

## 4 Design Development & Supporting Plans

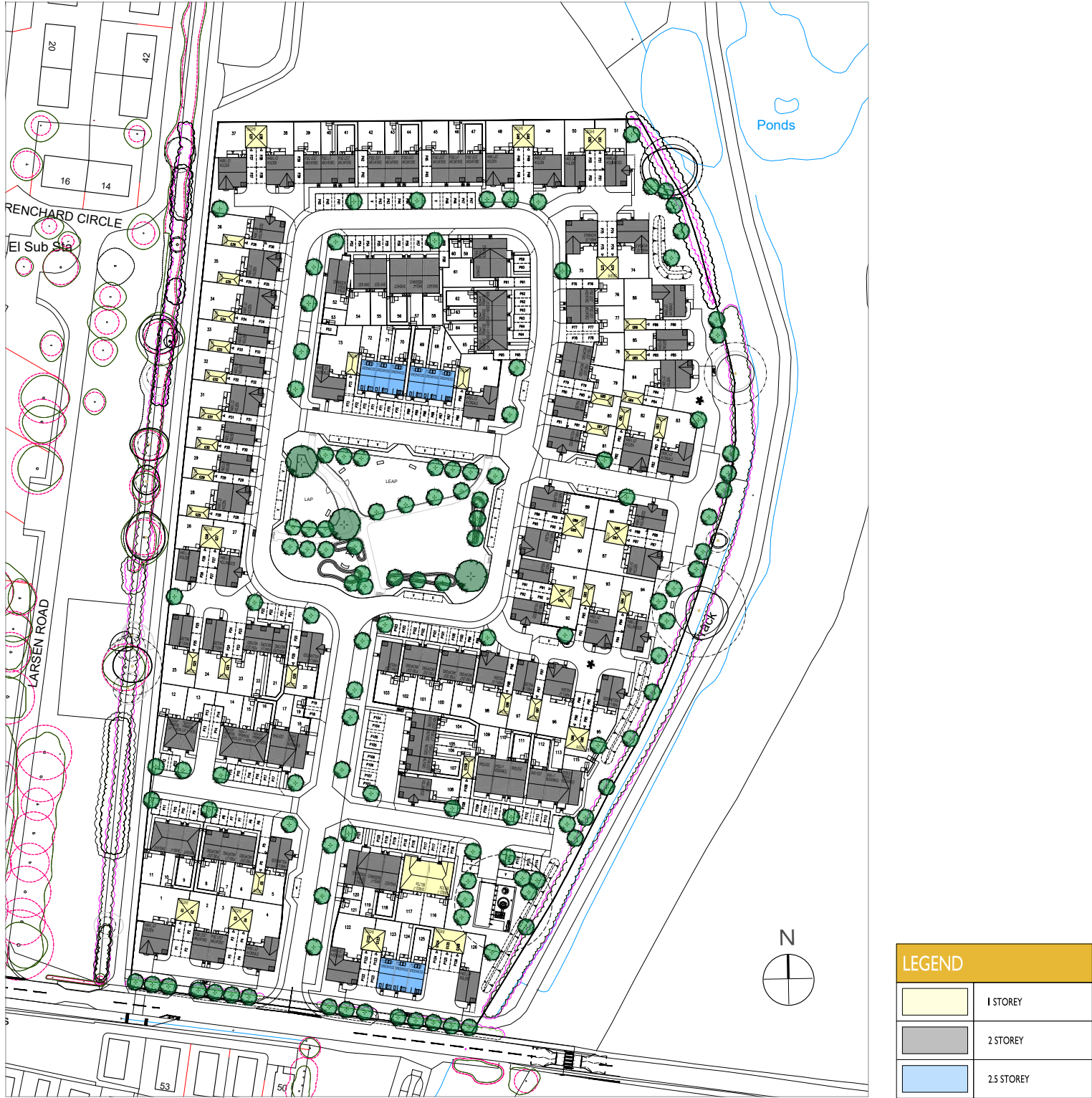
### 4.4 Scale

#### 4.4.1 Building Form

Buildings will be a mix of detached, semi-detached and terraced forms reflecting the existing buildings in the vicinity, as drawn from the character analysis.

#### 4.4.2 Building Heights

The development will be predominantly 2 storey dwellings with 2.5 storey units positioned as focal points overlooking the open space and at the end of the primary route. Single storey bungalow units are located near the eastern boundary. All garages are single storey.



