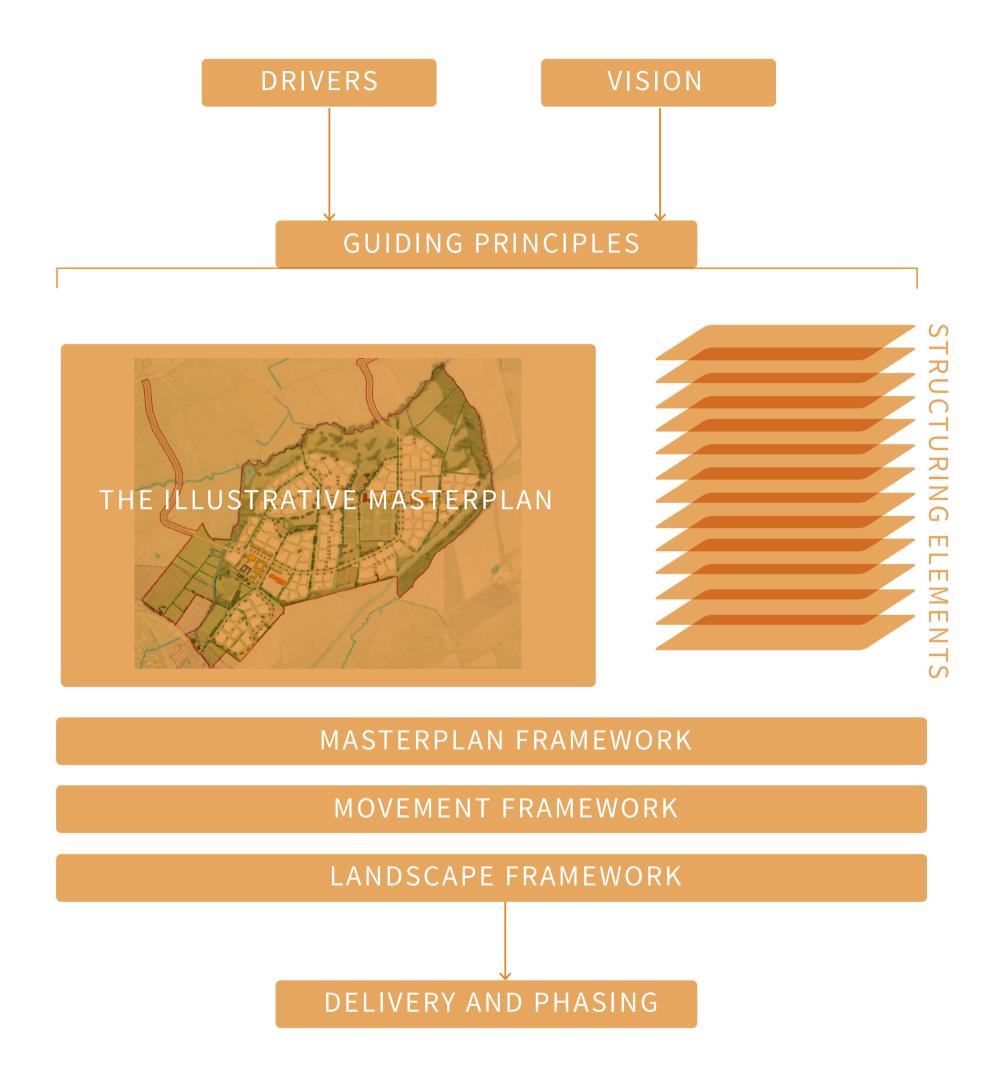
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DEVELOPING THE MASTERPLAN

4.1 The site - Masterplan drivers



INTRODUCTION

This chapter explains the process of developing the masterplan. The context analysis and precedent research from the previous chapters have fed into this process to help define the key drivers, the vision and guiding principles which have shaped the masterplan.

The masterplan for the Lotmead Farm villages has been guided by a series of basic underlying masterplan drivers that have informed the layout, quantum, design and nature of the proposals. The following pages outline the individual drivers in turn, explaining why they are important and the constraints and opportunities that they have presented for the development of the masterplan. The key drivers include:

- Existing buildings and infrastructure
- Strategic connections
- Landscape features
- Ecology
- Flood risk
- Site visibility

From the over arching vision, a number of **guiding principles** have been drawn, which are each supported by a series of **structuring elements**. These structuring elements sit alongside the masterplan, forming the main themes around which it is structured.

The **frameworks** articulate in more detail the masterplan parameters, movement characteristics and landscape characteristics.

Finally, **phasing and delivery** deals with the realisation of the masterplan through a logical phasing strategy.

ECOLOGY, LANDSCAPE AND HERITAGE

Various technical surveys have been conducted on the Site. Further detail can be found in the relevant sections of the ES which accompanies this application. These studies have indicated a number of key ecological and landscape features which are shown on the plan in Figure 4.1, and areas of archaeological sensitivity where development would not be appropriate. The following key ecological features are present and considered to be of District Level nature conservation value:

- River Cole LWS / River Cole and its tributaries and associated fish and aquatic invertebrates
- Hedgerow network and associated mature broadleaf trees
- A small serotine bat maternity roost
- A medium metapopulation of great crested newt
- A high population of grass snake

In addition, local biodiversity interest is added by the presence of Individual / small populations of otter, water vole and dormouse, breeding birds and foraging bats.

Retaining landscape features where possible not only helps to protect wildlife habitats but also influences the character of the new development, helping the village to blend with its rural townscape (as seen in the surrounding local villages). The existing landscape boundaries have helped to shape the form of development, for example development plots, the central green corridor and the nature of the development edges. Retaining hedgerows and woodland will also help to screen the development and allow it to integrate successfully within the surrounding landscape. This can be supplemented with additional planting where necessary to help mitigate any potential visual impact.

SITE VISIBILITY

The development of the masterplan has been informed by the Landscape and Visual Impact Assessment accompanying this application.

There are a number of landscape designations and Public Rights of Way in close proximity to the Site, from which the proposals should be considered, notably the SM and the AONB. These, along with key viewpoints identified as part of the LVIA are shown in Figure 4.1.

The key baseline observations relating to Site visibility include:

- The Site is located in a flat low lying rural landscape on the eastern urban edge of Swindon.
- Field hedgerows with trees, are a dominant feature of the surrounding farmland, creating a strong and distinctive framework in the local landscape, which also restrict local views into the Site.
- This combination of hedgerow vegetation and flat topography restricts visibility of the Site from most aspects except from the south.



FIGURE 4.1 SITE ECOLOGICAL AND LANDSCAPE FEATURES

- Approximately 2kms to the south of the Site this flat valley landscape gives way to the rolling downland of the South Wessex AONB. Whilst there are not many views of the Site from the surrounding villages, which lie just above the foot of the scarp slope, the Site is overlooked from the high ground above, which includes notable viewpoints such as Charlbury Hill (open access land). A prominent feature of the these views is the strong vegetation framework, which tends to result in only intermittent views of parts of the Site
- There do not appear to be many views of the Site from the Ridgeway National Trail. This is because for the most part, it runs just beyond the crest of the scarp slope.
- Views of the Site from within the North Wessex Downs AONB tend
 to be far reaching and panoramic. Whilst the landscape in view may
 be regarded as a pleasant pastoral landscape, it is not exceptional
 and suffers from a number of significant visual detractors. The most
 prominent of these is the urban sprawl of Swindon, including the
 large scale industrial complex on the town's north eastern outskirts.

DRAINAGE AND FLOOD RISK

Flood risk is a key consideration for the whole of the New Eastern Villages development. The Flood Risk Assessment accompanying this planning application provides a detailed review of flood risk issues and mitigation.

Whilst some areas of the Site lie within the 1 in 1000 year flood extents, the built development will be wholly accommodated outside of these and therefore has a very low risk of flooding.

Floodplain restoration / land lowering is proposed along the eastern edge of the Site to mitigate flooding in the central area. The resulting areas affected by flood risk are shown in Figure 4.2.

The ground is predominantly clay and therefore any increase in surface water runoff will be stored and controlled on-site, using sustainable drainage measures.

The surface water management strategy forms an integral part of the masterplan and integrates water bodies and attenuation / SUDS features into the development adding interest and character.

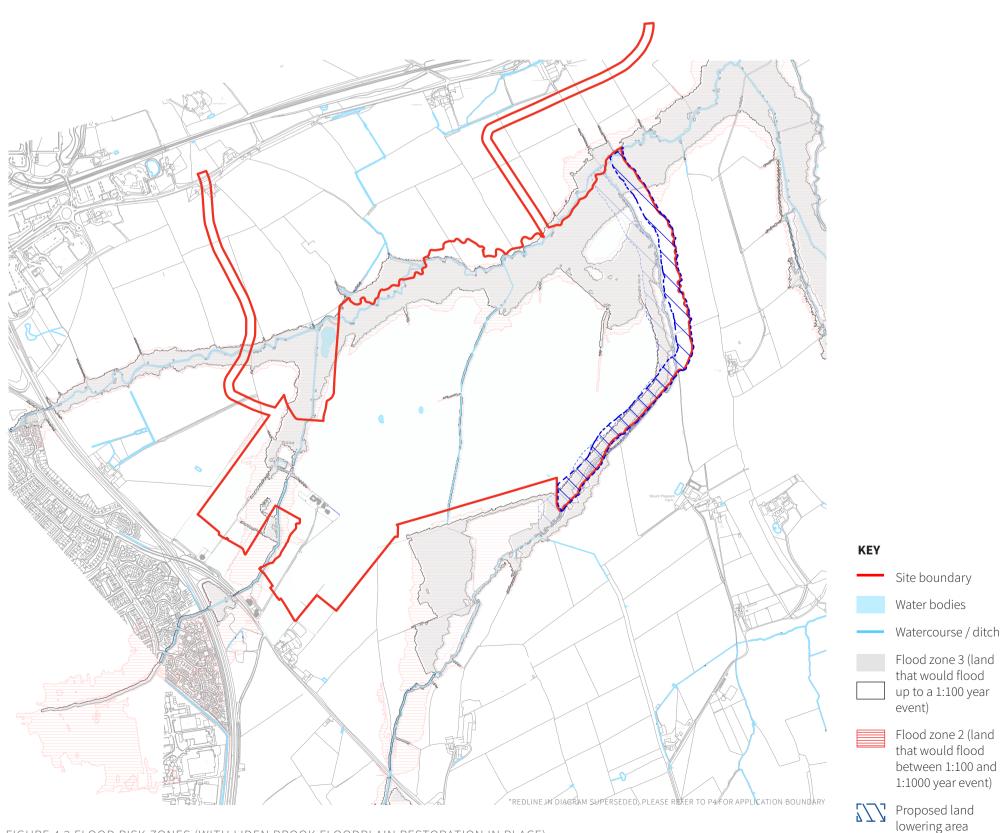


FIGURE 4.2 FLOOD RISK ZONES (WITH LIDEN BROOK FLOODPLAIN RESTORATION IN PLACE)

EXISTING BUILDINGS AND INFRASTRUCTURE

An important principle of the masterplan approach is to retain and enhance existing positive characteristics of the Site and where possible to develop these as part of the new villages.

