

3.7 CLIMATE CHANGE AND SUSTAINABILITY IMPACT

3.7.1 This section of the Design and Access Statement provides an overview of the climate change issues and considerations that have informed the design of the Barwell West scheme. With reference to the Master Plan (Figure 3.7) considers how the physical impacts of climate change will be addressed as well as identifying how the development will contribute to mitigating carbon emissions, a major contributor to climate change.

CLIMATE CHANGE

3.7.2 The impacts of climate change that are relevant to this development are the impact of more extreme weather events, especially rainfall, temperature and the impact of extreme temperature on human health. The new development will also contribute to carbon emissions although this must be put into the context of the performance of the new development relative to the bulk of existing building stock in the area. Here, simply the impact of past and proposed future changes to the building regulations in 2013 will deliver around 80% reduction in carbon emissions relative to buildings constructed pre 1999.

FLOODING AND DRAINAGE

3.7.3 Over the last 45 years there is evidence that there have been more extreme rainfall events. In 2009 UK flooding was the worst for 270 years. These extreme rainfall events are now being attributed to climate change and in particular, global warming. This means that the Barwell West scheme must mitigate against these extreme rainfall and associated flooding events.

3.7.4 The potential impact of climate change upon floodplain extents has been assessed using a hydraulic model and this information has been used to inform the master planning process. Similarly, the surface water management strategy has been designed to accommodate the predicted increase in rainfall intensities associated with climate change. Adaptability and resilience to a changing climate are therefore “built in” to the proposals.

TEMPERATURE.

3.7.5 Climate change is predicted to give rise to increased fluctuations in extremes of temperature, from prolonged periods of winter cold to extreme summer temperature. The energy strategy for the Barwell West scheme incorporates measures to mitigate against both summer and winter temperature extremes.

3.7.6 Building regulation has and will continue to drive up fabric energy efficiency such that a building constructed against the new 2013 regulations (as proposed) will deliver up to 80% improvements in energy performance relative to houses built pre 1999. This will do much to mitigate the impacts of extreme winter cold by making heating more affordable for those living in the development.

3.7.7 To mitigate against the impacts of extreme heat, the master plan layout seeks to maximise the use of natural shading and to control the impact of shading such that it contributes as much as possible to mitigating against the impacts of climate change. In addition, the water bodies within the development will as far as possible be used to provide natural cooling.

3.7.8 In this way, green infrastructure has been carefully allocated such that it supports energy demand reduction through summer shading or winter wind breaks. This also includes shading of car parking spaces. Green open spaces to the east and west have been incorporated into the Master plan to provide evaporative cooling at night, reducing heat island effects. Green routes have been included running through the master plan and mature trees have been retained to provide shading.

HEALTH

3.7.9 It is well understood that extreme heat events can prove fatal to certain groups of people, especially the elderly and vulnerable. In addition, the impact of temperature and sunlight on air quality can be fatal to those suffering with breathing related illness.

3.7.10 The impact of heat will be dealt with as far as possible through the provision of shading and natural cooling to overcome the heat island effect in the Barwell West development. Air

quality issues will be addressed through the master plan layout using the prevailing wind direction in a positive manner to promote air flow and thus natural ventilation of the site.

MITIGATION MEASURES – ENERGY

3.7.11 National and regional policy dictates that any new development should follow the simple energy hierarchy of reduce demand, use energy more efficiency and then supply clean energy where possible.

3.7.12 The energy strategy for Barwell West follows these principles. Passive design and the use of site layout will maximise the use of natural daylight, natural cooling and where required natural heating. The building fabric will ensure energy efficiency through optimising the U-Values of the structure, reducing thermal bridging and the appropriate use of thermal mass. Within the buildings, efficient temperature control, lighting and other equipment will be used.

3.7.13 Finally, appropriate low or zero carbon technologies will be used where appropriate. The selection of technology will be optimised around location, use and cost to the occupant, but will likely include heat pump technology, PV cells and even micro CHP. However, it is unlikely that a district heating network will be commercially viable on the site.

MITIGATION MEASURES – SUSTAINABLE DEVELOPMENT






3.7.14 The Barwell West development will be delivered as sustainably as possible within the constraints of the site and viability. This means that resource efficiency will be incorporated wherever possible. This will lead to materials recycling, less waste generation, less transportation of materials and a reduction in the energy used in construction as far as possible.

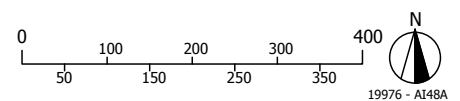
3.7.15 This approach will also go as far as practically possible to reduce carbon emissions and thus mitigate against climate change.