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### 4.5 Access

#### 4.5.1 Vehicular Access

The site benefits from an existing planning permission that has been subject to both public consultation and highways authority review. The scheme reflects the access arrangement of the earlier permission and therefore further pre-application consultation was not considered necessary.

The main vehicular access point into the scheme via Camp Road reflects the approved S278 works, incorporating the upgrade of the footpath and cycleway leading into the Heyford Park development.

Two private drives are also accessed to the east and west of the main adoptable site entrance. The accesses require removal of sections of the existing hedgerow to form the visibility splays and also the removal of the existing highways island, as seen in the bottom right-hand image.

1 Site entrance via Camp Road.



Approximate proposed entrance to site



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### 4.5.2 Pedestrian Movement

The focus is to encourage more sustainable active modes of transport by providing new pedestrian accesses and link to the wider context of Heyford Park. New routes within the site will look to promote a healthy lifestyle connecting people to the green open spaces provided. These routes will be formed via tactile surface routes or informal mown grass footways.

### 4.5.3 Cyclists

Given the size of the site, cycle routes will be provided within the public realm, shared within the pedestrian and vehicle routes.

### 4.5.4 Parking

Parking will be provided in accordance with Oxfordshire SGC's document *Residential Parking Standards: Supplementary Planning Document – Adopted December 2013*, which sets out minimum residential parking standards.

The site will provide 291 allocated spaces provided on plot as a mix of surface parking and garages.

In addition, 25 visitor spaces will be provided on street.

Garages will have minimum internal dimensions of 6x3m for a single garage.

Electric vehicle charging points will follow the building regulations part S, section 6.

Secure cycle parking will be provided to each dwelling. This will either be in garages or for dwellings without garages. A secure cycle parking shed will be provided.

➤ Refer to 'Transport Statement' for further information.

### 4.5.5 Emergency and Refuse Vehicles

The development has been designed to provide ease of movement for refuse and emergency vehicles. Private and adoptable areas have been designed to provide adequate turning facilities for service and emergency vehicles.

➤ Refer to Drawing 22-192-002D 'Refuse Vehicle Swept Paths'

### 4.5.6 Refuse Storage and Collection

Bin storage hard standings for refuse and recycling bins will be provided in locations that are both convenient for access and for delivery to roadside on the relevant bin collection day.

Where bins are stored in rear gardens, gated access will be provided to the rear gardens from the front of the properties.

➤ Refer to Drawing 0778-111 Access and Bin Collection Plan-A0P

### 4.5.7 Accessibility

The design of the streets is based upon the principles set out in the Oxfordshire County Council Street Design Guide, which provides appropriate forms of access for all users. The layout is in accordance with building regulations for inclusive design.

The layout has been designed to promote low vehicle speeds to encourage safe cycle and pedestrian integration.

At road crossing locations drop kerbs and tactile paving will be provided to assist all pedestrians.

A 2-bed bungalow house type has been included within the scheme to reflect demand previously identified by the Housing Officer.



- KEY**
- ➔ Site access
  - - - Primary route (5.0 - 6.0m wide + 2 x 2m footways)
  - ..... Secondary route (5.0m wide + 2 x 2m footways)
  - - - Shared surface route (7.6m wide)
  - - - Private drive (3.5 - 4.1m wide)
  - Footway access
  - - - Footways through open space



# 4 Design Development & Supporting Plans

## 4.6 Appearance

### 4.6.1 Introduction

The overall objective is to create a place with a strong and unique identity that provides a suitable response to the existing site conditions and its surroundings.

The built form, materials and details have taken their influence from the surrounding area.

Design cues have been taken from new Heyford Park development and the existing Officers' Housing, located to the west of the proposal. This is to form a seamless extension to this new development.

Reflecting upon the current Pye application the scheme has taken cues from the use of red brick. However, this will be developed further, with the inclusion of render dwellings to enhance the site entrance and central green open space. Architectural details of the proposed Pye house types and that of the surrounding dwellings are retained for consistency.

