DRAFT SS1 Policy area and Monkton Heathfield phase 2 Design Principles

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1 Overall Placemaking Strategy

Policy SS1

Policy SS1 sets out a series of provisions in terms of development form and layout as follows:

- A variety of character areas which reflect the existing landscape character and the
 opportunities and constraints provided by natural features to create a place that is distinctive
 and memorable;
- An accessible district centre with a mix of uses and facilities;
- A connected street network which accommodates pedestrians, cyclists and vehicles and promotes a viable public transport system;
- Well designed public open spaces which are enclosed and overlooked by new development;
- A positive relationship between new housing and existing communities; and
- A well-defined green edge to the urban area that protects views from Hestercombe House and the Quantock Hills.

2 Character Areas

Design Strategy and objectives

Create a distinctive place through the identification of specific elements that must meet certain design criteria. The criteria will be clearly set out with shared narrative themes that are contained in the following documents.

- National Planning Policy Framework:
 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment
 data/file/810197/NPPF Feb 2019 revised.pdf
- National Design Guide: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/843468/National Design Guide.pdf
- Taunton's Garden Town Vision:
 https://www.somersetwestandtaunton.gov.uk/media/1450/taunton-garden-town-vision.pdf , and
- Taunton's Garden Town Charter and checklist: https://www.somersetwestandtaunton.gov.uk/media/2108/taunton-design-charter-and-checklist.pdf .

The interpretation of the aforementioned criteria must have regard to this guidance.

The design of these elements will then form a framework for creating the placemaking narrative and resulting identity for the SS1 area generally and MH2 specifically.

3 Built Form principles

- Block Form Generally perimeter block style. Smaller blocks of higher density must be located closer to district centre, along the Spine Street and central green corridor to create a finer grain of development. Generally the blocks forms will gradually get larger and less dense towards the edges of development.
- Townscape A hierarchy of streets and spaces with a coherent and varied townscape must be created to reflect the many good design precedents that exist locally and within traditional garden towns. This will aid legibility and provide the opportunity to create a place with its own identity.
- Density The density of the development will be determined by the application of the design criteria. Appropriate design responses will determine density rather than the other way around. Hence the requirement to have a greater populous close to the District Centre and along public transport routes will result in higher densities in these locations.
- Building Heights The strategy for building heights should recognise that heights should be commensurate with their function. The development will be predominantly two storeys.
 Taller buildings however have an important role to play in creating interesting townscape that is legible and distinctive. There are many ways this can be achieved such as:
- Creating an intensification of development near to District Centre and along transport routes and movement corridors such as the spine street and central green corridor;
- Being an important component of set-piece designs enclosing spaces and creating nodal points;
- To create key buildings and impart landmark status to buildings or groups of buildings;
- To create focal points and visual markers;
- To function as important corner buildings;
- To add variety to the street-scene and create interesting townscape/roofscape.

4 Street hierarchy

Design Strategy and objectives

Streets must be designed to create a coherent and recognisable hierarchy that will reinforce legibility and connectedness within the development. The design of any street must have regard to its function in the wider development. Important principles include:

- Creating a permeable development with streets providing direct and convenient connections to the District Centre, transport nodes and amenity areas;
- Street design to prioritise safe pedestrian and cycle movement whilst still accommodating vehicles;
- Streets design to encompass a variety of uses; streets for play, social interaction, safe and overlooked environments; 'green streets' containing landscape corridors, SuDs, amenity space and wildlife/ecology corridors;
- The creation of a 'Spine Street' as a gateway to the development from the Eastern Relief Road (ERR) to the east and taking the form of a gently winding tree-lined street accessing the school and district centre before reconnecting with the ERR to the south-west;
- Any on-street parking must be designed in association with hard and soft landscaping to provide an attractive and practical street-scene;

- Any on-street parking must not dominate the street or have a detrimental effect on the overall composition of the street-scene;
- Consideration of how building form relates to the composition of the street;
- More continuous and unbroken street form closer to District Centre and along important routes;
- Common or staggered building line depending on street type and location;
- Placement of buildings either close to street to create high degree of enclosure or set back behind garden boundaries or landscape elements to create streets of differing character;
- Streets can be oriented to create vistas to form visual connections to important nodes;
- Thoughtful parking solutions must be explored including the use of parking courts such that
 the integrity of street frontage can be maintained and the over dominance of the highway be
 reduced;
- The integration of conveniently placed electric charging points into the street network must be considered and promoted.
- Where possible street design should promote rooflines running within 20 degrees of eastwest in order to provide promote south facing roofs and facades thus promoting the benefits of solar gain.

5 Development Edges

Design strategy and objectives

The edges of the development will have development on one side only (with the exception of those adjacent MH1), nevertheless the same principles of good street design apply to these areas. Specific requirements include:

- Housing along the ERR must provide an active and attractive frontage to create a coherent and overlooked development edge avoiding poor relationships associated with rear and side garden fences/walls and indiscriminate parking;
- The noise levels generated by the ERR will have to be considered when considering appropriate design solutions, glazing specifications and acoustic ventilation must be considered along with other noise mitigations measures which avoid unsightly acoustic fencing and the like;
- Design promoting dwellings that face the ERR and provide an acoustic barrier protecting the private amenity spaces behind must be explored;
- Development along the northern boundary with the downgraded A38 will be designed as outward facing development, set back from the boundary and retaining existing trees and hedgerows within a landscaped setting.