3.7.16 Further details can be found within the Sustainability Statement for Barwell West.



FIGURE 3.7 CLIMATE CHANGE PLAN

-  Outline Planning Application Boundary
-  Natural Airflow to penetrate the development to provide natural surveillance
-  Trees incorporated within the masterplan will provide shading
-  Attenuation Features
-  Open space within the development provides evaporative cooling at night



04

INVOLVEMENT AND EVOLUTION

04 INVOLVEMENT AND EVOLUTION

4.1 STAKEHOLDER INVOLVEMENT AND DESIGN EVOLUTIONS

PRE-APPLICATION CONSULTATION

4.1.1 In preparing the planning application the Applicants have undertaken extensive pre-application discussions with the Council in addition to a comprehensive community consultation exercise in line with best practice guidance. The purpose of the exercise was to assist in identifying the views of the community regarding the proposals and to identify what their key issues were. This information has been utilised to inform the proposals and the application submission.

PLANNING APPLICATION PROPOSALS: SCHEME EVOLUTION

4.1.2 This planning application is submitted on behalf of 3 major landowner developer companies who are working together to ensure the successful delivery of the Barwell SUE. A single and comprehensive professional team was instructed to engage with the Council and all relevant statutory and regulatory bodies as part of an extensive pre-application engagement exercise. Pre-application meetings between the professional team and the Council were project managed by HOW Planning have taken place over approximately 18 months where a range of issues have been discussed as summarised below.

4.1.3 The Applicants team have engaged with a wide range of bodies including Leicestershire County Council, the Highways Agency, the Environment Agency, Natural England, English Heritage and a range of Officers at Hinckley and Bosworth Borough Council. This comprehensive approach to the pre-application process has ensured that the masterplanning exercise has been carried out in an extremely robust manner.

COMMUNITY AND STAKEHOLDER CONSULTATION EXERCISE

Community Consultation Exercise

4.1.4 The draft masterplan proposals were available for invited key stakeholders and the general public to view between 12th-14th January 2012 at the George Ward Centre in Barwell. The event was subject to extensive publicity with approximately 4,000 flyer invites being delivered to residential properties in the Barwell and Stapleton area in addition to personal letter invites which were issued to key stakeholders and local interest groups. Other forms of publicity including locating posters in local shops, press releases, public notices placed in the Hinckley Times and radio adverts were also utilised. The methodology employed in publicising the event was prior agreed with Council Officers.

4.1.5 As described in further detail in the Statement of Community Involvement (SCI) submitted with this application a preview session was held on 12th January for Council Officers, Councillors, Parish Council members, statutory consultees and other local interest groups to view the draft development proposals and speak to the Applicants professional technical team. A series of exhibition stands were utilised to explain the proposals and a number of tables were set out with copies of the masterplan and large scale aerial plans of Barwell to help people understand the proposals in their context.

4.1.6 The proposals were then open to the general public to view at their leisure between the 13th and 14th January 2012 and a full technical team was manned at the exhibition to respond to individual queries and explain the proposals. Comment forms were provided to capture feedback and the proposals were also hosted on the HOW Planning website with an online feedback mechanism. A total of 910 people attended the exhibition over the two days it was open to the general public demonstrating the effectiveness of the publicity exercise. A detailed analysis of the issues raised during the event and the Applicant's response to these are set out in the submitted SCI.

Presentations to Officers of Hinckley and Bosworth Borough Council

4.1.7 Prior to the community consultation exercised summarised above, the applicants and members of their professional team presented the draft scheme proposals to the following Member groups:

- Council Executive
- Scrutiny Group
- Earl Shilton and Barwell Forward Group

AWAITING TABLE OF MEETINGS AND IMAGES

4.2 STAKEHOLDER INVOLVEMENT AND DESIGN EVOLUTIONS

4.2.1 The starting point for the design process was the Master plan set out within the Earl Shilton and Barwell Area Action Plan that had been subject to significant consultation and led to the Preferred Option shown in fig. 4.1

4.2.2 The initial design work focused on testing and understanding the reasons for some of the key design decisions within the AAP Preferred Option master plan. The principal question was why new development was not being 'stitched' into the existing urban fabric of Barwell, and how this might be achieved see fig 4.2.

4.2.3 The three concepts explored were:

1. AAP Plan 'Modified': Focused on minor tweaks to access arrangements;
2. AAP 'Intensified': Considered re-orientation of open space to create large development blocks and minimising over provision of open space; and
3. Urban Stitch: Explored developing from the edge of Barwell and resolving the issue of exposed backs. This option also looked at the relocation of Community Hub and explored the dispersment of employment uses, into smaller clusters, along the primary route.

4.2.4 The combination of design testing, technical investigations and consultation with Local Authority made it apparent why the design in the AAP Preferred Option is as shown. The key influences related to the existing floodplain, attenuation requirements and the response to local residents concerns regarding the proximity of the proposed development. The Local Authority also established clear parameters to be incorporated with the eventual master plan.