### 4.6.2 Materials and Details

Listed below are the materials and details proposed for the scheme:

#### Façades

- Predominantly red brick
- Render to form the gateway material into the scheme and will overlook the central green space
- Rainwater goods will be black

#### Roofs

- Plain slate grey colour tile
- Plain brown colour tile
- Dog tooth brick detailing under eaves and gable verges

#### Windows

- White UPVC casement windows
- Red brick voussoirs window heads
- Cast stone window cills

#### Doors / Entrances

- 6 pane doors; colour - black
- Door canopy styles flat GRP, lean-to and gable-fronted porches

#### Boundary Treatments

- Boundary treatment to front gardens will include garden planting with herbaceous plants and shrubs
- Rear boundary treatments to key public areas will comprise 1.8m red brick walls
- Secondary boundary treatments will comprise 1.8m high close board fence
- Internal garden division boundaries will comprise either of 1.8m close board fence or 1.8m panel fence



Wilford - Illustrative



Greenwood - Illustrative



Holden - Illustrative





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### 4.7 Design and Infrastructure

The construction specification for the development will be to current building regulations for meeting target emission rates in order to reduce annual energy consumption for each dwelling.

#### 4.7.1 Flood Risk and Sustainable Drainage Systems (SuDS)

The Environment Agency's Flood Mapping for Planning shows the site is located within Flood Zone 1 (not in the floodplain) and it is not at risk of surface water (pluvial) flooding from areas upstream. Residential development classed as 'More Vulnerable' is suitable for allocation in Flood Zone 1 as per the NPPF.

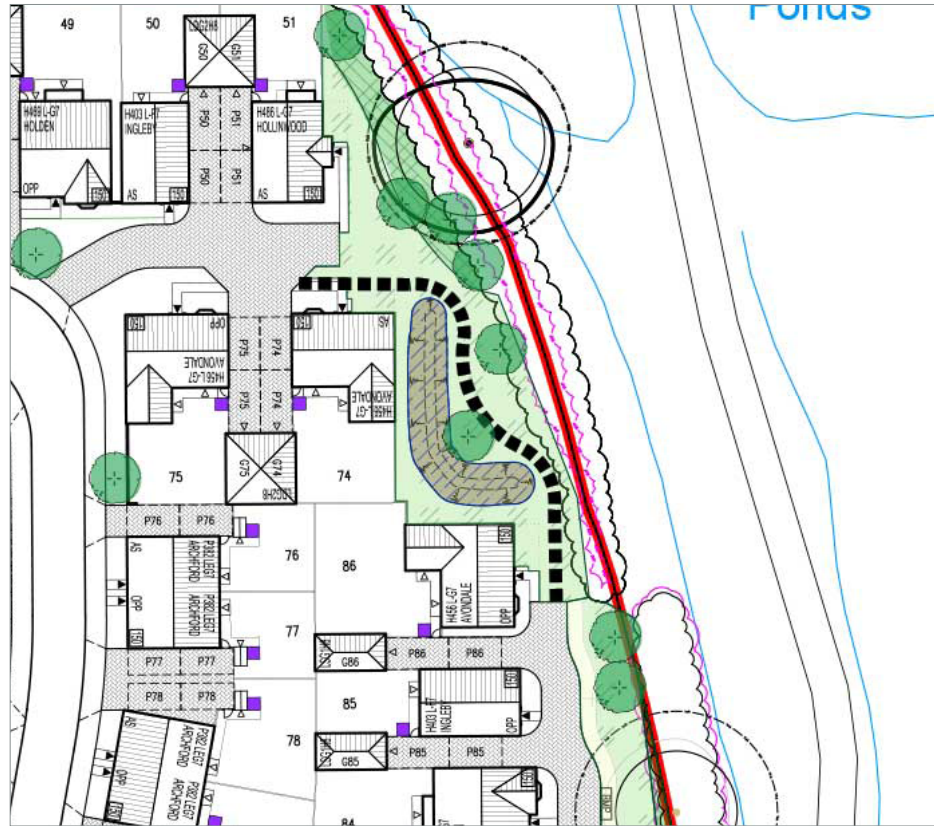
Surface water generated by the development will drain to cellular storage tanks, permeable paving and dry swales. Flows from the site will be discharged to the existing culverted watercourse at a restricted rate, equivalent to the greenfield runoff rate of the existing site.

The swales will temporarily store water during periods of heavy rainfall and will otherwise remain dry. The swales will also provide aesthetic and biodiversity benefits.

The SuDS features have all been designed to accommodate surface water runoff generated by a 1 in 100 year storm, plus 40% to account for climate change, whilst accounting for urban creep commensurate with local and national policy. This is to ensure flood risk is not exacerbated anywhere upstream and downstream of the site.