6 Public Space Network

Design Strategy and objectives

A series of well-designed public spaces will be an essential ingredient of MH2. The spaces may take the form of squares, large open spaces, streets, green corridors, pocket parks or even small incidental areas with seating. They will fulfil a variety of functions and strategic aim such as:

To serve as nodal points to aid orientation and wayfinding within the development;

- Providing destination points for people to meet, socialise and share experiences (the beginning of community);
- To be available to the whole range of user groups and be well overlooked by adjacent dwellings with active frontages;
- To be given identity and attractiveness through design, such that their function is clear and their form is fit for purpose;
- To recall examples of traditional garden town spaces but designed to 21st Century requirements and technology;
- To be given integrity through design (the intrusion of poorly designed parking and highways into important spaces should be resisted for example).

7 Open Space and Landscape

Design Strategy and objectives

The land within MH2 contains existing landscape features that will be retained and used to contribute to the overall character of the development. MH1 will be designed as a garden community with a network of green spaces and corridors linking into the green necklace, MH1 and the northern green edge. This network will consist of:

- A network of green routes focused around the retention of existing woodland, trees, hedgerows and public rights of way;
- The establishment of a central green corridor running from the eastern side of the development through the District Centre and onto MH1 that;
- Will be predominantly a car free zone to prioritise movement for pedestrians/cyclists and will be complemented with substantial tree planting to provide shaded areas and offset carbon emissions;
- Opportunities for the establishment of pocket parks with micro allotments, raingardens and orchard planting to promote community engagement through horticulture;
- Ecological mitigation through the establishment of wildlife corridors and wildflower meadows will be promoted within the green infrastructure,
- The introduction of swales and ditches into the green infrastructure should be as naturalistic as possible with measures to promote ecological mitigation and habitat creation;
- The planting of a substantial number of new trees to offset the effect of climate change and meet carbon reduction targets;
- A well-defined green edge to the Eastern Relief Road 2 including noise mitigation measures, drainage swales and opportunities pedestrian movement;
- An inclusive set of principles will be established for each green space or corridor addressing its form, function, connections, built form enclosure, landscape elements, surfacing, seating, lighting, boundaries and maintenance to inform its design and identity;

Design Aesthetics – Placemaking is about more than just assembling the various components that make up a place. Aesthetic considerations are also important if a place is to actually look attractive and fulfil its function to its fullest potential. These must not be neglected on the grounds of aesthetic considerations being subjective. There are immutable rules relating to scale, proportion and appearances of building forms that have stood the test of time, and these should be fully considered at the design stage.

Design Strategy and objectives

To create a well-designed and conveniently located mixed-use District Centre with a range of facilities to meet the needs of the community, along with the ability to draw in passing trade from the ERR. The District Centre will be a community hub and should blend the various uses into an environment that is safe, well-enclosed and a focus for social interaction.

The District Centre will:

- Provide a mix of uses including community hall, multi-functional space, health facilities, convenience store, retail businesses, café/hot food outlets, pub/restaurant, professional and financial services;
- Provide children's play facilities within a village green setting located between the District Centre and the school site;
- Integrate office space and residential uses in buildings at first floor and above;
- Residential provision included elderly persons housing should be seamlessly integrated within
 the District Centre to create a mixed use community and promote activity beyond core
 opening hours;
- Be designed within an overall transport and movement strategy to promotes the use of the ERR for HGV traffic local farm traffic, thus reducing such traffic within the internal road network in MH2.

The design of the District Centre should be aspirational, it will contain landmark buildings and be designed to create areas of enclosure such as the village green along with other intimately designed spaces with seating and well designed landscaping to encourage social interaction. Consideration should also be given to the provision of covered areas in order to create useable and sheltered space all year round. Special consideration must be given to provide for the needs of all user groups including the visually impaired and disabled, to ensure that no one is disenfranchised.

From a design point of view the District Centre should:

- Be populated be development forms that increase the local populous in the immediate context to encourage as many people as possible access the District Centre via non-car means and;
- Therefore buildings up to 4 storeys in height will be acceptable;
- Buildings must effectively enclose the spaces without being overbearing and should also function as focal points identifying the District Centre along vistas within the development;
- The overall design intention must be to create a high quality public realm that relates to a human scale similar to a high-street or traditional village/town core, however the design response may be;
- Traditional or more modern but still promoting the use of traditional and more locally identifiable materials;
- The example of 'out of town' retail consisting of low rise single use retail buildings within large car parking areas is not considered appropriate in creating a well-designed centre;
- Some parking provision will be required and this must be sensitively design such that it is safe and convenient to use, whilst not dominating the public realm;

- Servicing of the retail must be designed to avoid movements of delivery vehicles within the public realm areas such that a more sensitive design response is achievable, therefore;
- Servicing should be provided to the rear unless its small drop off type of deliveries;
- Hard and soft landscaping should be used imaginatively to create social spaces.

9 The positive integration of Monkton Heathfield 1 and 2.

Design Strategy and objectives

To explore potentials for creating a positive relationship between the existing community of MH1 and the final phase of MH along the boundary where the two developments will meet.