The existing Site access is off Wanborough Road in the south west of the Site, which will be retained and improved to provide access to the first phase of the Application development. It currently provides access to Lotmead Farm including:

- The business centre
- Lotmead cottages

And indirect access to:

- · 'Pick Your Own'
- Petting zoo and children's play facilities
- Farm shop

These rural buildings clusters create a clear concentration of activity towards the south west of the Site at present, and potential for the masterplan to build on this established community offer, with the farm remaining at the heart of the new communities.

The area around the south west of the Site also contains a Scheduled Monument (SM). The Wanborough Road area of the site will need to consider the development interface with the SM to ensure its sensitive setting is preserved and enhanced, however, the development does not physically encroach on the SM.

The Site sits within a framework of proposed strategic connections forming part of the wider New Eastern Villages masterplan produced by SBC. Figure 4.3 illustrates the natural focal points based on existing buildings and infrastructure, and the main existing and proposed connections to the wider area.

An area for future development adjoins the south western boundary of the site, the masterplan will be designed to consider the locations of development, connections, amenity and uses provide a cohesive link between the Site and future development.

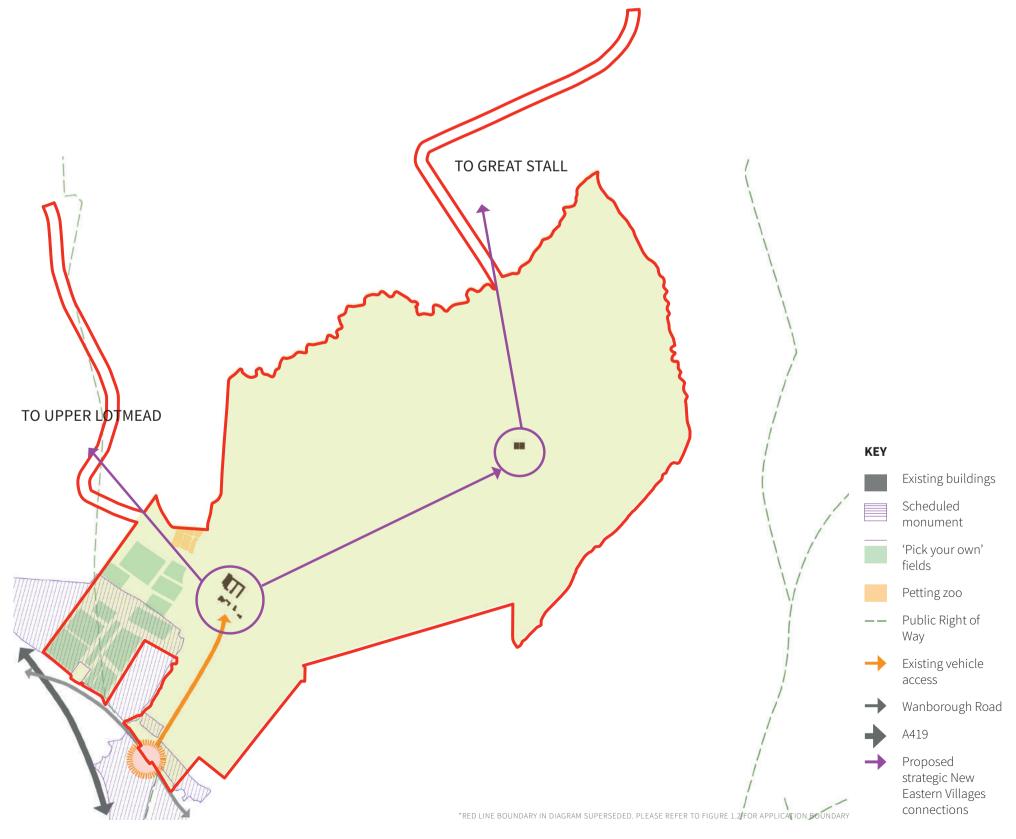


FIGURE 4.3 EXISTING FARM AND CONNECTIONS

SUMMARY

The proposals harness these natural influences to form the basis of the green infrastructure framework and to define the development parcels of the two Lotmead Farm villages.

The basic structuring elements of the Site take cues from the existing features. This can be seen clearly in Figure 4.4 below. In particular, these include:

- Landscape features and natural boundaries These have been retained as far as possible and form the borders of the development and the structure of the blocks and streets within the development.
- Views The key views identified as part of the LVIA have informed the buildings heights, which will step down around the sensitive edges of the development. The built form will open up more to allow the landscape to infiltrate and soften the development where it can be viewed from visually sensitive locations.
- Existing farm buildings These form the natural centre points for the two villages. The activities at Lotmead Farm form an existing focal

- point for community activities and the masterplan seeks to continue this, with the south western area (Wanborough Green) and Lotmead village centre linked to the existing farm.
- Existing access lane This existing infrastructure is integrated into the masterplan to provide the initial access to the development, and will be supplemented by additional strategic links at a later stage.
- Flood zones These have shaped the development parcels to minimise flood risk within the development. Flooding has also been addressed as part of the development proposals with a surface water management strategy and land lowering to mitigate potential flood issues.
- Sustainable and Walkable Neighbourhoods Provide new homes within walking distance, local facilities, amenity and bus routes, to create attractive and safe green links for pedestrians and cyclists.

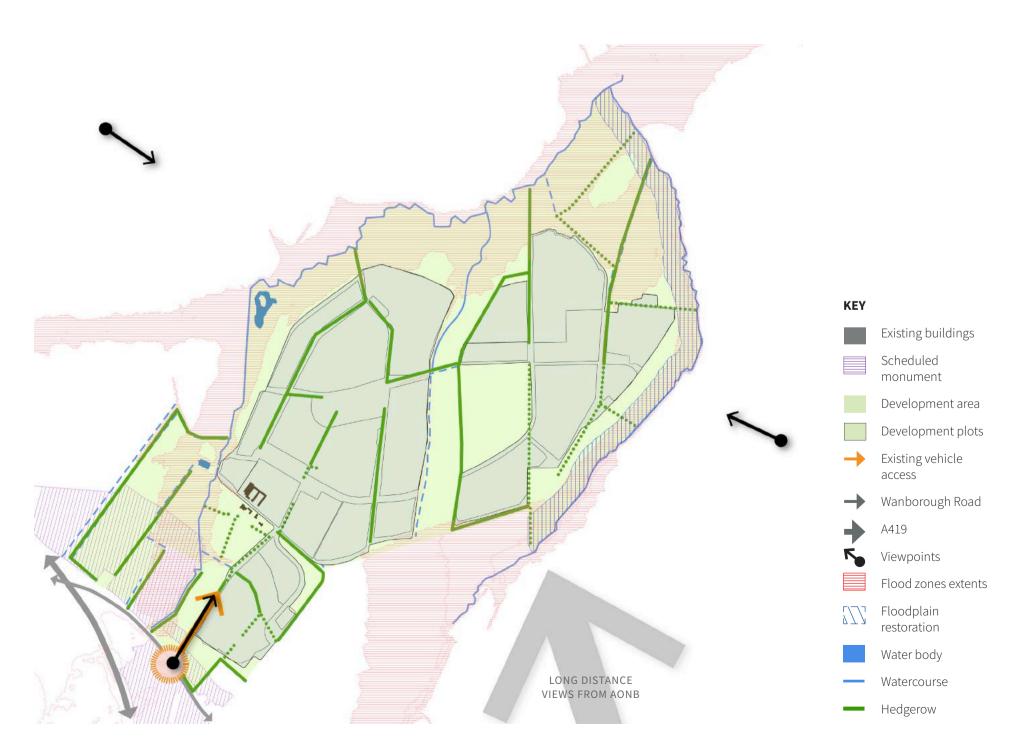


FIGURE 4.4 MASTERPLAN DRIVERS COMPOSITE PLAN

4.2 Vision

A SUSTAINABLE NEW COMMUNITY



Neighbourhood distinctions







Connections to existing settlement

Our vision builds upon the unique qualities of Lotmead Farm to create a community of regional and national standing. Lotmead Farm Villages will become the place where the people of Swindon and beyond will aspire to.



Innovative, sustainable design





Draw influences from the landscape context



A walkable (and cycle friendly) network of streets

4.3 Guiding principles and structuring elements

GUIDING PRINCIPLES

The guiding principles for the masterplan are set out on the following pages. The masterplan design is largely shaped by the key masterplan drivers and incorporates the 6 key ingredients of a great village which were identified from the precedent study in Section 3. These are represented by the icons beside each principle. The principles are supported by a series of structuring elements, which make up the different layers of the masterplan. These are explained in more detail on the following pages.











GUIDING PRINCIPLE 1: FUSING LANDSCAPE AND TOWNSCAPE

The villages and their neighbourhoods would fuse townscape and landscape in a sympathetic manner, in a form which is very much part of the Semi Rural Landscape Setting, and consistent with the findings of the precedent study.

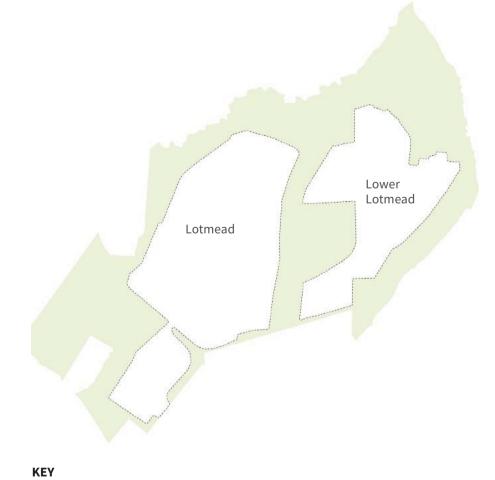
The formulation of these areas begins from the premise that development should be softened and woven into the landscape fabric of the rural edge. The landscape features of the Site (hedgerows, trees) inform the overall structure of the villages and create a distinctive character to the neighbourhoods.

Moreover, the villages neighbourhoods embrace the landscape through its outward looking edges, all be it with varying characteristics. By drawing the existing landscape into the development blocks, in the form of 'rural courtyards' and 'Green Fingers', a stronger relationship is created between the neighbourhood and the landscape, and variety can be created around the edges of villages.

This provides opportunities for Strategic Sustainable Urban Drainage Systems (SUDS) features including a number of attenuation basins. The attenuation basins are fed from swales that run along the Green Fingers of the neighbourhood. Urban form along sensitive green edges (as outlined in the Section 7 - Neighbourhood Design Codes) resembles locally observed farmstead clusters, with groupings of buildings mimicking the scale and massing of local barns and individual farmhouses helping to form a congruous relationship with the surrounding rural landscape.

DEVELOPMENT PARCELS

- Taking account of the constraints explained earlier in this document, such as flood plain and landscape boundaries, there are clear developable areas which create two distinct villages.
- These two development parcels are surrounded by generous areas of parkland, predominantly along the river corridor, which provides separation and 'space to breathe' between all of the proposed New Eastern Villages.
- The distinction between the two villages is further reinforced with the location of the sports hub. The sports hub is located at the centre of the development and incorporates the existing landscape and parkland to provide amenity and sports provision for the development. Whilst there is a physical separation between the two villages, the sports hub allows the villages to come together as one community.





