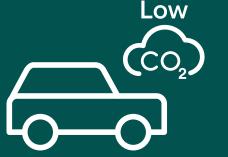
PART 2















Mandatory Spatial Principles











MANDATORY SPATIAL PRINCIPLES

Introduction

This section presents the spatial elements of the masterplan framework which are shown by Mandatory Spatial Principles.

The Mandatory Spatial Principles on the following pages set out key principles covering:

- Land Use and Spatial Organisation
- Landscape Character
- Green/Blue Infrastructure and Strategic Views
- Access and Movement

These principles will need to be incorporated, or any alternative approach explained, in any future proposals for the neighbourhood

These mandatory principles establish the spatial concept and disposition of uses.

Future planning applications will be accompanied by detailed assessment and technical work to set the parameters of the proposed development in line with these principles.

LATTON PRIORY LATTON PRIORY

Key

MANDATORY SPATIAL PRINCIPLES LAND USE AND SPATIAL ORGANISATION

Mandatory Spatial Principles: Land Use and Spatial Organisation

1 Location and Arrangement of the Local Centre
- will be positioned in the heart of the neighbourhood
with primary access from the East-West Green
Corridor and Latton Avenue and with frontage onto
Latton Park to the east. The local centre will provide a
mix of residential and non-residential uses including
retail, community uses and employment. Nonresidential uses (retail, food / drink, adjacent education
and community uses, which help animate the public
realm) will be located at ground floor around the Plaza
and Latton Avenue.

2 Location and Arrangement of the Plaza - will be positioned on the eastern edge of the local centre, predominantly to the south of Latton Avenue and facing onto Latton Park. The Plaza will be designed to a suitable size to support the quantum of non-residential uses intended with retail, food/drink, adjacent education and community uses activating and fronting onto this space. The mobility hub will be within the Plaza.

3 Nodes - nodes to provide public space should be located at central locations to residential areas for equal access from homes within the development. A minimum of two nodes to coincide with mini-mobility hubs (see Mandatory Principles for Access and Movement) should be provided to the east and west of the local centre. Further nodes and gateways will be provided with number/locations fixed through design coding work.

4 Location of Latton Priory Primary School - The site for the primary school will be circa 2.1ha. The primary school will be a central component of the neighbourhood and will have frontage onto the proposed East-West Green Corridor to promote sustainable travel. It will have a car-free frontage / dwell space for parents. The primary school will be adjacent to the secondary school to facilitate a through-school if required.

5 Location of Latton Priory Secondary School - The site for the secondary school will be circa 10ha. The secondary school will be a central component of the neighbourhood and have frontage onto the East-West Green Corridor to facilitate sustainable travel. The frontage will face onto the Plaza, activating it and using it as dwell space. It will have frontage onto and be visible from Latton Park. It will be adjacent to the primary school to facilitate an all-through school if required. School pitches will be located within the nobuild zone south of the school and will be designed in accordance with Sport England standards.

6 Location of Gypsy and Traveller Site - will be positioned to allow for good access to the road network. The site will allow for 5 pitches in line with policy, with the final configuration to be determined upon consultation. It will not be positioned near the existing gypsy and traveller site in Fern Hill Lane. Three potential sites are shown opposite but only one site will be provided.

7 **Build-to Line -** This follows the ridgeline in the site. Land to the south will be retained for public open space, landscape or other appropriate open uses including recreational uses and the school playing pitches.

8 Formal Open Space - Community cricket pitch and/or football pitches will be located south of the 'build to' line as part of the new Rye Hill Park and will be designed in accordance with Sport England standards.

9 Other Open Space (parks and gardens, amenity, natural/ semi-natural greenspace, play space, productive landscape, green fingers) - see Mandatory Principles for Landscape, Green/Blue Infrastructure and Strategic Views.

① SANG (Suitable Alternative Natural Greenspace) - see Mandatory Principles for Landscape, Green/Blue Infrastructure and Strategic Views.

11) East-West Green Corridor - see Mandatory Principles for Landscape, Green/Blue Infrastructure and Strategic Views and Mandatory Principles for Access and Movement.

Avenue Alignment

LATTON PRIORY

MANDATORY SPATIAL PRINCIPLES LANDSCAPE CHARACTER

Mandatory Spatial Principles: Landscape Character Areas and Landscape Interfaces

1 Landscape Character Areas

The Southern Plateau - will remain open in character and retained as a rural buffer and key open space feature of the site. The southern plateau is primarily south of the build-to line. It will be managed to provide for both biodiversity as well as recreation and productive landscape. The southern plateau incorporates Rye Hill Park (recreation, community sport pitches, productive landscape, heritage), secondary school pitches, areas of meadow land (rewilding) and areas of SANG (recreation and enhanced biodiversity). New trees will be planted along the southern edge of the site to enhance the wooded skyline as seen from Harlow Town Centre.

Wetland Landscape - The wetland areas along the northern site boundary (Northern Waterways) will provide for sustainable urban drainage and attenuation ponds, biodiversity gain, habitat creation and recreation. Recreational routes through the wetland to be defined to allow access without disturbing wildlife.

Eastern Woodlands - New planting added to this area to enhance important existing treelines and woodland areas. These will be located in the Latton Priory Woods built-form character area (eastern residential area relating to Mark Bushes). New trees will be planted along the southern edge of the site to enhance the wooded skyline as seen from Harlow Town Centre.

Central Green Wedge & Greenways - Open space areas within to be relatively informal parkland in character, with trees interspersed with areas of meadow and amenity grassland in the main park area. The planting will be arranged to retain key view corridors towards Harlow Town Centre, including but not limited to views from the NEAP which will be located in Latton Park.

2 Landscape Interfaces

A Rye Hill Road interface (Western boundary) The landscape will incorporate the retained roadside
hedgerow and trees. Properties will be orientated to
face Rye Hill Road and set back to reflect the
established character west of the road, with intervening
tree planting to strengthen the wooded character of the
street.

Wetlands interface (Northern boundary) SuDS basins and connecting swales will be provided
along with landscape interventions with native wetland
trees, shrubs, grassland and marginal plants for
amenity and ecological benefit. Site boundary
hedgerow will be retained and enhanced with further
tree planting. Recreational paths will provide
connections between the development and areas to

Ancient Woodland interface (Eastern boundary) - Buildings will be set back 25m from the woodland edge and be oriented to a landscape buffer comprising woodland planting, ecologically valuable grassland and a recreational footpath/bridleway.

Southern Plateau interface (west) - The interface comprises open woodland planting on the highest ground with the framework of historic native field boundary hedgerows and meadow grassland reinstated beyond to the south, also incorporating allotments, orchard and play.

Woodlands interface - Streets must have a strong woodland character, with buildings set back from the woodland edge while oriented towards it. Native trees and hedgerow planting will define the built edge. Meadow grassland and recreational routes will pass through the the woodland buffer and directly connect the neighbourhoods and SANG.

Parkland interface - Parkland edge will include trees within areas of meadow or amenity grassland as well as an area of productive landscape.



LATTON PRIORY

MANDATORY SPATIAL PRINCIPLES GREEN/BLUE INFRASTRUCTURE AND STRATEGIC VIEWS

Mandatory Spatial Principles: Landscape, Green/Blue Infrastructure and Strategic Views

- (1) **SANG** The natural and semi-natural open space which will provide suitable alternative natural greenspace (SANG) will be located in the southern plateau south of the extension of the green wedge / Latton Park. The SANG will allow for good pedestrian connections with residential areas, linkages with other open spaces, streets, provision of attractive walking routes with appropriately surfaced paths, open sight lines along walking routes, avoiding overhanging vegetation where this exists, access for dog walking with off-lead areas and facilities to attract dog walkers, secure boundaries where needed, biodiversity enhancements, seating, litter and dog waste bins, signage and interpretation, ongoing landscape management, play, tree groups, holding ponds, scrapes and swales, furniture and features, underground constraints or legal constraints. As SANG is intended to attract new residents arising from the relevant Masterplan areas the SANG provision should be located adjacent to the built parts of the site and designed to be visually and physically linked with it. (EFDC GI Strategy)
- 2 General Location of Pitches Sports Pitches are included in the secondary school and within Rye Hill Park on the southern plateau. Pitches will be designed in accordance with Sport England standards. A sensitive lighting strategy will be implemented. In response to the plateau location, flood lighting is not proposed.
- 3 Extension of the Harlow Green Wedge There will be a continuation of this existing landscape structure through the site. Its relation to the surrounding countryside and pedestrian rights of way is key to creating an integrated landscape.

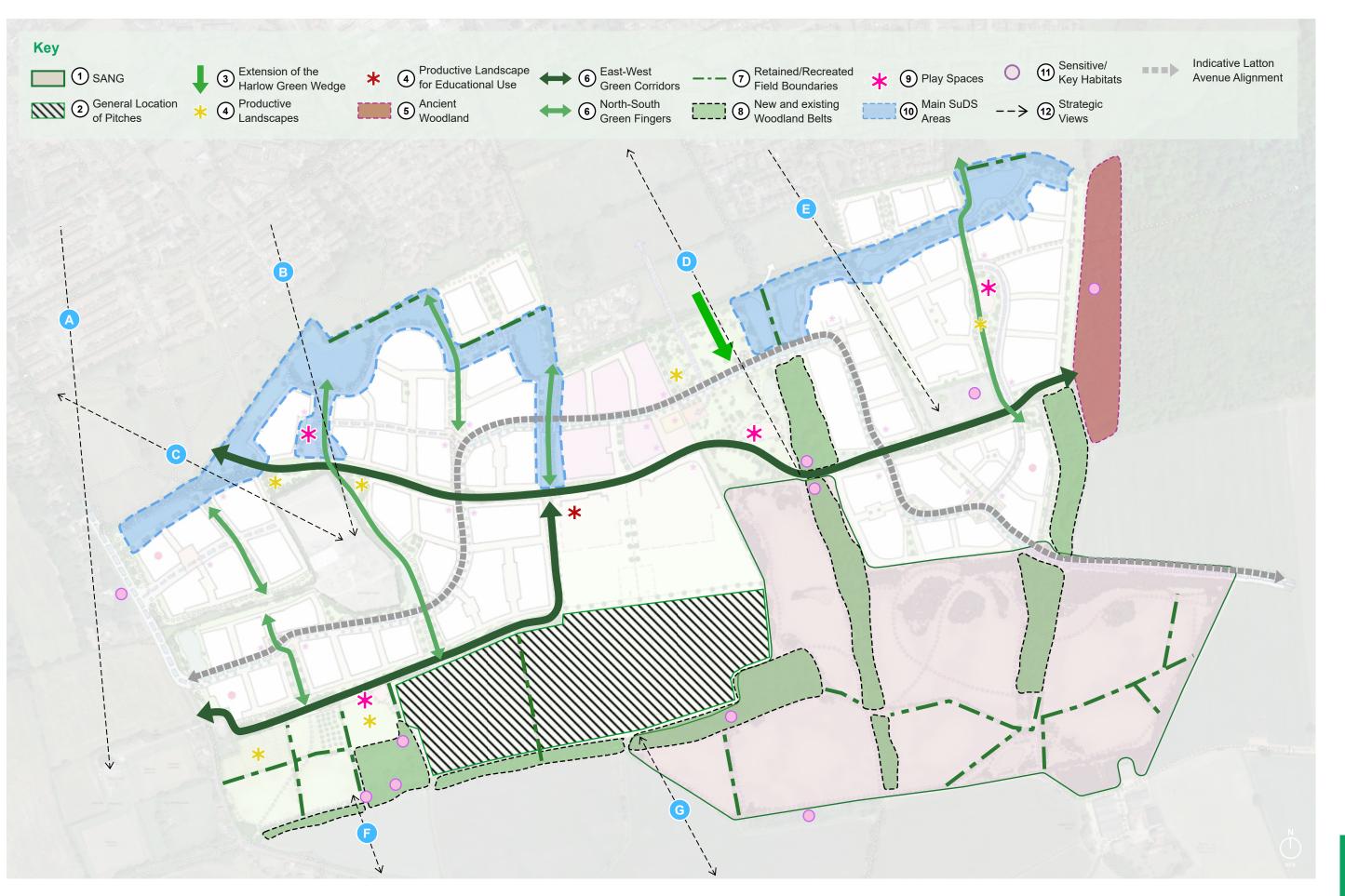
- 4 Productive Landscapes Areas of productive landscape will be located to allow equitable access, at a maximum of 800m distance from all homes.

 Locations will include Rye Hill Park (allotments, and community orchard). Smaller areas of community orchards/gardens will be included: north of Dorrington Farm near to the western end of the E-W Green Corridor, at the intersection of the North-South green finger in Lower Rye Hill South and the East-West Green Corridor, within the primary school, in Latton Park and in the central open space within Latton Priory Woods built-form character area. Further smaller areas of productive landscape may be included in suitable locations for equal access and focal points.
- 5 Ancient Woodland will be protected and conserved with a 25m eco-tone buffer of grassland and native woodland along its boundary to provide a structured edge and enhance the wooded character. Housing will face this woodland to address the buffer for natural surveillance.
- (6) Green Corridors and Green Fingers There are two East-West Green Corridors proposed, a 'Super Greenway' and a southern branch, There are also five north-south green fingers proposed. These will provide a suitable green grid of connectivity for access, movement, outlook and ecology along with access to onwards connections. Green Corridors and Fingers must have suitable width for walking, cycling, planting and SuDS. Where possible properties will be orientated to overlook these spaces which will accommodate walking and cycling providing direct connections between the focal recreational and play spaces. Water management will be incorporated within the green corridors and especially in the green fingers where applicable, managing the transition of surface water from higher ground in the south, to the lower wetlands areas in the north. A natural and primarily native planting approach will be utilised.

- 7 Retention and Recreation of Field Boundary
 Structure The existing site boundary hedgerows will
 be retained and historic field boundary hedgerows will
 be reinstated within Rye Hill Park and the SANG area.
 Where breaks in existing hedgerows are required for
 access and movement this should be justified.
- 8 Woodland Belts Existing belts will be retained and enhanced with new connecting native woodland planting in order to enhance the woodland character existing in these parts of the site and to create a wooded skyline when seen from Harlow Town Centre.
- 9 Play Spaces 'Play' will be at the forefront of the public realm and green infrastructure strategy, incorporating informal and formal sports and recreation, 'play-on-the-way' routes with playable landscape features, public art, outdoor gyms and natural playgrounds. One NEAP will be provided with additional LEAPs with equitable access also provided. Door-step play will be incorporated close to family dwellings and be well overlooked with safe and convenient access.
- (10) SuDS (throughout masterplan) will be sensitively and creatively integrated into the landscape, working with existing hydrology, topography and ecology and support character and place-making.
- Habitat Creation and Management (throughout masterplan) The development proposes to deliver a minimum 10% Biodiversity Net Gain with the promotion of biodiversity to be explored at every opportunity. This will be delivered through the provision of enhanced and newly created habitats, including the delivery of a landscape-scale coherent ecological network.

- Riddings House grounds when seen from Harlow town centre will be incorporated into the masterplan.

 Existing woodland blocks will provide a backdrop to the proposed development along the horizon in views from Harlow town centre. New woodland planting will link these existing woodland blocks as it matures. Strategic views towards the Town Centre will be incorporated from Latton Park. There are views from the plateau south across gently undulating farmland towards the town of Epping and northwards towards Harlow (Harlow town centre being the prominent feature)
- A Town Centre to Water Tower
- Town Centre to Poplars
- © Between Water Lane and Poplars
- Between Town Centre and Green Wedge
 Extension
- Town Centre to Woodland Backdrop
- Between Southern Site Boundary & Epping Countryside
- G Between Southern Site Boundary & Epping Countryside
- (3) Sensitive Lighting Design development fringes, interfaces with natural habits (new and existing) and all ecological corridors will consider sensitive lighting design to preserve dark corridors, character and visual impact.



Mandatory Spatial Principles: Access and Movement

(1) East-West Green Corridor (Super Greenway) - will be the primary east-west sustainable movement corridor across the neighbourhood. It will accommodate pedestrians and cyclists as well as any micro-mobility vehicles. The route will be established across the neighbourhood from the existing recreation ground to the north west to the local centre and on to Mark Bushes in the east. The corridor will facilitate sustainable travel across the site, particularly to the Local Centre and Plaza which will include the Mobility Hub.

2 North-South Green Fingers - will be the primary north-south sustainable corridors across the neighbourhood. They will accommodate cycle and pedestrian movement and facilitate connections with surrounding existing routes north and south of the

3 Latton Avenue - Latton Avenue will accommodate vehicles, pedestrians, cyclists and micro-mobility vehicles. It will be designed to discourage the use of private vehicles by making the route for such vehicles less direct than for sustainable modes. It will have a speed limit of 20mph and be designed accordingly. Priority will be given to active and sustainable modes at junctions. It will be designed to include green verges and street trees. Latton Avenue will pass through the local centre and the points shown on the adjacent plan.

4 Plaza/Community Square and Mobility Hub - will be located in the Local Centre in the area to the west of Latton Park. The Plaza will act as a dwell space for the secondary school and will also contain the Mobility Hub and more functional transport requirements on the north side. The Mobility Hub will act as an interchange between public transport and a range of sustainable transport options, as well as providing further related facilities.

Mini Mobility Hubs - will support the main Mobility Hub in encouraging sustainable travel, facilitating the movement of residents living further away from the Local Centre via bicycles and other micro-mobility vehicles. One will be located on the west side of the neighbourhood within the green finger to the north of Latton Avenue. Another will be located on the east side of the neighbourhood within the green space.

6 Potential Bus Stop Locations - All homes should be within circa 800m (or a 10 minute walk) of a Mobility Hub or the Sustainable Transport Corridor, and within circa 400m (or a 5 minute walk) of a local bus stop.

7 Key Active Travel Connection Points Pedestrian and/or cycle routes within the
neighbourhood will connect with these access points
into/out of the neighbourhood to link with existing
active travel routes in the surrounding areas.

8 Vehicular Access from Rye Hill Road - There will be up to a maximum of two vehicular access junctions into the neighbourhood from Rye Hill Road. These will also provide cycle and pedestrian access.

Access from London Road - Latton Avenue will connect with B1393/London Road at an appropriate stage and location to be determined. Priority will be given to sustainable modes of transport at this

(where practicable) to get between the store of the store

modes over the private car (with associated journey time advantages in respect of public transport) to ensure frequent, fast and reliable services.