These are set out below:

- The Community Hub is to be serviced from Stapleton Lane;
- The employment area is to be located in the south; and
- The sports pitches are to be located within the north and south of the site

4.2.5 Having confirmed the above, an illustrative sketch master plan (Fig 4.3) was produced and discussed with the Local Authority to discuss and agree the over arching principles of the layout. The sketch master plan (Fig 4.3) was then developed further, supported and refined with technical inputs relating to ecology, landscape and attenuation features as well as the application of principles defined with the Character Area Appraisal.

4.2.6 As the master plan design continued to develop, it became apparent that the AAP master plan showed an under provision of attenuation became apparent. A figure of XXXXX was calculated by PBA. This meant that some of the In response the design opened dialogue with the HBBC to agree percentages of alternative space types that could be included with the natural green space quantum. A percentage of 25% of Local Wildlife Site was agreed with HBBC. 15% of attenuation was agreed following technical modelling to prove that this percentage was a viable, without impacting on the attenuating function.



FIGURE 4.2 THE AAP MASTER PLAN

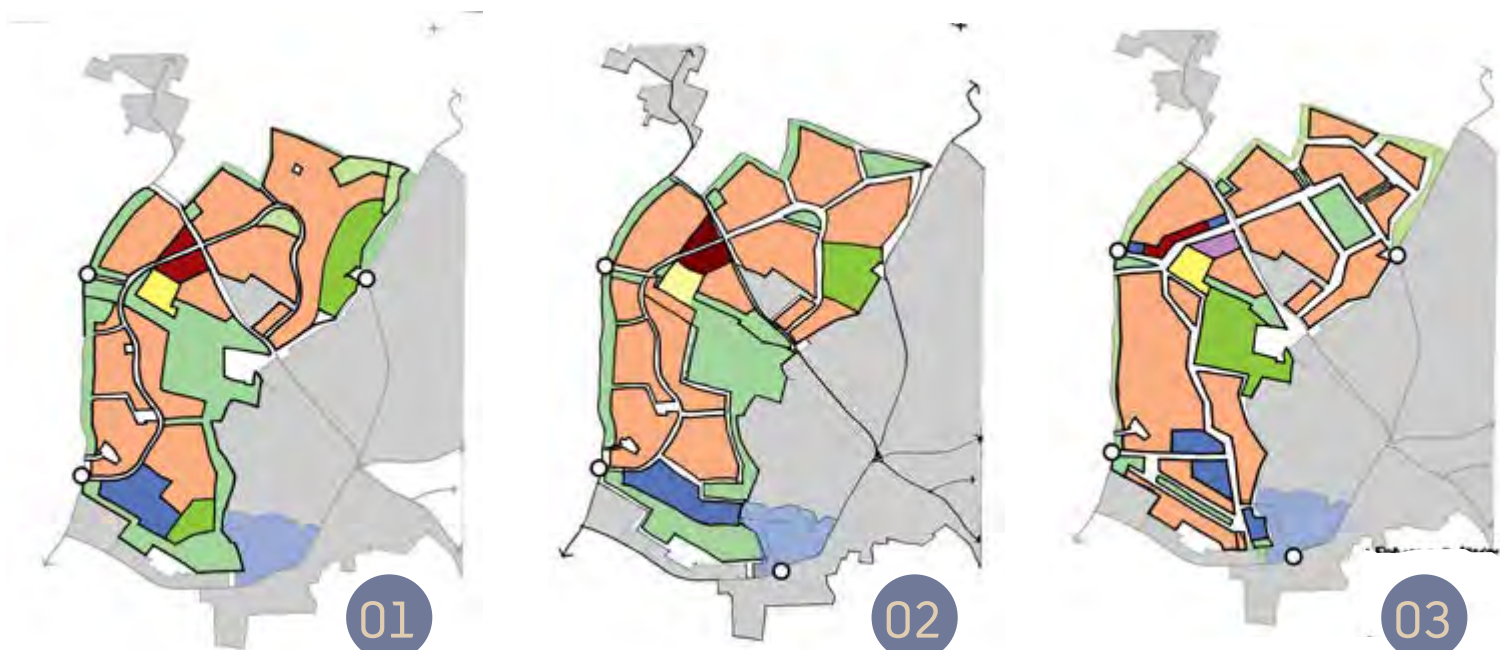


FIGURE 4.1 EXPLORED CONCEPTS (LEFT TO RIGHT): THE AAP PLAN MODIFIED, INTENSIFICATION OF THE AAP PLAN, URBAN STITCH