Development areas

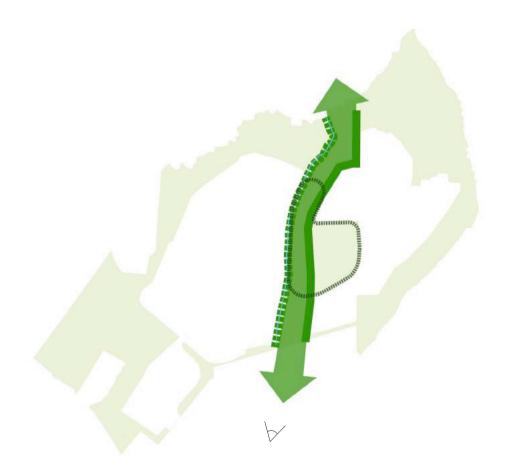
INFLUENCES FROM THE LANDSCAPE

- The development will be integrated into the existing landscape and setting. The existing landscape will be enhanced with additional planting and trees.
- The landscape proposals inform the concept of the masterplan and provides a structure for the villages, whilst creating a relationship between them.
- Green fingers bring the landscape into the development areas, providing a strong influence on the character of the masterplan.
- The new landscape will extend into the streets, gardens and public spaces which will provide mitigation and reduce the impact of the built form on the landscape.

KEY Development areas Central parkland corridor Green links Informal green space / Ecological The common and village green Central Sports Hub

THE RECREATIONAL SPINE

- The Central Parkland creates a visual and perceptual division between the neighbourhoods, as well as forming a focus for the Central Sports Hub which provides recreational open space, sports pitches, sports pavilion and play. The visual separation of the villages will be understood not only by the users of the Central Sports Hub and park itself, but also distant views from the AONB, to the south.
- The green corridor is clearly defined within the natural boundaries defined by existing landscape features. Existing Site features of value are retained, within a landscape buffer to ensure that their quality is not compromised. The edges of the villages are clearly defined by the existing landscape features.
- The recreational spine create a network footpaths, fitness trails and cycle connections throughout the Central Sports Hub and Park, connecting the two villages and allowing easy access to the local facilities and amenity.
- Distant views along the green corridor reinforce the separation between the villages, aide legibility and contribute positively to the visual amenity value of the green space.



KEY	
	Development areas
	Central parkland corridor
,	Closed development edge (hedgerow)
•	Open development edge
>	Distant view from the south
	Central sports hub

SUDS / SURFACE WATER MANAGEMENT

The bullet points below (as agreed with SBCs drainage engineer on 19th July 2019) set out the key parameters and criteria of the strategic design code for the proposed surface water drainage design.

Surface Water and SuDS Design

- SuDS are to be provided in accordance with CIRIA C753 and to be located outside of Post-development 1 in 100 plus climate change floodplain extents.
- Shallow above ground conveyance features will be prioritised throughout the development (where feasible), utilising natural drainage routes and existing drainage features which must be retained post-development.
- Plot scale 'source control' SuDS features such as raingardens, permeable paving, green roofs or swales, will be prioritised in the first instance. The exact features, including their locations, will be determined at the detailed design stage.
- SuDS drainage features will be prioritised in the following hierarchy:
 - Primary plot scale 'source control' features such as raingardens, permeable paving etc;
 - Secondary under drained swales providing conveyance and attenuation storage;
 - Tertiary attenuation basins or ponds providing attenuation storage.
- All existing watercourses will be retained post-development.
- All strategic SuDS attenuation features will be design with a minimum freeboard of 300mm to allow for any residual risk related to blockage or an extreme rainfall event (in excess of the 1 in 100 plus climate change event).

Rainfall catchment areas have been determined and for each catchment a limiting discharge rate (mean annual greenfield rate) of 4.67 l/s/ha will be applied for all events up to and including the 1 in 100 plus climate change event. Each rainfall catchment will comprise a minimum of two SuDS components to attenuate and improve water quality prior to discharging into one of the adjacent watercourses.

The following assumptions have been used in the surface water management strategy design:

- No infiltration potential at site.
- Limiting discharge rate of 4.67 l/s/ha (mean annual greenfield rate) for all events up to and including 1 in 100 plus climate change event.
- Design undertaken in accordance with best practice and National Planning Policy Framework (NPPF).
- Additional ecological and biodiversity benefits to be provided within SuDS such as planting, reed beds, or varying permanent water depths where feasible.
- Exact detail of onsite drainage to be confirmed through detailed design. This can be achieved through provision of swales, ditches, permeable paving or other forms of SuDS and in accordance with the 'SuDS Vision for New Eastern Villages (NEV) Supplementary Planning Document' (SPD) – February 2017.
- All SuDS designs within the development shall be based above the 1 in 100 plus climate change flood level, including any outfalls.

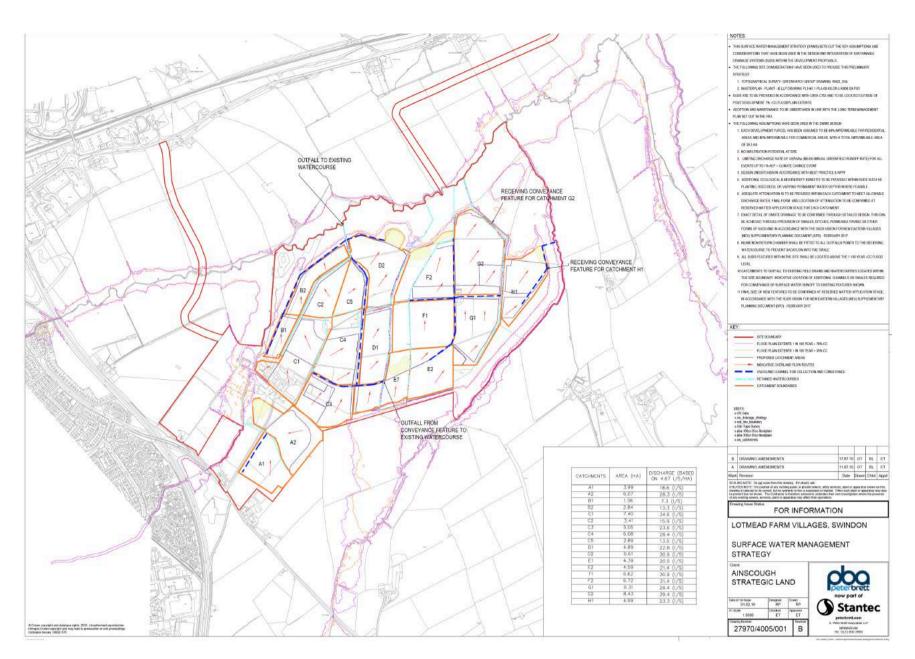


FIGURE 4.5 SURFACE WATER DRAINAGE STRATEGY (DRAWING PRODUCED BY PETER BRETT ASSOCIATES

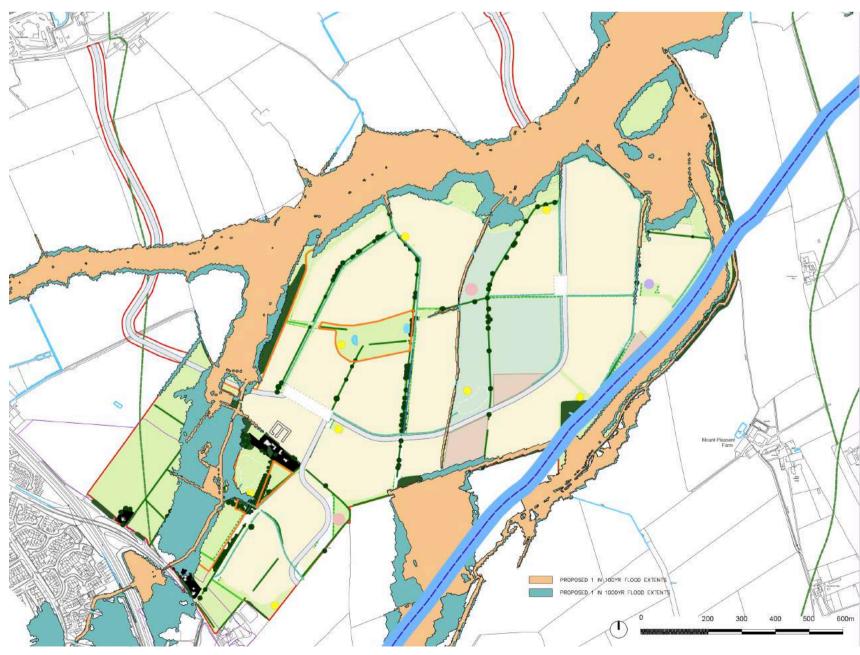


FIGURE 4.6 FLOOD ZONES (DRAWING PRODUCED BY PETER BRETT ASSOCIATES

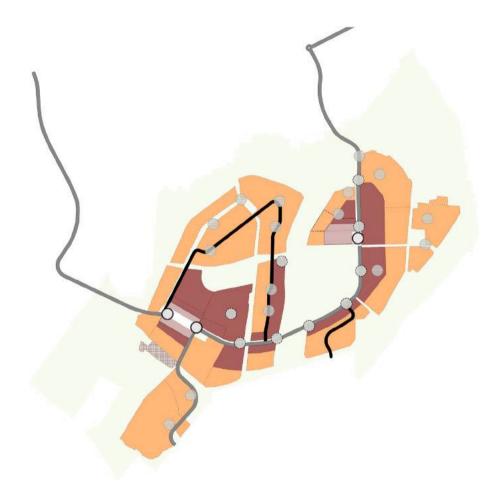
DEVELOPMENT BLOCKS

- The layout of the development is largely shaped by the landscape features.
- The blocks are designed as perimeter blocks with outward facing properties at the edge and private gardens in the interior
- The form of the development edge is defined by the green fingers particularly along the eastern edge of the development.

HEIGHTS

- The form of the development responds to the potential landscape and visual impact, with lower heights (up to 2 storeys) close to the development edge, particularly around the SM and the south and eastern edges of the Site. The more central areas of the development will be 2-3 storeys.
- There is potential for small localised height increases for marker buildings in key locations to provide variation and structure in the form of the development and to aide orientation. Within the central areas of the development and surrounding proposed local centre locations, these markers could reach up to 5 storeys. 4 storey buildings are considered appropriate at key junctions and nodes along the Primary Road, helping to define the node and ensure legibility. 4 storey markers are also located along the Central Parkland edge in order to create an appropriate level of enclosure overlooking the large village recreation area. Closer to the edges and within the development parcels, the maximum marker height would be 3 storeys.





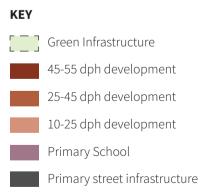
Development areas Development blocks Local Centre Education facility



DENSITY

- Density will gradually increase towards the centre of the villages, particularly around the local centres where a formal character will be appropriate. There is an opportunity to provide a proportion of residential above ground floor retail uses within the local centres.
- Increased density and continuous built form will enhance primary routes. At key junctions and nodes within the development, densities will be increased to create enclosure surrounding urban spaces, squares and gateways.
- Densities will gradually reduce around the periphery, particularly on the southern and eastern edges to ensure the development blends sympathetically with the surrounding landscape and respects the setting of the SM.