Existing boundary and challenges to integration

The recently development of MH1 shares a boundary with MH2 directly south of Monkton Elm garden centre and abutting the western side of the existing A38 (inc footway and cycleway), from the existing roundabout next to West Monkton Cricket Club down to the existing roundabout west of Langaller. The houses generally face this boundary at a distance of between 15 and 30 metres from the road and are separated by exiting hedges and a grassed noise reducing bund with a 300m noise reducing fence along the southern part of the boundary. An existing footway and green corridor through MH1 connects to the A38 just north of the noise fence.

Barriers to integration

- The existing A38 is a wide road with no speed constraints between the roundabouts;
- The existing A38 to be rerouted as part of MH2 proposal (although this road is to be retained for local traffic provision);
- The noise bund is physical and visual barrier between housing and the A38
- The noise reducing fence (set on at various points on top of a bund) is a particularly unattractive barrier to the A38 as existing

Potential positive interventions

- An acceptable interface between MH1 and MH2 must be delivered;
- Consideration should be given to potential for part/total pedestrianisation of current road subject to ensuring continued local road access to existing homes and businesses;
- Removal of noise bunds and fencing with regard to reduced use and traffic noise on the downgraded road must be considered;
- Realignment of road if necessary with regard to removal of existing noise reducing fence must be considered;
- Further speed constraint methods should be explored if required;
- Safe crossing points for pedestrians and cyclists from MH1 to MH2 across the road is essential
 given the need to ensure residents and school children have safe, convenient access to the
 District Centre, through school and green necklace beyond;
- This should be via an extension of the green link into MH2 and potentially from culs-de-sac 'opened up' by bund removal or breaks in the bunding;
- Creation of a more people friendly and landscape focused environment between MH1 and MH2 through design must be achieved;
- Housing within MH2 will be designed to face the boundary and MH1 to create a positive street frontage.

10 The downgrading of the existing A38 alignment

Design Strategy and objectives

To explore potentials for creating a positive relationship between the existing communities to the north of the site and the final phase of MH along the A38 boundary.

Existing boundary and challenges to integration

The proposed development will see an Eastern Relief Road (ERR) running along the eastern and southern edge and will form the new settlement edge of Monkton Heatfield as proposed in the Core Strategy and the SS1. This ERR will enable downgrading of the existing the A38 to the north of the new development and will provide the infrastructure route for the new bus rapid route proposed along this stretch of the A38.

The A38 changes along the development boundary form a dual carriageway to the east of the A3259 junction to a single carriageway westwards. The character however changes further west with the appearance of the new development at Heathfield Gardens and Monkton Elm Garden Centre behind the existing hedges along the road.

The junction with the A3259 also provides access to Doster's Lane which is a direct connection to West Monkton to the north. The A38 provides access to a limited number of dwellings along the eastern part of the road. There are currently very limited visual connections to the surrounding landscape and properties due to the existing major vegetation alongside the road with the exception of Springfield House which lies to the north of the road.

The PRoW's provided on site and to the north of the site currently terminate at the A38. No pedestrian crossings are provided and a pedestrian connection between the northern and southern footpath network is broken as a crossing and is quite dangerous.

Barriers to integration

- The existing A38 is a dual carriage way with no speed constraints;
- The existing A38 will be downgraded as part of the MH proposal set out in the Core Strategy and SS1 Policy;
- The road can be retained for local traffic provision;
- Current traffic volume will need to be guided along the new ERR to relief the current A38 route
- Appropriate traffic measures will need to be realised to disable easy traffic flow along this
 route towards the west and towards the town centre. Considerations should be given to bus
 only routes or bus gates along the existing roads and where best suited for the movement
 network, the new development and the existing settlements;
- Local traffic will still have to be allowed along this route to access the existing dwellings and to maintain the connection to West Monkton

Potential positive interventions

- A reduction of the carriageway width from dual (four lanes) to a single (two lanes) should be delivered;
- A traffic speed reduction along this route should be explored and adjusted to highlight the ERR as the preferred route to destinations to the west of Monkton;
- The route should be designed to accommodate the rapid bus service proposed along this road;

- The downgrading of the A38 will create the opportunity to deliver an attractive pedestrian and cycle route and will connect more safely with the existing network of PRoW and proposed footpath within the proposal site and the surrounding;
- Access from this route into the new development of MH2 can be delivered but should be restricted to a minimum of two and exclude an access south of Elm Monkton Garden Centre and Heathfield Gardens development.
- Furthermore there should be no public traffic access into the school site provided form the A38;
- Bus stops should be provided along this route to serve new development and in particular the school site:
- The existing hedges and hedge trees framing the A38 corridor should be maintained and enhanced with new planting where gaps are present;
- The corridor should also provide an attractively landscaped pedestrian and cycle route separated from the car traffic along the downgraded road to connect with the green network and footpaths/cycle paths within the new development;
- Due to the utilities easement corridor along the northern development boundary the housing proposed here will have limited direct connection to the downgraded A38. The easement will have to be landscaped to provide a green linear open space along the existing planting along the A38.

11 ERR corridor

Design Strategy and objectives

The new Eastern Relief Road (ERR) is defined as eastern spine road within Taunton's Core Strategy which runs south and parallel to the existing A38. The ERR will have to be designed as a road that balances traffic capacity with the needs of development access, walking, cycling and public transport.