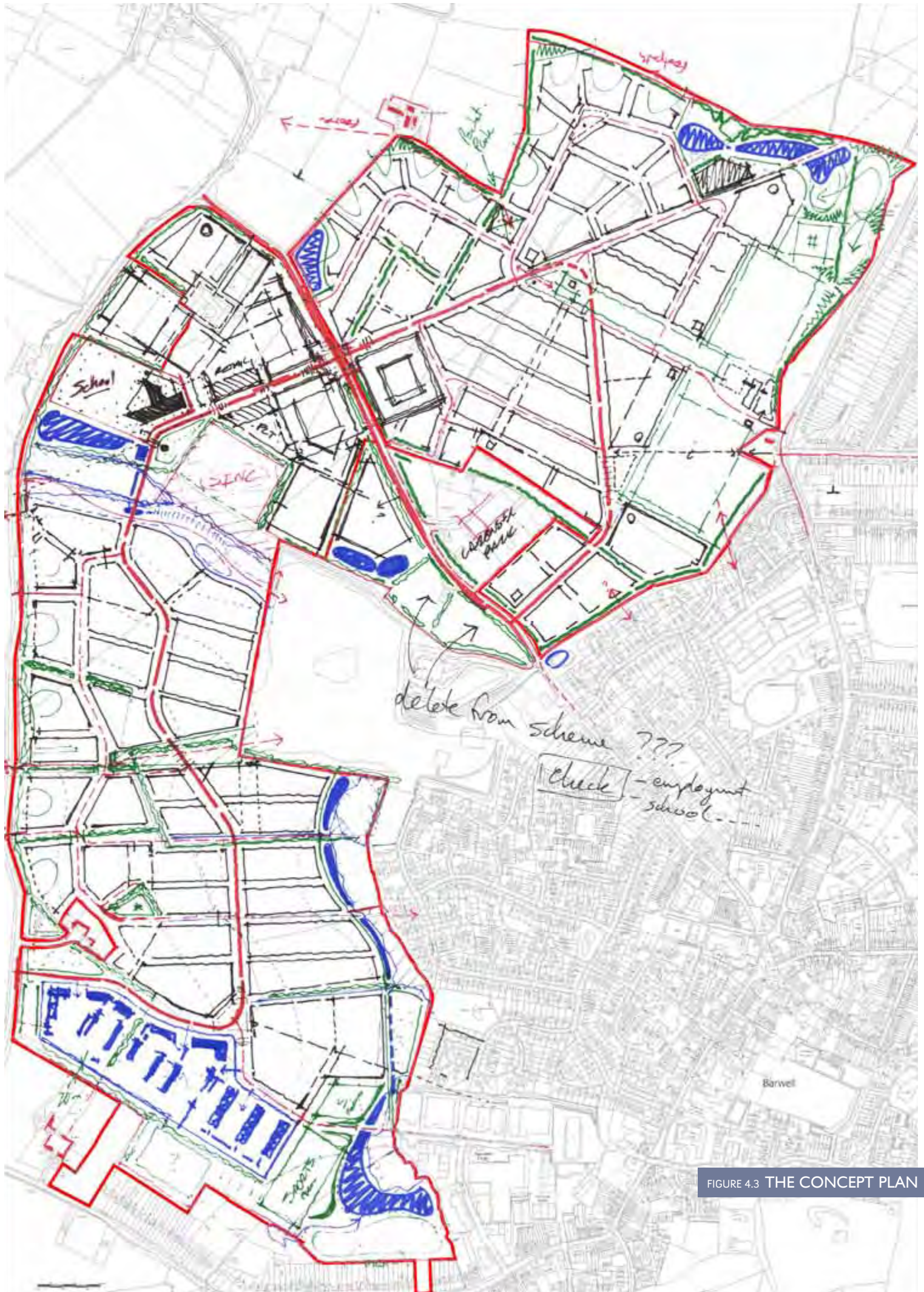


FIGURE 4.3 THE CONCEPT PLAN

Key points (general and site specific) arising from the consultation:

4. Link be upgraded to a bridleway

5. Possibly relocate the allotments to behind the Hinckley residents?

7. Concern over junction on dangerous bend.

6. Increased buffer to Carousel Park with additional landscaping? Apparently this has been promised, see consultation feedback.

3. Improvements to signage within the immediate area - a possible early win

2. Traffic lights required?

12. Survey for Great Crested Newts requested

9. A need for sound barriers across the site?

10. Inclusion of a cemetery? The Parish Council has identified a site outside of the SUE.

11. Possibly relocate sports pitches to be alongside the skate park - early win?

17. Is this development too close to the LWS?

16. Can this link be upgraded to a bridleway?

14. Visibility plays to be improved on this junction?

8. Maintenance of green space?

13. Location of sports pitches not welcomed by local residents - preference for Natural Green Space?

15. Is this distance sufficient from the roundabout to the existing dwelling?

1 WELCOME TO THE EXHIBITION

Attingham Strategic Land, Barwell Development Securities and Taylor Wimpey would like to welcome you to the public exhibition for the Barwell West Sustainable Urban Extension (SUE). This is an opportunity for you to view the draft proposals and provide us with valuable feedback.