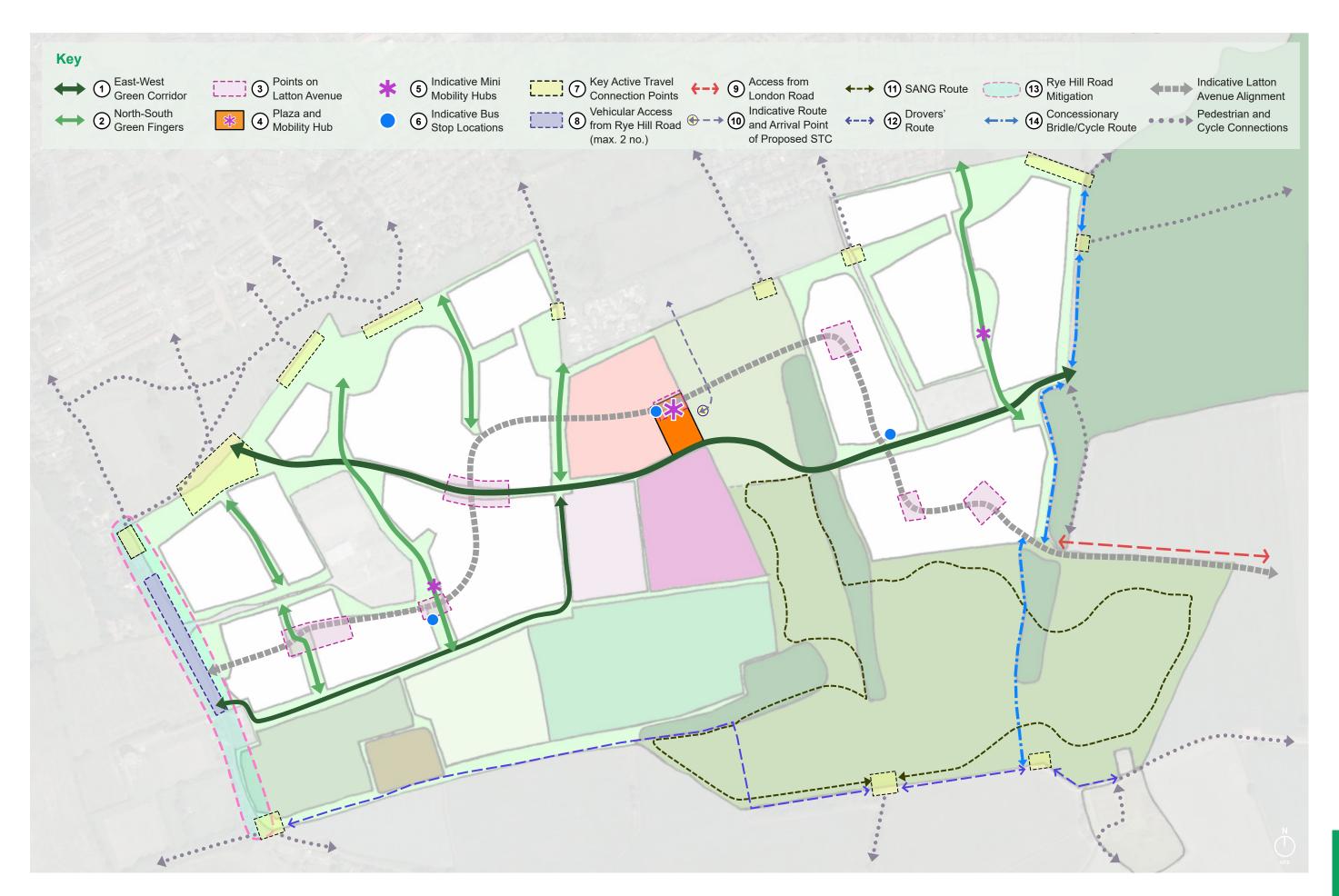
The STC is proposed to connect from the Local Centre to the north of the site through to Commonside Road and into Harlow Town Centre, with a terminus at the Mobility Hub in the Local Centre. The STC is proposed to accommodate dedicated facilities for walking and cycling and public transport, and will be designed to the STC Placeshaping Principles (where practicable).

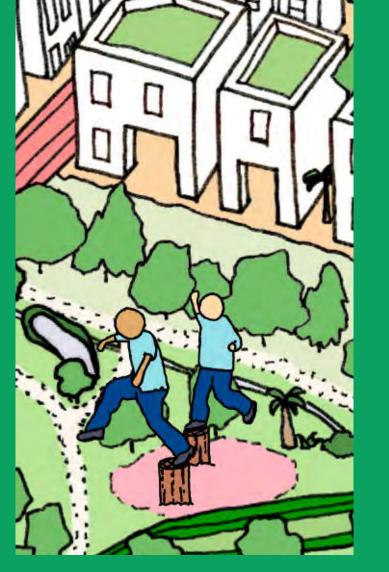
11) SANG Route(s) - A choice of shorter and longer recreational circular routes will be provided around the SANG to cater for dog walkers and also to support other walkers. These will vary from 2.3km-3km in length. Paths must be easily used and well maintained and if surfacing is to be provided in order to support greater accessibility this should be done in a sensitive way so as to avoid the site becoming too urban in feel within the SANG.

12 **Drover's Route -** will be a recreational pedestrian, cycle and bridle route.

(13) Rye Hill Road Mitigation - Appropriate mitigation will be provided on Rye Hill Road as determined by the detailed transport assessment.

(14) Concessionary Bridle/Cycle Route - A concessionary bridle/cycle route to west of Mark Bushes connects to the reinstated drovers' route and existing bridleway at its southern end, further enhancing local cycle and bridle connections.



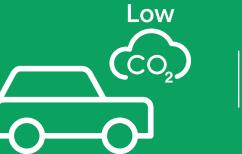


The Strategic

Masterplan Framework









07



THE STRATEGIC MASTERPLAN FRAMEWORK

A high quality, sustainable neighbourhood

This document seeks to create a strategic masterplan framework for a holistic sustainable neighbourhood, demonstrating environmental, social and economic sustainability.

This section presents the spatial elements of the masterplan framework, which were shown by Mandatory Spatial Principles in section 6, by means of an illustrative masterplan. This section presents the proposed land uses before presenting strategies for movement and connectivity, green and blue infrastructure, ecology and heritage.

The Illustrative Masterplan (shown overleaf) demonstrates an option for how the development requirements of the Epping Forest Local Plan could be accommodated. This is consistent with the EFDC "Strategic Masterplanning Briefing Note" guidance which seeks the preparation of a "high level overarching framework" to ensure effective planning and delivery.

The Illustrative Masterplan demonstrates an example of how the Mandatory Spatial Principles could be applied and where the following elements of the proposals could be appropriately accommodated:

- Initial studies show there is capacity for 1,500 dwellings which is shown in the masterplan. However, this considered to be the maximum and the minimum will be 1,050 dwellings. The Local Plan policy is that 40% of the homes should be affordable unless not economically viable
- An indicative route for the STC within the site boundary capable of connecting into the wider STC
- The location and general scale of the local centre and education facilities;
- The extension of the green wedge from the north
- Suitable Alternative Natural Greenspace
- Latton Avenue and East-West Green Corridor

Whilst the Illustrative Masterplan shows how proposals can respond to key issues identified in the SMF, the details of this beyond the overarching Mandatory Spatial Principles framework will need to be tested and developed at further stages of design development through the planning application process.

Consistent with the Local Plan (2023) application proposals for development at Latton Priory must "take into account" the structuring elements and principles described within the SMF. Detailed application proposals will also be prepared having regard to the detailed technical assessments that will, in due course, accompany application proposals.

To be clear it is not the purpose of the "high level" SMF or the Illustrative Masterplan to "fix" matters that should properly be addressed through further technical assessment or more detailed design coding and testing work, or in the preparation of planning applications. Specifically the SMF and Illustrative masterplan does not fix the tertiary street network, block geometry or matters such as car parking design. Principles described within the SMF which are mandatory principles are presented in the preceding pages.

Future planning applications submitted by developers will provide further information and detail, appropriate to that stage of the planning process and will include:

- a parameter plan setting out a detailed land use budget and quantums of development – including for the local centre and hub;
- density and building height proposals consistent with the principles in the SMF
- Heads of Terms in relation to the delivery of key infrastructure which is appropriate and proportionate to the scale of development and to be secured via Section 106 Legal Agreement
- a Design and Access statement to show and explain the further design evolution and decisions
- preparation or application of design codes that address and develop key aspects of design, building on the Mandatory Spatial Principles illustrated in Section 6.

THE ILLUSTRATIVE MASTERPLAN LAND USE

The Strategic Masterplan
Framework responds to the
analysis, influences, key design
drivers and design concept
established in the previous
sections and this illustrative
masterplan demonstrates how
these framework principles could
come forward subject to further
testing and design development.

Indicative development specification shown on illustrative masterplan:

- Initial studies show there is capacity for 1,500 dwellings which is shown in the masterplan. However, this considered to be the maximum and the minimum will be 1,050 dwellings. The Local Plan policy is that 40% of the homes should be affordable unless not economically viable.
- Provide land for 1 Gypsy and Travellers' site containing 5 pitches
- Mixed use local centre inclusive of retail, mobility hub, community space, employment and other suitable uses and including health care facilities if required.
- Provide a 10ha site for a secondary school
- Provide a 2.1ha site for a primary school with early years provision
- Approximately 61.64ha of green infrastructure inclusive of a SANG of approximately 28.8ha
- Approximately 3ha of outdoor sport facilities
- Transport infrastructure inclusive of a link road between Rye Hill Road and London Road and the facilitation of a Sustainable Transport Corridor

Land Uses

The illustrative masterplan for Latton Priory is shown on the opposite page. It sets out how the specific allocation requirements in the Local Plan policy may come forward on the site and is used in this section to illustrate the principles of the SMF subject to further testing and design development.

The illustrative masterplan builds on the design drivers and design concept set out in earlier sections, and taking into account the provisions of Local Plan policies.

The illustrative masterplan shown here provides a minimum of 1,050 new homes in accordance with the Local Plan (see Section 2) but shows the potential for the site to accommodate up to 1,500 new homes. It includes a mixed use local centre at the heart of the scheme and a network of green spaces and parks including an extended Green Wedge which leads through to an onsite SANG and then open countryside. The southern edges create a transition between development and the countryside and will be used for recreation and local food production. Residential neighbourhoods are located either side of the local centre. The local centre and new open spaces will be within easy access of new and existing residents through accessible, enhanced walking and cycling connections. The new facilities will be beneficial to residents in Harlow and the wider area.

Further structural elements of the masterplan include: safeguarding of land within the site for a Sustainable Transport Corridor (STC), an East-West Green Corridor and Latton Avenue connecting the site to the surrounding road network.

Further detail on access and movement and green infrastructure is set out later in this section, but in terms of land uses, the key elements are as follows.

Residential

The illustrative masterplan shows approximately 34ha of residential development in two main areas on either side of the local centre. This plus the local centre could provide up to 1,500 dwellings. The housing mix and tenure will be considered further at outline planning application stage, but it will seek to accord with the requirements of local plan policy.

Local Plan Policy seeks 40% affordable housing unless subject to other viability considerations. The locations for

affordable housing will be determined at a later stage. The local centre could accommodate a retirement/Care/ Extra-care home. This would need to be further assessed and determined at a later stage in the planning process.

Mixed-use local centre

Located centrally, the local centre is proposed for a mixture of uses. This will comprise food retail, non-food retail, cafe and community uses and a mobility hub adjacent to public transport services and point of connection to the STC, with associated uses such as a delivery pick-up and business work spaces.

The local centre could also include a variety of residential accommodation to support the creation of a vibrant and active place with good natural surveillance. A limited number of residential flats will also be provided on the upper floors of the local centre to provide natural surveillance and a vibrant setting. Extra-care accommodation, Care home or retirement living could also be provided to aid vibrancy, shared facilities and housing choice and variety. An illustrative plan of the local centre is provided in Section 8.

Education

A 2 form entry primary school with an early years / childcare facility is proposed to the south of the local centre. The masterplan is designed to also provide a 10 hectare plot for a secondary school adjacent to the primary school, so that there is flexibility to combine both plots to create an all-through school facility should that be required

Community and Health Facilities

The Local Plan policy identifies that the Latton Priory development should include the provision of appropriate community and health facilities. Engagement is ongoing with the Hertfordshire and West Essex Integrated Care Board (ICB), the body responsible for planning for healthcare. Space will be allowed for within the local centre which could potentially accommodate a primary care health centre, dentist or pharmacy services if required to be delivered on site. If there is a requirement to adapt/extend/improve existing healthcare provisions to help serve the new development and ensure that residents have access to healthcare services, financial contributions will be negotiated and agreed as part of a

future planning application.

Employment

Part G (ii) allocates an additional 1ha of employment land at Dorrington Farm (RUR.E19A). Dorrington Farm is not currently part of the SMF area.

In order to prioritise the vibrancy of the local centre and the quality of its environment, small scale employment uses could form a constituent part of the mix of uses in the northern part of the local centre. Employment uses could include offices, workshops, some small-scale light industrial uses, professional services or live/work units if the demand arises. An illustrative layout of the local centre and the distribution of employment uses is shown in Section 9

Open space and recreation

The illustrative masterplan provides a network of open space. This includes new parks, a large area reserved for Suitable Alternative Natural Greenspace (SANG), landscaped corridors for surface water storage, informal play areas, allotments, retained green infrastructure such as tree belts and hedgerows, nature reserve and areas of structural landscaping.

Dorrington Farm and Riddings House

Both Dorrington Farm and Riddings House remain in their current use.



CONNECTIVITY AND MOVEMENT **KEY STRATEGIC PRINCIPLES**

The integration of Latton Priory with the rest of Harlow and the **Epping countryside is an important** objective in terms of ensuring that new residents have good access to surrounding facilities and open

Key Principles

One of the key principles of Latton Priory is to achieve a development that makes every attempt to promote social, economic and environmental sustainability and equality at each stage of the design and development. Central to achieving this objective will be the creation of "walkable neighbourhoods". As per the TCPA Guidelines "the creation of these 'complete, compact and connected' places is being given different names by different communities. In Paris, it's the 15-minute city. In Melbourne, it's the 20-minute neighbourhood. The description, or the number of minutes, doesn't matter: the idea is, in essence, the same. The benefits that this way of configuring places bring are multiple and include healthier communities, cleaner air, stronger local economies, and better resilience against climate

The access and movement principles set out over the following pages will guide the planning and design of Latton Priory. They are intended to create a sustainable approach to local and strategic movement and support a range of modal choices for those living, working and going to school within the Latton Priory neighbourhood, promoting and encouraging active travel as the most attractive and convenient mode.

The Latton Priory masterplan will support the Garden Town objectives and strategies and assist in helping to achieve the goals set at this level. Working towards these objectives will require a phased approach with a series of interim objectives, measures and approaches. The Harlow and Gilston Garden Town Transport Strategy (endorsed 2022) sets out the following:

"MODE SHARE OBJECTIVE: 50% of all trips starting

and/ or ending in the existing settlement area of Harlow Town should be by active and sustainable travel modes and 60% of all trips starting and/or ending in the new Garden Communities of Harlow & Gilston Garden Town should be by active and sustainable travel modes." These Mode Share objectives will be achieved by applying the following principles:

1) User hierarchy: Reduce the need for travel > Walking and cycling > Public transport > Private vehicles

2) A culture of active and sustainable travel

3) Accessibility and inclusion"

Access and Movement Strategy

The access and movement strategy for Latton Priory comprises sustainable transport modes (such as walking, cycling and public transport) as well as the private motor vehicle and potential car sharing/ car

Strategic Connections

The plan (opposite) shows how the strategy for connectivity within the Latton Priory site has been considered as part of the wider network of routes and connections across the surrounding area.

The site provides the opportunity, also, to connect into key existing strategic long distance routes. This includes for instance facilitating the arrival into the site of the Sustainable Transport Corridor (STC) proposed in EFDC and Harlow Local Plans, HGGT Transport Strategy and Vision which is intended to run from the site to Harlow Town Centre, providing a rapid bus route as well as a direct pedestrian and cycle link to the town centre.

The pedestrian and cycle network within the site is also linked to existing walking and cycle routes to the south of the site which allow existing and new residents to have access through the site to the open countryside.

Pedestrian and cycle routes within the site will also be linked into the network of existing pedestrian and cycleways to the north and within Harlow, and through specific enhancements and modifications will give new

residents access to existing local facilities (e.g. schools, local centres at Staple Tye and Bush Fair) and beyond (e.g. Harlow Town Centre).

A bus strategy will be prepared to support a future planning application. The bus strategy will need to be flexible so that it can react to future changes in travel behaviour and destinations but is likely to focus on key employment areas (such as Pinnacles, Templefields and Harlow Town Centre), Princess Alexandra Hospital, and transport interchanges (such as Harlow Town Station and Epping Underground Station). Demand Responsive Transport (DRT) will also be considered, particularly in the early years of the development.

Vehicle access is proposed to be provided via junctions with Rye Hill Road to the west and London Road to the southeast.

The form and timing of the Rye Hill Road and B1393 London Road access junctions will be determined through the planning application process. However the access will be designed to promote and prioritise sustainable modes of transport.

The applicants support the principle of closing Rye Hill Road as a through route to the south of the new access junctions at the appropriate time. The potential to limit through traffic on Rye Hill Road is supported by HGGT (PJA Report) and ECC (B1393 Sustainable Transport

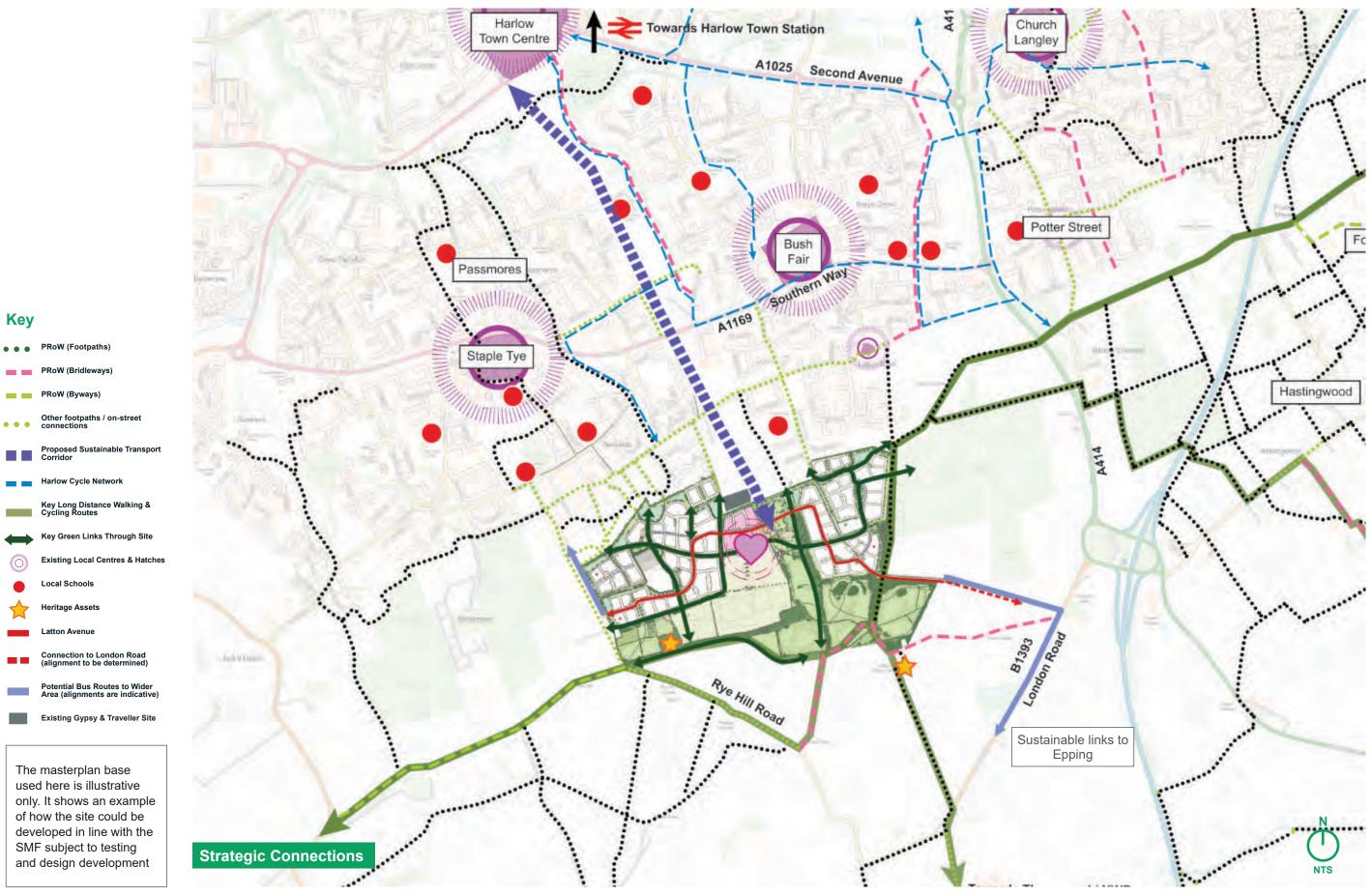
Potential Off-site Mitigation

The package of off-site mitigation to be implemented or contributed to by the proposed development will be determined as part of the planning application process. Measures included within the HGGT and Epping Forest District Council Infrastructure Delivery Plans will be considered, along with those suggested in the HGGT Latton Priory Access Strategy Assessment Report (July 2020) prepared by PJA.