The ERR will accommodate and divert the traffic from the existing A38 around the new development at MH2 to connect with the already constructed part of the ERR to the south and Western Relief Road (WRR) further west. The road will provide a corridor with access points into the new development as well as towards the new B&R and employment land to the west adjacent to the existing employment area at Walford Cross.

Barriers and opportunities to construction

- To the north west of the development site the majority of traffic will be diverted to follow the alignment of the ERR and relieve the existing A38, which will be downgraded;
- The point of diversion must be appropriately constructed to guide the traffic along the new ERR but equally provide convenient access for local traffic along the downgraded A38;
- Access to the ERR from the north east should be discussed and agreed with the Highway Authority and should preferable take the form of a roundabout;
- The proposed ERR adjacent to the new development will connect to the south with the existing ERR roundabout already providing access to Hardys Road and MH1;
- This roundabout will have to be upgraded and repositioned to accommodate the connection to the new ERR stretch proposed;
- The ERR will be a single carriage way with speed limit approved by the Highway Authority and which should seamless connect with the existing ERR further south;
- Access into the new MH2 development will be provided via roundabouts along the ERR;

- Buildings at these access points should use the opportunity to create key and gateway buildings supported by a sophisticated landscape design to appropriately announce the entrance into the new development;
- Generally housing along the ERR will provide an active and attractive frontage and façade;
- The noise levels generated by the ERR will have to be considered when designing the site for housing development
- Careful consideration should be given to the appropriate masterplan layout design, glazing specifications and acoustic ventilation design, and at a later detailed stage in the planning process, external building fabric acoustic performance along the ERR;
- An acoustic bund, acoustic fence or a combination of these must if at all possible be avoided in order to provide an attractive route, as this would create a physical and visual barrier between housing and the Green Necklace;
- House types will provide a natural acoustic barrier with a close frontage protecting the private amenity spaces behind;
- The building line along the ERR should vary to create an interesting frontage along the route;
- Consideration should be given to design and roof orientation to create corner turning buildings to emphasise access points into the development;
- The Development edge will be supported by a landscaped corridor along the ERR which will include avenue style tree planting, hedge and shrub planting as well as swales;
- The accessibility and usability of the Green Necklace along the eastern side of the ERR will need to be carefully considered with safe pedestrian/cycle crossing points at the roundabouts as well at the existing PRoW's;
- The number of pedestrian crossings will be restricted due to the nature of the road and its function as a swift and convenient route around the new development;
- Further considerations should be given at future planning stages to the impact of the road on the air quality and vibration and appropriate design solutions should be implemented to prevent any negative impact of the road on new residents;

12 Green Necklace

Design Strategy and objectives

The adopted Core Strategy Policy SS1 states that the following will be provided: A multi-purpose 'Green Necklace' of landscape and open space surrounding the settlement provide allotments, outdoor recreation and wildlife habitat. In the Policy the Green Necklace was conceived as a belt of landscaping between the motorway and the development areas including the Monkton Heathfield development.

The Green Necklace is a linear landscape area located along the development edge to protect this important area of open landscape, woodland planting and recreational uses from development and as a contributor to the quality of life of the new residents and to promote landscape and wildlife corridors. This linear park should contain new tree and woodland areas which will provide a notable landscape context to the new development edge of MH2 and should be designed with a wooded country park character.

This will create a natural setting for the development, complimented by woodland interspersed by glades, some areas of open space and open swales. The Green Necklace should connect with the development and its integral green spaces / corridors via pedestrian crossing points over the proposed ERR2.

As an integral part of the overall landscape and open space framework for Monkton Heathfield, the Green Necklace:

- Will provide a buffer for the new development to the M5 motorway;
- Will provide a noise buffer along the M5 motorway incorporating appropriate noise mitigation measures and must be informed by a detailed noise report.
- Should provide well-designed edge to the development that protects views from Hestercombe House and the Quantock Hills;
- Should complement the existing landscape features on site with new hedge, trees, woodland planting and wildlife meadows;
- Should provide an increase in biodiversity through the creation of wildlife corridors and wetland habitats;
- Will include a sustainable drainage strategy in form of open swales which should be accompanied with the provision for surface water drainage storage and release e.g. open swales which can also create new habitats for wildlife. The swales should be scaled appropriately and should seamless integrate in the designed landscape of the area;
- Should incorporate provision for active and passive recreation in the open space strategy as part of a network of routes throughout the area in form of footpaths, informal paths, routes for walking and running and natural play;
- Should also include the potential to provide seating opportunities and outdoor exercise equipment to promote the usability of the area and healthy living. Gravel bound footpaths should be provided suitable for walking, running and cycling;
- Will create potential opportunities to provide areas for growing food, micro allotments and community orchards;
- Should minimise light pollution and any adverse effect on wildlife. Lighting provided in the area will need sensitive treatment to ensure a natural woodland character is achieved with no negative affect on the wildlife;
- Will provide improvements to the air quality due to the proposed uses and planting within the area which will absorb the majority of potential pollutions coming from the M5 motorway; and
- Must be thoroughly assessed in regards to the significant level changes across the site and especially the lower lying ground between the ERR / development and the M5 motorway.