GUIDING PRINCIPLE 2: NEW LANDSCAPE BOUNDARIES



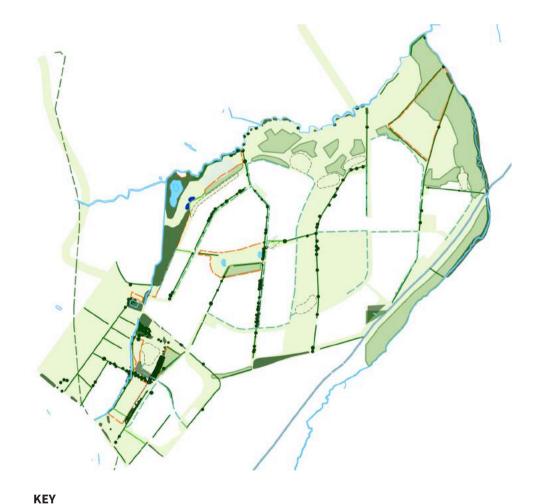


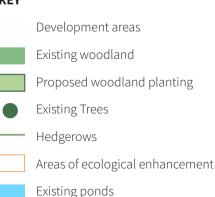
Due to the current agricultural use there has been little maintenance of the existing landscape boundaries. Restoring the landscape from agricultural use to a publicly accessible Meadow Parkland, rich in biodiversity and habitats is a key opportunity created by the development. Diversification will occur through the introduction of new habitat ponds, woodland, wet grassland and grassland meadow.

The Parkland edge provides a wide buffer between the built development edge and the wider countryside. Existing landscape features screen some of the development edges. However, these will be supplemented by wide tree belts along the south and east of the Site and along the northern edge of Lotmead village to mitigate potential visual impacts caused by the development. The development edge will also be softened at the interface with the heritage setting of the SM in the south west of the Site. The sensitive integration of new landscape boundaries will ensure the development knits comfortably into its landscape setting.

LANDSCAPE BOUNDARIES AND HABITATS

- The existing hedgerows and woodland would be retained as far as possible, which creates strong green linear corridors throughout the development helping to connect it to the parkland and wider countryside.
- Areas have been specifically identified for ecological enhancement to deliver net biodiversity gains; including the creation of new ponds, new Community Woodland, species-rich meadow, and dedicated core areas for amphibians and reptiles.
- The Site is well contained by existing features, including substantial hedgerows, forming strong boundaries which can be enhanced with additional planting. Extending the existing woodland will provide additional amenity within the parkland and also serve to mitigate potential visual impacts including sensitive views from the south and east, and adjacent large scale development visible from within the Site.





Proposed attenuation basins

Proposed swale

GUIDING PRINCIPLE 3: STRATEGIC ROADS

The Primary Vehicular road provides a 'Village Street' forming a focus for community activity – particularly around the local centres. It would also accommodate the movement of strategic vehicular traffic and a route for buses between the villages and the Southern Connector Road to the south. It is important that the design of the road itself should incorporate Manual for Streets principles.

Manual for Streets 2 provides detailed guidance on the provision of strategic vehicular routes within the contexts of new urban extensions. "Practice that relies on limited access via distributor and relief roads limits the level of connectivity that can be delivered and is not recommended" (MfS2).

It is important to consider the place function that the Village Street will provide; given that it will divide the neighbourhoods within the wider masterplan framework, its is essential that its design allows for the right balance of pedestrian connectivity between the villages and neighbourhoods.

The character and geometry of the street will change along its length, dependent upon the level of pedestrian connectivity / priority at key points. For example, the use of local retail and other community facilities such as a crèche will serve to anchor and activate the street, drawing pedestrian footfall from the surrounding neighbourhoods.

Within these key locations traffic speeds should be reduced using integrated traffic calming solutions such as shared spaces, surface treatments and landscape. A dedicated cycle route is incorporated within the primary carriageway.

Junctions will also be used to slow traffic by creating equal priority and providing opportunities for pedestrian crossing

Along the length of the Village Street, development should front out onto the street to provide overlooking and observation.



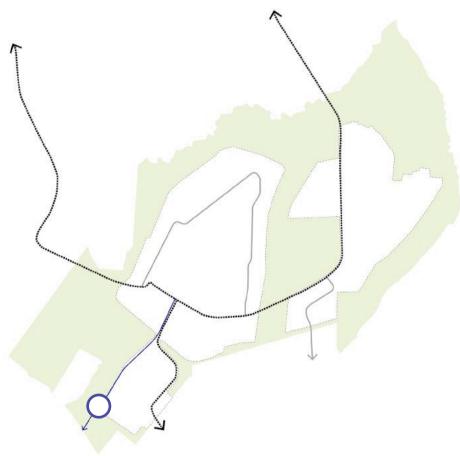






ACCESS AND MOVEMENT

- The proposals would deliver new road infrastructure which will create a highly sustainable Primary street between the villages and through the wider development (villages and neighbourhoods to the north and the Southern Connector road to the south).
- It is important that the primary route is designed as an integrated element of the village townscape, which performs a strong place function and allows the right balance of pedestrian connectivity and vehicular movement / speeds - in essence it should be designed as a Street, all be it a Strategic Village Street.
- The roads will be designed to accommodate buses providing a link between Swindon, Lotmead Farm Villages and the Mass Rapid Transit services which form part of the wider New Eastern Villages.
- Vehicular connections, junctions and access points that surround and adjoin the site will influence the masterplan, the proposed street hierarchy will be designed to integrate into the existing movement network.
- Future residential properties will be within walking distance from bus routes which has influenced the masterplan layout.
- Two secondary routes are proposed, one serving residential dwellings within the westernmost Lotmead Village, the second connecting both proposed Villages with the proposed Redlands Village located south of the Site.
- The Bus Gate would come into operation at a time to be agreed within a phasing plan that shall be submitted and agreed prior to the first occupation of any dwelling within phases 2-7 as set out in the DAS Phasing Strategy.









GUIDING PRINCIPLE 4: PERMEABLE AND CONNECTED VILLAGES AND NEIGHBOURHOODS, WHICH FAVOUR PEDESTRIAN MOVEMENT

The development of the villages would maximise the opportunities to create pedestrian connections between the villages and the wider development framework. This includes enhancing the existing pedestrian connections along the Public Rights Of Ways, which cross the Site, through the provision of new surfacing, lighting and setting them within high quality open space overlooked by residential development. Once completed, the Primary Village Street will provide the strategic connections back to wider New Eastern Villages development, as well as the Southern Connector Road to the south.

New pedestrian / cycle links will be created for recreational access to the surrounding green space, connecting back to the wider urban development. There would be a strong pedestrian and east / west cycle route between the two local centres, which permeates the open spaces, the two primary schools and creates a direct link to the Central Sports Hub.

GREEN ROUTES (PEDESTRIAN AND CYCLE)

- A core green link connects the villages via a series of recreational green spaces along its length, and links into a wider network of streets and pathways.
- The main community facilities lie along this green link including the two local centres and the primary school. This provides a valuable opportunity to create a safe, high quality walk and cycle route, encouraging sustainable travel and enjoying the outdoors.
- New pedestrian / cycle links will be created for recreational access to the surrounding green space, including ecology trails, and connecting to Swindon and the surrounding villages, allowing greater permeability for walking and cycling.
- Two pedestrian footbridges are proposed along the Site's northern boundary, establishing connections between the Site and proposed NEV villages located to the north.



GUIDING PRINCIPLE 5: SUSTAINABLE TRANSPORT

To encourage sustainable transport, the public realm and streets within the development will be designed to give priority to pedestrians, cyclist and public transport. Future residential properties will be within walking distance from bus routes which has influenced the masterplan layout.

Vehicle speeds will be controlled through design of the streets. In order to create a legible movement framework, where both pedestrians and vehicles understand and use the streets appropriately, different types of street geometry are proposed which vary depending upon level of vehicle flow and highway classification of the particular street.

Lotmead Farm Villages will facilitate movement across the New Eastern Villages and to Swindon. Pedestrian and cycle routes within the Site will connect to routes provided within the New Eastern Villages. It is also proposed to provide a bus service through the Site to connect with the Mass Rapid Transit services which will route through the New Eastern Villages.

New village centres will be focused around shared public realm where people are encouraged to stop and dwell.





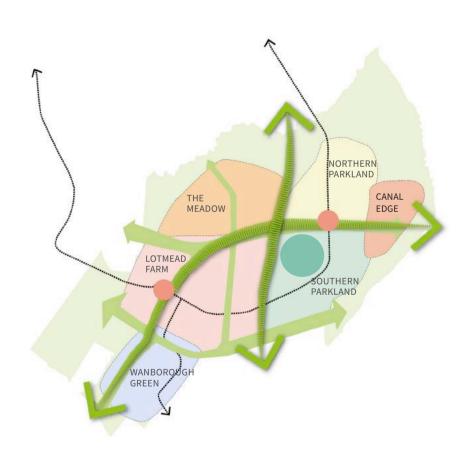
WALKABLE NEIGHBOURHOODS

• Within the 2 villages there are 5 walkable neighbourhoods based broadly around 5 minute walking isochrones, with the exception of the main village centre neighbourhood within Lotmead which is encompassed within a 10 minute walking isochrone. This will encourage sustainable patterns of travel and allow access to local facilities across the 2 villages.

THE NEIGHBOURHOODS

- The combination of the various structuring elements amounts to a series of distinct neighbourhoods.
- Defining the unique characteristics of these neighbourhoods will inform the visual appearance of buildings, streets and spaces. Each is described and illustrated in more detail later in this document.



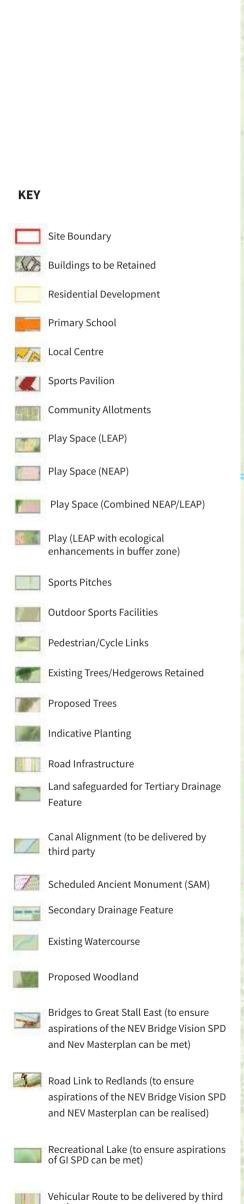






4.4 The Illustrative Masterplan

- Meadow parkland contains areas of potential enhancements and management of biodiversity and habitats.
- Development opens up to linear country park, rural character overlooks Park Edge.
- 3 Scale of blocks reduce and open up to woodland edge.
- Ecological village green semi-natural green focus to Lotmead forms a link between neighbourhoods.
- Linear Parkland ensures physical and perpetual separation between the villages and allows formal recreation, playing fields and ecological enhancements.
- 6 Central Sports hub includes adult football pitches, additional sports facilities and play within easy walking distance of residents.
- Sports Pavilion centrally located within the development, provides dual function for Local centre and increases footfall to the local centre facilities.
- 8 Land safeguarded for tertiary attenuation features
- 9 Community woodland.
- Rural character within Wanborough Green edge and to the adjacent SM.
- Southern parkland and amenity.
- Local Centre incorporates the existing buildings with a new public square, pedestrian priority area, car parking and planting.
- Country park surrounds the development and mitigates impact on views into the development. A combination of formal and informal recreation, ecological enhancements and trails incorporating new planting.
- Rural, housing typologies and intimate courtyards are proposed to address the canal edge and connect with pedestrian footpaths connecting to the canal towpath.
- Green Corridors provide meandering, informal pedestrian links and amenity space through attractive landscaped spaces and SUDS.
- Play areas are located along key routes to allow for easy access and natural surveillance to provide a safe environment for children.
- Eastern blocks open up views to AONB.
- 18 Species-rich wildflower meadow and recreational lake.
- Primary street/SCR includes central median strip and pedestrian crossing points to access the play area (NEAP) from the adjacent dwellings.
- Combined NEAP/LEAP creates incidental breakage in built form and focal point to Eastern Canal Edge neighbourhood.
- 21 Secondary street link to Redlands development







4.5 The Masterplan Framework

CONSULTATION PROCESS

A comprehensive approach to consultation was adopted in order to ensure that as much feedback as possible could be obtained from the public and relevant stakeholders.