Foul flows from the proposed development will drain by gravity to a packaged private treatment. The treated effluent will be discharged into the ditch adjacent to the site.

More information can be found in the accompanying 'Flood Risk Assessment'.



Swale location



Swale location

## 4 Design Development & Supporting Plans

### 4.8 Landscaping

The proposed scheme aims to retain existing landscape features and build upon the existing landscape structure at the eastern boundary with native tree and shrub planting to physically and visually contain the proposed development. A central multi-functional green space will provide opportunities for play and activity as well as tranquility and peace.

#### 4.8.1 General Principles

- Create an attractive setting for the development
- Minimize the effects of the development on existing landscape features
- Retain, manage and enhance a majority of the native tree and shrub planting on the perimeter of the site.
- Maintain a naturalistic and 'soft' edge to the east of the site, filtering and screening the proposed dwellings from view.
- A strong new landscape structure would be provided within the development, assisting with placemaking and creating a green and attractive environment for residents.
- Aim to provide a cohesive landscape vision in accordance with the wider Heyford Park Master-plan.
- Play provision designed to augment the existing and future play facilities in the Heyford and the Heyford Park Master-plan.

#### 4.8.2 Landscape and Visual Impact

The outcome of the landscape visual assessments shows that the proposed development would maintain the character and visibility of previously permitted schemes within the site. The site is situated within a low-lying area and is currently well contained by vegetation on all sides, which screens it from most publicly accessible viewpoints.

Principle predicted visual receptors are as follows

- Users of rights of way from surrounding area;
- Travelers along Camp Roads and Larsen Road;
- Adjacent residents; and
- Visitors to RAF Upper Heyford and the businesses associated with the RAF Upper Heyford.





# 4 Design Development & Supporting Plans

## 1. Entrance Avenue

The arrival from Camp Road will be a green entrance to the site with formal grass verges and an inviting avenue of street trees with seasonal interest created through bulb planting. House frontages along the avenue will include formal hedge planting to provide further green links



## 2. Green Street

The frontage of the houses will be planted with flowering ornamental Shrubs and Grasses. Formal hedgerows will be used at key junctions to define the front garden. Street trees and ornamental specimen shrubs will be planted where possible to add an extra layer of height and interests.