Walking and Cycling

Walking and cycling have been given priority in the masterplan, with the structure providing legible and direct routes that follow desire lines. Key features of the The key movement principles for Latton Priory are therefore as follows:

- Contain travel within the site: Contain trips within homes, thus reducing the need to travel .Also
- public transport over the car by creating a connected network of high quality, attractive, well-overlooked and safe streets, which provide direct links from homes to local destinations such as schools and shops
- support walkable neighbourhood principles and respond to the topography of the site.
- 4. Encourage the use of public transport including safeguarding the indicative route and location of the Sustainable Transport Corridor (STC) and mobility hub
- 6. Create effective links into and from the existing footpath and highway network to provide improved accessibility between the existing communities and the facilities within the site, ensuring safe, accessible connections through to the wider network.
- . Enhance and integrate existing Public Rights of Way into the movement network to ensure they provide an alternative form of access for leisure



- the development as far as possible, by providing local services and facilities in close proximity to facilitate interchange between transport modes and facilitate travel within the site by provision of mobility hubs" Prioritise movement by walking, cycling and
- 3. Ensure block dimensions and building typologies
- Design a network of routes that provides choice and legibility, so that way-finding is easy and the function of the different streets is easily understood by users

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing

PRoW (Footpaths)

PRoW (Bridleways)

Other footpaths / on-street

PRoW (Byways)

Local Schools

CONNECTIVITY AND MOVEMENT SITE WIDE WALKING AND CYCLING

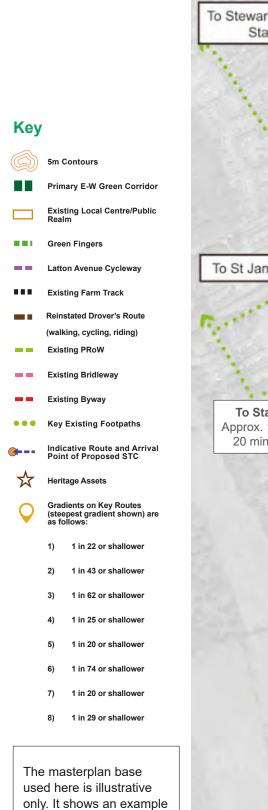
strategy are:

- Walking and cycling routes are designed to be cohesive, direct, safe, comfortable and attractive, and consistent with LTN1/20 Cycle Infrastructure where practicable
- All existing Public Rights of Way (PROW) have been incorporated into the masterplan and new footpaths and cycle routes connected to them
- Routes within the masterplan connect with the wider network of PRoWs and other pedestrian/cycle ways providing access to the wider Harlow area and facilities to the north and to the Epping countryside to the south. Specific upgrades or modifications required to connect into the wider network will form part of future applications
- The creation of safe, overlooked, attractive routes is critical and will be a key design feature of the proposed green routes and streets. This is to ensure residents and people living nearby are encouraged to utilise these routes and travel by sustainable
- Movement for pedestrians and cyclists will be fully integrated into the masterplan with designated paths alongside the central Latton Avenue and traffic-free routes permeating into the site, promoting active

- A key East-West Green Corridor runs across the site, connecting the public open space in the north west with the new neighbourhood at Latton Priory as well as the new local centre. This will be a key walking and cycling connection across the site, which will link into green fingers connecting the spaces and key routes.
- A historic Drovers' Route has been re-established to the south of the site, connecting the heritage assets on the southern edge. It will have bridleway status for walking, cycling and riding
- The plan opposite shows the steepest points of key routes. All routes are within or well within the tolerances of the Essex Design Guide. Key routes should aim to be generally shallower than the steepest points shown.







5m Contours

■■■ Green Fingers

Existing PRoW

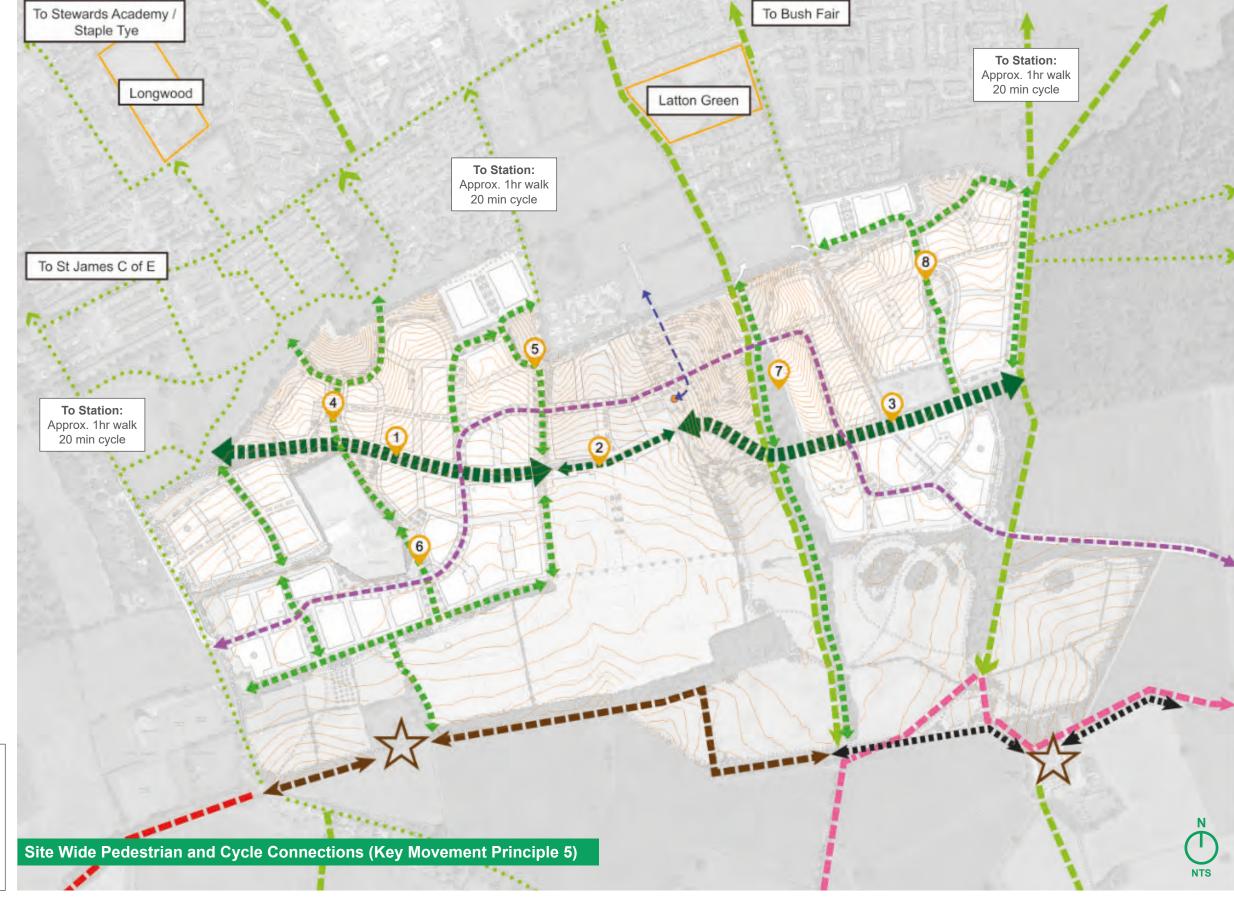
Existing Bridleway

Existing Byway

Heritage Assets

of how the site could be developed in line with the SMF subject to testing

and design development



Walking and Cycling Route Hierarchy

The table below shows the hierarchy of pedestrian and cycle routes within the Latton Priory neighbourhood. It provides guidance on primary users, widths and surface treatment and lighting.This is indicative and subject to design development through design codes and future applications.

Cycle Parking

Cycle parking will be provided in accordance with the minimum standards identified in the Essex Parking Standards.

- To make cycling attractive the parking needs to be placed in locations where it is convenient, secure and easy to access and not necessarily shared with other household/garden possessions.
- Where garages are provided, these will be of a size that facilities the storage of cycles. For houses without garages, suitable facilities within each dwelling, such as garden sheds will be provided.
- For flats / apartments, storage areas will be provided that are secure (lockable) and covered to provide a high quality facility for residents.

- Visitor cycle parking will be provided at key areas within residential areas. Where appropriate, these will be linked to local centre facilities.
- Local centre cycle parking will be designed attractively in prominent areas and will be covered and secure where possible (e.g. at the mobility hub).
- The provision of inclusive and accessible cycle parking within the site will be a key element of the strategy that will seek to encourage cycling and ensure that it is a clear, preferred choice of travel
- A cycle parking strategy will be developed at application stage



	ROUTE HIERARCHY & TYPE	PRIMARY USE / USERS	WIDTH	SURFACE TREATMENT & LIGHTING
1 ==	Primary E-W Green Corridor	Foot / cycleCommuter	• 3-5m	Machine laid sealed surface e.g. asphaltLighting: Yes
2	N-S Green Fingers A. Urban B. Rural fringe C. Rural fringe (with bridle uses)	 Foot / cycle (recreational) Foot / cycle (recreational) Foot / cycle / bridle (recreational) 	• 3m • 3m • 4m	Machine laid sealed surface, litSelf-binding gravel, unlitUnlit
3	Central Latton Avenue Cycleway	Foot / cycle	• 3-5m	Machine laid sealed surface e.g. asphaltLighting: Yes
4	Drover's Route	Foot / cycle / bridle (recreational)	• 2m + 2m	 2m rubber crumb surface + 2m grass verge (within verge clay soil will require suitable drainage and aggregate incorporated to avoid poaching)
5	Existing Farm Track	Foot / cycle / bridle (recreational)	• 2m + 2m	Existing surface or rubber crumb surface
6	Existing PRoW D. Footpath E. Bridleway	FootFoot / cycle / bridle	VariesVaries	 Varies Varies











CONNECTIVITY AND MOVEMENT **PUBLIC TRANSPORT AND MOBILITY HUBS**

Public Transport and the Sustainable Transport Corridor (STC)

The masterplan makes provision for good quality public transport.

The masterplan has been designed to allow the extension of existing and provision of new bus routes through the development via the central Latton Avenue. A detailed bus strategy will be prepared and agreed as part of a future planning application to ensure that the development is served by high quality bus services to help facilitate a mode shift from private car trips.

Opportunities to introduce bus priority along Latton Avenue will be explored as the design of the scheme progresses. In addition, this could include bus priority at the Rye Hill Road and London Road vehicle connections, which could be provided in advance of any STC connection.

The plan (opposite) shows a potential bus route along Latton Avenue as well as possible bus stop locations within 400m (5 minute walk) of the majority of the housing.

The EFDC and Harlow Local Plans state that the provision of sustainable transport options together with a significant modal shift from car to non-car use (including walking, cycling and public transport) are central to the successful growth of the Garden Town. The Councils share an ambition to enhance established transport corridors and to create new travel corridors, in order to help manage overall travel demand and to help integrate the new Garden Town Communities into the existing built-up Harlow area.

In order to maximise the promotion and use of active and sustainable transport modes, it will be necessary for sustainable transport provision, including, as appropriate, connection into and contributions towards the Sustainable Transport Corridor network, to be commensurate with the phasing of development of Garden Communities. This is required to prevent the establishment of unsustainable travel behaviour, and to provide viable alternatives to private car use.

The form, width, timing and route of the STC from Latton Priory to the town centre is still to be determined and is the subject of ongoing studies. The masterplan supports provision of enhanced sustainable connections to key destinations in the wider area of which the STC forms one of the key elements. Hence the masterplan makes provision to connect to the STC beyond the site boundary, and the promoters of Latton Priory will work with the relevant stakeholders to facilitate the delivery of the STC link to Commonside Road at an appropriate stage during the development. Prior to the full link to the town centre being available, alternative sustainable connections will be provided.

Contain travel within the site:

As described earlier in this report, mobility hubs are becoming key components in the planning and design of new neighbourhoods.

A central mobility hub is located adjacent to the local centre at the confluence of Latton Avenue, the East-West Green Corridor and the potential location of the

The provision of such a mobility hub within the masterplan can help to provide an interchange for public transport and be the hub for a range of sustainable travel options and shared mobility services including ebikes, e-scooters, on-demand services and car clubs.

The mobility hub can also help to respond to changing work/life patterns and habits by acting as a convenient location for collecting and delivering parcels.

The plan (opposite) also shows two smaller, localised mobility hubs in the east and west of the site. These are locations for parking and collection of bicycles, e-bikes and e-scooters to allow the surrounding residents the ability to use such modes in accessing local destinations (e.g. the schools, local shops).







Longwood Latton Green To St James C of E Manual Ma Indicative Route of Potential Sustainable Transport Corridor (STC) **Public Transport Connections**

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development

To Stewards Academy Staple Tye

Existing Bus Route - 2 & 3

Existing Bus Route - 4

Existing Bus Route - 87

Proposed Bus Route

Proposed Bus Stop

Walking Distances (400m and 800m radii)

* Mobility Hub

CONNECTIVITY AND MOVEMENT STREETS





EXAMPLES OF SHARED SURFACE ACCESS LANES

Latton Avenue

Vehicular access to the site will be provided from London Road to the east and Rye Hill Road to the west. These points will be connected by Latton Avenue which will be formal and tree lined. There is no private vehicular access from the north or the south of the site.

The route of Latton Avenue from the edge of the development towards London Road has yet to be fully determined, but will need to balance the visual impact of the road on views in and out of the site as well as its impact on site heritage assets and traffic movement to and from nearby communities.

The East-West route will be designed to encourage low vehicle speeds and will include traffic calming and priority for sustainable modes where appropriate, such as crossing side roads.

The road will be designed to allow best-practice transport and urban design principles to be brought forward. The geometry of the street alignment and the dimension of development blocks may be further developed at future stages of the planning process.

Traffic Modelling

Modelling was undertaken on behalf of ECC and EFDC to support the EFDC and Harlow local plans. Detailed multi-modal assessment for Latton Priory will be undertaken to support a planning application for the development, as set out in the HGGT Sustainability Guidance and Checklist Tr7. This will be based on new traffic surveys undertaken at junctions surrounding the development based on a study area that is currently being agreed with ECC, which includes roads in Harlow and the surrounding area. The modelling will consider committed planning applications (i.e. those that have been approved but not implemented at time of surveys) and cumulative schemes (i.e. those that form part of the local plan). The schemes to be included will be agreed with ECC in advance. This modelling will be used to assess the impact of the development on the highway network, which will in turn determine the mitigation strategy.

A Transport Review Group will be established to have an oversight of the monitor and manage approach and the achievement of the modal shift targets. A capped fund will be available for enhanced sustainable transport measures if targets are not being met.

Street Connections

As discussed earlier in this section, the network of green corridors and green fingers create routes that are direct, attractive and sustainable, encouraging walking and cycling for local journeys.

Vehicular movement will be actively discouraged and sustainable modes made more direct and attractive than vehicular routes for local journeys. The plan (opposite) shows the hierarchy of streets within the site.

Even though the network of green corridors provides car-free walking and cycling, the streets will also be pedestrian and cycle friendly with different measures applied to different street typologies such as designated cycle routes, street layout or the use of surface materials to prioritise non-vehicular users.

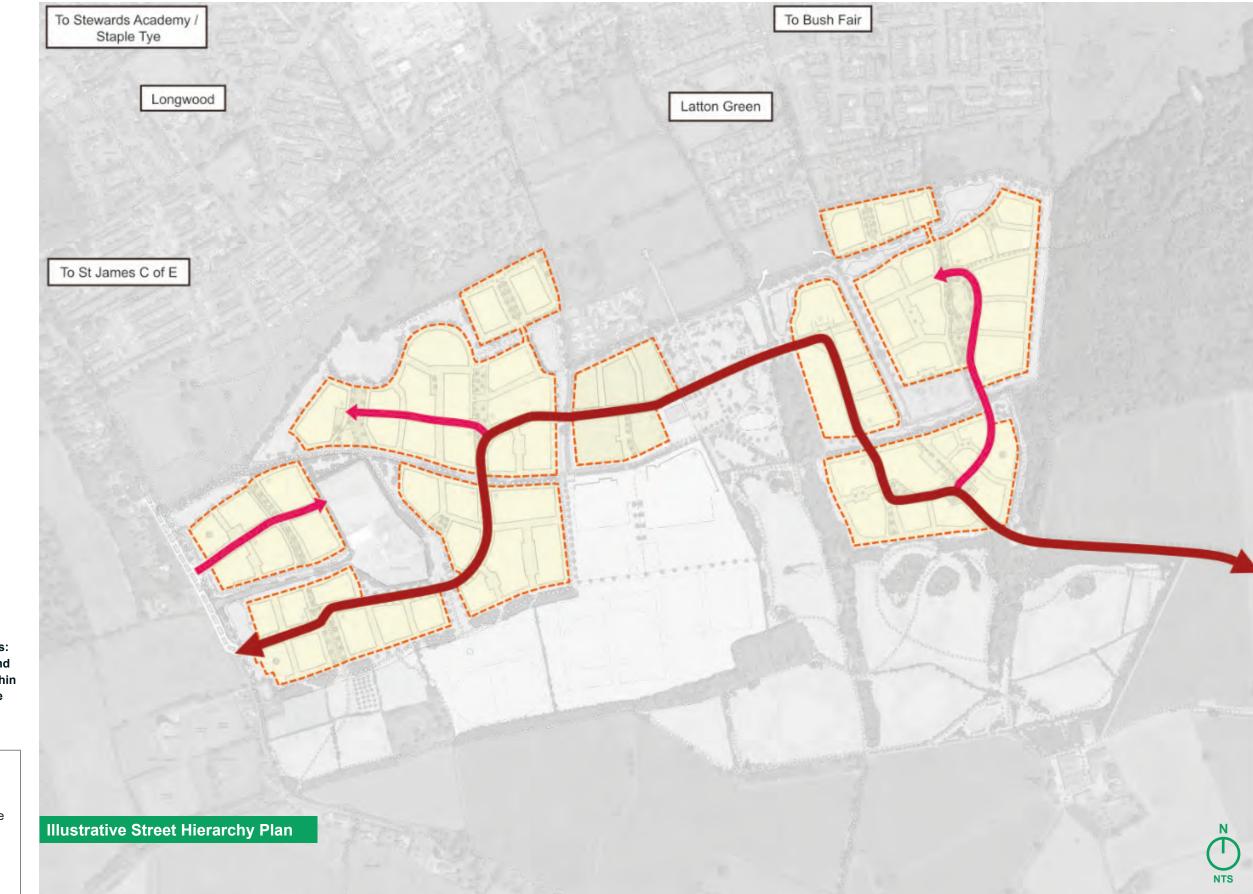
The plan should be read with the illustrative street sections in Section 8 of this report

The street typologies are:

- Latton Avenue: The primary vehicular route within the site which also accommodates a high quality cycle/pedestrian route.
- **Secondary Streets:** These are the local vehicular access streets into the neighbourhoods.
- Tertiary Streets/ Access Lanes: Whilst the tertiary street network will be developed at future stages through testing and incorporation of best practice design principles, a number of illustrative street sections, which could contribute to a pedestrian and cycle-friendly movement network, are shown in Section 8 of this report.

Parki

For more detail on parking strategy see Appendix 3.



Kev

Primary Street

Secondary Street

Residential Blocks:
Tertiary Streets and
Access Lanes within
these blocks to be

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development

GREEN AND BLUE INFRASTRUCTURE STRATEGIC PRINCIPLES

The Green Infrastructure proposals for the site utilise and expand upon its natural assets (landform, woodland, hedgerows and mature trees) to form a comprehensive green framework in which to locate the new neighbourhood.

The masterplan design approach adopts effective and well-considered urban design and landscape measures to ensure that the development is sympathetic to the surrounding built environment and its landscape setting and to deliver a range of benefits for landscape and biodiversity, water and sustainable drainage, sports and recreation, health and well-being and climate change.

Latton Priory will be set within an extensive network of multi-functional green open spaces that will serve all age groups of the existing and new communities. The local plan sets out policy on public open space typologies and quantity of provision. This policy requirement and more will be delivered within the development, which also makes provision for a substantial new area of Suitable Alternative Natural Greenspace (SANG). Open space provision will also have regard to the EFDC Green Infrastructure Strategy and HGGT guidance.

Using design principles, inspired by Ebenezer Howard (as outlined in New Garden Suburbs TCPA, 2012), the proposals for the open space and recreation work with the grain of the landscape to preserve as many natural site features as possible. The development includes the provision of a mix of formal and informal open spaces and provides generous and usable green open space, ranging from gardens to parkland and dedicated allotments for local food production.