The approach focused on providing the widest possible number of people with information on the emerging development proposals, offering them the opportunity to contribute their ideas, voice their opinions and actively engage with the plans.

In this spirit of maximising opportunity for involvement by and collaboration with the local community and stakeholders, as well as providing feedback and being as responsive as possible, the consultation measures taken exceeded the pre-application consultation requirements and responsibilities, as outlined in Local Planning Authority's Statement of Community Involvement (2013).

Details of this extensive consultation, as well as the responses and ongoing liaison with certain stakeholders and groups, can be found in the SCI accompanying the Application.

Ainscough Strategic Land and its consultant team have engaged with all relevant statutory consultees during the process of compiling the application, including the Environment Agency, Thames Water, the Highways Authority, Swindon Borough Council Planners, Historic England, Natural England and the County Archaeologists as well as local Parish Councils.

Public exhibition of proposals was held on 28 November 2018 at Hoopers Field, Rotten Row, Wanborough SN4 0AN. The event was open from 3pm to 7.30pm, providing 4.5 hours of face-to-face time with the public. This enabled a meaningful dialogue with members of the public on all aspects of the emerging proposals. In total, 161 visitors attended the event. An additional Members Briefing was held on the 7th of February 2019.





PUBLIC CONSULTATION EVENT

DEVELOPMENT PARAMETERS

The application is submitted in outline with all matters reserved except for means of access from Wanborough Road. As such, the proposal is based on a number of parameters relating to the proposed mix of uses, overall quantity and zones of development. A series of Parameter Plan have been prepared and are submitted for approval (see Appendix B). These include:

- Land Use
- Green infrastructure
- Movement
- · Buildings heights
- Densities

Development should accord with these plans unless otherwise agreed by the Council. The applicant proposes that these parameters will be controlled by a suitable planning condition.

Amount and land use

The applicant seeks outline planning permission including means of access from Wanborough Road only. The scheme proposes:

- Primary School West: 2.2 ha
- Primary School East: 2.2 ha
- Local Centre (West): 2.86 ha
- Local Centre (East): 1.35 ha
- Green infrastructure: 91.76 ha
- Central Sports Hub: 9.74 ha
- Residential: 54.2 ha (net of open space) with up to 2500 new family homes
- Primary vehicle route within ownership (min. width 14.3m): 3.38 ha
- Existing plots retained: 1.27 ha

Urban structure / continuity and enclosure / Safety and security

The masterplan provides a strong urban structure around the retention of a substantial area of open space and the creation of development blocks arranged around rural courtyards and lanes with tree planting. The residential streets have been designed to reflect key characteristics of the townscape in the locality.

There is clear definition between public and private space through the use of hedges, walls and fences creating defensible space. And the perimeter block arrangement seeks to enclose the rear of properties so that dwellings are outward facing, addressing the street.

Consideration has been given to defining, enclosing and activating the public realm. All public spaces have been designed to be overlooked by the surrounding buildings to provide natural surveillance.

The orientation of dwellings and position of road links relate to the adjacent proposed villages to achieve a cohesive townscape and good connectivity.

Density

The overall development area is broken down into a mix of character areas and building typologies which respond to the locality. A mix of densities has been identified across the Site (see Appendix B), which reflect local Site characteristics. These range from 20 dph along sensitive edges of the development to 55 dph around the village centres. The average density across the site is approximately 45 dph.

Scale

The masterplan proposes a low scale of development across the

Site. A maximum of 2 storeys is proposed to the edges of the site, with potential marker buildings of up to 3 storeys at key locations. Within the central areas of the site, and within the local centres, the maximum building height will increase up to 3 storeys with potential for marker buildings of up to 5 storeys at key gateways and nodes. The variation in roof form will provide variety and interest within the street scene.

Mix

The development will provide a mix of homes, consisting of 1, 2, 3, 4 and 5 bedroom family homes with some provision of apartments within central increased density areas. The precise mix of homes will be determined at detailed planning stages based on local demand at the time.

4.6 Movement framework

MOVEMENT DESIGN PRINCIPLES

The approach to access and movement for the masterplan has been developed by the following development principles:

- Fluid vehicular and pedestrian access and movement within the Site and the surrounding area;
- Uninterrupted and significant areas of Public Open Space (POS);
- A clear hierarchy and legibility between the various streets;
- Provide priority to pedestrians, cyclists and public transport to encourage sustainable travel.

The intention is that these principles set a precedent for high quality street design and can be rolled out across the wider Eastern Villages development. The access and movement diagram (Figure 4.6) illustrates the overall movement framework across the Site. The following section is not exhaustive; please also refer to the Transport Assessment supporting document prepared that accompanies this submission. The proposed hierarchy of access routes into and across the Site are outlined opposite.

Access

The access, including bus access, for the Wanborough Green Character Area is from Wanborough Road. This access can accommodate up to 200 units and is designed to serve the first phase of the development. Later phases of the development will be accessed from the Southern Connector Road, entering the Site from the south, and from the potential accesses onto the A420 running into the Site from the north (further detail is provided within the Highways Report).

The Southern Connector Road connects to the south western tip of the site, within the Wanborough Road Character Area, this connects with the Wanborough Road, further south east of the site.

It's important that all of these strategic routes are designed as a integrated elements of the village townscape, balancing the place and movement functions.

Movement hierarchy

A street hierarchy is outlined below including: primary and secondary streets, local access lanes and semi-private access. The masterplan proposes to provide safe and secure pedestrian movement across the Site through the provision of:

- a walkable green link running directly through the centre of the Site providing a strong connection between the two villages.
- The creation of shared surfaces and pedestrian priority streets, to slow traffic.
- Trails and informal paths through the meadow and parkland, arranged in loops of varying distances with way finding to encourage use.

Parking standards

Parking provision on the Site will generally offer 2 spaces per dwelling to comply with the requirements of the local planning authority. The layout of the Site has been assessed for refuse collection, ensuring appropriate areas are accessible using a large refuse vehicle. Please refer to the Strategic Design Code, Section 7 of this document for guidance on approach to car parking.