13 **Employment Land reserve**

Design Strategy and objectives

This area should be seen as regional scale employment site with potential connection to the adjoining employment site at Walford Cross and other employment areas north and south of the A38. In addition to the employment land provision at The Hatcheries and at land south of Langaller, 10ha of land should be released for employment land as set out in the Core Strategy and SS1.

The layout form should indicate a series of plots or 'rooms' bounded by landscaping to

• divide parking areas and provide spaces for swales or other attenuation features within the area connecting to the adjacent Green Necklace;

- Within plots landscaping should be used to provide relief to large areas of parking and to guide pedestrian routes to building entrances;
- The buildings themselves will provide employment in the form of office space, storage and industrial usage.

The concept of dividing the employment site into rooms will enable the massing of the buildings to be controlled by limiting large runs of tall buildings. Along with appropriate landscaping this will effectively limit the scale of development and the visual impact on the surrounding landscape.

Layout opportunities:

Site access is taken from a roundabout off the new proposed ERR2 which also provides access to the new Bus & Ride area adjacent to the employment land. There is an opportunity to access the employment area from the north and directly from the existing Walford Cross. This option would need road and junction improvements beforehand to create an acceptable access point.

Generally, the site and its new buildings will be screened from views from the surrounding, including the M5 motorway, due to the existing levels and hedge and tree planting surrounding the site. The proposed tree planting within the adjacent Green Necklace site will provide additional screening. In addition:

- Pedestrian links will have to be provided to connect the employment site with the new and existing residential areas including settlements to the east of the M5 motorway
- The existing footpath/cycle link crossing the M5 motorway will need to be maintained and enhanced and should be considered a benefit for the overall pedestrian/cycle network within the area;
- Routes through the employment site will be reinforced by the inclusion of a structured landscape treatment alongside the roads which is intended to unify the individual plots and highlight the routes through the site;
- The sites layout should be structured along strong primary routes linking the entrance with all parts of the site;
- Car parking areas will have to be arranged to minimise visual connections with the surrounding context other than the existing employment area to the north and the Bus & Ride;
- A combination of internally structured landscape zones will provide a balanced environment shared by roads, parking bays, cycle parking sheds and hard / soft landscaped areas;
- Service yards should be located at the perimeter of the sites away from the public areas. The
 visual impact of service yards should be minimised through the use of appropriate landscape
 buffers where possible;
- Buildings addressing the access route to the Bus & Ride area to the north must be designed
 with a higher quality finish and with visual interest through combinations of height, scale and
 design.

14 Landscape and Green Infrastructure Opportunities:

Design Strategy and objectives

Every effort should be taken to integrate a purposeful landscape strategy and should focus on:

- Including street trees which enclose the main road corridors to emphasise the importance of these main roads and function as orientation within the area. Well-designed modern street signage should be used to mark the access road from the ERR and to enhance the overall appearance of the employment site.
- The use of native hedges, ornamental shrub planting and trees within the parking areas which provides visual seasonal interest. This should be provided through the use of flowering fruit trees in certain areas within the employment site.
- Clearly defined routes along the main routes will be landscaped to provide attractive landscape pedestrian links connecting the employment area with the Green Necklace and area to the east of the motorway.
- Attenuation measures will be an integrated SUDs network located within the green corridors
 and spaces included in the employment area. This network and any wetland areas and
 potential ponds should be planted with natural species suited to local environment and
 climate and the creation of wetland habitats should be promoted. The attenuation measure
 will furthermore enhance the ecological value of the site and the wider environment.

15 **Bus and Ride Site**

Design Strategy and objectives

An area for a new Bus and Ride (B&R) is set aside in the north eastern corner of the site and west of Walford Cross. This facility will provide opportunities to create a central point for a rapid bus service and local bus service. The vision is to provide appropriate sustainable transport opportunities, connect visitors efficiently with the centre of Taunton and potentially provide a sustainable connection to the north to Bridgwater.

Access is proposed to be provided from a roundabout along the new ERR which also serves the proposed employment site adjacent to the B&R.

Supporting infrastructure will include new bus stops within the MH2 area and along the A38 route. The alignment of the A38 is proposed to be downgraded as the ERR will take the majority of traffic currently passing along this road. Therefore, the original A38 route can provide bus stops as well as shared walking/cycling paths.

The B&R scheme is proposed in combination with other junction and crossing improvements proposed in the wider area with bus lanes and bus gates specifically designed to improve the reliability, frequency and journey times of public transport using the route.

Overall, the scheme aims:

- To support the employment and housing growth and economic vitality within the area;
- To reduce transport emissions and meet our obligations to the Garden town vision of Taunton;
- To protect and possible enhance the environment and improve quality of life within the MH2 area as well as within Taunton; and
- To improve public health, air quality, safety and individual wellbeing for the existing and new residents as well as for visitors.

In particular for the design and layout of the site and any structures proposed will be:

- To communicate a strong environmental message and embracing the natural environment in the design of the scheme and gatehouse building;
- A simple permanent building set within a much greener landscape setting is considered appropriate;
- Potentially creatively incorporating recycled materials such as recycled materials in the boundary treatment and hard surface, such as incorporating walls built from plastic bottles or recycled tires as boundary treatment or planting support; and
- Sympathetically designed potentially with a green roof and or solar panels.