Strategic Green Infrastructure

The green open spaces shown on the illustrative masterplan have been designed to integrate into the wider open space network and countryside. This network includes:

- The Green Wedge, which runs from Harlow town centre to the northern edge of the site (designed as part of the original plan for Harlow by Sir Frederick Gibberd), has been extended into the site. It forms an extended green corridor to / setting for the local centre. The Green Wedge within the site can also accommodate pedestrian, cycle and STC connections.
- The public park to the north west of the site between Latton Priory and the Stewards area of Harlow is connected to the rest of the neighbourhood by an East-West Green Corridor. Enhanced walking and cycling routes through this open space will be explored in consultation with Harlow District Council to provide links into neighbouring communities and wider walking and cycling networks.
- The adjacent woodlands of Mark Bushes forms a back drop to the eastern part of the neighbourhood. Existing routes into the woodland and to existing open spaces in the north east of the site and Parndon Wood to the west will be linked into the green infrastructure network within the site.
- The southern edges within the site provide a transition between town and country. The transition area in the west of the site accommodates recreation and productive landscapes and is referred to in the SMF as Rye Hill Park. The transition area to the east is the new SANG. Between them are the school pitches.

A key component of the green infrastructure strategy is the incorporation of the strategic views shown in section 3 and on the plan (right), based on the strategic views shown in the HGGT Design Guide and landscape analysis. This includes views towards Harlow and across the Epping countryside from the site, and the protection of key features on the horizon when seen from Harlow town centre, the green wedge extension, areas of woodland and poplars at Dorrington Farm.

The illustrative masterplan shows an example of how development can be brought forward on the site and which positively responds to these views. The final response to the strategic views will need to be tested to bring forward best-practice design principles.

Other important views have been identified by EFDC as part of the development of the Design Code and these should be considered where possible.

Other Views

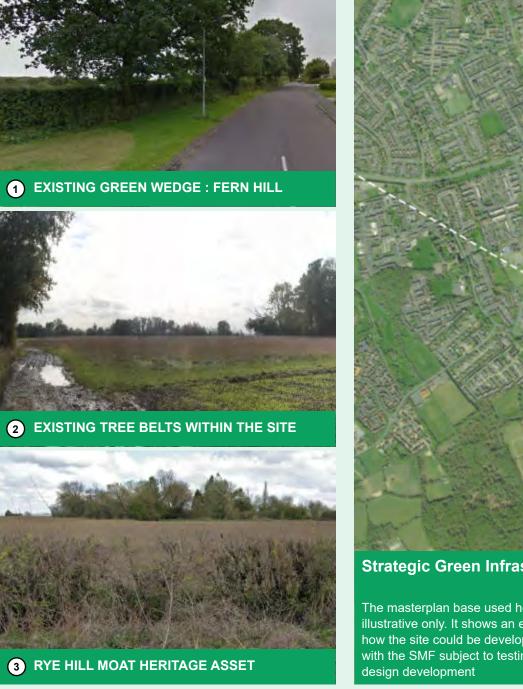
The key green infrastructure design principles for Latton Priory are as follows:

- 1. Protection of the horizon (containment of Harlow, protect heritage assets and views)
- 2. Incorporate and respond to strategic views as shown in section 3 and opposite
- 3. Extension of the Harlow Green Wedge (extend to meet the plateau)
- 4. Woodland planting strategy (new linear woodland blocks to connect existing along the skyline)
- Large new public parks (Latton Park, Rye Hill Park and the SANG)
- 6. Greenways/fingers/streets (a network of green spaces and extensive tree planting integrate the built development within the landscape and function holistically with topography, ecology and blue infrastructure)
- 7. Green commuter and recreational routes
 (a hierarchy of direct connecting and circular
 routes for pedestrians, cyclists and bridle users
 throughout the green spaces)
- 8. Community recreation (delivery of LPA

policy requirements and above on quantity and quality of public open space)

- 9. Integration and re-connection of heritage assets (Rye Hill Moat and Latton Priory)
- Sustainable Drainage Systems (SuDS, habitat, landscape and visual amenity benefits)
- 11. A minimum 10% Biodiversity Net Gain (an extensive connected network of retained and new grassland, hedgerow, woodland and wetland habitats, including SANG provision)
- 12. Management and Monitoring Strategy (to be prepared in liaison with the LPA and key stakeholders)
- 13. Proposed tree belt planting along the southern site boundary and within the SANG will provide habitat connections between existing ancient woodland to the east of the site, and trees and woodland to the west of Rye Hill Road

Strategic Views







GREEN AND BLUE INFRASTRUCTURE SITE WIDE LANDSCAPE CHARACTER & KEY SPACES



Site Wide Landscape Character & Key Spaces

The green infrastructure design principles are established on the previous page. Whilst these provide the framework and setting for the Latton Priory development and should be seen as a whole, its varied character means that it can be divided into distinct landscape character areas, all influenced by the varying topography and wooded characteristics of the site.

Within all the character areas, green corridors and open spaces will be designed to consider green infrastructure, including ecological features, in relation to topography and active travel principles in order to create a harmonious, accessible, ecologically diverse and attractive environment.

These areas are indicated on the opposite page and comprise:

• Northern Waterways: The lowest parts of the site will incorporate blueways (swales) and drainage basins as set out by the SuDS strategy. The associated landscaping will seek to incorporate areas of wet woodland and wetland parks distinctly defining the character of these areas. Attenuation basins here and in other character areas will be designed to be naturalistic features.

- Eastern Woodlands: An established woodland backdrop, comprising Mark Bushes and linear woodland belts defines the character of this area. This will be further strengthened through planting of connecting areas of woodland through the SANG.
- Southern Plateau: This broad plateau landform will contain the proposed development. Linear woodland will extend across the plateau providing a backdrop to the entire Latton Priory development and broad sweeping views out north to Harlow and south to the Epping Countryside will be retained. The plateau incorporates Rye Hill Park, playing fields and the SANG.
- Central Green Wedge & Greenways: Areas of transitionary character comprising the central green wedge and connecting greenways, community squares and parks, link the three distinct landscape character areas. These include key spaces that define and connect neighbourhoods – Latton Park, Latton Avenue and E-W Green Corridor, N-S green fingers and green edges at boundaries with Riddings House, Dorrington Farm and Rye Hill Road. Swales and attenuation basins in this area can include permanent wet features to create focal points on green corridors.

These character areas are particularly important in defining the character of different neighbourhoods at Latton Priory as explained in more detail in Section 8.

Within the character areas, key spaces identified on the

adjacent plan comprise:

• **Latton Park**: is incorporated within the extension of the Green Wedge and provides the setting for the local centre. It will be more formal in nature and be

an area for rest and relaxation as well as outdoor neighbourhood activities.
Rye Hill Park: is located around Rye Hill Moat. It includes sports pitches and recreational space as well as allotments and community orchards. This forms a soft edge between the new neighbourhood

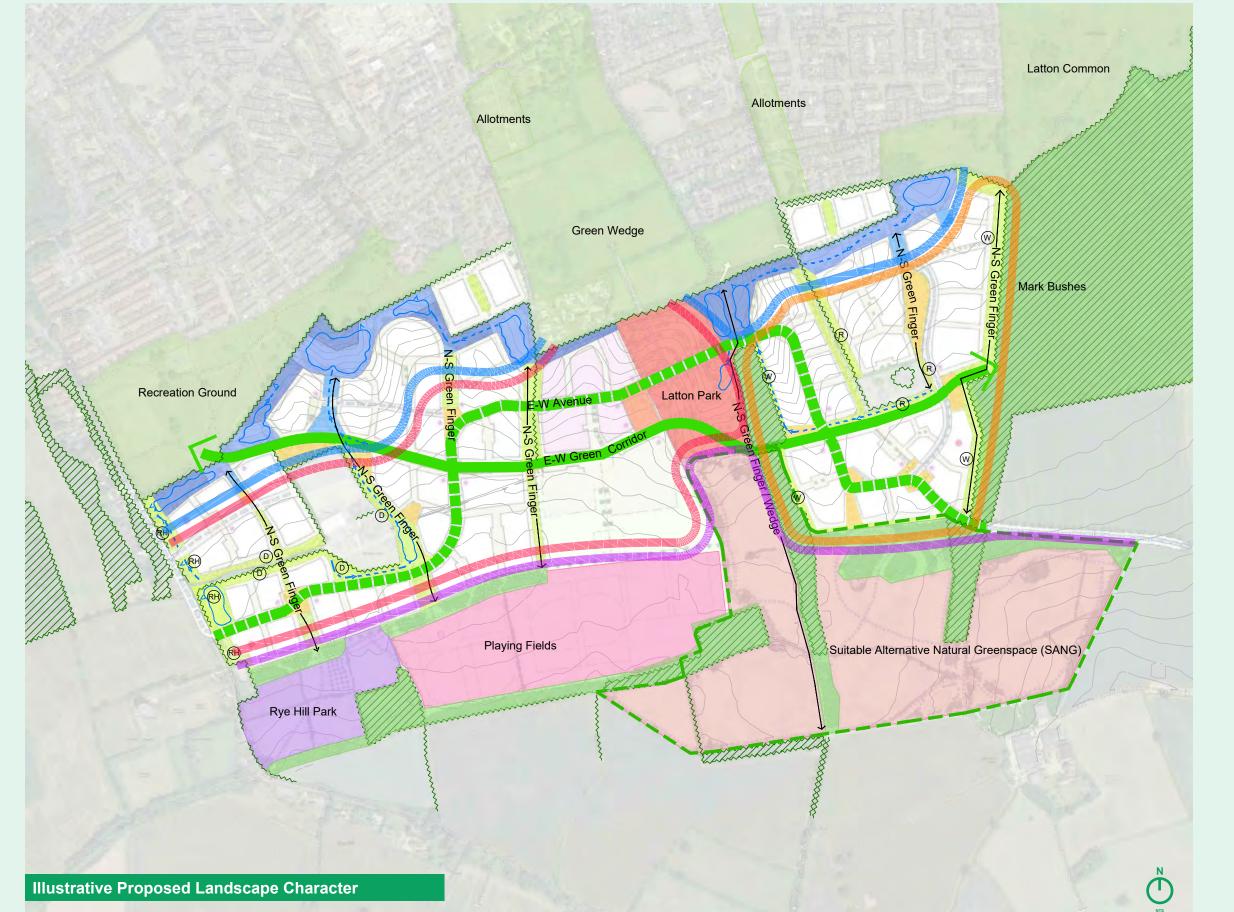
and the surrounding Green Belt and open

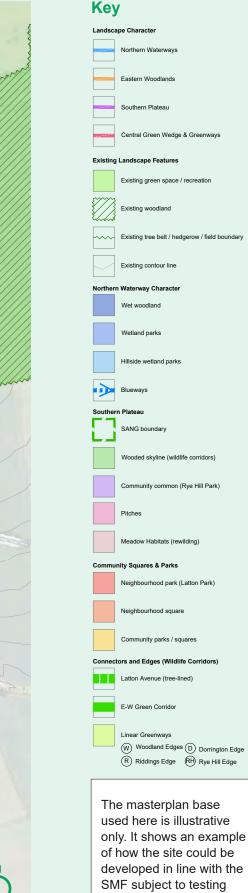
south of the neighbourhood.

• SANG (Suitable Alternative Natural Greenspace): this provides 28.8ha of natural green space as part of the mitigation measures for Epping Forest. Natural England were consulted and support the location and form of the SANG. The detailed design of the SANG is yet to be finalised.

countryside. School pitches are also located to the

- **The East-West Green Corridor:** provides a direct off-road green route for cycle and pedestrian connections across the neighbourhood and to the local centre.
- North-South Green Fingers: provide green linkages onto the East-West Green Corridor as well as towards the existing neighbourhoods of Harlow in the north and the open countryside to the south. Some of these also contain swales.





and design development

Fill 1.0m-2.0m

Fill 0.1m-1.0m

Fill 0m-0.1m

Cut 0m-0.1m

Cut 0.1m-1.0m

Cut 1.0m-2.0m

Look to retain field boundary

hedgerow and trees where

present along the southern boundary of the residential parcel

Surface water from these

and infill any gaps in hedgerow

Marchan whith you republic

GREEN AND BLUE INFRASTRUCTURE BLUE INFRASTRUCTURE, DRAINAGE AND LEVELS

Surface Water Drainage Strategy

The surface water drainage strategy for the site uses SuDS. This comprises a combination of swales and detention basins across the development, in order to control surface water run-off into the existing watercourse.

In accordance with The SuDS Manual C753 and national government guidance the SuDS across the site have been designed in order to store storm water for the 1 in 100 year + 40% climate change storm event. The inclusion of SuDS throughout the site removes the risk of surface water flooding throughout the new development catchments.

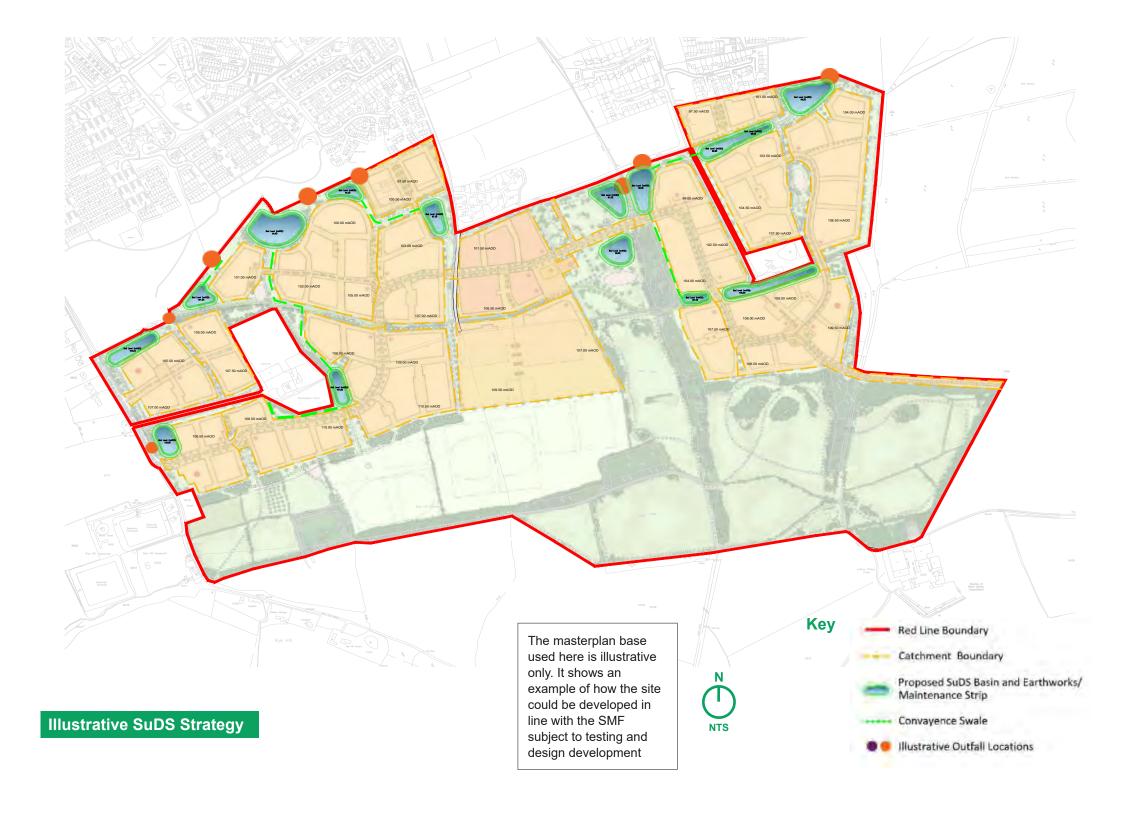
To complement the overarching site topography, the proposed development has been spilt into twenty catchments, with eighteen detention basins across the site. Surface water generated from the development footprint within these catchments will be collected and conveyed via a surface water pipe network under the adopted roads and/or within roadside and conveyance

All undeveloped greenfield areas and open space in the south of the site will continue to flow naturally through the site.

Surface water that is stored within the basins has been designed to discharge at QBAR (in accordance with the SuDS Manual and national and local government guidance) into the existing drainage network that operates across the site. This therefore reduces the risk of flooding further downstream.

The basins have been located in the lowest lying areas of each catchment in order for surface water to drain naturally via gravity and into the existing features at the most convenient locations.

The site currently does not have a system in place that improves the quality of surface water before discharging into the watercourse. The use of SuDS across the site will provide two stages of treatment to surface water before it is discharged into the local drainage network.



Earthworks

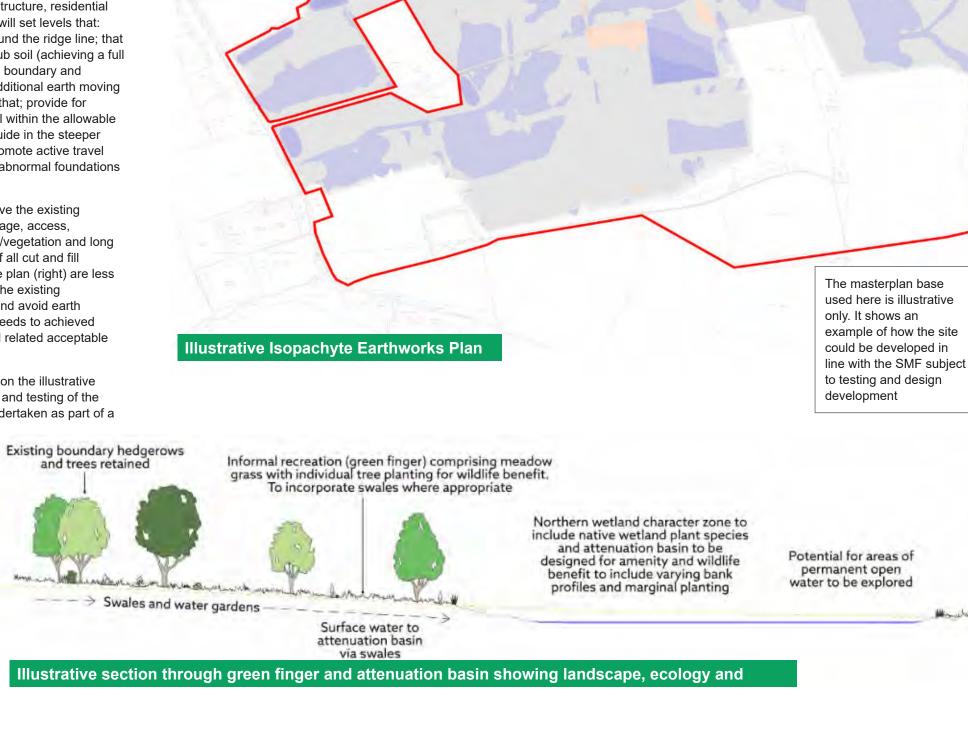
The existing site sits across a plateau which runs on a north east to south west alignment, with falls generally in a northerly direction towards the site boundary. Prevailing existing gradients range from flatter than 1 in 200 up to steeper than 1 in 10 in places near the northern boundary. It is therefore crucial to review the locations and impact that the development parcels will have on the existing topography to ensure that the proposed development is integrated into the landform and to avoid the need to export any earthworks material

An earthworks analysis has been undertaken involving an assessment on the spine infrastructure, residential parcels and other land uses. This will set levels that: avoid raising ground near and around the ridge line; that removes the need to export any sub soil (achieving a full cut and fill balance within the SMF boundary and therefore removing the need for additional earth moving vehicles to and from the site) and that; provide for sensible development gradients all within the allowable tolerances of the Essex Design Guide in the steeper areas of the site which will help promote active travel and avoid raising levels such that abnormal foundations are widespread.

Levels will be developed to preserve the existing character but have regard to drainage, access, preservation of existing landscape/vegetation and long distance views. Over 90 percent of all cut and fill operations proposed shown on the plan (right) are less than 1m cut or 1m fill to preserve the existing topography as much as possible and avoid earth removal from the site. A balance needs to achieved between acceptable gradients and related acceptable levels of cut and fill.

