## 5.2 Concept Design

A concept plan for how the Site could be developed has been generated, building on the work assessing the opportunities and constraints of the Site. The sketch provides a set of design principles that should be included within any layouts for the development of the Site:

- Potential access points off Lower Luton Road including potential redesign to the Lower Luton Road / Bower Heath Lane junction;
- Potential pedestrian and cycle access points into the Site, which link with the surrounding area (roads and footpaths) and also provide access to new potential new amenities provided within the Site;
- Internal street network designed as a 'hierarchy' of routes - primary roads, secondary roads, tree lined residential streets, shared surface areas, private drives etc;
- Internal street network designed to acknowledge the ground level constraints of the western part of the Site;
- Integration of existing Public Rights of Way throughout development, and linking with new public open space to north of the Site;
- Potential location for new Local Centre ensuring good access with local community in Batford via Noke Shot
- Other uses such as new Primary School and Flexi-care development positioned around Local Centre to ensure higher level of footfall through the space;
- Integration of existing landscape & field boundaries to ensure green corridors are respected and features are made of the landscape setting;
- Potential locations for Sustainable Urban Drainage facilities (SUDs) such as attenuation basins and swales.



## 5.3 Development Masterplan & Potential Capacity

A Development Masterplan has been conceived that includes the design principles outlined by the concept plan, includes the opportunities outlined through the early assessment work, and acknowledges the constraints affecting the Site. Key elements of the design of the masterplan have been outlined as follows:

- Potential access off Lower Luton Road;
- Landscaped green spaces overlooking new residential development;
- Higher density terraced residential development set within existing landscape features
- Large area of public open space parkland
- Local centre comprising community centre, retail opportunity + pharmacy;
- New 2 form entry Primary School;
- Flexi-care development incorporating medical care/GP provisions;
- Area for new sports pitches and childrens play facilities;
- Existing farm treck retained as edge of development + reinstated as pedestrian lay route through development;
- New residential development set within existing landscape features;
- Existing public rights of way through site preserved;
- Potential for new pedestrian/cycle access between development and adjacent playing facilities;
- Potential pedestrian/cycle access onto Common Lane, towards new Katherine Warington School;
- $\blacksquare \P$  Diversion off Bower Heath Lane through the site to a new improved junction with Lower Luton Road.
- Potential pedestrian/cycle link to Sauncey View Lodge if required

#### **Potential Capacity**

The development parcels indicated on the framework plan (excluding the School and Flexi-Care sites) provide an overall net developable area of just over 17ha. The masterplan could provide the following:

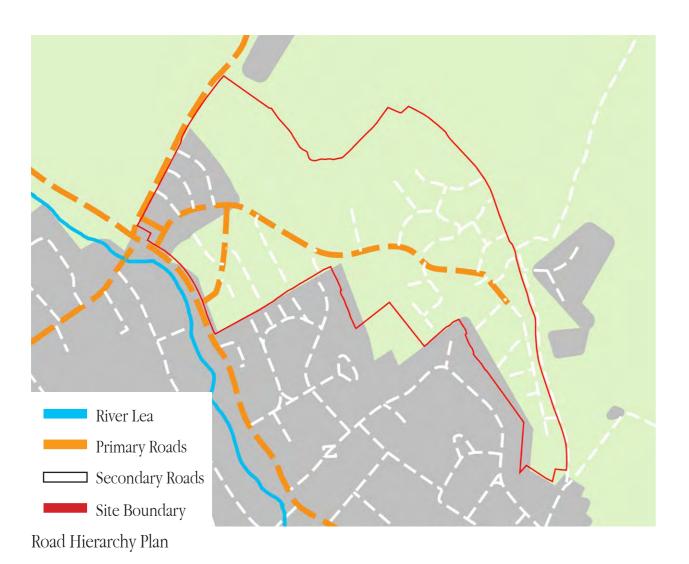
- A landscape-led development comprised of 60% built form coverage and 40% open space/green infrastructure;
- At an average density of 40dph, approx. 680 new homes;
- In line with current policy, 40% of this total allocated as affordable housing could bring forward circa 270 new affordable homes;
- Current aspirations for custom build plots could therefore provide up to 35 plots (5% approx. of the total);
- A new Primary School of up to two forms of entry per year (up to 420 pupils);
- A Flexi-Care development for elderly care, which could provide up to 60 bed spaces.