## 3. Central Green Space

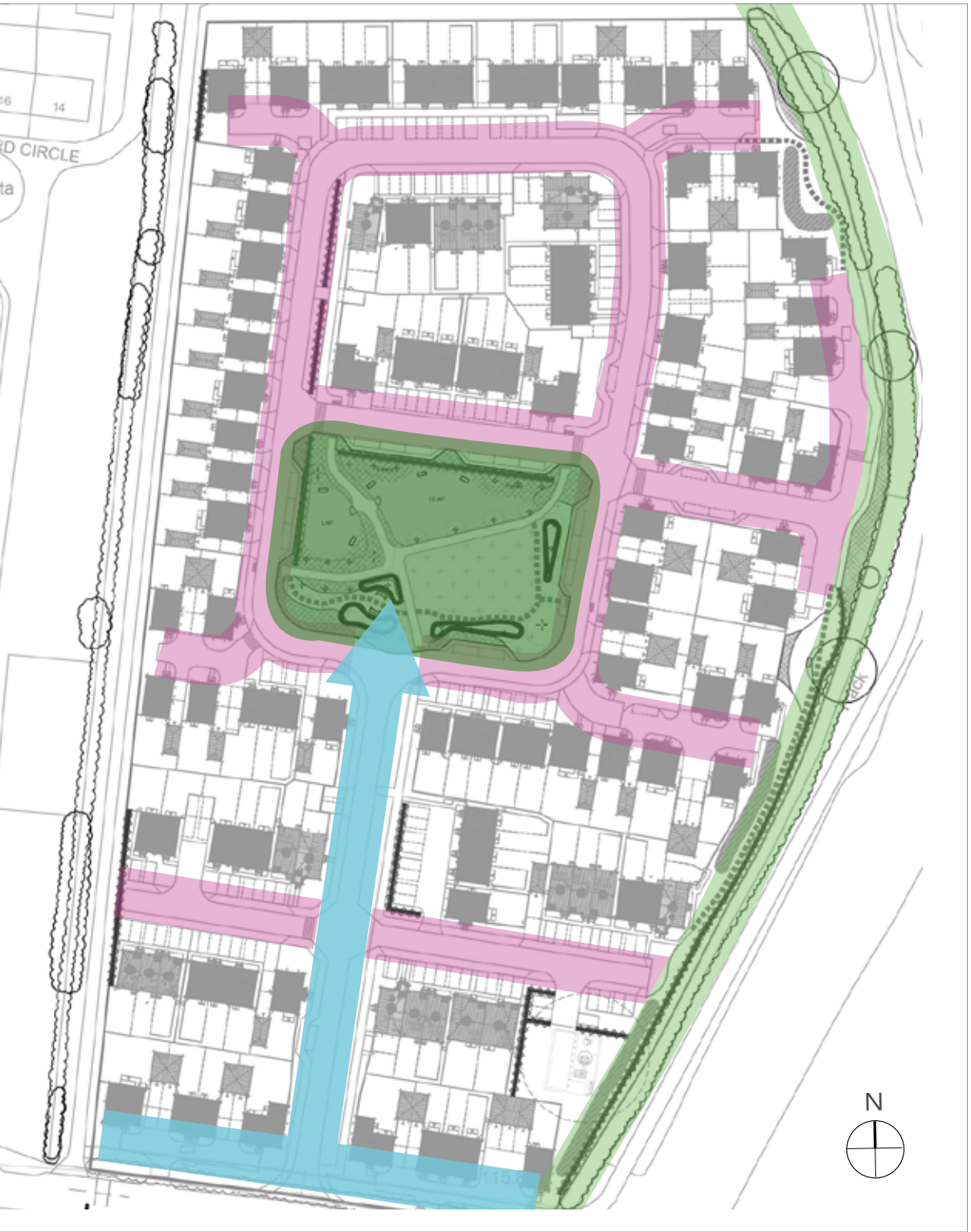
The central green space will host multiple activities, from play and informal activity to tranquil seating spaces

- The play zone is proposed away from the main road, including the linked LEAP and LAP, enclosed by bow top railings and sensory planting to enhance safety.
- An open amenity green space to the south-east will encourage flexible uses for the community, from picnics to kick-about.
- Primary surfaced routes cross the space, with informal routes providing secondary circulation.
- Parkland tree planting at various scales will give the space permanence and structure whilst also proving shade and screening.
- Example tree species include – Silver Maple, Ornamental Pear, Ornamental Apple, Tulip Tree, and Hornbeam.
- Single species hedges



## 4. Enhanced Rural Edge

The eastern boundary will be enhanced to provide a new soft edge to the settlement. This will be achieved through the provision of native tree species and shrubs, informally arranged along the boundary, along with meadow planting and native hedgerow reinforcement. Drainage swales will be planted with native wetland species to maximize their potential for biodiversity.



- Entrance avenue
- Green street
- Central green space
- Enhanced rural edge



## 4 Design Development & Supporting Plans

### 4.9 Sustainability

In 2021 Barratt was recognised as the UK's most sustainable housebuilder in the Housebuilder Awards - building on our success at being identified as the top scoring UK housebuilder by the Carbon Disclosure Project. Also, in 2021, Barratt were the highest scoring national housebuilder in the NextGeneration benchmark, the housebuilder-specific sustainability index. We also secured the Crystal Award for the most transparent housebuilder.

It is recognised that mitigating and adapting to the impacts of climate change are an important priority for the District, which is reflected in policies ESD 1 – 7 in the Local Plan. This section of the DAS explains how this application contributes to the delivery of those policies.

We have considered sustainability at three levels as suggested by the Cherwell Design Guide:

- Masterplan
- Plot
- Dwelling

Full details of sustainability case studies, future targets and ongoing trials are available online at

[www.barrattdevelopments.co.uk/building-sustainably](http://www.barrattdevelopments.co.uk/building-sustainably)

#### 4.9.1 Masterplan/site wide

The site is in a sustainable location, being within walking and cycling distance of the growing number of amenities within Heyford Park allowing people to meet their daily needs locally and reduce reliance on the private car. Planned offsite highways improvements will further improve footways and cycleways to encourage people to choose active modes of transport.

