision and improvements to local bus stops.
- Hook Lane currently experiences speeds well in excess of the 30mph speed limit. New tabled road junctions are to be considered in order to help define access into the proposed development, integrate development into the adjacent road network and importantly to slow traffic along Hook Lane.
- Promote access to and use of existing bus services. Proposed footways linking the development to existing bus stops on Hook Lane are to be promoted. A new bus lay by and stop is to be created on the east side of Pagham Road in order to improve accessibility to this service.
- New on site Public Rights of Way are to be created in order to provide both existing and proposed new residents with easy access to accessible green space.
- Adopt shared surface design strategies to enable all road users to access the development safely, whilst creating an attractive, pedestrian friendly environment.
- Ensure access for all is considered at every level of design.
- Ensure that car parking is provided in line with Arun District Council's SPD relating to parking standards (October 2000).

MAXIMISE
GREEN CONNECTIONS



Creating a 'place' which is both safe and attractive and which establishes a desirable setting and enhances quality of life

DESIGN

Design Evolution

- 4.2 Having gained a good understanding of the existing site and place, through the various environmental and technical studies, it is possible to formulate an appropriate masterplan response.
- 4.3 The Masterplan process seeks to achieve an optimum solution that minimises potential adverse effects on the environment whilst delivering a responsive layout, which maximises environmental, social and community benefits. The development proposals have evolved over time through a series of iterations. This process seeks to minimise any adverse environmental impacts whilst maximising economic, social and sustainability benefits. The following plans illustrate the schemes evolution and development:



Original Concept Plan

An initial concept plan distributed development blocks around the site in response to existing site conditions, access points and ecological corridors.

A driving factor to this initial proposal, was the incorporation of extensive ecological networks, integrating the sites wider rural context with the existing urban edge of Pagham. The existing water way is reworked to have a natural meander, with wide riparian banks running parallel.

Similarly, the tree count is extensively expanded, with large swathes of trees introduced around the site's boundaries offering both shelter and screening. Street trees were introduced to line roadways and positioned so as to guide residents through the neighbourhood.



Secondary Concept Plan

Following further technical work completed by WSP regarding site drainage the site's on site Sustainable Drainage Network was expanded in order to increase the site's attenuation capacity and maximise its scope to actively drain areas that experience water logging. The central stream, running through the site, meanders its way west and links with adjacent swales and attenuation ponds. During dry periods, these areas will function as parkland and amenity space, for the residents to use and enjoy whilst enabling the inclusion of some permanent water bodies for habitat and visual amenity.



Third Concept Plan

Breaking down the blocks, into individual streets, spaces and indicative properties, this plan developed the rationale with regards to the interaction of private properties, care home, D1 Use and the public realm, ensuring development actively fronts open space and avoids blank gables and dead ends. This iteration also sought to diversify open spaces and habitat provision, ensuring that the site's landscape is an integral part of the development.

Bringing the Design up to the Present Day

Further development following public consultation saw the increase in width of green space along Hook Lane, along with an increase in tree planting for screening. The proposed D1 Use was moved south next to the proposed care home and the northern most vehicular access onto Hook Lane was moved further north so that development traffic would be routed past fewer existing residential properties fronting Hook Lane.

In addition the Care Home and its communal gardens have been reorientated for the privacy of residents fronting Hook Lane.

ILLUSTRATIVE AERIAL OPTION A



FIGURE 2: ILLUSTRATIVE MASTERPLAN OPTION A

ILLUSTRATIVE AERIAL OPTION B



A Hook Lane Vehicular Access

B Hook Lane Pedestrian Access

C Pagham Road Vehicular Access

D Care Home/Specialist
Accommodation for the Elderly

E Health Centre/Day Nursery (D1 Use)

F High Quality Housing

G 'Hook Meadow'

H Min. 20m Green Buffer with reinforced planting
and linear Swale/Attenuation Basin

I Formal Equipped Play Space

J 'Downs View'

K Re-routed Existing Eatercourse

L 'Sefter Meadow'

M Min. 20m Green Buffer from
carriageway with reinforced planting

FIGURE 3: ILLUSTRATIVE MASTERPLAN OPTION B



Design Parameters

- 4.4 The development proposals are illustrated by the Development Framework Plan (Figure 1) which identifies the amount of built development, and the distribution of land uses.
- 4.5 In accordance with DCLG publication “Guidance on Local Information Requirements and Validation” (2010) Two Illustrative Masterplans (Figures 1 & 2), have also been prepared, the purpose of which is to demonstrate the general design principles that could be adopted for the new residential development, and how the development could be laid out within the parameters illustrated on the Development Framework.
- 4.6 The Illustrative Masterplan Options indicate the principles of urban structure and urban grain, i.e. the framework and the layout of streets and routes, the location, arrangement and design of the development blocks, plot arrangement, and green infrastructure. These plans provide an approximate location of buildings across the site, and how the built form could relate to the streets/ public realm.
- 4.7 Illustrative Masterplan A depicts how a two form entry primary school may be delivered within the proposals whilst Illustrative Masterplan Option B depicts how the site could be developed without a school site being included.