The siting and location of the gateway building on the B&R site should be sympathetically designed potentially with a green roof and or solar panels. The site boundaries should support the existing and retained hedges by providing pergolas with climbing plants as well as opportunities for artwork to softening the usual monotone and rather bleak area of car park normally proposed. Furthermore, a "green" building or build form element should be of appropriate size and massing and accompanied by a thoughtful landscape scheme which should improve the quality of the environment for the general public.

Design Criteria

- Retain and enhance the existing good level of boundary planting around the perimeter and expand where necessary
- Arrival at the B&R site presents the first impression to many visitors and therefore the
 appearance of the "green" building and site has relevance to the perceived quality of the
 towns public real and should be appropriately landscape led designed
- The site should consider including new individual native tree planting, hedge and shrub planting, ground cover and wildflower meadow areas where possible
- A Landscape Maintenance and Management Plan should be considered to protect the trees on site and to ensure the landscape scheme is realised and maintained as proposed
- In addition to the car parking arrangements, the site should also provide for cycle parking facilities for the staff but also for potential visitors and commuters using the local or rapid bus transport opportunity to access the town centre.
- A significant number if not all car parking spaces should be equipped with electric charging points
- In the light of potential shortage of coach parking spaces within the town centre, coach parking spaces should be considered and accommodated within the B&R area
- Solar panels on the roof of the proposed buildings on site or within the parking spaces can be used to feed the electric car charging points
- Following the Core Strategy, the majority of the new homes should be located in appropriate
 walking distance and should be within 800m of a bus rapid stop and within 400m of other bus
 routes.

16 School site and grounds.

Design Strategy and objectives

The proposed 2-form-entry school will provide the places needed for the new and proposed strategic development areas and the appropriate guideline should be used for space calculation and allocations within the site. There is a potential to create appropriate spaces which will include: classrooms, dining/hall, sports hall, administration space, specialist teaching rooms, meeting rooms, storage, and staff room. The school could also include specialised areas such as sensory & therapy rooms, warm water pool and medical spaces if required. Outdoor spaces will include sensory gardens, habitat areas, MUGA and adventure playground.

The building should be designed using Government guidance designed to a specification to be agreed by SCC and meeting DFEE standards. The scale and aesthetics of the school building design is informed by the functionality of the spaces within the unit itself. Classrooms should benefit from being orientated north to south to avoid disruptive glare and solar gain during school hours. The building orientation will be an important factor in defining the siting, proportion and configuration of the proposed building. The external outdoor spaces will play a crucial part of the school ground design and should include:

- Grassed sports play pitches suitable for a variation of sports games such as football;
- Opportunities for dual use of school facilities. This will be considered, subject to security and safeguarding issues being overcome;
- Hard play areas for formal play such as PE lessons;
- Adventure play areas with play equipment for appropriate age groups;
- Specialised outdoor areas to accommodate sensory gardens to stimulate senses including sight, touch, taste, sight and hearing. This area can also be used for outdoor teaching;
- Quiet soft play areas and informal meadowland and ecological areas which potentially can contain small ponds for outdoor teaching, socialising and relaxing; and
- Retain and enhance any existing planting such as trees and boundary hedges to promote biodiversity.

The school building layout should be developed in cooperation with the Local Planning Authority as well as the Education Authority responsible and respond to the site constraints on and around the site. The entrance locations should be specifically considered to provide a drop-off and pick-up solutions benefiting from the location of the adjacent District Centre. Staff / visitor car parking and drop-off / pick-up area will be located at the front of the building with a range of landscaping proposals behind the secure line. The school building will be positioned in the south western corner of the school site and provide the northern edge of the green open space proposed adjacent to the school site.

17 **Energy and Climate change**

Design Strategy and objectives

In line with the objectives set out the NPPF and within the Garden Town Vision for Taunton the main concern lies to deliver sustainable development which addresses economic, environmental and social factors.

The design should also follow the requirements of Policy SS1 and DM5 to allow for a development to be built with a focus on sustainability and climate change resilience. Whilst at very early stages, the new Local Plan seeks to deliver carbon neutrality for the district by 2030. The Council has declared a Climate Emergency and the emerging SWT Framework Carbon Neutrality and Climate Resilience Plan identify the importance of planning to ensure new built environments respond appropriately. A

guideline on how a development should respond is described within the Design Charter and Checklist for Taunton. This document identifies opportunities to address the Climate Emergency under the most relevant subsections below:

Energy

The approach to energy demand and carbon emissions will be to ensure that the dwellings are as energy efficient through its fabric. This not only reduces energy demand (and therefore costs) but also ensures that the implemented measures last for the life of the building. This includes high performance glazing, well insulated building structure (walls, ground floor and roof) and a well-built envelope that minimises heat loss through draughts. It also addresses issues of passive solar design and gain, so that at least half of the dwellings will still have a southerly aspect. Thus the principles of energy conscious design for this site should follow Policy SS1 and are to minimise the use of energy in the first place.