At a masterplan level the site has been designed to encourage walking and cycling to the wider neighbourhood, connecting into the existing and proposed network. The central square contains a number of different spaces for children of different ages, quiet areas of seating and a multi-purpose grassed area for a kickabout, picnic etc. Trees have been incorporated into the streets to provide shade, encourage wildlife and enhance the street scene. The eastern edge of the site is focused on providing an ecology corridor to support biodiversity, particularly for bat foraging and newts.

The site is at low risk of flooding and makes use of sustainable drainage methods that improve water quality and limit runoff from the site to greenfield rates.

Barratt have partnered with the Supply Chain Sustainability School to support and educate our supply chain on our business sustainability goals and how their work can support the national agenda. Our tender process includes local contractors and we have a broad training programme for apprentices and trainees, graduate and ex-military personnel to join the industry. As the country's largest housebuilder, many building materials can be procured and produced at scale, minimising waste.

- 95% of our construction waste is diverted from landfill through smart material selection and sizing, reuse and recycling, working closely with suppliers and waste contractors.
- Ground works are carefully assessed to identify existing constraints, proposed excavations, build sequence and proposed levels. A materials strategy can then determine how and where arisings can be used on-site to minimise the

movement of earthworks vehicles to and from the site. This is regularly reviewed as the design and programme evolves.

- Sustainable Urban Drainage systems – a hierarchy of sustainable solutions have been used and a system of permeable paving and a swale has been used connecting to the existing watercourse.
- We run 72% of our electricity on renewable tariffs and this will be 100% by 2025.

#### 4.9.2 Plot

All homes will have an electric vehicle charging point in accordance with Part S of the Building Regulations. All homes will be provided with sheltered secure cycle storage, either within the garage or within a cycle shed for homes without garages.

Bat boxes, swift bricks and hedgehog highways will be provided across the site to encourage biodiversity and create habitats and wildlife routes within the built form. David Wilson Homes has a partnership with RSPB and designs its show gardens to demonstrate to future homeowners how to encourage wildlife to thrive in gardens.

All our new homes have a water efficiency of 105 litres per person per day – 16% below national requirements and below the limit of 110 lpppd quoted in Policy ESD 3.

#### 4.9.3 Dwelling

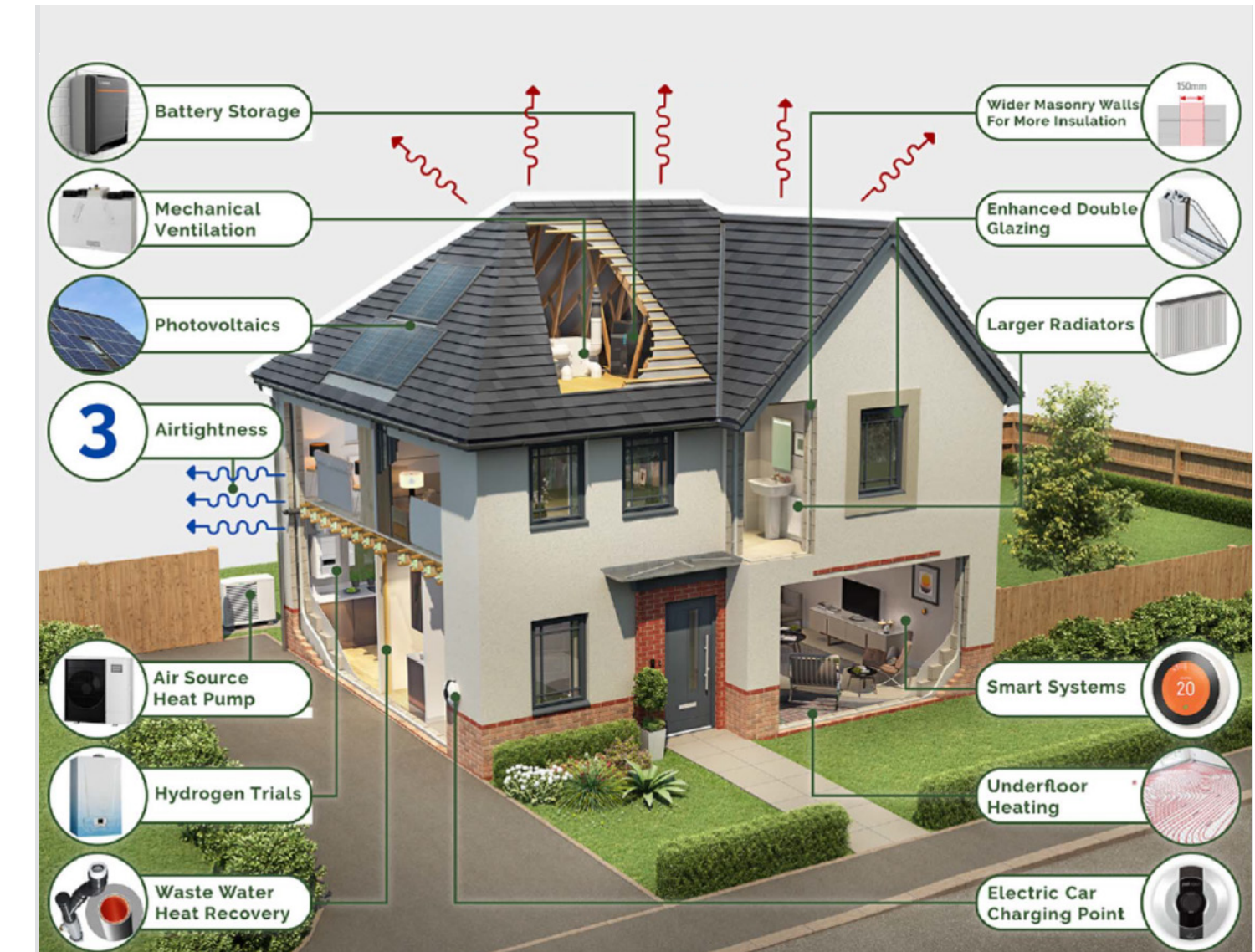
The places we build have a lasting impact over many decades. We aim to design homes and places in a way that supports our customers to reduce their annual heating and electricity running costs, lead lower-carbon lives and help to lower the UK's greenhouse gas emissions that contribute to global warming. This 'fabric first' approach is about designing homes that are not only energy efficient and low-carbon, but are comfortable and economical to run. Smart techniques in a home's fabric include