Quantum of Development

- 4.8 The Development Framework illustrates the quantum of development that may be delivered on site (17.2ha total site area).
- 4.9 Should the primary school or proposed D1 Use be constructed residential development will equate to circa 216 units. If demand for these facilities results in their provision elsewhere within Pagham the quantum of development would increase up to 300 units in total.
- 4.10 In summary the amount of development proposed on the Site is up to 300 dwellings, with a mix of dwelling types from 2-5 bedroom houses, with up to 30% being affordable. This mix is further complemented by a care home / specialist housing for the elderly, catering for up to 80 beds, on 0.55ha.



Mix of Uses

- 4.11 Alongside new housing, the proposed development safeguards land for the provision of a new two form entry primary school on 2.4ha, and a new D1 Use to provide a children's day nursery and / or health centre (subject to demand) on 0.4ha. The maximum plot and building sizes for development of these uses is indicated below:

Land Use	Site Area	Number / Footprint	Height
Residential units	depending upon delivery of the school and D1 Use - between 7.2 and 10ha	Between 216 – 300	Houses up to 2 storeys in height (9.5m to ridge)
two form entry primary school	2.4Ha site	footprint not to exceed 2400 sq.m	up to 2 storeys in height (10m to ridge)
D1 use (health centre and / or children's day nursery)	0.4ha site	footprint not to exceed 1600 sq.m.	up to 2 storeys in height (10m to ridge)
care home / specialist housing for the elderly (80 beds)	0.55ha site	footprint not to exceed 3200 sq.m	up to 2 storeys in height (9.5m to ridge)
Green Infrastructure (including road infrastructure with single sided development - excluding Semi Private Drives)	6.65ha	n/a	n/a

- 4.12 At this stage, the final mix of market and affordable homes has not been fixed. The final mix will be subject of further discussion with the Local Authority and will therefore be subject of a reserved matters application. The form and layout of the development will reflect the principles established in this Design and Access Statement.

- 4.13 As a working assumption to assist the preparation of the Illustrative Masterplans and Development Framework Plan, the following mix of dwelling types has been adopted:

Dwelling Type	Average Floor Area	Average Number
2 bed	80 sq.m	86 to 120 (40%)
3 bed	96 sq.m	65 to 90 (30%)
4 bed	125 sq.m	54 to 75 (25%)
5 bed	167 sq.m	11 to 15 (5%)
Total	n/a	216 to 300 (100%)

- 4.14 The development will comprise a variety of dwelling types from detached and semi-detached housing to small groups of terrace accommodation. The main objective is for the development to offer a range of accommodation with a choice of houses to provide for single occupancy and family accommodation. This will foster a wide demographic and a mixed community.
- 4.15 Housing will be designed to maintain good permeability ensuring that all residents have easy access to Hook Lane, the internal Spine Road, the public right of way network and to accessible public open space. The land will be used efficiently in accordance with Government guidance.



Structure & Layout

- 4.16 There are no definitive best practice dimensions for development block size or form. For the most part development blocks will be arranged to ensure public frontages and secure private rear gardens.
- 4.17 The arrangement of buildings within development blocks is defined largely by their plan form, height, and scale. To maintain good legibility and permeability the block arrangement will be subdivided by a choice of interconnecting streets and pathways. This will create a human scale and finer pedestrian grain to the development.
- 4.18 Best practice advocates that a mix of both wide and narrow frontage plan forms should be used. Wide frontage buildings will allow for a greater opportunity of variation along the street, whilst a narrow frontage approach will establish a run of linked dwellings and continuous frontages.

Corner Plot Arrangements

- 4.19 How streets interconnect or development blocks change direction are critical components of 'the place'. Best practice examples follow the principle of a continuous built frontage and/or focal building or space 'wrapping' around a corner. This provides a positive definition to the street and avoids 'weak' ill-defined edges. In addition, this provides opportunities for landmark buildings that terminate or help frame views along the street.





Landmark Features

- 4.20 Landmark features or points of focus allow users to orientate themselves, creating an easily navigable and distinctive environment. Appropriate features or points of focus include public squares, pocket parks, prominent buildings, street trees, public art, and smaller items such as street furniture. The use of landmarks such as a building projecting onto the street, or a gable end facing onto the street in an otherwise straight line of buildings will provide identity within the layout.

Views and Vistas

- 4.21 The detailed block and street layout will be arranged so that it comprises a series of attractive views and vistas. This will add a certain character and charm to the development, and respond to traditional place making principles. Furthermore views and vistas help to reinforce and create a legible environment which is easy to navigate. The detailed design will also include subtle variations in the building line, in terms of scale, height, and setback of buildings from the footway. This will be supplemented by a quality materials and landscape treatment which will produce an attractive street.