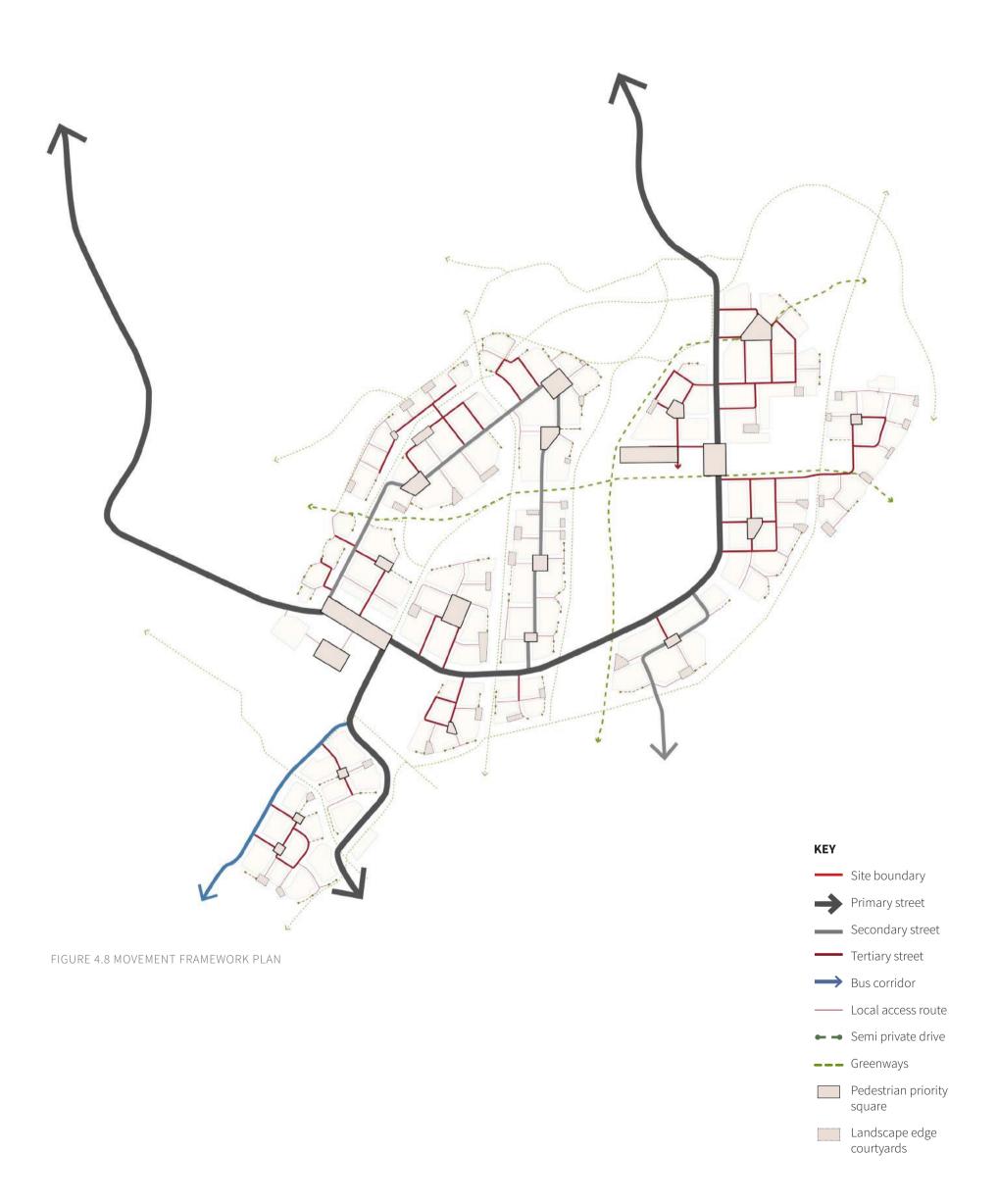
STREET DESIGN PRECEDENTS



EXAMPLE OF SUDS BRINGING A 'GREEN' CHARACTER TO THE STREET



EXAMPLE OF PEDESTRIAN PRIORITY ZONE WITHIN A LOCAL ACCESS LANE

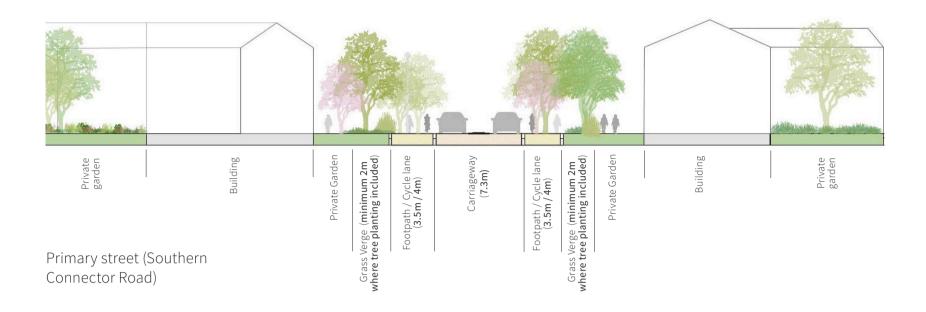


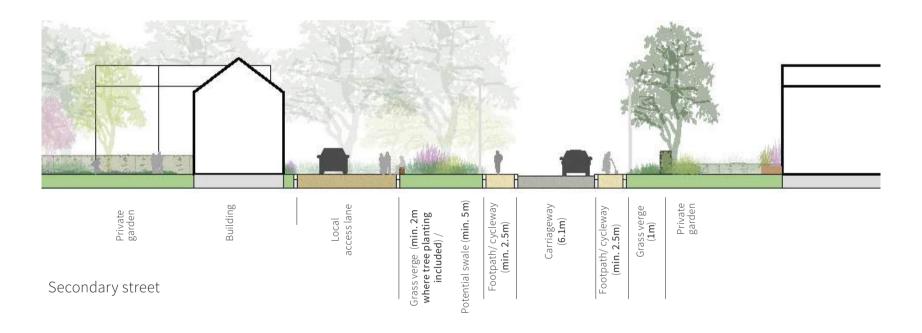
4.7 Movement framework

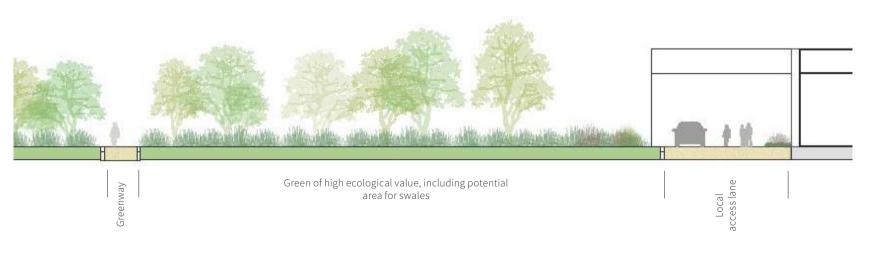
TABLE 2 - STREET HIERARCHY

	DESIGN FEATURES	TRANSPORT MODES
Primary street (Southern Connector Road)	 7.3m carriageway, 2 x 3.5-4m wide shared footway/cycleway either side of the carriageway Pedestrian cycle routes will be 4m where possible and if segregated, but no less than 3.5m Grass verge with potential for tree and shrub planting (verge must be minimum 2m where tree planting included) 	Private vehicles, public transport, pedestrians, cyclists
Secondary street	 6.1m carriageway Pedestrian cycle routes along development frontage Pedestrian cycle routes will be 3m wide where possible and if segregated, but no less than 2.5m Grass verge with potential for tree and shrub planting where this runs along Local Access Lane/ swale (verge must be minimum 2m where tree planting included) 1m verge including shrub planting where this runs along open space / hedge Potential on-street parking (2.5m) Potential swale, min 5m 	Private vehicles, pedestrians, cyclists
Tertiary street	 Carriageway 4.8m to 5.5m 2m footway on both sides of carriageway if street serves 50 to 300 dwelling 2m footway on one side of carriageway with 1.2m verge opposite side if street serves up to 50 dwellings 20mph speed limit with traffic calming measures 	Private vehicles, pedestrians, cyclists
Local access lane	 Carriageway 4.8-5.5m potentially with short / localised narrowing. Pedestrian priority areas within residential areas, min overall width of 7.5m 20mph speed zones, along with traffic calming measures to encourage motorists to observe the speed limit Potential grass verge service strip including tree or shrub planting (minimum 2m where tree planting included) 	Private vehicles, pedestrians, cyclists
Semi-private drive	 Pedestrian priority area, up to 25 dwellings Tarmac surface treatmnet to be avoided No raised kerbs or definition of carriageway Variable width with a minimum of 3.7m Design speed of 10mph Potential grass verge service strip 	Private vehicles, pedestrians, cyclists

TYPICAL STREET SECTIONS







Greenway

4.8 Open Space framework

OPEN SPACE DESIGN PRINCIPLES

The provision of open space within the masterplan has been provided as part of the overall design approach of providing strategic buffer spaces and interfaces, as well as high quality shared spaces and community greens, which could incorporate attenuation and play facilities. On this basis, the indicative masterplan results in the provision of a generous amounts of open space (approximately 97 ha).

This consists of various spaces defined by their character and use, each of which can be categorised within the space hierarchy outlined opposite. They include:

- Meadow parkland
- Central parkland corridor
- Central Sports Hub
- Allotments
- Informal green space
- Common
- Village green
- Biodiversity zones
- Green links / green fingers
- SUDS
- Play
- Proposed woodland and screening

Play areas will be situated along key pedestrian connections to ensure easy access and frequent use. Dwellings will be organised around play spaces to provide surveillance and a safe environment for children. A variety of play spaces will be provided within the development including equipped areas of play (LEAPS, NEAPS and bespoke play areas which respond to the neighbourhood character areas). Landscape areas will also provide formal / informal and naturalistic play elements within the green spaces.

The landscape framework emerges from the following design principles:

- 1. Utilise green spaces to provide Sustainable Urban Drainage;
- 2. Retain existing trees of ecological value and contribution to the distinctive local character;
- 3. Create a Central Sports hub to include sports pavilion, adult football pitches and cricket pitch;
- 4. Provide allotments to include parking, within easy access of new homes;
- 5. Creation of a liner green park at the centre of the development;
- 6. Creation of strong visual and physical green links, in the form of green fingers, which link together the green spaces, and which draws the adjacent planting / landscape character into the Site;
- 7. Creation of hierarchy of spaces and variety of open space types, to add interest, aid legibility and establish / define character.

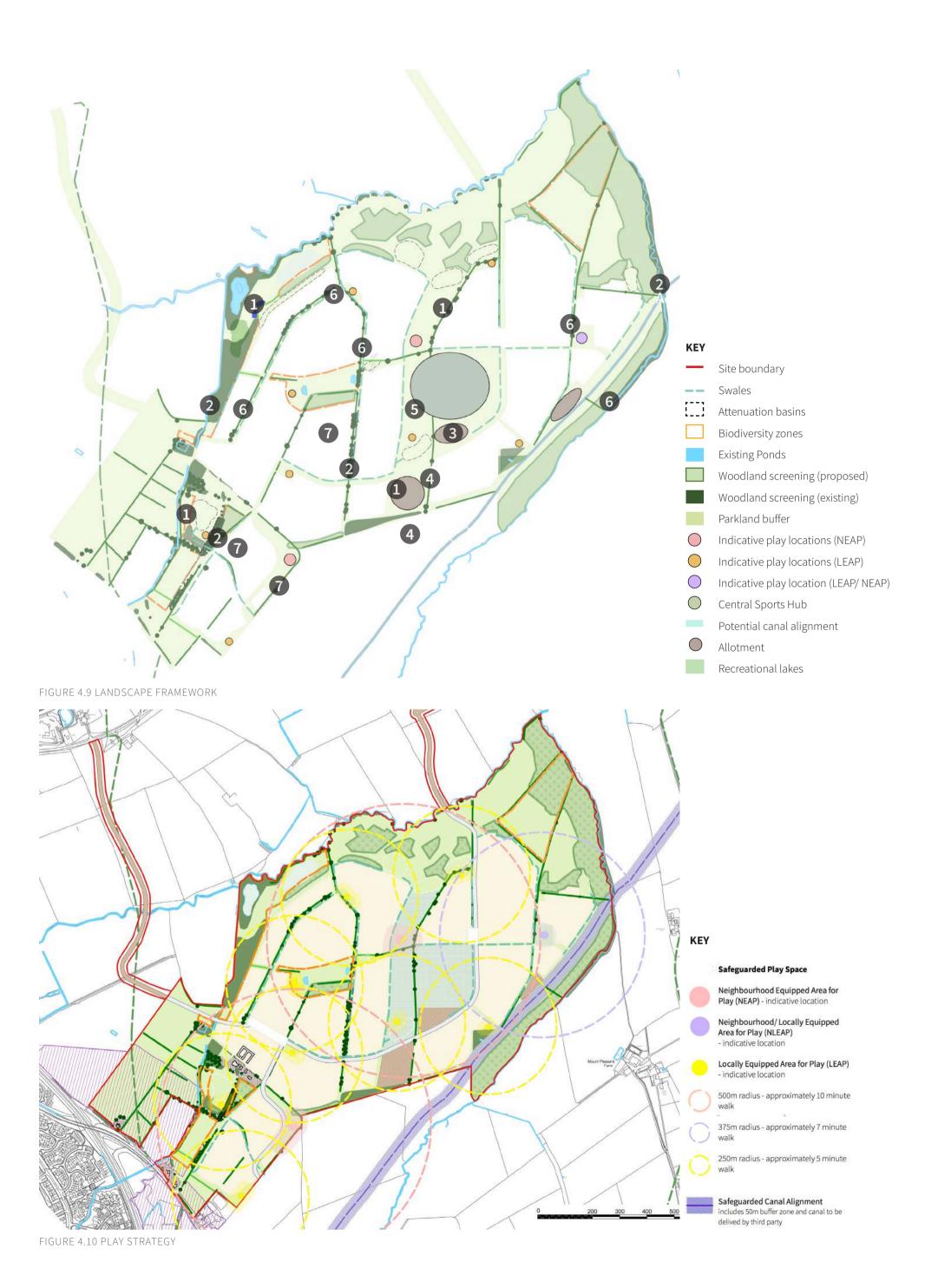
TABLE 3 - OPEN SPACE AUDIT

Categories of Open Space	Open Space requirement (ha)	Masterplan provision (ha)
General recreation area***	5.88 ha	62.29 ha
Outdoor sports facilities	9.40 ha	9.74 ha
Children and teenagers play	1.76 ha	2.16 ha
Allotment	1.76 ha	2.6 ha
Sports pitches*	7.05 ha	7.43 ha
TOTAL OPEN SPACE	25.85 ha	91.76 ha**

^{*} INCLUDED IN 'OUTDOOR SPORTS FACILITIES'

^{**} INCLUDES ALL CATEGORIES OF OPEN SPACE

^{***} CALCULATED BASED ON NEV AND LOCAL PLAN PRESCRIPTION



SPACE HIERARCHY

A variety of public amenity spaces have been proposed across the development to create a hierarchy of amenity spaces. Each of which can be categorised within Table 4 overleaf and outlined in Figure 5 opposite.