The Councils recent motion to declare a climate emergency should encourage any development to comply with a sustainable energy hierarchy created for the site and should in general consider:

- Development location: Reduces transport need and gives access to sustainable transport;
- Site master planning: Solar master planning optimises use of natural light and heat;
- Building fabric: High performance fabric gives maximum thermal efficiency;
- Building services: Low carbon building services support fabric measures;
- Clean on-site energy: Low carbon / renewable energy reduces unavoidable emissions;
- Offsite measures: Developer contributions finance offsite carbon reduction where onsite measures are not practical/viable;
- In-use performance: To ensure actual performance aligns with design intent.

Developments should envisage achieving high levels of insulation and air tightness as well as MVHR (mechanical ventilation with heath recovery) on buildings near the motorway.

Developers must also prove that a development is provided with carbon reduced and CO2 reduced energy resources which follows the energy reduction aspirations of the Council. This need to include the options for a combined local energy source for developments in close proximity and includes local energy centres.

Potable Water

Water efficiency becomes increasingly important in a changing climate with diminishing water resources.

The use of Part G Building Regulations will be the means by which water demand will be measured and reduced. There will be a focus on reducing demand for water in the first place and using the water that is required as efficiently as possible. Such measures include dual flush toilets and water butts for external watering in gardens.

Surface Water

Inevitably there will be an increase in hardstanding and surfaces on the site once completed, which under normal circumstances would increase the amount of run off from the site and potentially cause flooding issues further downstream.

However, measures must be introduced to eliminate this risk, particularly in light of a worsening climate with more intense rainfall projected. Sustainable Urban Drainage and attenuation measures must be introduced as part of considered drainage strategy, and this can be complemented by the design and arrangement of green spaces with rain gardens to help cope with surface water run-off.

Ecology

Full ecological surveys must be undertaken and reports produced. Any measures required to mitigate the impact of development on native or endangered animal species must be set out within an Ecological Management Plan. The removal of any habitat must be mitigated by enhancement elsewhere. New landscape planting must be designed to enhance the biodiversity of the development area as part of the overarching landscape strategy.

Materials

Materials can have a significant impact on environmental performance, both in construction, but also ongoing use. Through construction, where those materials are sourced from, the means of extraction and manufacture and how far they travel all have varying effects on the environment. The materials issue will be addressed in the following ways:

Through the use of 'C' rated materials, as defined in the Green Guide to Specification;

By using materials in the main elements of construction (roof, walls, floors, etc.) that have been sourced responsibly;

By using materials in the finishing elements of construction (doors, staircases, fascias etc.) that have been sourced responsibly;

Maximise the re- use of recycled building waste material and spare soil generated by the site preparation and adopt sustainable soil management practices to guarantee this practise to be carried out.

Tree Planting

The Council recently committed to prioritise the planting of new trees and considers this an important aspect in the future for many reasons which include the sequestration of CO2 and the positive aspects of urban shading and cooling to the climate. The aim is to provide tree species in locations suitable for the development and the trees themselves. New woodlands should contain a variety of species to avoid the creation of areas of monoculture.

A Better Quality of Life

Well designed, environmentally friendly homes have an important role to play in maintaining a sense of well-being and a good quality of life.

Therefore, buildings should be Building for Life (BfL) compliant. For example, dwellings will be designed to enable good levels of natural daylighting to help create a feeling of space and to promote healthier environments.

Furthermore, all residents will have access to private external space in the form of gardens or communal space in the case of flats, a vital component of improved health.

Furthermore, developments within Taunton should follow the 'The Vision for our Garden Town' document and the 'Design Charter and Checklist' provided by the Council. These guides and charter/ checklist provide the opportunity to create a higher quality natural and built environment which will support healthier and happier places.

Transport

Any development should be located in an area to promote the reduction of energy usage and CO2 emissions.

This development is conveniently located adjacent to the existing MH1 area along the proposed ERR which provides a vital transport route for the region as well as for Taunton and will relief the existing A38 which is proposed to be downgraded once the ERR is provided.

The ERR will provide direct access with good connections for the new mixed used development of MH2 as well as for the employment site and B&R proposed near the existing employment area at Walfod Cross.

The site and its residential development encourage sustainable transport modes such as walking and cycling rather than car usage by providing the option to easily access:

- The green necklace to the east and south for recreational use,
- The proposed green corridors within the residential development, and
- The existing bus stops, educational facilities and local centre proposed within the proposed new development and the adjacent MH1 site, and
- The new development also proposes a rapid transport system that can be easily accessed from the site and creates a sustainable connection to the centre of Taunton and the Bus&Ride area.

The development should encourage compliance with a sustainable transport hierarchy created for the site and should in general motivate to:

- Reduce the need to travel;
- Inspire active travel, public transport, and shared transport modes; and
- Instigate a preference of Electric Vehicles over fossil fuel vehicle when buying a new vehicle.

Furthermore, the development is proposed to encourage local scale employment rather than a strategic employment location to reduce the use of cars within the area.

Waste

Throughout construction, there will be a number of measures in place that will facilitate high levels of reuse and recycling, including the development of a Site Waste Management Plan (SWMP) which will:

- Identify all waste streams and planning for their management,
- Set targets for waste reduction, and
- Identify a specific person responsible for its oversight and implementation.

Operationally, the dwellings will be provided with bins to split the different recycling streams prior to storage outside. Suitable provision will be made for the safe, convenient and sensitively located storage receptacles.