air tight-ness, high levels of insulation and high performance windows and doors. We also hold customer demonstrations showing how to work heating and electricity effectively and efficiently.

BDW is one of the only developers to have done a full review of overheating to help with our house designs in the future. We have engaged our supply chain and run workshops to future proof the homes. We are also working in partnership with the University of Salford on the Energy House 2 project. Within Energy House 2.0 there are two environmental chambers within which two detached houses are being built under controlled conditions, recreate a wide variety of weather conditions with temperatures ranging between -20°C to +40°C and simulated wind, rain, snow and solar radiation. Once constructed testing and research programmes will be carried out until Spring 2023. This unique facility will play a key role in accelerating the progress towards low carbon and net zero housing design.

The last two years have seen a large shift in the way our customers use their home, particularly in respect of working within the home. We have reviewed the homes we deliver to increase opportunities for home offices within the home. We also deliver high-speed broadband to all of our developments to support working from home.

Our homes are built to include current Building Regulations. Recent updates to Part L includes a 31% reduction on 2013 regulations which is due to be updated again in 2025 to the Future Homes standard which will see a 75-80% reduction in carbon emissions and the removal of gas boilers from new dwellings. The phased approach to changes in building regulations ensures that the supply chain can effectively prepare, deliver and maintain new products and technologies at a successful rate to meet the demand of new housing stock across the country. As the country's largest developer, it is crucial to balance delivering vital homes to meet local and national housing need whilst also embedding new technologies at the right time.





# 5 Conclusion

This Design and Access Statement should be read in conjunction with other supporting documents, in particular the Planning Statement. It has demonstrated that a high quality, responsive and sustainable development is achievable and deliverable on this site.

The proposals have been driven by a thorough appreciation of the constraints and opportunities of the site. They emphasise the applicant’s commitment to an environmentally driven solution. The masterplanning process has been led by Focus on Design, with substantial inputs from others.

The development scheme will deliver further benefits to the wider Heyford Park development; more homes which includes affordable tenures such as rented, shared ownership and first time homes, creation of usable green open space for the public to utilize which includes play provisions, retention of existing vegetation and along with providing further access routes for pedestrians allowing for more sustainable modes of transport.



Entrance into Heyford Park



Existing access to Trenchard Cir.



Vegetation on the eastern boundary



View from Trenchard Cir. south







FOCUS  
ON DESIGN