## 5.4 Road Hierarchy

### **Road Hierachy**

Analysis of the Development Masterplan shows how it reflects the surrounding context in terms of alignment of roads (in particular to the western area of the Site), and also allows for routes extending out to the northern edge of the Site and the new public open spaces. Secondary and pedestrian routes are also highlighted whereby the layout can extend these routes through the Site.



### **Urban Grain**

A study of the built form of the local area along with the Development Masterplan shows how the new built form is respectful to the surrounding properties and sensitive to the Site's edge of the settlement location. Alongside this, the masterplan provides potential areas where density can be increased, such as within the centre of development parcels where external sensitivity is lower, lower parts of the site where wider visual impact is not as high, and around the Local Centre where accommodation could be increased.



Figure Ground Plan

### 5.5 Sustainable Measures - Off Site Construction

Crest Nicholson strive not only to be a 5 star Builder and to achieve high levels of quality throughout the construction process but we want to achieve that in a modern efficient manner; perhaps in a more industrialised fashion. As widely publicised there is a need for more housing, delivered faster and to higher standards than ever before.

Crest Nicholson has invested a significant amount of time over the last 18 months researching how we address the challenges ahead and identifying options that will help us achieve our goals. This involves two core workstreams:

- Researching changing customer requirements and availability of new technologies and design a new highly efficient, customer focussed range of house types and apartments that can be rolled out across the business.
- Researching traditional and alternative construction methods that can work at Crest Nicholson's current and proposed operational scale and identify how this will meet the challenges of future regulations, climate change, sustainability, customer acceptance.

Following on from this research, Crest has developed the first five house types around a core DNA that is embedded into each of those house types and will continue through the rest of the range.. Included within the DNA is that the houses and apartments will meet the Government's Nationally Described Space Standards and Approved Document M Category M4(2) to ensure that the designs provide adequate habitable and storage space as well as consideration for accessibility and adaptation.

Through a robust set of technical and sustainability requirements we have researched, inspected, commercially tested and further developed different types of construction methods which included Timber Frame, Modular, Clay Blocks, CLT (Cross Laminated Timber), SIPs

(Structural Insulated Panels), Volumetric, LGS (Light Gauge Steel), Panelised Aircrete and variations of the same. The aim of the programme was not to simply consider how we could replace the inner leaf of a cavity wall with an off-site fabricated frame, but to look at how that panel could be developed to maximise the use of the factory production line to deliver a fully wind and weathertight panel to site.

Through 12 months of working with the off-site manufacture (OSM) suppliers we selected two partners to help us develop our 'Advanced Panelised Construction' method. The specification included the structural frame, insulation, windows, doors, cavity trays and airtight seals which would all be delivered and assembled at the factory. Working to tolerances as little as  $\pm$  2-3mm we are able to pre-assemble stairs allowing the OSM supplier to fully erect the advanced panel, stairs and roof as part of their scope meaning that internal fit out works could start immediately upon completion.

A clear benefit to this approach is that some teams that we traditionally employ on site will move to the warm, dry factory environment that is well lit and provides a comfortable place with good quality facilities to work. The expected lost earning potential during the winter's inclement weather will be a thing of the past for many as factory panel assembly continues unhindered and once erected on site, the dry environment is there immediately for our fit out teams.

The Crest Nicholson development at Arborfield near Reading was selected to construct the three prototype units from the new core range of house types, using one timber based and two light gauge steel based structural frames from UK factories. The three houses showcase the new core range of house types, the DNA, new technology including app controlled heating and lighting, customisation options, and of course the new advanced panel construction method.