This earthworks strategy is based on the illustrative masterplan. Further development and testing of the proposed earthworks would be undertaken as part of a future planning application.





parcels to drain via pipework to adjacent attenuation basin to the west



GREEN AND BLUE INFRASTRUCTURE ECOLOGY

The proposed development will deliver a mosaic of new ecologically valuable habitats, enhancing and re-connecting existing nature conservation interests within the area. These 'green corridors' will be interlaced with the existing network of public paths to realise the vision of an integrated landscape that benefits wildlife and people alike.

Overview

The proposed development offers a unique opportunity to provide residential development in combination with delivering a minimum 10% Biodiversity Net Gain (BNG). There is ample scope for ecological features such as bat boxes, bird boxes, amphibian, reptile and mammal hibernacula, dead wood/log piles and invertebrate habitats such as bug hotels.

The proposed residential development can deliver a Biodiversity Net Gain (BNG) through the provision of enhanced and newly created habitats, including the delivery of a landscape-scale coherent ecological network. The establishment of a resilient ecological network of woodlands connected by a mosaic of habitats will provide significant cumulative enhancements for biodiversity within the wider area.

The development has the potential to indirectly effect local designated sites such as Lee Valley SPA, Epping Forest SAC and Harlow Woods Site of Special Scientific Interest (SSSI). The provision of Suitable Alternative Natural Greenspace (SANGS) in the southern part of the site will comprise semi-natural habitats and will provide recreational opportunities to reduce the impact of increased recreational pressure on nearby designated sites.

Broadleaved woodlands within the site are retained and the adjacent Mark Bushes Local Wildlife Site (LWS) will be protected from development by an adequate buffer of green space. Woodlands will be connected by retained/enhanced and new species-rich hedges, new woodlands and scrub, with these improved over time by woodland management plans. Other improvements will include increasing the deadwood component within woodlands, creation of new mosaics of scrub and grasslands, and establishment of a Sustainable Urban Drainage System (SUDS) throughout the site. These will provide a range of habitats for amphibians, bats, birds and reptiles.

The development also offers a unique opportunity to contribute towards the Wildlife Trust's 'Living Landscapes'

project and will deliver a 'jigsaw piece' of ecologically valuable habitat to establish a coherent network not only in the immediate area but also to the wider landscape. Green space through the site will help to connect local designated sites, including Harlow Woods SSSI, Parndon Wood SSSI and Mark Bushes LWS.

A minimum 10% BNG will be achieved through provision of high value habitats throughout the built realm and green space, enhancement of retained habitats and provision of species-specific features such as bat and bird boxes.

Amphibians

Although all of the ponds supporting GCN will be retained, and only minimal amounts of terrestrial habitat suitable for GCN will be lost, mitigation will be provided to protect these species during and after development. Where required, habitat suitable for GCN will be removed in accordance with a European Protected Species Mitigation (EPSM) licence from Natural England with existing ponds retained and enhanced through clearance of over-shading vegetation and planting of native bankside vegetation where appropriate. Replacement compensation habitat will be provided.

Newly created habitats within the open spaces will comprise a mosaic of terrestrial habitats that will provide optimal areas for amphibians. Rough grassland will provide foraging habitats and inclusion of log piles, dense scrub and hedgerows will provide suitable areas for shelter and hibernation. In addition, the SUDS network will be created and managed to provide suitable aquatic habitat for amphibians. These habitats will enhance connectivity through the site and to offsite populations to the east in the Mark Bushes LWS.

Badge

The main sett off site will be protected from direct impacts through demarcation of an adequate buffer and habitats within the open spaces will provide

additional foraging opportunities. The site will be continually monitored for the presence of additional setts and if required, setts will be closed in accordance with a licence from Natural England. During construction, measures will be implemented to reduce the risk of impacts to badgers and during occupation, measures such as reduced speed limits and protection / creation of dark corridors will ensure nocturnal wildlife continue to move through the site.

Bats

It is possible that some trees with potential to support roosting bats will be removed to facilitate construction of the spine road, however surveys to detect the presence or likely absence of roosting bats will be undertaken prior to removal and a licence from Natural England obtained (where required). Bat boxes will be provided to compensate for the loss of any tree roosts.

Habitats with high value for foraging and commuting (woodland, hedgerows, ponds) will be retained and protected. Newly created habitats will provide a variety of additional resources for the local bat population (e.g. rough grassland, new hedgerows, SUDS). A sensitive lighting strategy will be implemented both during construction and occupation to allow bats (and other nocturnal wildlife) to continue to utilise the site undisturbed.

Bird

Although removal of nesting habitat will be kept to a minimum, where required habitat will be removed outside of the breeding season or after an ecologist has confirmed the absence of active nests.

Proposals have sought to retain woodland, hedgerows, mature trees and ponds. These habitats will continue to provide nesting, foraging and wintering habitat for birds throughout the construction and operation phases.

Newly created habitats will be designed to benefit

wildlife, including farmland birds, though the provision of wildflower-rich grasslands, wetlands and targeted management. Bird boxes will be included throughout the site to provide additional nesting opportunities.

Invertebrates

The masterplan avoids development on the main areas of semi-natural habitat and as such direct impacts on invertebrates are unlikely to be significant. Indirect impacts will be mitigated through implementation of a sensitive lighting strategy and enhancement for invertebrates will be provided through creation of semi-natural habitats and inclusion of bug boxes throughout.

Reptile

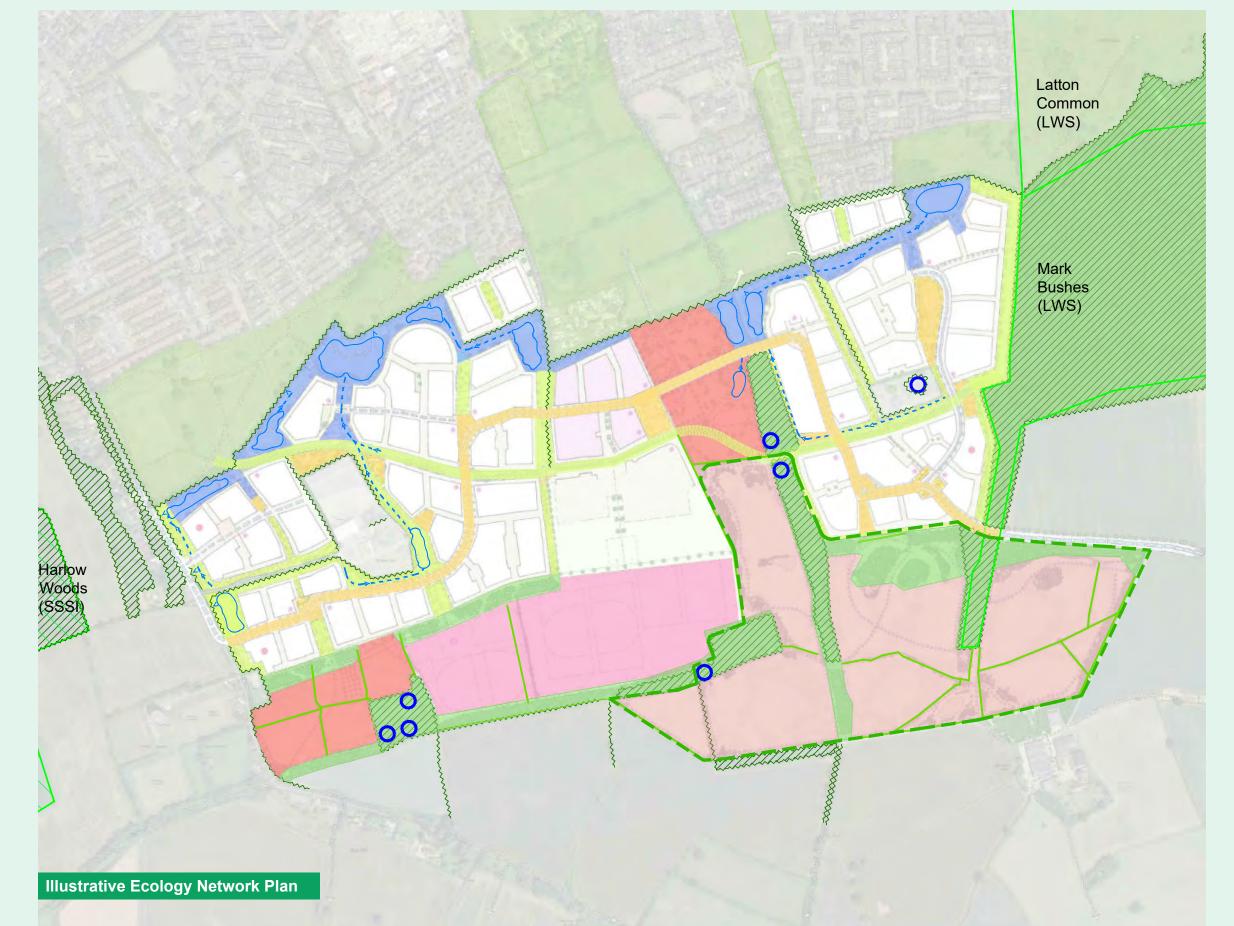
Although no reptiles were found in 2014 (and updated surveys undertaken in 2022 also found no reptiles), due to historical records and presence of suitable habitat on site, clearance will be undertaken in accordance with a detailed method statement.

A suitable on site receptor area will be identified and enhanced, to act as a safe refuge if any reptiles are found.

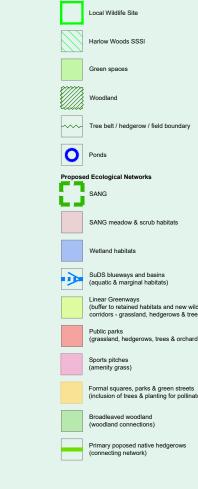
Areas of rough grassland, scrub and wetland will be created throughout the open spaces to provide additional sheltering and foraging habitat for reptiles.

Other notable species

Habitats of value to other notable species such as hedgehogs, harvest mouse and polecat (i.e. hedgerows, scrub, woodland) will be retained and additional and enhanced habitat will be created throughout (for example the network of open space with green links, log piles, enhanced management of scrub etc.).



Key



The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development

GREEN AND BLUE INFRASTRUCTURE RECREATION AND PLAY





Open Space, Recreation and Play

The SMF sets out the overarching strategy that addresses the approach to provision across the illustrative masterplan. The overall proposals comply with Open Space Standards (EFDC Local Plan Policy DM6 and the EFDC Infrastructure Delivery Plan) and follow guidance set out by Fields in Trust, Play England and within the HGGT Vision, Gilston Area Charter SPD and the EFDC Green Infrastructure Strategy.

The table below details the quantity of open space provision included within the masterplan in accordance with, and in excess of the required standards.

The masterplan accommodates a hierarchy of accessible public spaces - from the 'destination' Latton Park, which extends into the SANG, to the Rye Hill Park 'neighbourhood' space, to local and door-step spaces which are accommodated at key nodal points within the masterplan.

Provision is made across the illustrative masterplan for a range of uses and experiences, from active to calm and tranquil at the wooded or rural interfaces to the east and south. Semi natural greenspaces permeate the masterplan via the E-W Green Corridor and N-S green fingers and incorporate SuDs and tree planting. At key intersections, focal amenity areas comprise pocket parks with seating, play spaces and / or community gardens to provide moments of intensity along the greenways.

The detailed design will deliver safe, high quality, attractive and sensitively located sociable streets and spaces (including play spaces) with well-orientated buildings that provide for good natural surveillance and incorporate design for climate resilience; for example, disease resistant and climate adaptable tree species, planting for wildlife networks, careful placement of trees to create both sunny and shaded spaces / seating areas and provision of informal food growing spaces and orchards. The open space network will incorporate a range of way-marked fitness and walking /cycling routes of varying distances for a range of abilities. Key locations and access standards for the proposed open space typology are mapped on the adjacent plan. Fields in Trust distances will be followed for formal play spaces and all new homes will be within 800m of existing or proposed allotments and within 400m of a community garden. A green infrastructure, open space and play

strategy will be developed further based upon these established principles at the outline application stage to set a 'design code' for standards, design and delivery of open space and play provision at the reserved matters stage.

The play strategy shown right is based on the illustrative masterplan which shows an example of how the SMF principles could be brought forward. The final location and design of play spaces and productive gardens will need to be agreed at future stages of the design process to bring forward best-practice design principles including 'play-on-the-way' strategies and safe, independent access from family housing to doorstep play.

In accordance with Sport England advice and guidance from the sports governing bodies, the community sports grounds provision will be designed flexibly but will be capable of accommodating at least two senior football pitches and a 9 pitch cricket square. There is also sufficient space for the community sports ground to be supported by a pavilion with associated parking provision if required (location to be tested and agreed through further design work). The current proposals indicated within Rye Hill Park comprise 2No. senior football pitches (106x70m incl margins), 1No. youth age 12 15 football pitch (56x88m incl. margins), 1No. mini soccer pitch U9/10 (61x43m2 incl. margins) & 1 senior 9 wicket cricket pitch. The exact combination and size of pitches will be determined through the detailed design

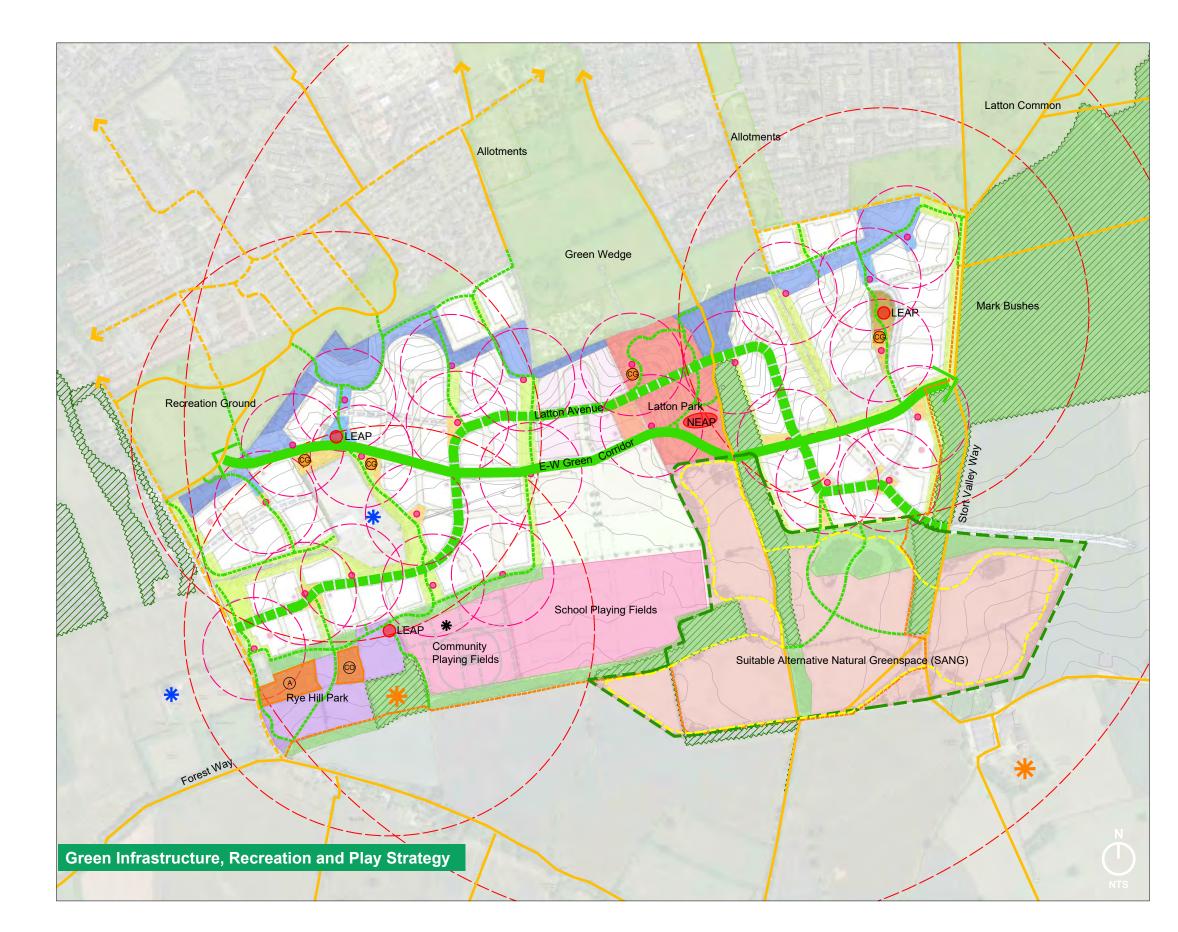
process.Pedestrian access and or vehicular gates along the boundary between the school and the sports ground could be explored at a later stage if required.

Potential for a shared facility located at the school which provides for a 3G artificial grass pitch (AGP) and MUGA will be explored. The proposed parks are unsuitable (due to their predominantly natural character or unsuitable topography) to accommodate a facility of this kind.

Policy D4 supports dual use of school sports facilities by the community and provision for facilities onsite will be made where possible, or where a financial contribution towards off-site provision will be made in accordance with the standards in the Infrastructure Delivery Plan and ECC "Developers Guide to Infrastructure Contributions". Further details will be provided as proposals develop in future planning applications and in discussion with EFDC and ECC.

Typology	Standard Quantity	Access Standard	Amount Required	Amount Proposed
	per 1000 population		for 1500 dwellings	
Amenity	0.6ha	480m	2.16ha	7.47ha
Greenspace				
Parks and Gardens	0.8ha	710m	2.88ha	5.18ha
Natural / Semi	1.8ha	720m	6.48ha	6.73ha (excludes
Natural				28.80ha SANG)
Greenspaces				
Provision for	0.25ha	LAP (equivalent)	0.9ha	0.9ha
Children and Young		100m		
People		LEAP 400m		
		NEAP 1000m		
Allotments	0.2ha	800m	0.72ha	0.72ha
Sports Pitches	Sport England	1200m	4.82 No. pitches	3.27ha *(5 pitches)
	'Playing Pitch New			
	Development			* Includes the space for any pavilion and parking
	Calculator'			any parmon and parking

(based on 1500 dwellings @ 2.4 persons per dwelling)



99

Designated Heritage Assets

SANG boundary

NEAP / LEAP (with walking distance radii)

Food Production

walking distance radii))

CG=Community Gardens)

Community Sports Pitches

Pavilion and associated parking (if required)

Existing Public Rights of Way

Other Existing Key Routes

Latton Avenue (tree-lined)

Proposed Primary E-W Greenway

Proposed Recreational

Footpath / Cycle Network

Proposed Bridle (& Cycle) Route

(minimum 2.5km long)

Existing contours

The masterplan base

only. It shows an

line with the SMF

used here is illustrative

example of how the site

could be developed in

subject to testing and

design development

Proposed Circular Walk (& Cycling)

(Rye Hill Moat and Latton Priory)

Other Distinctive Local Assets / Features

(Dorrington Farm Poplars and Water Tower)

(play incidents, distributed at recommended LAP

(A=Allotments, CO=Community Orchards,

ACTIVE DESIGN PRINCIPLES

To create a truly sustainable, healthy and socially integrated community, Active Design Principles promoting physical activity and wellbeing will be embedded at the heart of the new neighbourhood at Latton Priory.



The Essex Design Guide 2018 places a strong emphasis on the importance of establishing Active Design Principles early on in the masterplanning process. These principles echo urban design best practice and these active principles have been a key component in establishing the design principles for Latton

The objective of these principles is to create an environment through design which encourages activity in daily life. This includes providing an environment which promotes and encourages sport and children's play and other active leisure activities such as food production. It also encourages active living by promoting sustainable, active, modes of transport. Creating high quality, safe streets and spaces is a key component of design to encourage active



Cycling and Walking

Latton Priory will be a sustainable, connected, walkable neighbourhood with safe, accessible, direct and attractive cycle and pedestrian routes integrated within the network of roads, green fingers and open space which link key facilities within the site and further afield, including Harlow town centre. Community facilities have been located within the centre of Latton Priory to ensure maximum walkability.