Street Frontage

- 4.22 To define the boundaries between private and public spaces, all dwellings will have some form of private frontage. These will vary in depth to avoid a uniform approach development and provide visual interest along each street. Opportunities for deeper front gardens should be explored where practicable in order to maximise green space fronting public highways and to increase the space available for tree planting along streets. It is important that frontages are not excessive and that buildings still relate and interact with the public realm.
- 4.23 Frontages will be defined by the use of consistent boundary treatments, which reflect the local vernacular and will be kept clear by the provision of bin storage to the side or rear of plots.

Design & Safety

4.24 A desirable place to live, work and play, which is safe and secure, is fundamental. This will be achieved by the way the development is laid out and by the street, block and plot design. Buildings will be located to actively face streets and public areas in order to promote 24 hour surveillance, and to encourage safer places. Public areas such as the streets and play area will be designed so that they are safe, easily accessible and attractive to use.

4.25 All users will be considered as part of an inclusive design approach. It is important that there is good surveillance of public spaces by a number of properties and buildings, and that barriers, blank walls and 'dead ends' are avoided. Locating windows and on corners, or gable ends is a key principle, and occurs within the local context. Across the whole development careful attention will be paid to designing out crime through the layout, and promoting privacy and security.

4.26 This will be achieved by:

- High quality active streets;
- The position of buildings to the front of the plot, avoiding blank gables and spaces between the back and / or sides of properties;

- The use of street lighting where it is needed to illuminate key routes and spaces, and;
- Well located windows and doors that survey public spaces.

Street Lighting

4.27 The National List of Local Requirements requires:

4.28 *"proposals involving the provision of publicly accessible or visible developments, in the vicinity of residential property, a listed building or a conservation area, or open countryside, where external lighting would be provided or made necessary by the development, should be required to be accompanied by details of external lighting and the proposed hours when the lighting would be switched on. These details shall include a layout plan with beam orientation and spillage and a schedule of the equipment in the design."*

4.29 Given that the scheme is for an outline application and as such the detailed layout is indicative with full details of lighting equipment not yet known we would anticipate that full details are to be provided via subsequent reserved matters applications.

4.30 Street Lighting will however be guided by the following principles:

- The development will include a range of measures which would control the use of artificial light without detriment to the lighting task;
- The need for lighting would be carefully assessed and all lighting would be designed in accordance with guidance issued by the Institute of Lighting Engineers (ILE) in order to prevent light pollution;
- Use will be made of light fittings that reduce light emitted upwards and towards wildlife corridors etc, with all lighting fitted with light sensors which triggers lighting to switch on or off as required, and;
- The Spine Road, Side Roads, Semi Private Drives and Parking provision for the D1 Use, care home and primary school will be lit to ensure adequate security and safety is maintained. Broader public open spaces will remain unlit to ensure light spill is kept to a minimum.
- Lighting will be selected and positioned so as to maintain a dark corridor along the site's western and northern boundaries for commuting / foraging bats.



Green Infrastructure

- 4.31 Green Infrastructure (GI) refers to a robust framework of structural planting, open spaces (both hard and soft) and habitats. The site's GI seeks to develop an attractive environment for residents and visitors to the site whilst effectively integrating the development into its wider context. Green Infrastructure promotes recreation, movement and leisure, access to nature and the whole sale enhancement of site wide biodiversity.



- 4.32 Key design objectives relating to the design of the site's GI include the following:

- The creation of attractive useable spaces that are accessible to all.
- The use of structural planting and open space to provide an effective transition between urban and rural environments. This is to include 'Green Wedges' into and through the development in accordance with recommendations within both the Arun Green Infrastructure Study (2012) and The West Sussex Landscape Strategy (2005).
- Beside the formation of new site access points, maintain and enhance existing boundary vegetation and supplement this with new habitats, including meadow and wetland in order to maximise site wide biodiversity.
- Realign and reproduce the existing watercourse through the site so that this increases its functional capacity, its biodiversity potential and its visual amenity. This watercourse is to form part of a wider Sustainable Drainage System to regulate surface water runoff through and from the site.

- Maintain a landscape buffer, including ew there and hedge planting for screening purposes, between the proposed development and existing residents fronting Hook Lane. New planting is to balance the visual integration of the existing urban area with new development whilst softening views into the site.
- The development will include street tree planting to define key routes and road intersections. Street trees will also be used as focal features at the end of vistas and around incidental green spaces.
- The care home / specialist housing for the elderly will include communal garden space.
- Parking areas associated with both the care home, school (Masterplan Option A only) and D1 Use will be sympathetically designed to include planting and tree planting.