The display boards provide a description and a series of draft proposals for the site. Please take an opportunity to view the details and speak to our team of experts who will be on hand to provide you with any information you require. Comments have been provided and we would be grateful if you could provide your own comments and suggestions for you to have on the proposals.

The proposals are being shared by a consortium of leading developers and investors. These are Attingham Strategic Land, Barwell Development Securities and Taylor Wimpey. Attingham Strategic Land is a jointly funded business development and investment company. Barwell Development Securities is a subsidiary of Barwell Development Securities Limited, a subsidiary of Barwell Development Securities PLC. Taylor Wimpey is a leading UK house builder and developer. The Barwell West SUE is a major development in the Hinckley and Leicestershire area. The Barwell West SUE is a major development in the Hinckley and Leicestershire area. The Barwell West SUE is a major development in the Hinckley and Leicestershire area.

The Project Team available at the Exhibition:

- Attingham Strategic Land
- Barwell Development Securities
- Taylor Wimpey
- The Technical Team

2 BACKGROUND TO THE DEVELOPMENT

Hinckley and Barwell Borough Council has identified a large area of land for development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

3 KEY BENEFITS

- The provision of government level and provide the facilities for the creation of high quality open space for local people. Types of employment to be provided include: General industry and its change and development.
- The investment in the infrastructure will also generate benefits for the new and existing residents.
- The provision of government level and provide the facilities for the creation of high quality open space for local people. Types of employment to be provided include: General industry and its change and development.
- The investment in the infrastructure will also generate benefits for the new and existing residents.

4 BENEFITS TO THE CENTRE OF BARWELL

The development of the Barwell West SUE will provide a range of benefits to the centre of Barwell. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

9 NEXT STEPS

Attingham Strategic Land, Barwell Development Securities and Taylor Wimpey would like to thank you for attending this exhibition.

Your views on the proposals are of great importance to us so please complete a feedback form and deposit it in the comments box below you finish.

Alternatively you may view the proposals in your own time and leave comments at www.howplanning.com by clicking on 'Current Consultations'.

The project team will carefully review all comments received and use these to improve the design.

Once the process has been completed, it is anticipated that an outline planning application will be submitted to the Council in Spring 2022.

www.howplanning.com and click on 'Current Consultations'

5 DEVELOPING THE PROPOSALS

Attingham Strategic Land, Barwell Development Securities and Taylor Wimpey would like to thank you for attending this exhibition.

Your views on the proposals are of great importance to us so please complete a feedback form and deposit it in the comments box below you finish.

Alternatively you may view the proposals in your own time and leave comments at www.howplanning.com by clicking on 'Current Consultations'.

The project team will carefully review all comments received and use these to improve the design.

Once the process has been completed, it is anticipated that an outline planning application will be submitted to the Council in Spring 2022.

6 THE PROPOSALS

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

7 PROPOSED COMMUNITY FACILITIES

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

8 PROPOSED RESIDENTIAL DEVELOPMENT

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area. The development is a major development in the Hinckley and Leicestershire area.