## 5.6 Character & Design

The Masterplan provides opportunities and potential for mixture of differing character areas across the Site, each responding to their immediate context and layout aspirations. Some of these are outlined on these pages:

### **Attractive Arrival Spaces**

The new access points into the site would be designed as a series of spaces along Lower Luton Road which combine the landscaped setting with 'gateways' into the development, whilst also providing attenuation in the form of landscaped basins to ensure surface water run-off is managed along the River Lea corridor;

### **Terraced Streets**

The sloping nature of the western part of the site offers a unique opportunity to provide higher density terraced accommodation which seeks to minimise the impact of parking on the street and public realm by integrating parking underneath the houses with integral garages or innovative undercroft parking solutions;





### **Local Centre**

The 'hub' to the development would be the space at the centre of the masterplan surrounded by community facilities, pharmacy, new primary school, flexi-care accommodation and a denser residential typology such as smaller houses or apartments.

### **Parkland Opportunities**

In the northern part of the Site is proposed large, publically accessible open space with natural, fields on the western slopes and potential playing pitches and children playing facilities on the flatter, open areas to the north. New homes surrounding these spaces would be designed to overlook to provide good levels of natural surveillance and a sensitive

### **Woodland Edge**

Within the Site around the exiting tree groups hedgerows, and along the north-eastern edge fronting onto Common Lane, properties would be designed at a slightly lower density to respect the landscape setting and provide an adequate built edge to the rural lanes / private drives extending to the outer edges of the development.





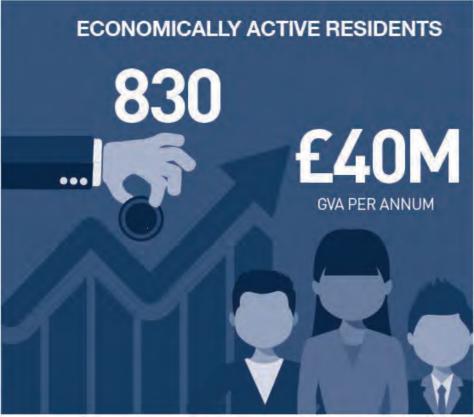






## Socio-Economic Benefits

















## Summary

This Vision Document and the Barton Willmore representations demonstrate the commitment of Crest Strategic Projects and Bloor Homes to bring forward collaborative mixed-used development proposals at the site of North-East Harpenden. Both companies are well established and have an excellent track record in securing and delivering such strategic sites.

The proposals for the site can provide residential-led development encompassing:

- Delivery of c. 680 dwellings at the site as secured within 60% built-form coverage (at a density of 40dph).
- The remaining 40% provided as open space/green infrastructure (formal and informal recreation) to sit in the northern part of the site in accordance with the Green Belt Review.
- 40% affordable homes, including potential for Starter Homes.
- Up to 35 Self/Custom build opportunities.
- Local Centre including retail, pharmacy and community uses.
- 2 FE Primary School.
- Flexi-care development for older people.
- GP/medical care space.
- Extensive pedestrian and cycle links through the site and connecting to urban area.
- Potential for Gypsy and Traveller accommodation.

The above proposals result in a new sustainable neighbourhood at this urban edge location of Harpenden. The development can be sensitively accommodated along the built edge of Batford, connecting and supporting existing infrastructure including education, retail, community uses and public transport. It is thus a good location for future planned growth.

The proposed masterplan for the site adopts a landscape-led approach and has regard to the SACDC objectives for the site. This includes the provision of 40% of the site area as undeveloped open space (in the northern part). This will include a defensible boundary along the route of the existing track crossing the site as well as areas of retained and proposed new planting.

Development of the site will result in numerous socio-economic benefits during the construction phase as well as job creation at the proposed school and other uses at the site. The population generated by the development will also provide support to and additional footfall at existing facilities/shops nearby, thereby positively contributing to the local economy.

Crest Strategic Projects and Bloor Homes have sought to positively respond to matters raised by SACDC and they will continue to engage with the local planning authority during the Local Plan process regarding the masterplan proposals for the site.











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