- Site Boundary
- Developable Area
- Green Infrastructure
- Pedestrian Access
- Viewing Mound
- Formal Equipped Children's Play Space



-  Site Boundary
-  Developable Area
-  Green Infrastructure

GI Components

4.33 Our Green Infrastructure (GI) framework consists of the following key components:

- Hook Meadow - To the south of the site a small green provides an attractive outlook for the proposed care home, informal recreation space and ensures that development is set back from the junction of Hook Lane and Pagham Road.
- Western Boundary - Along the site's western boundary a green buffer (minimum 20m in width) is proposed. This will retain existing boundary hedge planting and reinforce this with new woodland planting. A linear Swale / attenuation basin is proposed to run parallel to the boundary. This feature will be predominantly dry, filling to accommodate heavy rainfall events.
- Childrens Play Area - A new equipped children's play area, to include both fixed equipment such as slides and swings alongside logs, boulders and earth mounding etc for natural play is proposed towards the centre of the site. New roads in the vicinity of the play area are to include raised tables and a dedicated crossing as necessary.
- Downs View - Towards the centre of the site the creation of new parkland centred around the a realigned watercourse is proposed for semi formal recreation I.e the grass is to be kept cut for ball games, running and walking etc. Incorporated within this new park a viewing mound seeks to open up views north to the South Downs Area of Outstanding Natural Beauty.
- Sefter Meadow - To the north of the site a wide open space is provided for informal ball games, picnics and dog walking. This area is to be cut less frequently allowing meadow species to establish and flower.

- Northern Boundary - Along the site's northern boundary a green buffer from the Sefter Road carriageway (minimum 20m in width) is proposed. This will retain existing boundary hedge planting and reinforce this with new woodland planting.
- Sefter Green - To the north east of the site a small green provides an attractive space close to Hook Lane. Development is set back from the road and the green area echoes the character on the opposite side of Hook Lane, creating balance and a green gateway to Hook Lane.
- Rife Green - A new linear green space effectively extends Downs View to. Eat Hook hereby connecting a recreation route and wildlife corridor through the development. At the centre of this space the realigned watercourse meanders from its existing culvert under Hook Lane into the development.
- Eastern Boundary - Development will be set back from Hook Lane. Existing hedgerow boundaries will be reinforced and new street tree planting implemented to further define the streetscape of Hook Lane and to help nestle the development into the wider landscape setting.

4.34 The above features are common to both Masterplan Options A and B albeit Masterplan Option A also includes additional green infrastructure associated with the proposed school playing fields. Playing fields are designed to front Hook Lane thereby increasing the perceptible setback of development where existing housing fronts the proposed school.

4.35 It is of note that on site provision of open space equates to circa 6.65ha which far exceeds the quantum required within Arun District Council's Open Space Standards SPD (2000) which requires circa 1.78Ha. In line with this guidance we propose a Neighbourhood Equipped Area for Play within the proposals. Whilst we are not proposing formal playing fields within the site there is sufficient space available should playing fields be deemed necessary.

GI PLAN OPTION B



Structural planting and open space to provide an effective transition between urban and rural environments

Softworks

- 4.37 Planting throughout the public open spaces and around the Site's periphery will comprise predominantly of native species agreed through discussion with the Local Authority's Landscape Officer and/or Parks Department. Species will include, but not be limited to – oak, ash, hornbeam, field rose, field maple, wild cherry and hawthorn, guelder rose, blackthorn, hazel and holly.
- 4.38 Meadow and wetland species similarly are to be agreed with the Local Planning Authority but should as a minimum seek to meet local BAP guidelines. Specimen street trees will include a mix of native and ornamental species to promote biodiversity and offer seasonal interest and robustness.

Sustainable Drainage

- 4.36 An integral part of our proposals is to create a Sustainable Drainage System (SuDS) comprising of permeable paving (where appropriate), swales and attenuation basins (shallow ditches and ponds). These features will collect and regulate stormwater run-off thereby reducing peak flows leaving the site. In addition these features will reduce flood risk whilst also helping to improve water quality and provide additional biodiversity and ecology benefits.







-  Site Boundary
-  Developable Area
-  Waterways/Ponds
-  Re-routed Existing Watercourse
-  Indicative Drainage Fall

DRAINAGE PLAN OPTION A



Site Boundary

Developable Area

Waterways/Ponds

Re-routed Existing Watercourse

Indicative Drainage Fall

DRAINAGE PLAN OPTION B

Appearance

4.39 Whilst the proposed development does not seek to directly emulate the character of adjacent post war housing it will seek to take design cues from local materials and architectural styles evident within the wider area and from some of Pagham's original pre war buildings to ensure that it reflects the local vernacular of the wider area.

4.40 Traditional local vernacular can be defined as:

- Detached / semi detached properties
- The use of half hipped roofs
- Frequent gabled dormers
- Brick and render facia
- Regular point timber garden fencing
- Grid patterned framed windows (often white)
- The predominant roofing colour is brindle

4.41 Post war development within the wider settlement area varies in appearance. However, certain characteristics are to be echoed within the proposed development.