Co-location of Community Facilities

The distribution of community facilities within the site is based on the co-location of retail, education and community facilities. This will ensure a synergy of uses and create active and well-populated public spaces to support an active and integrated community.



Appropriate Infrastructure

Buildings will be designed to ensure sustainability and energy efficiency are achieved. While this is an issue for later stages of detailed design it is envisaged that this could include achievable methods of green energy generation such as photovoltaic panels, passive heating and homes with smart technologies that reduce energy consumption. Buildings will also be designed to provide an active environment where practical.



Activity for All

The masterplan ensures a range of recreational needs are met with easily accessible facilities including sports pitches, play facilities for all ages including toddlers to teenagers (LAP, LEAP, NEAPS), outdoor gym facilities play-on-the-way strategies and high quality open spaces which will encourage healthy movement, community engagement, physical activity and by extension social, physical and mental well-being.



High-quality Streets and Spaces

Latton Priory will comprise permeable, inclusive, walkable neighbourhoods which prioritise sustainable transport and are connected through safe walking, cycling and public transport routes. Attractive and well maintained green streets that accommodate all users will facilitate and promote leisure and active travel.



Network of Multi-functional Open Space

The masterplan includes an extensive network of multi-functional open spaces to support a wide array of users and uses including recreational space, sports facilities, enhanced woodland, SANG, drainage features and formal parkland.



Local Food Production

Allotments and community orchards within the new neighbourhood serve to encourage local food production and reinforce community through active engagement and the encouragement of active lifestyles.



Management, maintenance and evaluation

A charitable Community Trust could be created and established. This could be responsible for the day to day management and maintenance of the site facilities and open spaces to make the neighbourhood a safe, attractive and secure place to live and encourage active participation.



Technology

Technology will be used to aid sustainable transport use, neighbourhood management or community engagement in local groups. The mobility hub also provides services such as space for remote working and last mile delivery collection, allowing for residents to live and work in their neighbourhood.



Activity promotion and local champions

Local residents groups, clubs and forums will be established to promote opportunities for social engagement, active citizenship and interaction helping create a vibrant and integrated community.

Play and Sociable Space

"Children's well-being, safety, learning and social childhood, are affected by the extent and the quality allowing a range of opportunities for inclusive, of their opportunities to play" Design for Play Guide, Play England 2008

The illustrative masterplan includes play provision at a variety of scales. The destination 'Latton Park' incorporates a neighbourhood equipped area of play (NEAP). Three local equipped areas of play (LEAPs) are proposed, evenly distributed across the meets the needs of different user groups. neighbourhoods. Locally, play provision will be more informal and comprise a range of doorstep and local play incidents close to and within easy walking distance of homes. These will form integral and incidental components of local nodal green spaces.

they will comprise accessible components of the development, as well as their essential enjoyment of landscape, along with seating and street furniture, adventurous, sensory, imaginative and social play for children of all ages and teenagers to socialise in a safe environment.

> The play strategy and detailed design will be developed at future planning stages to ensure that the provision is high quality and accessible and

Play incidents will not be formally defined, rather









s Strategic sterplan

HERITAGE



Overview

Great places have heritage at their core. At Latton Priory, the importance of the area's heritage has formed a key aspect of the masterplan, even down to the name of the site which reflects the presence and importance of the medieval priory located just beyond the site boundary.

The site which is located in an area of archaeological potential has been the subject of extensive desk based research, field survey and consultation with Epping Forest District Council's archaeological advisers and Historic England. A geophysical survey has identified a number of features within the study area, most noticeably two possible Bronze Age ring ditches and a number of other features of potential archaeological interest, although none of these are design constraints.

As set out earlier in this report, there is a medieval moated site in the south western area of the site which is a scheduled ancient monument and the scheduled and grade II* listed Latton Priory lies immediately to the south east of the site. These designated heritage assets are all nationally important.

As the proposed development has the potential to affect the setting and heritage significance of these designated

heritage assets, the illustrative masterplan has been designed to avoid or reduce potential impacts upon these assets. The proposed SANG is located between Latton Priory and the edge of the built up area of the site, thereby avoiding any adverse effects on the scheduled monument and associated listed building. The SANG will enable greater appreciation of Latton Priory through the increased access it allows and through opportunities to provide interpretative material at suitable locations within the SANG.

The scheduled moated site will also be retained within open space thereby ensuring that it is unencumbered by new development. The moated site is currently in poor condition and the proposed development presents opportunities to improve the management and presentation of the monument to the new community. The details of this will be discussed and agreed with Historic England through the planning process.

A programme of archaeological evaluation of the site has been agreed with Epping Forest District Council's archaeological advisers which will be implemented in due course, with further mitigation investigations where necessary.



The Latton Priory Site

The Latton Priory site will be protected from any adverse impacts of development through the location of the SANG which provides a large area of natural open space to the north of the buildings.

It is proposed to reinstate the historic field pattern within the SANG landscape north of the Priory.

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development





The Scheduled Moated Site

This scheduled ancient moated site will be protected and afforded open space around it through the new Rye Hill Park in the south west of the site, which will contain allotments, orchards, sports pitches and open green space. It is proposed to reinstate the historic field pattern within Rye Hill Park adjacent to the moat.

Rye Hill Moat is currently in an isolated position within arable farmland with no public access. It is tree covered and is in poor condition. The proposed development presents an opportunity to improve the condition of the monument while also providing greater understanding of and access to the public. The monument will be located within the proposed Rye Hill Park with a key pedestrian route connecting Rye Hill Moat and Latton Priory running east-west along its southern edge. This will enable far greater public access to the monument as well as reinforcing the historic connection between the moated site and the Priory. It is proposed to reinstate a historic drover's route between the moat and Latton Priory. This will provide a key new bridle and cycleway link, connecting Rye Hill Road and Park, the SANG and Stort Valley Way.

A conservation management plan will be produced for Rye Hill Moat. This will cover following areas:

- Understanding an outline of the historical and archaeological background of the site. This will include the results of further research, a Lidar study of the monument and the results of a condition survey
- Significance identifying the heritage importance of the monument
- Issues identifying objectives of the management plan (e.g. protect Rye Hill Moat's heritage while making it accessible, better known and understood; create a usable, sustainable and biodiverse amenity for the new community, while also protecting the monument from people related erosion caused by walkers, bikes and their desire lines; and protect existing ecology and enhance biodiversity
- Long term management objectives and policies outline the objectives and policies designed to implement a proactive and appropriate management programme to maintain and preserve the archaeological resource and enhance the heritage amenity of the site.

The management plan will be devised in consultation with Historic England and Epping Forest District Council.

GYPSY & TRAVELLER PITCH SITE



Selection of Potential Locations

There is a requirement for one gypsy and travellers' site comprising five pitches at Latton Priory - as set out in the Local Plan based on evidenced

Potential locations for such a site have been considered and assessed using guidance including 'Gypsy, Traveller and Showpeople Guidance' from The Essex Design Guide and the government's 'Designing Gypsy and Traveller Sites - Good Practice Guide'.

The aforementioned guidance, along with a workshop with EFDC, has informed the production of a series of criteria (see below) for the selection of potential site locations.

The guidance states that there is no one-size-fits-all approach in terms of pitch size. However, for masterplanning purposes, we have assumed (based on examples elsewhere) a site size of 0.4ha.

Criteria for Site Selection:

- Preference for circular or horseshoe design rather than traditional linear layout
- Relatively flat land suitable for purpose
- Good access to the road network, appropriate for trailers/large vehicles
- Access to pedestrian and cycle routes and public transport
- Access to local services (local centre facilities, health facilities, schools)
- Separation from existing G&T site to the north
- Some degree of separation from settled communities to provide acoustic and visual privacy
- Levels of natural surveillance on key walking routes adjacent to potential site due to screening often desired by the gypsy and traveller community
- Balance between natural surveillance of the site and screening
- Consideration given to place-shaping
- Not located within 'no build zone'

Option 1:

Pros

- Particularly good access to road network (minimal disturbance to surrounding areas from any potential trailers)
- Very good access to the green corridor

Con

- Opposite existing and proposed settled community with fewer opportunities for the screening, which is often desired by the gypsy and traveller community
- May negatively impact sense of arrival from Rye Hill Road due to screening/ desire for separation often desired by the gypsy and traveller community
- Potential impact on natural surveillance (due to screening often desired by the gypsy and traveller community) on Rye Hill Road and surrounding walking routes

Option 2:

Pros

- Opportunity to use planting already provided in the masterplan to provide screening on southern edge of pitch site
- No major existing settled communities nearby (although some homes on Rye Hill Road)
- Good access to road network
- Very good access to the green corridor (southern branch)

Cons

- May negatively impact sense of arrival from Rye Hill Road
- Potential disturbance from trailers affecting proposed settled communities along site's western edge
- Noise and other disturbance from site may negatively impact adjacent community open spaces and vice versa
- Potential impact on natural surveillance (due to screening often desired by the gypsy and traveller community) on Latton Avenue and Rye Hill Park

Option 3:

Pros

- No existing settled communities nearby
- Good access to road network (once built)
- Very good access to green corridor

Cons

- May bring traffic from trailers further into site and near SANG
- Not suited to accommodate preferred horseshoe shape of

 Rest site.
- Potential impact on natural surveillance (due to screening often desired by the gypsy and traveller community) on surrounding walking and cycling routes
- Potential impacts on Mark Bushes LWS/ancient woodland and associated ecological features

The illustrative masterplan does not conclude on the optimum site of the three options. This will need to be considered further as the proposals develop through the planning process. Further consultation will also be needed with Essex Police and other stakeholders.



Built Form and Place-making









08



BUILT FORM AND PLACE-MAKING

Creating Places

Having established some of the key spatial elements of the strategic masterplan framework in the previous section, this section covers matters of built form and place-making.







Places with a clear identity generate a strong sense of place, which contributes to a sense of belonging to and connection with the place we live or work in.

Previous sections have described the basis for creating a sense of place through the structure and strategic elements of the masterplan.framework This section sets out how more detailed aspects of the neighbourhood (such as the quality of individual homes and spaces) are equally important in creating a strong sense of place.

This section sets out the next level of thinking in terms of place-making and provides general guidance for the design of these elements. It sets out:

- General design principles
- A density approach for the site
- A building heights approach for the site and key views that these relate to
- Legibility and place-making across the site and illustrative work for key streets, spaces and the nature of the development edges

Further detail is also provided in Section 8 which looks at character areas and how each character has its distinctive identity. This will affect the design of built form, streets and spaces but does not alter the general principles set out in this section.

The Design Code (being produced by Epping Forest District Council) will also provide the next level of detail for these spaces based on the principles set out in this section.

Key principles that have informed the guidance in this section are:

- A people-driven design: Places should be built around activity. Spaces and streets, if well designed, are inclusive and safe and an opportunity for social interaction, active travel and a greater sense of community
- A legible environment: The hierarchy of spaces, routes and focal points create a neighbourhood that has a legible environment, contributing to a strong sense of place.
- A landscape-led environment: Routes and spaces will be based around an integrated green and blue network for the benefit of wildlife, ecology, character, sustainability and healthy and attractive places.
- A harmonious environment: The relationship between the built environment and the human scale is also key to creating a harmonious interaction between people and buildings.

GENERAL DESIGN PRINCIPLES





General Design Principles

A number of design principles are set out here with the general aim to ensure that Latton Priory becomes an attractive, sociable, flexible and sustainable place. Further testing of blocks, including detail provided in the Design Code, will be necessary to establish how these principles outlined can be achieved.

Attractive, well defined streets and spaces:

- Buildings should seek to follow a consistent building line although how continuous this is may vary depending on the street type and housing density.
- Further testing of blocks and block dimensions may be required at later stages to ensure that bestpractice design principles can be brought forward.
- Key principles for front gardens are that
- They should discourage on plot front garden parking (a depth of 1-2m would achieve this). Bigger front gardens may be appropriate in lower density areas, however, it is important that this does not encourage on-plot parking.
- On-street parking should be incorporated in an inconspicuous manner. The streetscape should not become car-dominated.
- Street trees and/or planting should be an integral part of principal streets and spaces and a key component of the structure of the street. Careful species selection will be a key part of enhancing local distinctiveness and reflect the scale and sense of enclosure.
- Buildings and landscape elements need to be considered together and as one to create a harmonious whole.
- Clear boundaries to front gardens are needed to clearly demarcate public and private areas.
- Materials for buildings, boundaries and landscape should be of high quality and carefully chosen to increase local distinctiveness, connect the place with the existing surroundings and to be attractive, durable and sustainable.
- There will be no structural retaining between buildings and street level and no under-build

construction. All level changes will occur within rear gardens.

- Street gradients will be well within Essex Design Guide tolerances (see Site Wide Pedestrian and Cycle Connections in section 7)
- Topography, landscape and ecology (and SuDS features where these occur) will be considered together in designing streets and spaces to create a harmonious whole

Safe and sociable spaces

- Houses should front onto streets and open spaces, (including areas of woodland) with their main front door and point of access on the street.
- Active frontage-should be created through frequent windows, doors (and balconies where appropriate) onto the street and spaces to achieve high levels of natural surveillance. Blank elevations should be avoided. This needs particular attention for buildings fronting larger open spaces and on corner buildings.
- In the local centre, non-residential ground floor uses should be visible from the street, wherever possible, to create active ground floor frontage.
- Streets should be pedestrian and cycle friendly. Layout, materials and detailing should be chosen to emphasise this.
- Buildings, streets and spaces should be designed to be accessible to all. This includes addressing design in streets with steeper gradients. (see Site wide pedestrian and cycle connections for gradients of key routes).
- Public spaces should be designed to facilitate and encourage safe and inclusive social interaction (including children's play where appropriate) whilst, in larger spaces, also providing areas for quieter activities. Natural surveillance in these spaces is essential and where all people, irrespective of age and gender, feel safe and welcome.
- Orientation and positioning of street furniture and trees in streets and public spaces also needs to be considered to provide sunny and shadier areas so that spaces can be used all year round and in different ways by different groups of people.

Designing for flexibility

- Buildings should be designed to be adaptable. This could include adaptability wherever possible:
- so that residents can personalise and modify their homes for changing working patterns and other future trend lifestyle changes
- for all stages of life
- for increased accessibility
- for changes in technology,
- to adapt to climate change.
- In the local centre, an appropriate proportion of buildings should also be designed for adaptability to cater for use change e.g. from residential to commercial or vice-versa. This may affect some ceiling heights, width and depth of buildings.

Designing for sustainability

- Homes and other buildings should be designed to ensure energy waste is minimised.
- Homes and other buildings should be designed to encourage recycling and reduced household waste.
- There will also be opportunities for homes to reduce energy demand through fabric first improvements and to use renewable technologies such as PVs ,air source heat pumps and wind and which is consistent with the implementation of the Future Homes standard. It is important that these or other technologies that may be employed are incorporated in a way that does not detract from the visual quality of buildings, streets and spaces.
- Buildings should be designed, where possible, to maximise orientation for solar gain. However, this must also be balanced with the need to create perimeter block structures and active streets throughout the site.
- Buildings and spaces will be designed with opportunities to increase biodiversity where appropriate.



NATURAL SURVEILLANCE ONTO STREETS AND OPEN SPACES



RENEWABLE ENERGY TECHNOLOGY CAREFULLY
CONSIDERED IN STREETSCAPE



DESIGN TO ENCOURAGE ENHANCED BIODIVERSITY

100

OCIALISING

DENSITY

Residential Densities

As stated in the HGGT Design Guide, the "Garden Town will need a range of housing densities and typologies to provide the right mix of homes for people at all stages of life and for all budgets, including affordable homes". The guidance for Latton Priory states that the density should "support place-making, modal shift and viability by quality design". The guidance also states that densities can increase to 40 dwellings per hectare (dph) close to local centres.

The analysis of density, set out in Appendix 2, and briefly summarised in section 4, sought to look at densities in the surrounding area Densities in more rural locations within Epping Forest District, such as North Weald Bassett, are generally within the mid to high 20 dph range. In contrast, some of the more recent developments in Harlow reach densities of between 50-60 dph. This allows for more sustainable development and maximises the use of land. The Local Plan does not propose specific densities noting only the benefits of density in supporting sustainable development.

With the above in mind, the proposed densities set out on the plan (opposite) show density ranges that allow, at the higher end, densities that deliver significantly enhanced sustainability benefits. Lower densities of 20-30 dph are located around the rural/wooded edges and the properties on Rye Hill Road. Medium densities (of between 30-40 dph) are largely located in the central and northern parts of the site, to respond to the more urban context of south Harlow. Higher densities (of between 40-55 dph) are located around the local centre and the mobility hub to encourage more people to live close to the facilities and transport links on offer - thus ensuring a highly sustainable form of development.

The images (immediate right), are taken from the HGGT Design Guide and provide suitable typologies for Latton Priory. The lower density areas are likely to comprise detached, semi detached and terraces, whilst the higher density areas contain terraces and apartments.

Intimate, low-rise style, with private front doors alternating with garage doors. Flexible options to cater to a variety of changing household sizes, needs and lifestyles. Smaller average plot sizes can therefore achieve intermediary to high densities.

Typically one to four storeys

terraces can be converted

individual houses, allowing

along any given street. All

the while maintaining the

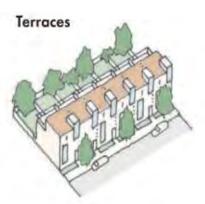
with well defined fronts and

desired street condition

backs.

for variation in unit types

into flats or remain as

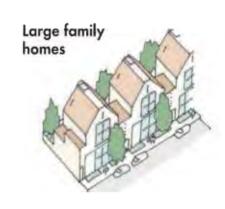


Terraced

Terraced apartments can agater to many needs. Lowerlevels can form maisonettes with private entrances or shops; whilst upper level apartments can have private Terraces and balconies. Can achieve high densities and can vary in scale to suit lacal context.



Paired dwellings of typically two to three storeys, set back from the street and suburban in character. Offstreet parking with strong visual links to front, side and rear gardens. Adaptable to changing needs and lifestyles, particularly that of a family.



Typically two to three storeys on large plots with generous und safe outdoor private amenity space. Good connections to communal or doorstep play space. Private garage spaces can be appropriate but should be adaptable for conversion, as should loft spaces.

Local centres



local centres provide opportunities for apartment perimeter blocks. High densities and a critical mass can be achieved with shops at ground levels to create active fronts. Suitable in urban contexts.

Above - Harlow and Gilston Garden Town Design Guide, Nov 2018

HIGHER DENSITY (40-55 dph) MEDIUM DENSITY (30-40 dph) LOWER DENSITY (20-30 dph) tree planting patterns

Around the local centre (40-55 dph)

- Buildings parallel with the street to create well enclosed streets and spaces
- Built form generally comprises terraces, townhouses and apartment buildings
- Streets should be formal with emphasis on hard landscape treatment and formal

(note: design code will look at testing block design in relation to promoting modal shift)

Northern areas (30-40 dph)

- Buildings generally parallel with the street to create well lined but less constantly
- Built form comprises a range of terraced and semi-detached houses and some apartments. An element of detached houses, may be included in the mix and within the density assumptions

(note: design code will look at testing block design in relation to promoting modal shift)

- Buildings generally parallel with the street with some varied setbacks to create greener, more informal streets and spaces
- Built form generally comprises a range of semi-detached and detached houses and some terraced houses.
- Front gardens should reinforce the soft landscape street character

(note: design code will look at testing block design in relation to promoting modal shift)

Illustrative Residential Densities

The masterplan base used here is illustrative only. It shows an example of how the site

could be developed in line with the SMF subject to testing and design development

BUILDING HEIGHTS

Building Heights

The plan (right) shows an approach to the spatial distribution of heights across the site. The distribution of illustrative building heights across the site has been determined by a combination of factors including: appropriate heights to achieve good place making; the visual impact of development on near and long distance views (see summary view plan opposite) and the residential densities set out previously.