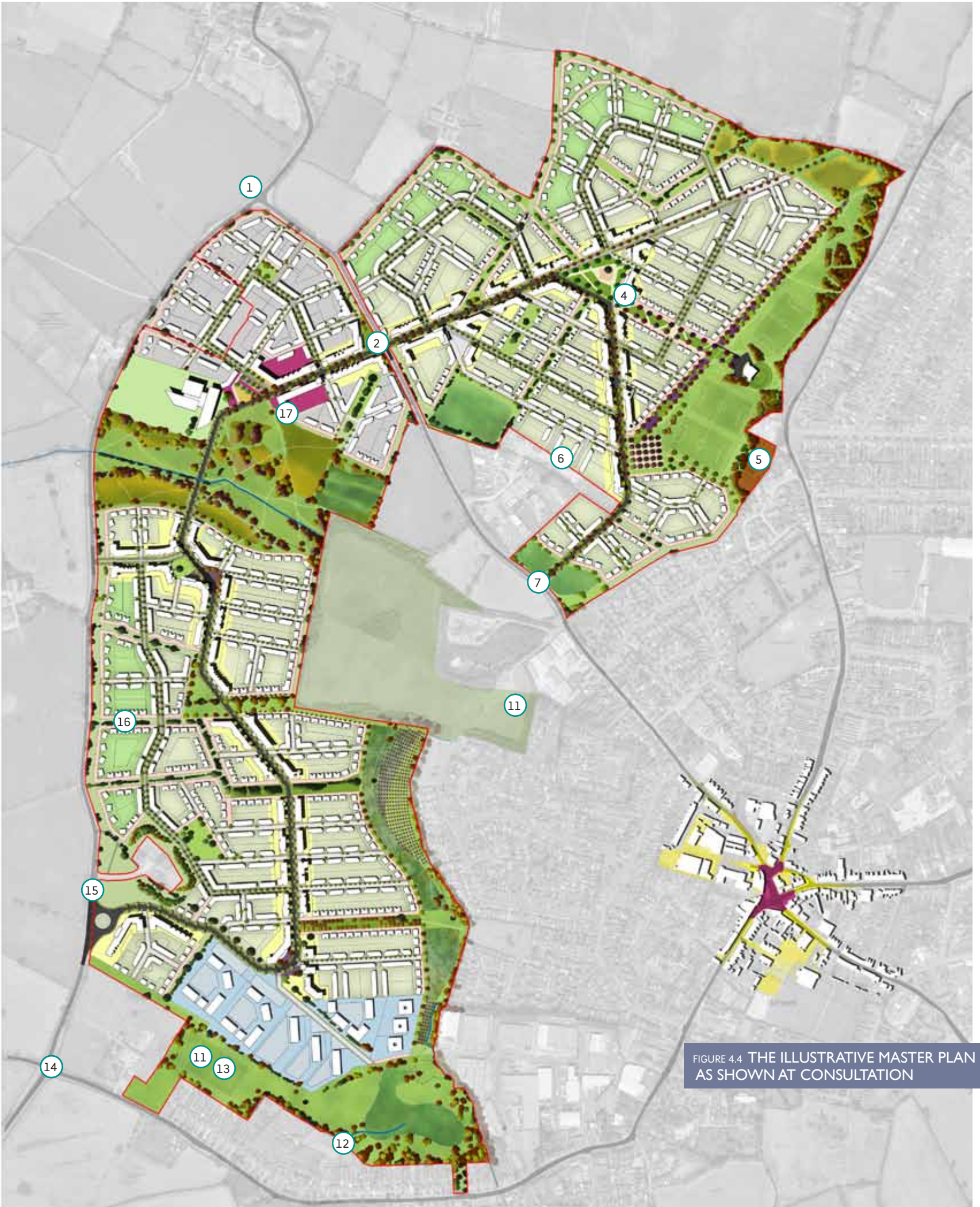


FIGURE 4.4 THE ILLUSTRATIVE MASTER PLAN AS SHOWN AT CONSULTATION

4.3 KEY CHANGES TO THE MASTERPLAN FOLLOWING CONSULTATION

4.3.1 Following the the public and other key stakeholder consultation amendments were made to the master plan; these are set out below:

- 1 The primary junction off Ashby Road was moved southward to mitigate any impact on the access arrangements to Bosworth House Farm following dialogue with local residents
- 2 Following further deatiled studies of the potable water main the primary junction arrangement off Stapleton Lane has been modified
- 3 The allotments located on the north eastern boundary have been removed from this area. Formal sports provision has been increased in this area. This is in response to the public feedback recieved with regard to the residents of Hinckley Road (see point 4);
- 4 Allotments have been provided to the rear of the Hinckley Road. A request for open space or allotments was suggested as an alternative to sports pitches
- 5 On-site equipped play provison has been increased to meet policy standards in response to consultation with Hinckley and Borough Council



FIGURE 4.5 THE FINAL ILLUSTRATIVE MASTER PLAN

4.4 THE CENTRE OF BARWELL FUND

4.4.1 The Barwell West development provides the opportunity to regenerate the centre of Barwell. The centre itself has deteriorated with the loss of localised industry within recent years. The centre was once part of a thriving street, with a mix of local retail provision that catered for the needs of the area and beyond.

4.4.2 The Area Action Plan (AAP) sets out a range of possible projects for the centre that include public realm and landscape works, new car parking provision and the redevelopment of existing buildings within the centre of Barwell.