- Modern characteristics can be defined as:
- Non linear layout with meandering streets
- Areas of accessible greenspace
- Appropriately scaled private gardens
- Homes with private driveways and the frequent use of garages.





ACCESS

Site Access

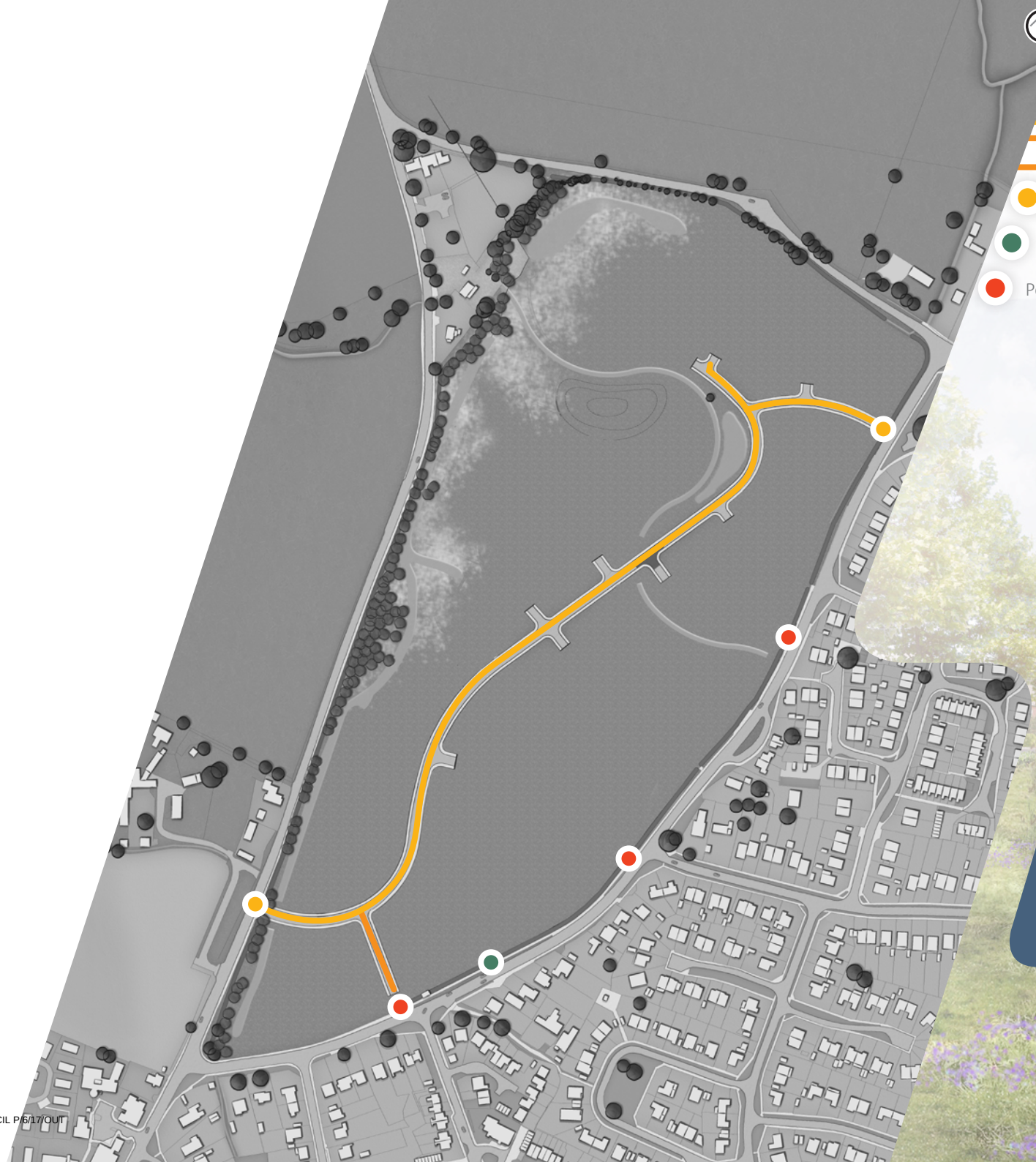
- 5.1 Masterplan Option A proposes three priority junctions that connect with existing highway infrastructure; two along Hook Lane and one from Pagham Road, whilst Masterplan Option B proposes two access points, one off Hook Lane and one of Pagham Road.
- 5.2 Access off the existing highway network will be provided from Pagham Road and from Hook Lane. Access points will comprise new priority T junctions. The proposed junction onto Pagham Road will include a ghost right turn lane to prevent traffic turning right into the development obstructing traffic along the main carriageway.
- 5.3 In addition to a ghost right turn the development proposes a new pedestrian footway and an improved bus layby arrangement on Pagham Lane. The proposed accesses off Hook Lane will also include new footways either side of the access roads which will in turn link into the existing footway network.