Taller buildings of up to 3 storeys (approx 12.5m max) are located on the northern parts of the site, on lower lying land. This also facilitates higher densities in and around the local centre, ensuring that more people are in close proximity to the facilities and transport on offer there

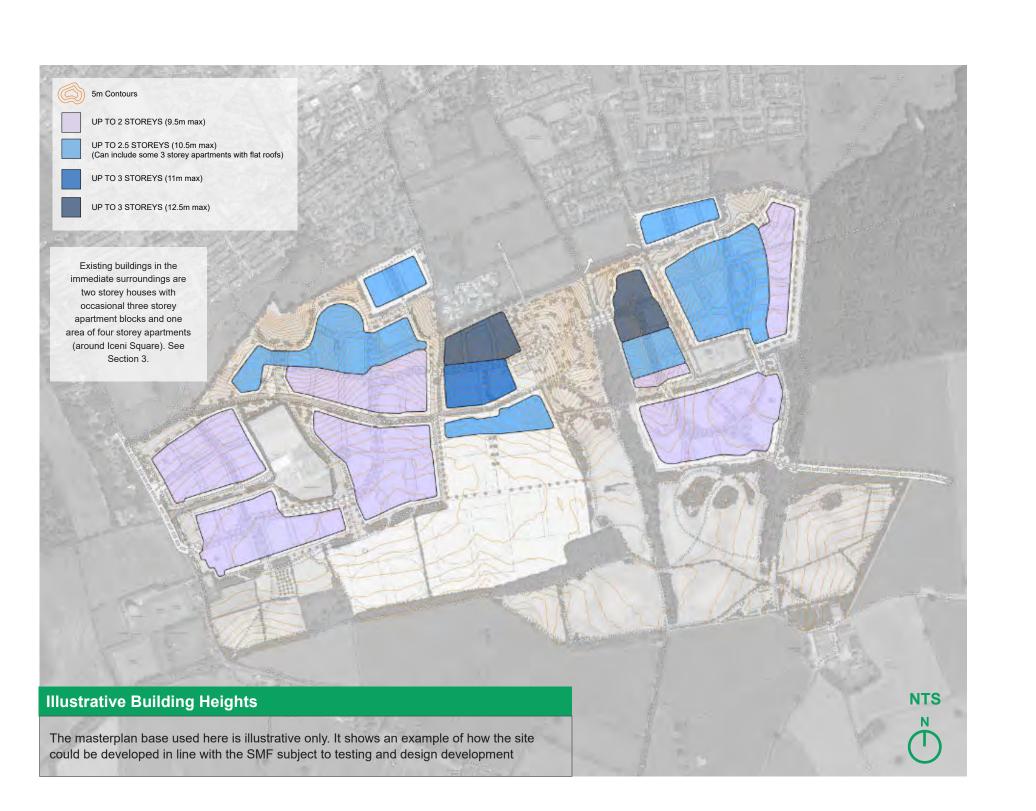
Within the southern half of the local centre (south of Latton Avenue), any development with commercial uses at ground floor level (which require higher floor to ceiling heights) may need to be limited to 2 storeys (e.g. commercial with residential above) as the land begins to rise here. Development here may require flat roofs - in keeping with the vignettes set out in the HGGT Design Guide.

The remainder of the site is up to 2.5 stories (10.5m max) or 2 storeys (9.5m max). 3 storey buildings (such as apartments with flat roofs) could also be accommodated within the 2.5 storey areas.

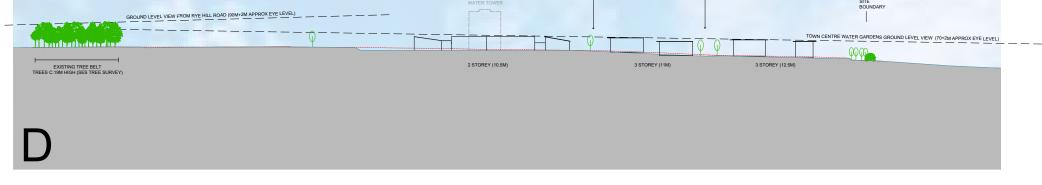
Development on the southern edges of the site should generally be limited to 2 storeys (9.5m) in height, having regard to the topography of the site.

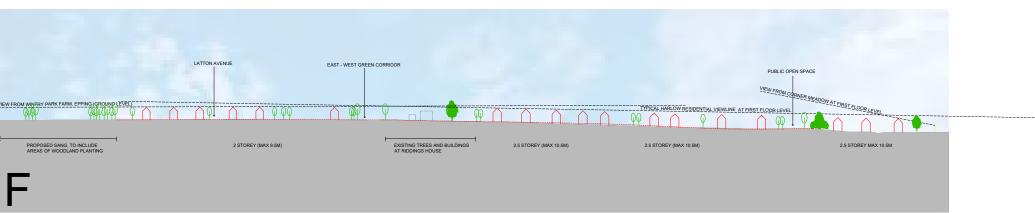
Existing buildings in the immediate surroundings are two storey houses with occasional 3 storey apartment blocks and one area of four storey apartments (around Iceni Square). See section 3.

Whilst the diagram opposite shows blanket building height ranges for different parts of the illustrative masterplan, it will be important that building heights are reviewed in detail at future stages in tandem with character, place-making, variety, wayfinding and visual impact both from within the new neighbourhood but also through interrogation of long views of the development.









Illustrative Site Cross-sections with Illustrative Building Heights

Key Views and Site Sections

A key parameter to the building heights are the long distance views from various points to the north within Harlow, including the Water Gardens and to the south from Epping (see summary plan below)

Section 3 describes the detailed analysis that was undertaken with regard to key views towards the site. Cross-sections (left) were undertaken showing the proposed earthworks strategy to inform building heights that would be contained by the existing and proposed structural landscaping in views from Epping to the south and which would retain a green backdrop in views from Harlow to the north.



Viewpoint locations and Visual Strategy Plan

VIEWS

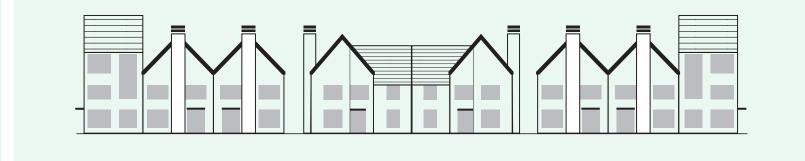
Protecting the Horizon

Latton Priory sits atop Rye Hill to the south of Harlow and marks the southern edge of Gibberd's original plan for the New Town. Because of this, the treatment of development on the higher areas of the site needs careful consideration so that new development does not have an adverse impact on long views from Harlow (and, to a lesser extent, from Epping). This has been addressed through the Epping Forest Local Plan and the establishment of a "build to" line. At a more detailed level there are several strategies which can be considered to help mitigate these issues:

- The typology and density of new buildings in this area needs consideration. Taller buildings will have a bigger impact as will typologies where the buildings are placed close together, such as terraced housing. These typologies should either be avoided in these high level locations or roofs designed to mitigate impact on views from Harlow.
- The aspect/orientation of the buildings also plays a part. Streets and buildings orientated east-west will have a bigger impact than those which are more aligned in a north-south direction as the streets and gardens help to break the massing of the buildings
- Landscaping can be used to further minimise the impact by providing a backdrop for the buildings to blend into. Several existing tree belts on the site will help to do this already but new planting can be used to extend these and create a natural horizon.
- Treatment of the horizon in regards to block structure and housing typology should be balanced against sustainable design considerations; including orientation for solar gain, achieving modal shift through design such as walkability of blocks and streets, and typologies relating to form.

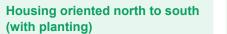
Housing oriented east to west (along horizon)

Taller buildings, like those on the end above, will have a bigger impact on views from Harlow. The orientation (east-west) and the typologies (terraced housing and semi-detached housing) risk exaggerating the issue.



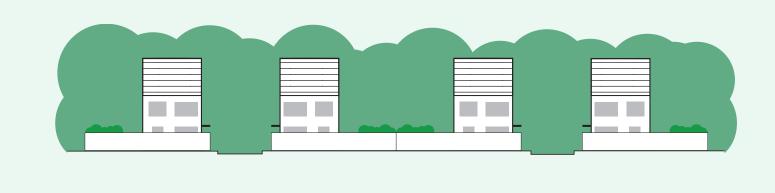
Housing oriented north to south (perpendicular to horizon)

By orientating the streets in a north-south direction, the impact is minimised. The streets and gardens help to break the massing of the development down so that there are glimpses of the horizon in between the buildings. The section (right) shows an illustrative street width with further testing to be undertaken.



Existing and enhanced tree planting will also help reduce the impact of development through creating a natural horizon and providing a backdrop to the development where the buildings blend in with the natural elements. The section (right) shows an illustrative street width with further testing to be undertaken.





LEGIBILITY AND PLACE-MAKING

Legibility and Place-making

The plan (right) shows the key legibility principles of the masterplan for Latton Priory. These are the key features that make the place memorable, legible for way-finding purposes and give it a sense of place. These are the areas that will benefit from a special design focus and are likely to be developed further through Design Coding.

A number of key frontages are shown. Frontages along the East-West Green Corridor will need particular attention to ensure a route which is harmonious in its scale, sense of enclosure and character with high levels of natural surveillance. Frontages along Latton Avenue will also need similar attention so that the route has a unified quality and is an attractive and safe environment to move along. Frontages across the local centre will need to provide a strong and harmonious sense of enclosure with active ground floor uses where ever possible and high levels of natural surveillance.

There are a number of nodal points along the East-West Green Corridor which should be clear, well designed and well over-looked spaces which will serve as markers for orientation and places where people can socialise or where play spaces are located. Section 9 provides an illustrative plan of a nodal point on the East-West Green Corridor. The plaza within the local centre is also a key location and nodal point along the East-West Green Corridor, albeit more urban in character. This will be the key gathering space for the development and the proposed STC.

Illustrative sections are provided in the following pages giving general guidance on the elements of the key routes and spaces in the masterplan. More detail is given with regard to the character of these streets and spaces in Section 9. Landmark buildings should be located in key locations, normally framing a key public space or on a key vista or line of sight, to further aid way-finding or create interest.

The plan (right) uses the illustrative masterplan to demonstrate principles for way finding and placemaking. The Design Code will provide further detail on how to achieve these principles and on the precise location, design and size of nodes.

Important Frontage Green Corridor ■■■ Important Frontage Key Green Nodes Focal Buildings → Key Views onto Open Space Main Gateways Existing G&T Site

Key Frontage -

Local Centre

Key Frontage

Key Nodes

Mobility Hubs



East-West Green Corridors

The East West Green Corridor is a green super link which runs across the site and provides an easily accessible route for walking and cycling. It is a highly attractive setting which

- encourages modal shift away from private vehicles.
- encourages healthy lifestyles
- provides a setting with potential to contribute to well-being including opportunities to socialise
- provides benefits for wildlife habitats and biodiversity

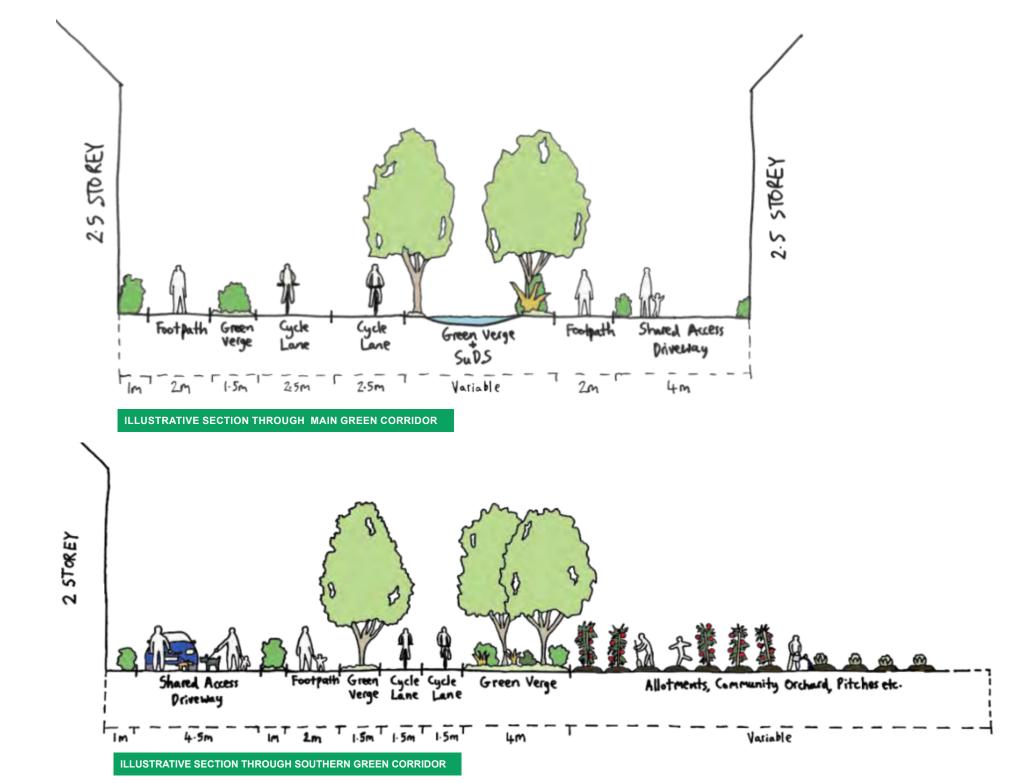
The East-West Green Corridor runs from the existing open space to the north west of the site, through the western area of housing to the local centre, through Latton Park and into the eastern section of housing and onto Mark Bushes.

The southern branch of the East-West Green Corridor runs along the southern boundary of the south western area of housing and loops up alongside the school pitches to converge with the main East-West Green Corridor at the local centre.

See the Building Heights plan above for building heights along the Green Corridors.r

Note: Shared access driveways shown on the illustrative sections (right) are dependent on further testing of the secondary/ tertiary road strategy





The drawings (left) show indicative cross sections through the main East-West Green Corridor and its southern branch.

Important design principles for the East-West Green Corridors are as follows:

- Consistency in terms of building heights and housing design along the length of the corridor to create a harmonious built backdrop
- High levels of natural surveillance from the houses that line the route will be important.
- The corridor may occasionally vary in width where it needs to accommodate front access drives or SuDS. However, the overall unity of the space and natural surveillance should not be compromised.
- Native tree planting and planting will be included to enhance biodiversity and habitat creation
- Play spaces and places to socialise/rest will be included, particularly at intersections with northsouth green fingers (See Section 9 for illustrative plan).
- The corridors and spaces within them should be designed to consider climate change in terms of species selection and considering the impact of sunlight and shade at different times of the day and year for residents. This is particularly important at nodes and places where people will rest/socialise.









Streets for Place-making

Whilst the street network design will be developed in more detail at future stages through testing and incorporation of best-practice design principles, the illustrative street sections shown here could be used as part of a cycle and pedestrian-friendly street network. Further development may include measures such as car-free streets or areas where the prevalence and convenience of cars is reduced in the interests of safety, vibrancy, character and high-quality public realm. The illustrative sections show overall dimensions for each street as identified on the illustrative street hierarchy plan. Building heights may vary in line with the building heights strategy.

Primary Street: Latton Avenue:

This is the main avenue and vehicular/bus access route through the neighbourhood. It also accommodates pedestrian and cycle routes. The design of this street should ensure that:

- Strong frontage and strong consistent building line is especially maintained to create a sense of enclosure.
- Street trees are provided within green verges either side of the route,. Where space permits, species will be selected that reach a mature height of between 12-17m. Where street trees will provide part of the planted horizon, ultimate tree height should be considered in relation to this where growing space allows and this may result in heights less than 12m.
- Footpaths are provided on both sides of the road.
- A two way cycle lane is provided on one side of the road.

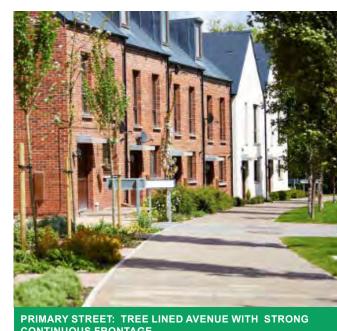
Building heights along this street will vary.

Secondary Streets:

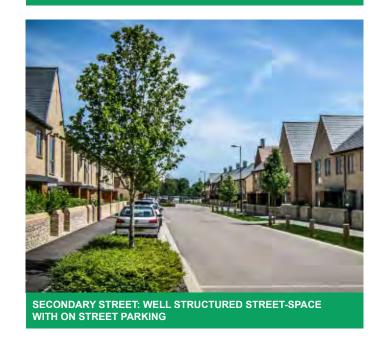
These are the main streets into the sub areas of the neighbourhood from Latton Avenue. They should:

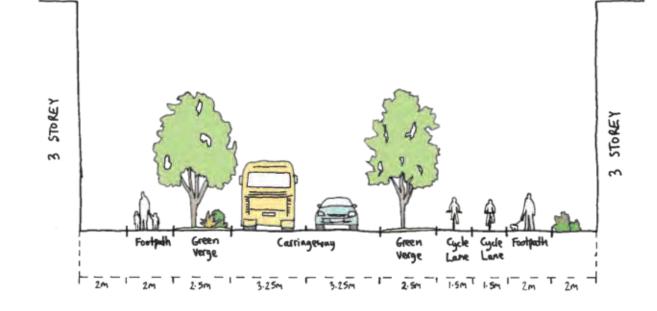
- Have strong frontage onto the streets, although there is more possibility for a more informal layout and variations in the building line and set-backs
- Have a green verge and tree planting on one side of the street with footpaths either side.

Building heights along these streets will vary.

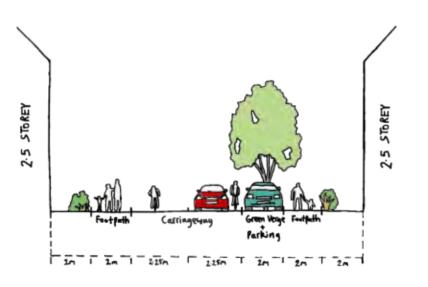


ONTINUOUS FRONTAGE

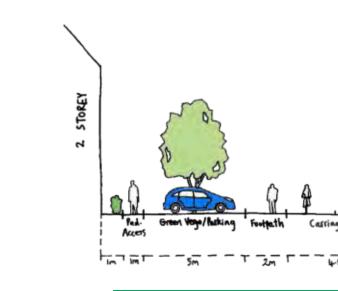




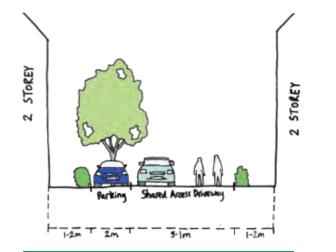




ILLUSTRATIVE SECONDARY STREET: MAIN ACCESS STREETS

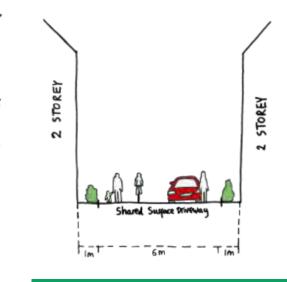


ILLUSTRATIVE TERTIARY STREET: LOCAL ACCESS STREET

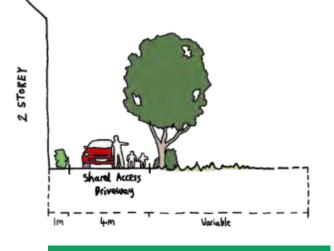


ILLUSTRATIVE SHARED SURFACE ACCESS STREET

Note: Shared access driveways shown on the illustrative sections (left) are dependent on further testing of the secondary/ tertiary road strategy



LUSTRATIVE SHARED SURFACE ACCESS STREET



ILLUSTRATIVE SHARED SURFACE ACCESS DRIVEWAY **EDGE OF DEVELOPMENT**



ERTIARY STREETS: INCORPORATING ON STREET PARKING



SHARED ACCESS STREETS: PEDESTRIAN AND CYCLE FRIENDLY STREETS



EDGE OF DEVELOPMENT: HOUSES FRONTING ONTO GREEN SPACES

Tertiary streets will be similar in character to secondary streets but will have a narrower carriageway and may be more informal in character.

As with secondary streets, frontage onto the streets is important but the street can accommodate less formality and a generally consistent but less continuous building line with the possibility of set backs which may also accommodate on-street parking.

Access Driveways:

Access driveways are shared surface spaces within blocks or on the edge of the development. Pedestrians and cyclists have priority on these streets.