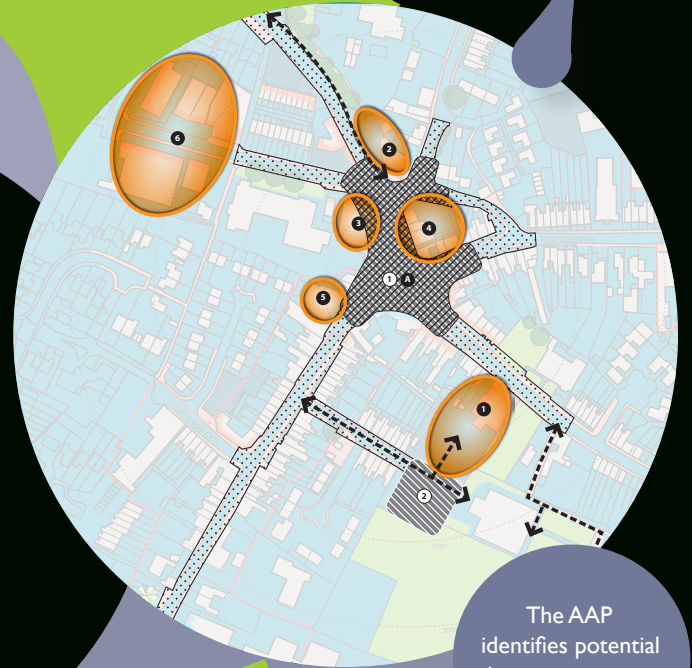
4.4.3 As part of the proposals a fund for the centre of Barwell is to be established in which capital is to be directly channelled into defined and agreed projects. A range of potential development projects have been identified (fig 4.5) that build upon those set out within the AAP and goes a step further by looking at how two of those potential projects could be realised. The developers will look to form a partnership with existing groups and stakeholders within Barwell to determine the key projects to be brought forward.



AAP 6.2.2
“The eventual realisation of these opportunities will depend on the desire of their current owners and / or others to bring them forward for development. This section of the AAP demonstrates ways in which that could happen and that would be successful in urban design terms.”

INFORMS: THE SUE

PROPOSES: CAPITAL INVESTMENT



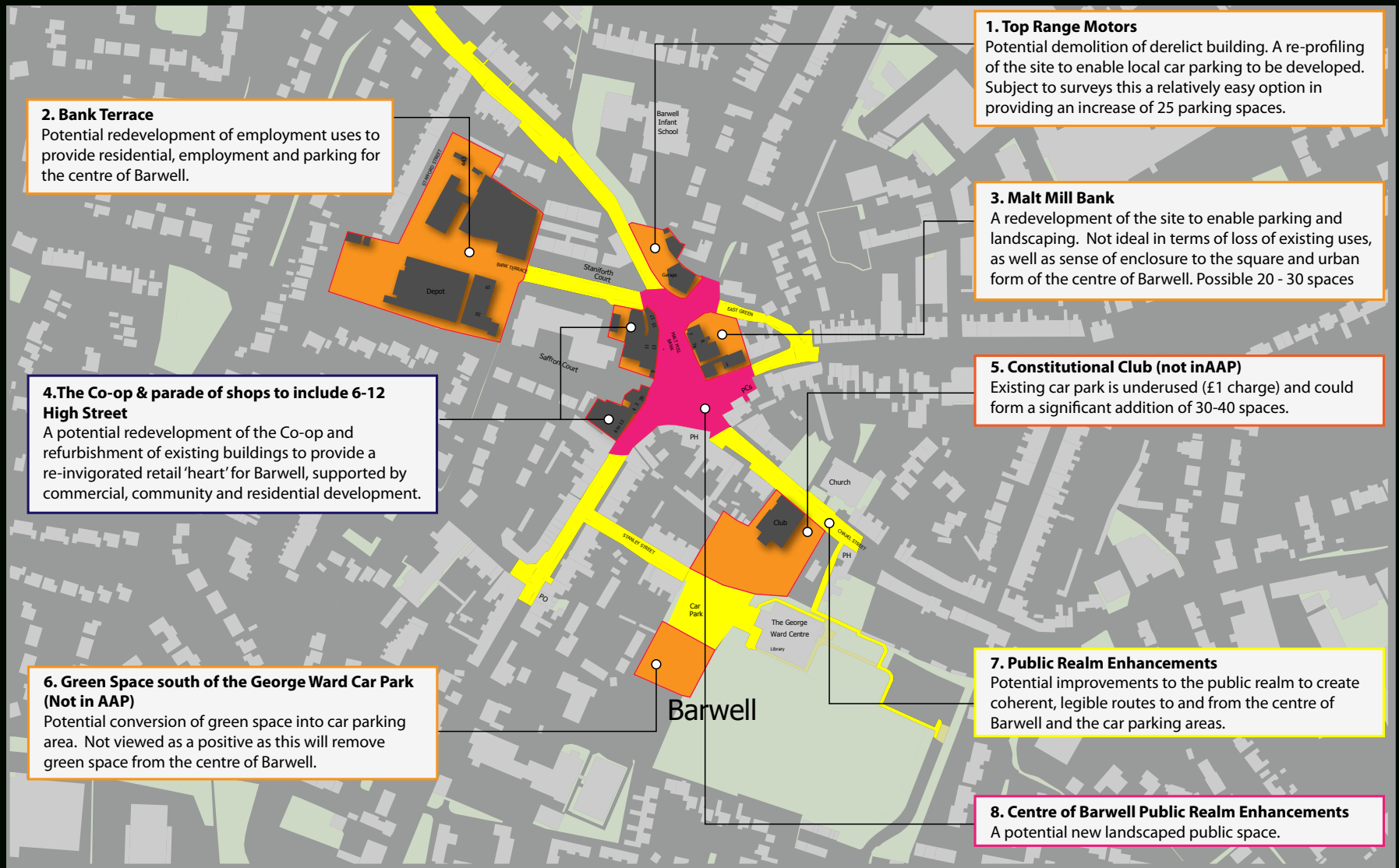
The AAP identifies potential improvements to the centre

The Barwell Centre Fund

- Environmental Improvement?
- Shopfront Improvements?