Streets & Spaces

- 4.42 Significant consideration has been taken to ensure that streets and spaces are legible, appropriate to the scale of the development and that they reflect the character of the wider landscape
- 4.43 Streets within the development will be built to an adoptable standard.
- 4.44 The hierarchy of streets and the size and arrangement of development blocks and open spaces is a connected design discipline addressing the need to meet the following:
- Maximise connectivity to the existing road network without detriment to its function;
 - Design a street pattern which reflects local morphology and place making character, with a single spine road providing access to a hierarchy of descending routes;
 - Utilise the local street pattern or 'Urban Grain' to create well-connected functional layout which ensures all desire lines are fully appreciated and considered within the scheme;
 - Promote a street pattern which is easy to navigate whilst providing priority to pedestrian movements;
 - Provide a choice of integrated routes for all. This should include a clear, easy-to-use network of streets and footpaths connecting to existing networks, and proposed local facilities/public open spaces etc;
 - Promote ready accessibility for the needs of those with impaired mobility and elderly residents, and;
 - Encourage the control of vehicle speeds and guide movement through good urban design. Explore local examples such as restricted forward visibility, narrow street widths, frequent connections, changes in direction, changes in surface treatment and tight junction radii.



-  Primary Vehicular Route- Both options
-  Secondary Vehicular Route- Both options
-  Vehicular Access- Both options
-  Potential Vehicular Access- Option B only
-  Pedestrian Access- Option dependent; see next page



Utilising the local 'Urban Grain' to create well-connected and functional layout



Access Objectives

- 5.1 Key access objectives include the following:
- The creation of attractive useable spaces that are accessible to all.
 - The use of structural planting and open space to provide an effective transition between urban and rural environments. This is to include 'Green Wedges' into and through the development in accordance with recommendations within both the Arun Green Infrastructure Study and The West Sussex Landscape Strategy.
- 5.2 New priority junctions into the development from Pagham Road and Hook Lane are internally connected by a single primary route or 'Spine Road' which meanders through the proposed development, allowing an efficient and even dispersal of traffic throughout the site.
- 5.3 The Spine Road is to be softened by garden fronted properties and will feature street trees at regular intervals. The road will comprise a 5.5m wide carriageway with 2m wide footways either side. Verges may or may not be included depending upon one's location within the development albeit the development promotes a green approach to streets befitting the site's transitional character between urban and rural areas. Moreover opportunities for localised rain gardens and / or swales should be considered alongside the Spine Road to convey and attenuate surface water runoff. In addition key junctions are to be tabled and block paved to denote an intersection or important pedestrian crossing.

5.4 Side Roads connect to, and feed from the Spine Road. The fundamental role of Side Roads is to provide internal circulation into residential areas, connecting them to the site access points and to the wider network of greenspaces. Development along Side Roads is to actively face the street whilst maintaining a setback for garden spaces and driveways. Buildings may vary in size and style, albeit housing will typically comprise semi-detached and linked accommodation. Side Roads will comprise the same overall dimensions as the Spine Road albeit with fewer regular street trees and verges and in place a reliance on front garden planting for softening and amenity.

5.5 Semi private drives lead from Side Roads and in some instances directly from the Spine Road, providing access to specific groups of properties. These roads are typically no through routes for access only and as such are semi private in nature. Their form and geometry is to be organic in nature with a carriageway nominally sized at 4.5m in width. These spaces will be designed as shared surfaces, i.e. they will comprise of a block paved surface which combines the carriageway and footway into a single surface. Variations in road width will include localised widening to provide space for visitor parking. These routes typically have single frontage development which faces across these roads towards open space. As such they provide logical, easy and unrestricted access between proposed residential areas and the site's wider GI.



Traffic Calming

- 5.6 The potential exists for traffic calming to be provided along Hook Lane should it be considered necessary to be provided. Traffic calming of Hook Lane would provide a safer route for pedestrians to cross when accessing local facilities such as the local schools and shops. The traffic calming measures could be in the form of table top ramps or priority working/ chicanes.

Public Transport

- 5.7 New footway provision is proposed on the western side of Pagham Road from the proposed site access southwards to link with the existing footway. This will link to a new crossing in order to provide a safe crossing point for pedestrians when accessing the local bus stops and facilities on the western side of Pagham Road.
- 5.8 In addition to the above, the proposal includes for the existing bus stop on Pagham Road (north of its junction with Hook Lane) to have a formal bus lay-by designed to accord with DMRB standards. This bus stop will include raised kerbs, bus timetable information and if room is available a bus shelter and / or seating.
- 5.9 The bus stops on the western side of Pagham Road, Hook Lane and Lodsworth Road close to Hook Lane will also be provided with raised kerbs and new bus flags.