Following the Council's climate emergency declaration any development should foster sustainable waste management behaviour within the development and encourage waste prevention and lower waste lifestyle as well as promote a strong self-motivation through the development of personal responsibilities.

The location will afford the opportunity for residents to access a range of existing and new facilities within the site and in the surrounding. In turn, the provision of new homes and employment will support the activity and economy of the town. The location also maximises the opportunities to provide convenient public transport and cycle links to and from the town centre as well as pedestrian and cycle routes around the development site.

The scale of the development and the density at which the houses are built, are also important to enable a range of facilities such as the school, district centre and shops to be viable.

18 Achieving Sustainable development

The following paragraphs describe the aspects fundamental to this project which will result in achieving sustainable development. These integrate the mix of economic, social and environmental attributes that define sustainable development.

- Building a Strong Competitive Economy Providing homes in MH2, in addition to the recent developments at MH1, Hartnell's Farm, Prockter's Farm and the proposed new development at Land South of Manor Farm, supports the local area and the continued development of its economy. Furthermore and vital for the development, the scheme will include buildings and facilities which will provide employment and thus create jobs locally.
- Providing Sustainable Transport The site offers an opportunity to bring about a change in behaviour and encourage residents to use healthier and sustainable modes of transport. A Travel Plan should be drawn up and be developed to encourage travel by walking, cycling and public transport instead of using the private car. The development will have to be designed to encourage residents to reduce the need for car journeys by providing car sharing schemes, pedestrian and cycle opportunities and by delivering sustainable public transport, such as local and rapid bus services. The majority of the new homes should be located in appropriate (ideally no more than 5 min walk) distance to the nearest bus stop on the spine road or the downgraded A38.
- All houses should be equipped or provided with sufficient infrastructure to be upgraded in the
 near future, with electric car charging points. Additionally and where possible, electric car
 charging points should also be provided within the District Centre and overall street network.
- Delivering a wide choice of high quality homes The dwellings proposed should include a
 variety of sizes and tenures including open market and affordable homes. The five overarching
 principles of Lifetime Homes should be considered and include:
 - 1. Inclusivity An inclusive environment aims to assist use by everyone, regardless of age, gender or disability.
 - 2. Accessibility Convenient and independent access into and around the built environment and to services to be provided for the widest range of people, including

- hose with physical / sensory impairments, older people and children, convenient and independent.
- 3. Adaptability A building can be adapted in the future to meet people's changing needs over time or to suit the needs of different users.
- 4. Sustainability The new sustainable communities should be underpinned by essential accessible elements aimed at meeting current and future needs, including homes, facilities, goods and services.
- 5. Good Value The main objective is to provide greater flexibility that allows homes to adapt to the changing circumstances of their occupants has the potential to build a more stable and diverse community. This will attract a wider range of occupants and create a thriving community.
- Requiring Good Design -A key element of good design is the efficient use of land, requiring densities that reduce the amount of land required to accommodate the houses and that can support the necessary social and green infrastructure to create high quality attractive places and spaces in which to live and work. The density of development set out in the masterplans will result in good accessibility and a high quality scheme and provide a living environment and amenity appropriate for the location. Higher densities around the District Centre encourage easy access while lower densities will provide and indicate the transition to the countryside.
- To encourage the use of public transport, shared trips and sustainable transport options, the
 District Centre will have a concentration of community, retail and social facilities. This local
 provision of essential facilities should encourage local trips, with a high proportion of access
 by foot, bicycle or by public transport and function and enhance the opportunities for social
 interaction.
- Promoting Healthy Communities Walking and cycling will be encouraged by creating clear routes with good vision green corridors and well planned destinations throughout the development. The green landscape corridors serve as a framework for leisure and recreational walking and cycling. The layout of the perimeter blocks will create a permeable network of walkable routes usable for a variety of activities. Designated walking and cycling networks using both quiet roads and the attractive green corridors will also encourage sustainable transport to access the district centre.
- Extensive areas of open space within the Green Necklace will include recreational facilities, informal natural play areas, community orchards and potentially allotments which are an integral part of the development and will provide opportunities for a healthy community to develop.
- Meeting the Challenge of Climate Change As a general principle, new development will incorporate high standards of sustainable design and construction. Any applications will have to be supported by information which demonstrates how the environmental design principles will be delivered and how the developments accords with Taunton's Garden Town Vision and Checklist. This will include the production of an Energy Assessment in order to demonstrate how energy and emissions have been minimised in accordance with an Energy Hierarchy, and a Sustainability Assessment, which explains how the environmental design principles will be accommodated by any new development.
- The community facilities, including the school and community buildings should therefore be taken forward as a flagship and example of sustainable design and construction and should be constructed in that way.

- Energy and Climate Change Mitigation The new development should be designed in accordance with an energy hierarchy, which promotes the reduction of energy, before using efficient systems and renewable energy. New development should also incorporate renewable energy produced on site. An analysis of feasible technologies will have to be provided in support of planning applications.
- Options for providing heating and hot water on site will need to be considered and could include a review of a local or district heating scheme in addition to more traditional alternatives. The lighting within the public realm areas should consider innovative low energy lighting and use renewable energy where possible.
- Provisions for electric car charging points within the street network and community car
 parking areas should be considered and introduced where possible and feasible.