DELIVERS: THE AAP




1. Top Range Motors

Potential demolition of derelict building. A re-profiling of the site to enable local car parking to be developed. Subject to surveys this a relatively easy option in providing an increase of 25 parking spaces.

2. Bank Terrace

Potential redevelopment of employment uses to provide residential, employment and parking for the centre of Barwell.

3. Malt Mill Bank

A redevelopment of the site to enable parking and landscaping. Not ideal in terms of loss of existing uses, as well as sense of enclosure to the square and urban form of the centre of Barwell. Possible 20 - 30 spaces

4. The Co-op & parade of shops to include 6-12 High Street

A potential redevelopment of the Co-op and refurbishment of existing buildings to provide a re-invigorated retail 'heart' for Barwell, supported by commercial, community and residential development.

5. Constitutional Club (not in AAP)

Existing car park is underused (£1 charge) and could form a significant addition of 30-40 spaces.

6. Green Space south of the George Ward Car Park (Not in AAP)

Potential conversion of green space into car parking area. Not viewed as a positive as this will remove green space from the centre of Barwell.

7. Public Realm Enhancements

Potential improvements to the public realm to create coherent, legible routes to and from the centre of Barwell and the car parking areas.

8. Centre of Barwell Public Realm Enhancements

A potential new landscaped public space.

FIGURE 4.6 POTENTIAL PROJECTS BANK TERRACE REDEVELOPMENT

4.4.4 The centre of Barwell improvement plan shows some of the initial ideas for regeneration. It is understood from meetings with the Council and the consultation events that one of the main issues within the centre is a lack of car parking. We have reviewed various sites around the centre of Barwell that could be brought forward to alleviate the lack of supply.

4.4.5 The case for each project is set out below. Please note that none of the projects mentioned form part of the Outline Planning Application:

CAR PARKING SITES

4.4.6 **Top Range Motors site:** Regarded as one of the easier sites to bring forward in the short term, it enables the possibility for creating 25 additional parking spaces in close proximity to the centre.

4.4.7 **Bank Terrace:** A planning permission has been granted for change of use on the site from employment to residential (NEED to confirm). The proposal takes that precedent to provide residential development north of Bank Terrace that reinforces the frontage and terraced form along Stafford Street as well as providing a naturally surveilled public car park for circa

27 spaces. A configured employment area is proposed to the south to retain employment uses within the centre of Barwell.

4.4.8 **Malt Mill Bank:** The provision of a new parking area would require the demolition of existing uses, such as the Earl Shilton Building Society, Barwell library and other local businesses. Not only does this remove the valuable uses, but demolition will also lose the historic character of the space and the sense of enclosure too.

4.4.9 **The Constitutional Club:** The car park is currently in private ownership. The public can access the car park at the cost of £1 a day. A potential arrangement could be reached with the club to provide free Barwell centre car parking throughout the week, if subsidised by the Barwell Centre Fund.

4.4.10 **The green space located south of the existing George Ward car park:** This is currently a green play area associated with the XXXX school. This could be relocated, and an extended parking area provided. However, the loss of green space within the centre of Barwell is not ideal.

REDEVELOPMENT/ RENOVATION

4.4.11 **The redevelopment of the Co-op Supermarket and the parade of premises of 6-12 High Street:** The co-op is within private ownership and redevelopment would need consultation with the owners. Likely to be a longer term project. 6-12 High street has the possibility to provide an enhanced shop frontage with the help of an upgrade, perhaps deliverable through a shop front enhancement grant supplied via the Centre of Barwell Fund.

PUBLIC REALM/ LANDSCAPING

4.4.12 **Public Realm of enhancements:** The Area Action Plan (AAP) highlights public realm enhancements that connect areas of parking within the centre of Barwell. This could be provided as part of the Barwell Centre Fund.

4.4.13 **Centre of Barwell improvements:** The AAP provides an example of how the centre of Barwell can be landscaped to give enhanced priority to pedestrian movement and defining the centre as a key space rather than a junction. Preliminary analysis suggests an estimated construction cost of £400-500K from the design as set out in the AAP. This could be funded or part funded by the Centre of Barwell Fund.