- 4.45 New footway provision is proposed on the western side of Pagham Road from the proposed site access southwards to link with the existing footway. This will link to a new crossing in order to provide a safe crossing point for pedestrians when accessing the local bus stops and facilities on the western side of Pagham Road.
- 4.46 In addition to the above, the proposal includes for the existing bus stop on Pagham Road (north of its junction with Hook Lane) to have a formal bus lay-by designed to accord with DMRB standards. This bus stop will include raised kerbs, bus timetable information and if room is available a bus shelter and / or seating.
- 4.47 The bus stops on the western side of Pagham Road, Hook Lane and Lodsworth Road close to Hook Lane will also be provided with raised kerbs and new bus flags.

Pedestrian & Cycle Links

- 5.1 Published best practice identifies five main requirements for pedestrian routes, and wherever possible these should be adhered to when planning for pedestrians within the proposed development:
- Convenience – follow desire lines without any undue deviation from route
 - Connectivity – link multiple origin and destinations
 - Conviviality – be pleasant to use
 - Coherence – be made legible through paving and/or signage
 - Conspicuousness – promote security and safety allowing pedestrians to see and be seen by others.

Pedestrian Linkages

5.2 The 'Guidance for Cycle Audit and Cycle Review' (The Institution of Highways and Transportation, 1998) determines five main requirements for cycle routes. It is highly crucial that these requirements are recognised if the promotion of cycling to the site as a viable and attractive alternative to car use is to be successful:

- Coherence: continuous & to a consistent standard
- Directness: closely follow desire lines as much as possible
- Attractiveness: in aesthetic as well as objective terms
- Safety: designed to minimise risks for cyclists & others
- Comfort – well maintained smooth dry surfaces, flush kerbs and gentle gradients.

5.3 The development will encourage sustainable methods of transport. The majority of local facilities and trips are located within convenient walking distance. All trip ends are located within reasonable cycling distance, as such, walking and cycling trips are a realistic alternative to the use of a car. Existing local amenities are discussed in more detail in paragraph 3.5-3.8.

5.4 The masterplan allows for walking and cycling connections from the proposed development to the east via multiple points along Hook Lane.





Vehicle Parking

5.5 Parking provision follows both national and local guidance. The development seeks to accord with Arun District Council's Supplementary Planning Document relating to parking standards (October 2000). Parking provisions for 'an Estate Development with 16 or more units' referenced within the above document is identified as:

- Smaller house size = 2.2
- Larger house size = 3.2

5.6 In addition to this some on street visitor parking is to be provided in semi private areas where areas of shared spaces have been sized to accommodate additional parking for infrequent use.

5.7 Car parking provision for disabled people should be consistent with the standards set out in Manual for Streets, which state that 5% of residential car parking spaces are designated for use by disabled people.

5.8 Parking provisions for the proposed care home accords with supplementary planning guidance, which requires:

- one car space for every twenty residents or increment of up to twenty residents;
- one car space for visitors at the ratio of one space for eight residents or increments of up to eight residents;
- eight car spaces for staff based on a rate of one space per five residents with at least one space to be provided as a garage; and
- space for service vehicles such as a doctor / ambulance space as required.

5.9 Parking provisions D1 Use and primary school are to be assessed individually and agreed with the Local Planning Authority. West Sussex County Council generally consider that a guide for school parking should be the provision of 1 space per 2 daytime teaching staff. A guide for the D1 Use is 1 space per practitioner plus 4 spaces per consulting / examination room for visitors and staff, plus 1 space per 20 sq.m of office space for administrative and support staff. Parking levels to be established within a Travel Plan.

Cycle Parking



5.10 The use of cycles will be promoted through three meter wide footpaths which travel through a network of interconnected green spaces that align with the wider landscape.

5.11 The development seeks to exceed the requirements of Arun District Council's Supplementary Planning Document (SPD) relating to parking standards (October 2000) which requires one cycle space per eight car parking spaces, subject to a minimum of two cycle spaces.

5.12 Each residential plot will include space for secure cycle storage. These are to be planned either within over sized garages or within a lockable garden shed / storage unit.

5.13 The D1 use (health centre / children's day nursery), care home and primary school will have dedicated, lockable, external cycle storage provision. The exact size and location of cycle storage for these uses will be agreed with the Local Planning Authority and will be determined in the subsequent planning stages.

Hardworks

5.14 The streets and roads within the scheme will all be designed and constructed to an adoptable standard using commonplace materials such as a tarmac road surface and concrete kerbing. At key junctions however the road surface may be tabled, i.e. raised to the same level as the adjacent footway and surfaced in high quality block paving. Semi Private Drives will also be block paved using a contrasting materials to the Spine Road and Side Roads in order to aid orientation and identity.

5.15 Footpaths through public open spaces will be formed in water bound gravel to a minimum dimension of 3m width to ensure safe shared use by both pedestrians and cyclists. Footpaths either side of roads will be a minimum of 2m in width.