The spaces are distributed to be within walking distance of dwellings, allowing residents to access to a variety of amenity types, encouraging outdoor living and fostering sustainable lifestyles. Residents will benefit from a range of spaces for recreational activities including:

1. Strategic parkland

Natural parkland areas incorporating informal walks around woodland and planting. These areas will incorporate SUDS and biodiversity zones which will create new habitats for wildlife.

2. Village recreation area

A range of informal and formal recreation types are proposed to include: The Meadow - a natural area of green space that will contain will be a biodiversity zone including habitat for wildlife. Lotmead Common and Green - The common is a natural area of green space and provides amenity for residents in the southern area of the development. It provides a buffer between the Scheduled Monument. 'The green' is a formal green space that provides an attractive setting and outlook for the southern area of the site and the existing buildings in this area. The Central Sports hub will provide sports facilities within a parkland setting and include 4 adult size football pitches, cricket pitch, areas for additional sports, play area for older children (NEAP) and a Local Equipped Area of Play (LEAP)for younger children. A sports pavilion will also be provided to include changing and meeting facilities for the sports hub.

3. Neighbourhood space

A range of recreation types from intimate and enclosed green spaces, to a variety of safe play environments for children to suit all age groups.

4. Neighbourhood squares and courtyards

A series of hard spaces will feature within the development, at key nodes and junctions within the development. These spaces will vary in scale in accordance within its setting and include the following:

- Neighbourhood Squares Buildings will be organised around neighbourhood squares to form pedestrian priority zones at the local centres. These will become a hub of activity and a place where people can meet and socialise, encouraging a sense of community within the villages.
- Courtyards / Mews/ Landscape edge courtyards Clusters of farmstead typology buildings will be organised around intimate courtyards, particularly at the edges of the development where a sensitive approach is required to allow the buildings to gradually blend into the countryside.

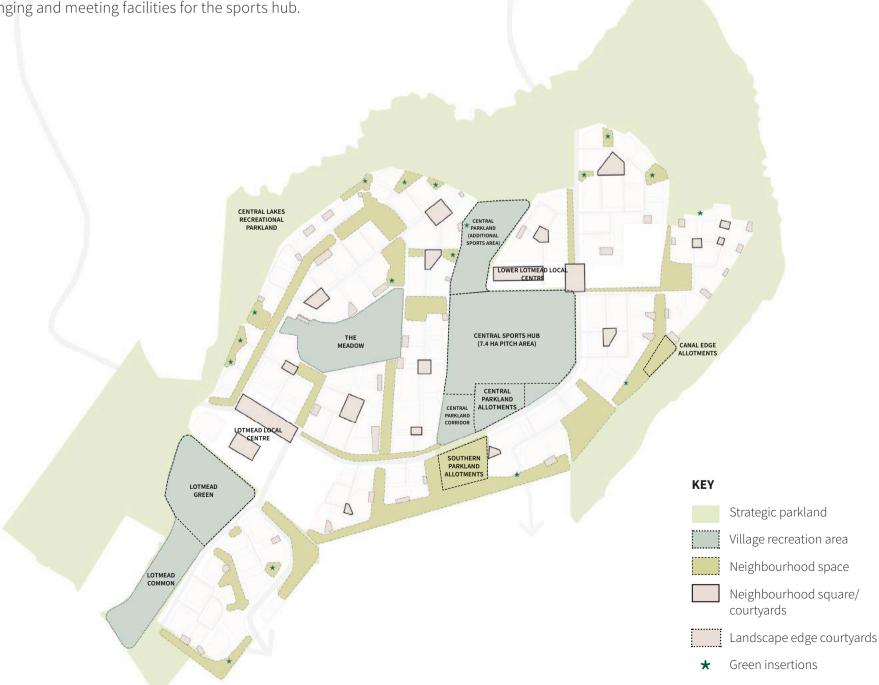


FIGURE 5 SPACE HIERARCHY

TABLE 4 - SPACE HIERARCHY FEATURES

Amenity Classification	Space type	General landscape features	Potential activities
	Natural open landscape	Natural open landscape (wildflower meadow/ semi-natural grassland/	 Informal sports and recreational activities (jogging, football, rounders, cycling)
1. Strategic parkland	Community Woodland	Retained hedgerows and existing trees of	 Childrens play and exploration
	Biodiversity Zones	value/ tree planting along key boundaries and development edges to enhance existing	Relaxing and contemplating
	Recreational Lakes	habitats and create new habitat zones	Recreational walks
	Flood zones	 Natural water bodies and SUDS features (swales and attenuation basins) 	Commuting / walking to school/ walking o cycling to use commercial facilities
		Pedestrian footpaths/ cycleways and associated lighting (where relevant)	of amig to use sommer during the
		 Pedestrian footpbridges and boardwalks where necessary 	
	 Central Sports Hub & Central Parkland Corridor 	Formal sports facilities	Formal sports participation
2. Village recreation area		 Protective hedging and mesh fencing along Village Centre edge 	
		 Cycle parking facilities 	 Informal sports and recreational activities (jogging, football, rounders)
		Pedestrian footpaths and associated	Recreational walks
		lighting	Maintaining allotments and growing
		Semi natural greenspaces and scrub planting along eastern edge	Recreational activities (jogging/ cycling)
		Retained hedgerows and existing trees of value/ tree planting along key boundaries and development edges	
		SUDS (attenuation basins and swales)	
		• Allotments	
		 Childrens play areas 	
		Well maintained amenity grassland	
	Lotmead Green and Common 8	Semi natural grassland and wildflower	Recreational walks
	The Meadow Parkland	meadow	Childrens play and exploration
		Maintained amenity grassland to encourage informal recreation	Informal sports and recreational activities (jogging, football, rounders, cycling)
		Childrens play areas	Relaxing and contemplating
		SUDS (attenuation basins and swales)	netaxing and contemplating
		Existing landscape and new tree planting	
		Areas for seating (naturalistic street furniture)	
		Protective measures and boundary treatments adjacent to GCN ponds (refer to Ecology Report for details)	
	Neighbourhood Greens	Allotments (where outlined in Figure 5)	• Informal sports and recreational activities (jogging, football, rounders, cycling)
. Neighbourhood green space		Maintained amenity grassland to encourage informal recreation	 Childrens play and exploration
		Retained hedgerows and existing trees of	Local gathering and social events
		value/ tree planting along boundaries of the space (to ensure open space allows for	Relaxing and contemplating
		recreational activity)	Recreational walks
	Green Links	Childrens play areasRetained hedgerows and existing trees of	Commuting / walking to school/ walking
	o.cen z.i.i.c	value/ tree planting along key boundaries and development edges	or cycling to use commercial facilities and Village Centre
		Wayfinding and navigation	
		Pedestrian footpaths/ cycleways and associated lighting	
		Informal, naturalistic childrens play facilities	
		SUDS (swales) (where relevant)	
Neighbourhood squares and	Pedestrian Priority Zones	 Hard surface materials and traffic calming measures 	Car parking
courtyards	Landscape Edge Courtyards	Street furniture (seating/ recycling bins/	Local gathering, meeting and social even
	Courtyards	lighting)	Informal childrens play and recreation
	• Mews	Street trees and soft landscape planting	
		 Integrated car parking spaces 	

THE GREEN NETWORK

The proposed villages will be sensitively designed to sympathetically integrate with the surrounding rural landscape, creating new meadow parkland, incorporating public open space, riverside walks, community woodland and ecological areas, which could be managed by a suitable body in accordance with a robust management plan. The total area of publicly accessible green space would be 91.76 ha.

The Meadow parkland would weave in between the new villages, enhancing their rural character, providing a locally accessible landscape/recreational resource to serve the villages and neighbourhoods.

Within the context of the Eastern Villages and the AONB, the Parkland would enhance and repair an existing landscape resource, opening it up to the villages and local neighbourhoods, in a highly accessible, but sympathetic, manner.

This would not compete with, but complement the wider open space provision that exists around Swindon; plugging the gap to create a high quality green space framework. The purpose of the parkland is to create ecological enhancements, but in tandem with recreation, education and residential uses; creating symbiotic relationships, and therefore a 'Living Landscape'. COMMUNITY WOODLAND **OPEN** PARKLAND COMMUNITY WOODLAND COMMUNITY WOODLAND RECREATIONAL LAKES COMMUNITY WOODLAND **GREEN LINK** GREEN LINK INFORMAL CENTRAL CANAL **GREEN SPACE** SPORTS HUB EDGE OTMEAD LOCAL FARM CENTRE VILLAGE GREEN COMMUNIT WOODLAND COMMON SCHEDULED MONUMENT

FIGURE 5.1 GREEN INFRASTRUCTURE

GREEN SPACE PRECEDENTS



EXAMPLE OF INTEGRATING NATURAL SPACES FOR INFORMAL PLAY



EXAMPLE OF NATURAL PLAY FEATURES



EXAMPLE OF A WET MEADOW WITH BOARDWALK



EXAMPLE OF MEADOW AND TREE PLANTING



Village recreation space example





4.9 Delivery and Phasing

PHASING STRATEGY

Figure 5.2 and 5.3 provide indicative phasing plans which identify how the subsequent phases of the proposed development are expected to be brought forward in response to the delivery of a strategic highway connections to the Southern Connector Road to the south and to the A420 to the north. Figure 5.2 shows the assumed phasing based on a link into the site from the Southern Connector Road (SCR) to the south being delivered in 2023, as anticipated by the Council, with this expected to be followed by the delivery of the eastern linked from the A420 into the site, through 'Great Stall East' (for which there is currently an outline planning application) followed by the delivery of the western access from the A420 through 'The Hub' (for which planning permission has be granted and partially implemented, but where additional highway infrastructure still needs to be delivered through intervening land (which is not the subject of any planning application at present).

Given that the delivery of phases beyond the first phase of development is reliant upon connection to the future proposed strategic highway infrastructure, subsequent phases of residential growth will be determined by the timing of the delivery of those connections. However, given the anticipated timings for the delivery of the SCR, the progression of phases is expected to continue from the south. The transfer of land to the Council for the first primary school in Lotmead Village will be provided at an early stage and is expected to be delivered within the early phases of the development (Phase 1B).

The Lotmead Business Centre will continue to operate during the early phases, with the wider first (western) local centre proposals developed around the Business Centre as part of Phase 3, with Phase 3 and 4 of the residential development continuing north and west. The Central Sports Hub, adjoining residential and the second (eastern) local centre are then expected to be delivered as part of Phase 5 of the development. The final phases of residential development and the second primary school will be delivered as part of the final Phases 6 and 7 of the development.