SUSTAINABILITY

Sustainable Initiatives

- 6.1 A holistic approach to sustainability has been taken by the design team. In this context, all dwellings will meet the requirements of Part L of the current Building Regulations, with the overall aim to reduce the carbon footprint of the development, particularly when compared to other similar forms of development.
- 6.2 The aim is for the development to deliver a high quality, environmentally, socially and economically sustainable form of development. Integral to the scheme are the following initiatives:
- a low energy design;
 - the use of renewable technologies;
 - the enhancement of biodiversity;
 - sustainable drainage (SuDS);
 - the encouragement of non-car modes of travel transport;
 - The provision of a range of housing for families, home workers and the elderly;
 - On site employment opportunities within the care home, school and D1 use: and the provision of community facilities, namely equipped children's play space, school and D1 Use.

Design Considerations

- The delivery of a mix of dwelling types, tenures and sizes to meet the housing needs of the community. Affordable housing would be provided in groups in order to meet the management requirements of the affordable housing provider but will otherwise be indistinguishable from market housing.
- A flood risk assessment has been undertaken which in turn has influenced the masterplan. The Site falls outside the 1 in 1000 year flood extent. No residential buildings are proposed within an area prone to flooding.
- The Site will use a Sustainable Drainage System (SuDS) to reduce flooding and manage flood risk including the use of swales and attenuation basins. An existing watercourse crossing the site will be naturalised and enhanced for biodiversity and visual amenity. The drainage system for the site will incorporate features to prevent the pollution of local water courses.
- Initiatives to reduce the waste generated during the construction process will be established through the production of a Construction Environment Management Plan (CEMP). For example the use of locally sourced waste products (e.g. demolition waste for aggregates and hardcore) will be considered where possible. Materials will be sourced from companies with accredited environmental best practice such as ISO14001. In addition the Green Specification Guide will be used to specify materials where possible.
- At the detailed design stage refuse and recycling facilities will be designed in and incorporated into each individual dwelling in line with Local Authority collection practices.

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- A background illustration of a park scene. In the foreground, three children are running on a grassy area, with a dog running alongside them. The middle ground shows a paved path and more greenery. In the background, there are trees and a building. The overall scene is bright and sunny.
- HLM are committed to developing a scheme that is energy efficient and reduces water demand. Building orientation for passive heating and improved thermal mass and insulation etc, will help reduce energy demand in every property. Furthermore bespoke micro or small scale energy technologies will be explored for onsite power generation. In addition to energy efficiency the development will incorporate measures such as low flow taps, showers and aerators, dual flush toilets and low volume baths to reduce water demand. Externally housing will be fitted with water butts to reduce the demand on garden irrigation.
 - The development will comprise of a range of properties that offer social benefits through reducing the likelihood of fuel poverty and fuel supply security. It is likely that each property will be provided with smart meters to allow individuals to manage and understand their energy usage.
 - Implementation of low energy lighting internally and externally will be provided. Control of lighting will include the application of daylight, time and presence reactive intelligent lighting controls. The choice of lighting at night-time for public areas will seek to ensure a safe environment but minimise any light pollution. Besides key footpath / cycle links open spaces will not typically be lit. In particularly green buffers to the west and north of the site will be maintained as 'Dark Corridors' for foraging bats.
 - A development of this size is not going to have a dramatic heat island effect and significant issues with the urban environment are unlikely. Any urban warming associated with the development will be reduced through the Green Infrastructure which will provide shading and shelter in public areas. The masterplan has included the ability to allow air flow across the Site to increase cooling effects at the street level. In addition consideration has been given to passive solar design to enable heating and nighttime cooling to permit natural heat loss to occur appropriately. The masterplan has sought to maximise the opportunity for openings facing towards the south to both maximize passive solar gain and to enable micro generation renewable facilities to be incorporated into the roof designs.
 - The principle of Secure By Design have influenced the masterplan but these matters will need to be considered further at the detailed design stage.
 - The aim of the development is to provide genuine transport choices to be made to reduce reliance on the private car. The development has been designed to enable future residents to walk safely around the development and to access Pagham whether on foot or cycle, and the wider area by public transport. The inclusion of on plot cycle parking would be part of the detailed design of each building and commercial / community uses.
 - The ecology surveys indicate that the site is not of significant ecological interest albeit it does lie within 1km of the Pagham Harbour SPA. The existing ecology, which is principally related to the hedgerows and trees, will be preserved and reinforced on site where possible. The site's bio-diversity will be significantly enhanced with extensive new open spaces and green corridors incorporating native and deciduous planting to reflect the landscape character of the wider area. Some of the green corridors are matched to the SuDS systems and will help to maintain the blue-green bridge which is an important factor in making the scheme resilient to the impacts of climate change. Opportunities will be taken at the detailed design stage to promote further biodiversity with incentives such as bird and bat boxes, but also the creation of reptile and hedgehog habitats within the GI which will provide increased foraging and refuge opportunities. A reptile translocation exercise will be undertaken to ensure that the populations within the site are protected from construction and to ensure a favourable conservation status is maintained.



prepared by:

on behalf of:

Hallam Land Management Ltd