FIGURE 5.2 PHASING STRATEGY

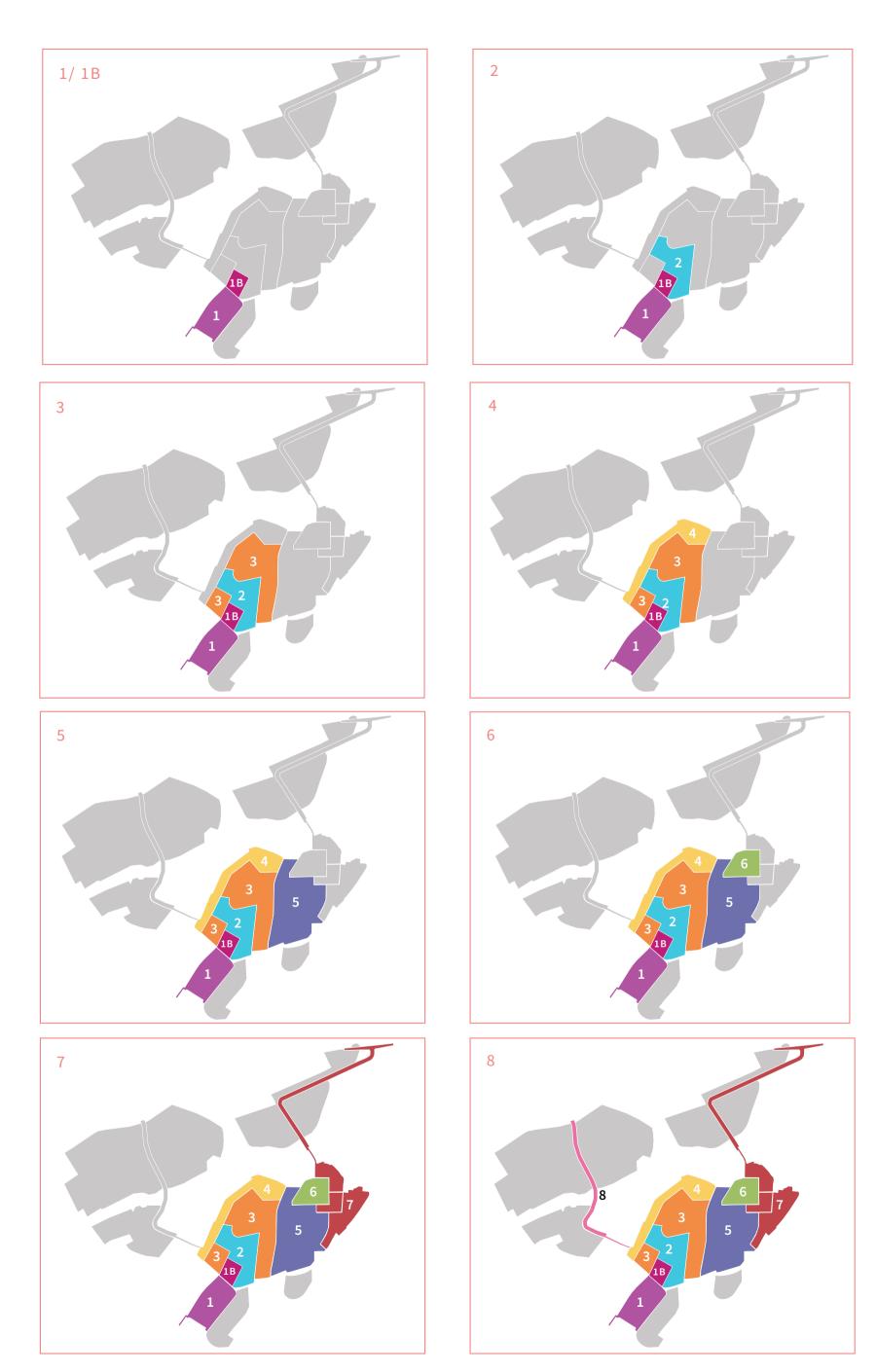


FIGURE 5.3 PHASING DIAGRAMS

DELIVERING COMMUNITY INFRASTRUCTURE

The local centres are located on the main village streets, providing strategic and public transport connections to adjacent villages and between Lotmead and Lower Lotmead. There are two primary schools proposed – one within each of the villages. The primary schools are located between the local centre facilities in both Lotmead and Lower Lotmead village to create a community heart within each village. The primary school within Lower Lotmead Village also benefits from being within close proximity to the Central Sports Hub and Pavilion. Community facilities and amenity are well connected through a walkable green network, maximising sustainable travel opportunities including encouraging walking to school, shared trips and cycling journeys.

Both primary schools are centrally located within their respective villages, and satisfy the 1km catchment area that is deemed appropriate for any given primary education facility.

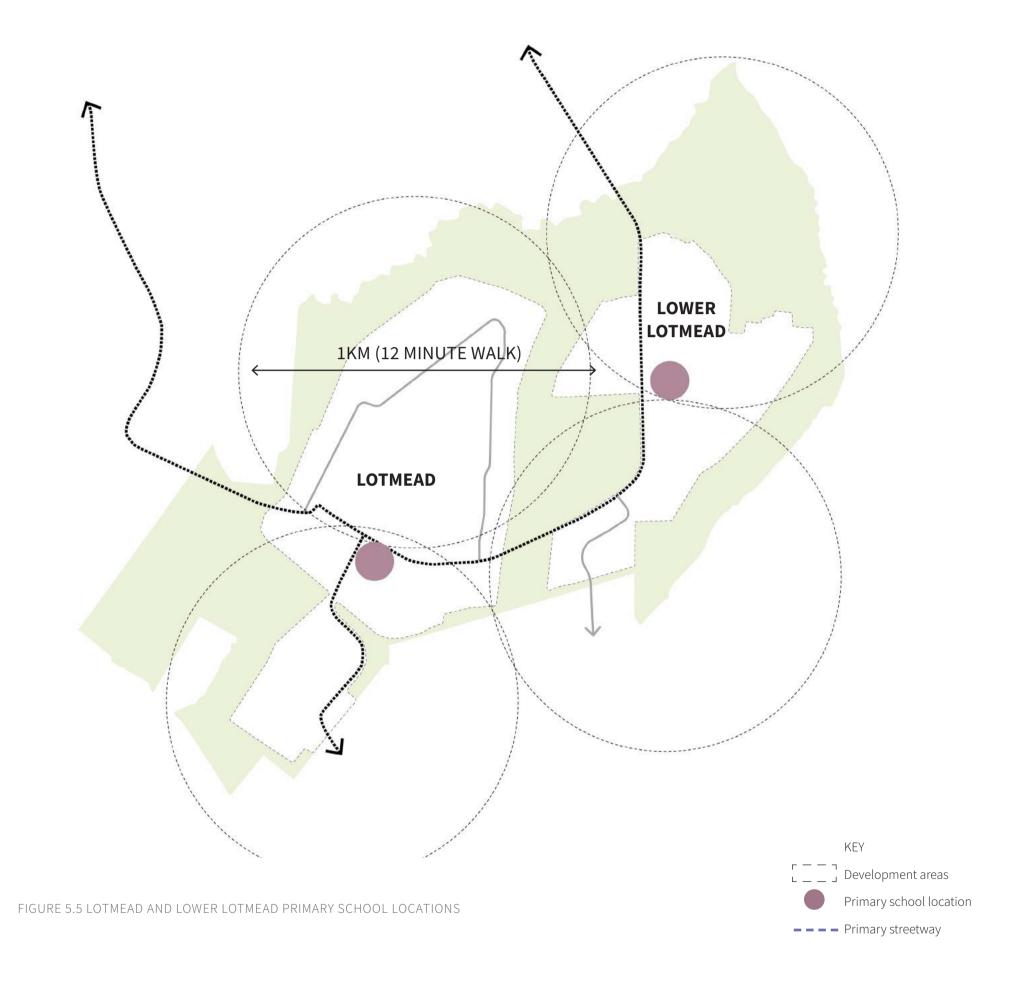
Their adjacency to both the primary route and the local centres ensures that both schools can be brought forward at an appropriate trigger point within their respective phases of development. Similarly, their adjacency to local centres establishes two focal points for the community of the two villages.

Community infrastructure are linked by both vehicular and non-vehicular connections, ensuring families have a choice in their method of transport.



FIGURE 5.4 VILLAGE CENTRES

SCHOOL LOCATION



4.10 Local Centre Design Principles

LOWER LOTMEAD LOCAL CENTRE & SPORTS PAVILION

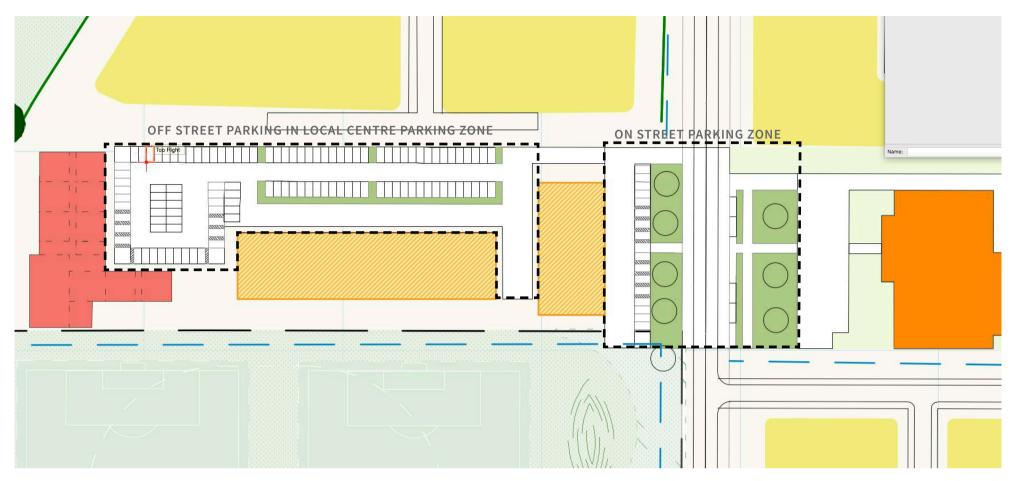


FIGURE 5.6 INDICATIVE LOCAL CENTRE PARKING LAYOUT PLAN

The Local Centre adjacent to the Sports Hub is approximately 1.2ha in area however, the Land Use Parameter Plan (Drg No. PL1461.1-PLA-00-XXDR-U-0008-S4- Rev P02) provides an 'Adjustable Zone' to provide optimal flexibility, enabling the local centre and the buildings within it to be moved and positioned accordingly.

The Pavilion Building shown on the Illustrative Masterplan (Drg No. PL1461.1-PLA-00-XX-DR-U-0002-S4-P02) has a GIA of 1,270sq m, providing sufficient space for changing rooms, showers/WCs, storage and club facilities such as a bar/meeting rooms. The size of the Pavilion Building has been guided by Sport

England's Club House Design Guidance Notes, 2016 Update and the Football Foundations Changing Accommodation Guidance. Whilst the final configuration of the local centre will be determined at detailed design, sufficient space has been provided within the local centre for circa 50+ bicycle spaces and circa 134 car parking spaces (including 19 disabled spaces) which can serve the Pavilion Building alongside the local centre building.

The level of car parking provision, and indeed cycle parking provision, will be detailed and approved at reserved matters, having regard to the Council's parking standards.

LOTMEAD LOCAL CENTRE MOVEMENT FRAMEWORK



FIGURE 5.7 PRINCIPLES OF MOVEMENT AROUND LOCAL CENTRE PLAN (PLAN PRODUCED BY PETER BRETT ASSOCIATES)

This 'Principles of Movement around Local Centre' plan illustrates how the different user requirements could be accommodated within the Lotmead Local Centre area. It highlights how the junction could operate safely whilst mitigating the convergence of both vehicular and pedestrian movement.

The Local Centre plays a major role in creating a sense of place within the wider development, serving both as a social and commercial hub. As such, it is absolutely pivotal the space is designed to prioritise the pedestrians experience of the place, creating an easily navigable and permeable area for people to both move through and dwell within.