Within blocks:

- Frontage and overlooking are important but there may be more variation in the building line creating more informal layouts and spaces
- Street trees are important to place-making and may be used in a less formal way to define spaces within the street
- Choice of materials will be important to reinforce pedestrian and cycle priority

Around the edges of the development, these streets:

- Generally front onto open space or woodland.
- May have more variation in the building line especially in areas of lower density.
- Should comprise planting that is likely to be more naturalistic with strong opportunities for enhancing biodiversity alongside woodland or in open spaces

Edge Conditions

The edges of the site are extremely important for placemaking and interface with the surrounding environment. The following pages show illustrative cross-sections with broad guidelines for dealing successfully with the development edges.

Northern and western edges

The new neighbourhood will be well integrated into communities of Tye Green, Stewards and Latton Bush to the north and with the existing development to the west on Rye Hill Road. Previous sections have shown how the masterplan seeks to address this by retaining and integrating the existing public rights of way and routes which connect with the surrounding areas and by introducing new routes across the masterplan area. This ensures new residents are able to use existing facilities nearby as well as allowing existing residents to have easy access to any new facilities being offered

Dwellings on the northern edge are part of the northern gateway to the neighbourhood and this aspect should be considered in their design. Section 9 provides a more detailed illustrative plan for this area

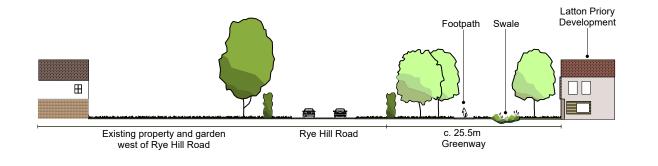
This also applies to dwellings on the western edge facing Rye Hill Road particularly near the start of Latton Avenue although this gateway is not as prominent as the northern edge gateway.

The plans (right) show cross-sections of these areas.

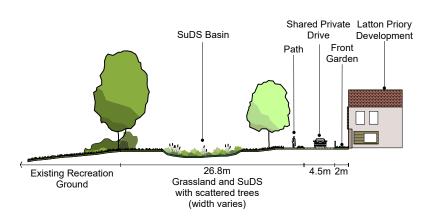




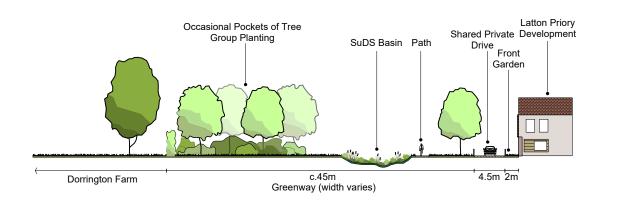
HOUSING FACING THE EXISTING RECREATION GROUND WILL BE IN A GATEWAY LOCATION



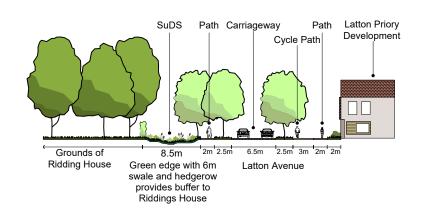
1 ILLUSTRATIVE WESTERN DEVELOPMENT EDGE TO RYE HILL ROAD



2 ILLUSTRATIVE NORTHERN BOUNDARY ONTO EXISTING RECREATION GROUND



3 ILLUSTRATIVE EASTERN BOUNDARY OF DORRINGTON FARM



4 ILLUSTRATIVE SOUTHERN BOUNDARY OF RIDDINGS HOUSE



ACCOMMODATE A SWALE



Boundaries with Dorrington Farm and Riddings House

The boundary between the new neighbourhood and Dorrington Farm and Riddings House needs particular attention to ensure these existing properties are integrated sympathetically into the development and are carefully designed such that their future integration could also nappen should it occur.

The landscaping around Dorrington Farm and Riddings House (which are not in the SMF area) has been carefully designed to contain these areas, but also reads as integral to the network of green fingers and corridors. Planting of boundary hedgerows around these sites is versatile so that in the future they can be allowed to grow tall or be maintained at a low height.

Note: Shared access driveways shown on the illustrative sections (left) are dependent on further testing of the secondary/ tertiary road strategy.



This will be a key edge of the neighbourhood and fronts out towards the countryside. It, therefore, needs careful

attention. It is important that this is a strong defensible

boundary. A strong frontage with a consistent building

Eastern edges:

An attractive edge must be created onto surrounding woodland and open spaces. Housing should front onto open spaces and woodland around the site edges. This allows woodland and open space to form an attractive setting for homes, provide natural surveillance for residents and also protect trees and open spaces by keeping them in public space or visible from it.

Development in the north-eastern corner of the site is bounded by Mark Bushes. The design of routes and networks in this area should provide future flexibility to connect through into this site.

Section 9 provides a more detailed illustrative plan for the area adjacent the SANG.

Cross sections for these edges are shown (left).

Development edge onto Green Wedge

It is very important that there is a successful development edge around the strategic Green Wedge where residential or local centre uses are adjacent to it. Homes should front onto Latton Park or the SANG area with regular windows and balconies. It is particularly important that there is a lot of animation (frequency of windows/ balconies/doors and size of openings) on these elevations and that these elevations are very carefully considered so that they successfully overlook and give a sense of natural surveillance onto the wider space of the park.

Apartments facing the park in the local centre also have an important function to provide a gateway to the neighbourhood for those arriving from the east and this must also be considered in the design of these dwellings. Section 9 provides a more detailed illustrative plan for this area.

Commercial and community uses as well as uses in the mobility hub should have active frontages to provide natural surveillance into the park and also so that the park can be enjoyed by residents from these facilities

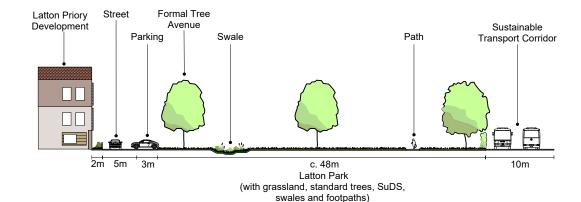
The plans (right) show cross-sections of these areas.

Note: Shared access driveways shown on the illustrative sections (right) are dependent on further testing of the secondary/ tertiary road strategy

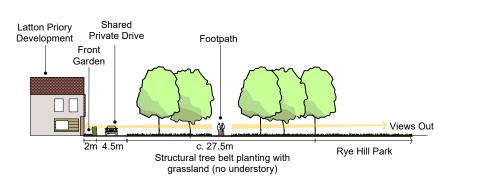
Southern edge onto Rye Hill Park



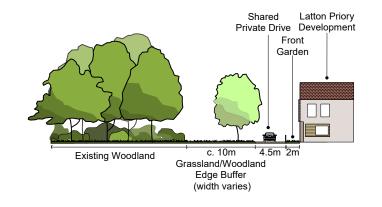




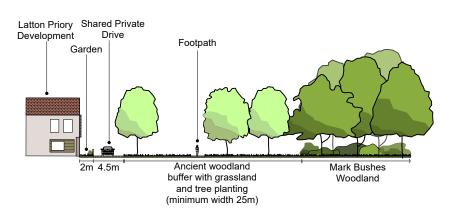
5 ILLUSTRATIVE DEVELOPMENT EDGE ONTO LATTON PARK



6 ILLUSTRATIVE SOUTHERN DEVELOPMENT EDGE TO RYE HILL PARK



LLUSTRATIVE DEVELOPMENT EDGE FACING WOODLAND

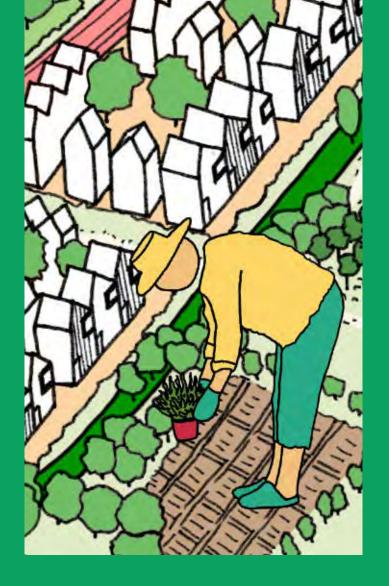


8 ILLUSTRATIVE EASTERN DEVELOPMENT EDGE ONTO MARK BUSHES





HOUSES SHOULD FACE WOODLAND



Character Areas











CHARACTER AREAS

Creating Distinctive Character

The guidance set out over the following pages provides an initial framework for the development of character within the site.

The size of development at Latton Priory will mean that a series of new local character areas will be created within it to create a neighbourhood that is varied, attractive and responsive to its unique context.

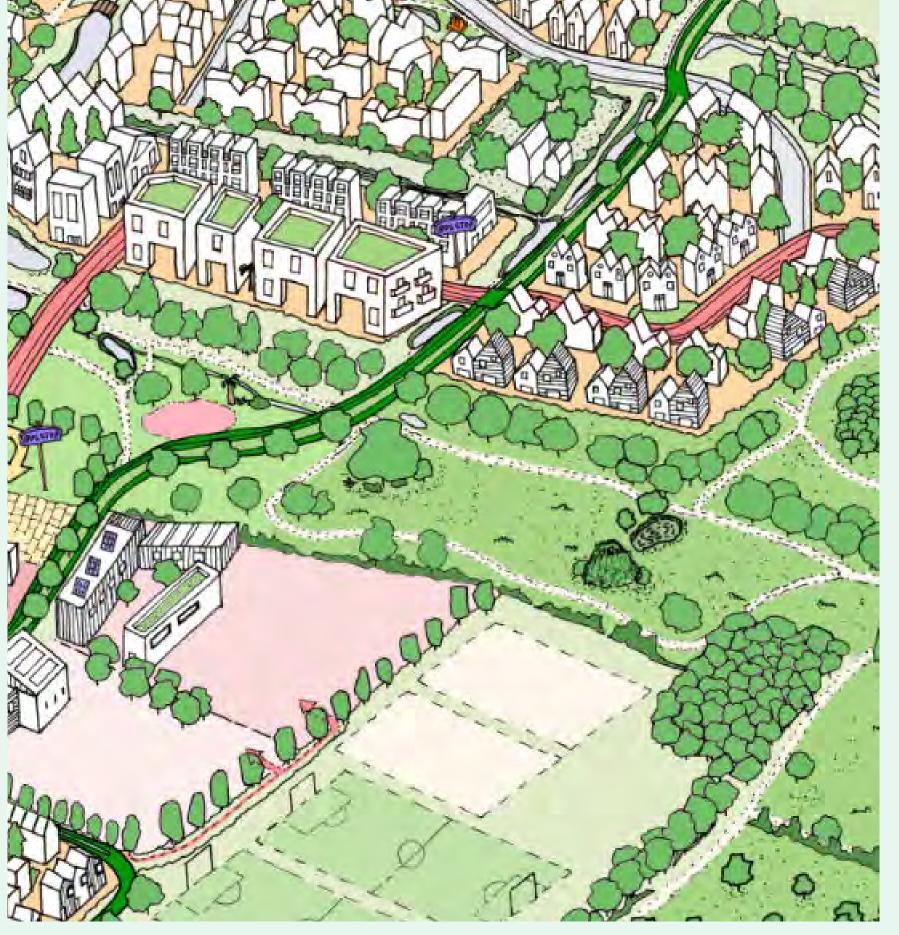
This section will form the basis of a strategic design code for Latton Priory, being prepared by Epping Forest District Council, which will focus on active travel and the routes and spaces within the site.

Character Generators

Character can be defined by things like the typology and density of development, relationship with surrounding features, landscape and architectural approach and material selection.

The approach to the character areas at Latton Priory has been informed by:

- The context and site appraisal and using the assets of the existing site. These are often landscape aspects such as woodland or topography, which have inherent place-making potential to provide the key identity of a character area. Landscape, both through existing assets and new landscape elements, is a crucial component of reinforcing character.
- Understanding the wider existing context to ensure the character area is well integrated into the surroundings. This involves both landscape and urban context and drawing on the character of Harlow and nearby settlements where appropriate.



CHARACTER AREAS

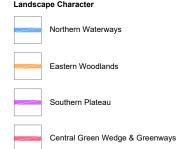
The plan (opposite) shows the **character areas** within the site. This should also be read in conjunction with the landscape character areas identified in section 7 and also shown in simplified form below.

Five distinct character areas have been identified, all influenced by their location within Latton Priory and the characteristics of their surroundings with an emphasis on the surrounding landscape character.

The section sets out **broad principles** to establish the character of each area and the key components and aspects of design that are important to consider. It sets outs how the **urban form** can reinforce the area's **unique identity** (for instance through urban grain, block structure, or house types) and the key role the **landscape approach** plays in achieving this based on the landscape character areas previously identified within the site (see also Section 7).

Landscape Character Areas Plan

Key



CHARACTER AREAS

CA1 - Heart of Latton Priory

CA2A - Lower Rye Hill South

CA2B - Lower Rye Hill North

CA3 - Upper Rye Hill

CA4 - Latton Priory Woods

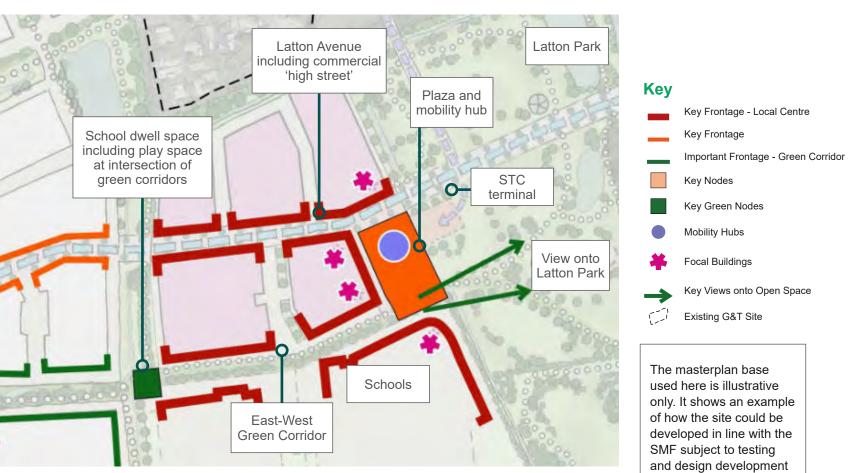
The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development



HEART OF LATTON PRIORY CHARACTER AREA 1

The local centre is the heart of the new neighbourhood and within walking and cycling distance of all residents. It accommodates a vibrant mix of uses and the design of its environment will be a key part of its success as an attractive and vibrant place.





Key Principles & Features

- A vibrant centre with a mix of commercial, community, employment, education, healthcare and residential uses (potentially including Extra Care accommodation, Care Home and/or retirement
- The main East-West Green Corridor and Latton Avenue pass through the local centre, ensuring that it is fully connected to the wider neighbourhood
- It has a main plaza which is a focus for community uses and activities. It is also adjacent to Latton Park and the indicative proposed location of the STC
- The mobility hub is located in the main plaza near the indicative proposed location of the STC terminus.
- Commercial activity should be focused in a linear manner along Latton Avenue
- The intersection of the two green corridors adjacent to the primary school will form a key space including
- The plaza will be fronted by key buildings including commercial uses, the mobility hub and the secondary school
- Integral design for biodiversity, proposals to incorporate planting to support a range of habitats, providing wildlife connectors as a key green infrastructure component.



View towards Harlow from Location of Latton Park

Illustrative Layout Options

Three local centre illustrative layout options have been undertaken. The options assessed two main characteristics of the local centre which were:

Where the employment should be located

- The Local Plan allocation requires additional employment land at Dorrington Farm but which is not included within the SMF boundary. It is still the intention for small scale employment uses to form an integral part of the mixed use centre and a number of options have been considered which adjust the scale and nature of uses envisaged.
- These options explored whether employment uses should be located in one area or whether they should be part of a mixed use centre. Options 1 and 2 show employment as part of a mixed use centre. Option 3 shows an area of pure employment land in the northern area of the local centre although this is not a bestpractice option. It was agreed at the HGGT Quality Review Panel that employment should be part of a mixed use centre to support its vibrancy and viability.

The best arrangement for commercial uses.

 Option 1 and 3 presented the commercial uses focused around a plaza. Option 2 presented the commercial uses in a linear configuration along Latton Avenue with community uses fronting the plaza. The linear arrangement (Option 2) was considered most suitable by both Epping Forest District Council and the HGGT Quality Review Panel.

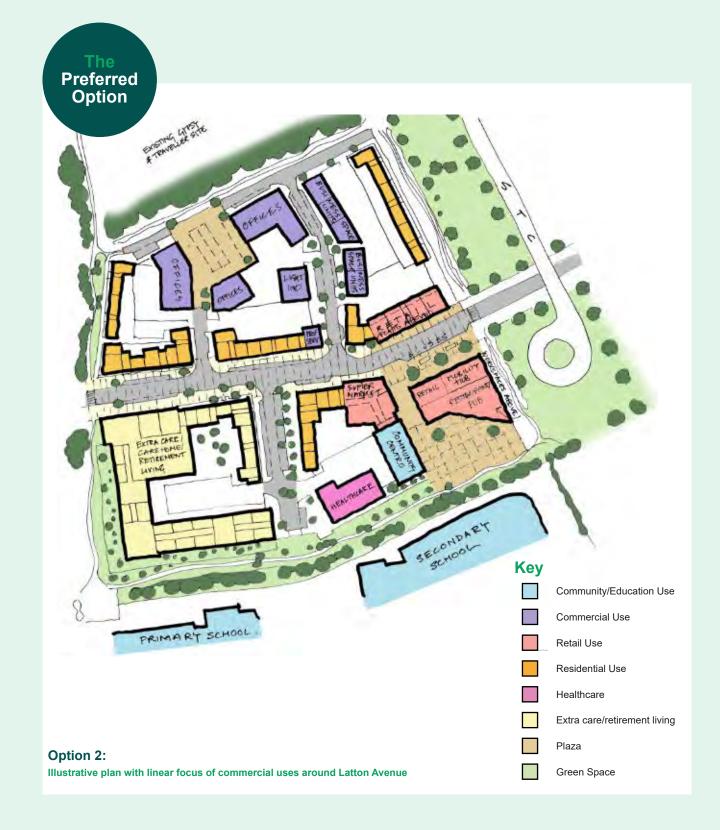
Overall, Option 2 (larger image, shown right) was considered the preferred option.



Illustrative plan with focus of commercial uses around plaza



Illustrative plan with employment north of Latton Avenue



Key design principles for the character area

Architectural and design character

- This area is located at the very centre of the development and comprises the mixed use local centre and a new park (Latton Park)
- Takes inspiration from the role and function of the 'neighbourhood centres' and 'hatches' which are a key part of the Harlow New Town masterplan. However it does not seek to replicate their architecture or their design issues (as detailed in Section 4)
- Streets should have continuous building frontage and building line to create a sense of enclosure..
- Active frontages should be included wherever possible and natural surveillance over streets from balconies and windows above is important.
- Units within the local centre should be flexible and respond to future community needs.
- Architecture should be contemporary and landmark buildings (through design, rather than height) placed at key arrival points and key vistas.
- Street parking can be provided on Latton Avenue, but rear courtyard parking should be provided for the apartments and offices.
- Service rooms, such as plants rooms, need to be well concealed and not located on the main Latton Avenue or plaza to ensure a high quality public realm.





High quality community facilities





Building form in keeping with central location



Contemporary use of traditional materials

Landscape character

- Central, high quality public plaza at the heart of the local centre. The plaza could contain areas for shelter (trees) and space for social events and community gatherings with the potential for appropriate planting where people of all ages, genders and abilities , feel safe and welcomed. The plaza should also contain seating areas that make the most of the south facing aspect.. High quality surface materials should be used for the plaza.
- Latton Park will be a key destination for both the residents of Latton Priory and surrounding communities, offering play space, community gardens, quiet seating areas and a community pavilion. It also offers views back towards Harlow, establishing a sense of place Latton Park will be more formal in character including semi-ornamental parkland trees
- Provision is safeguarded within Latton Park for the arrival space for the STC into Latton Priory and this route needs to be carefully integrated into the landscape.
- An avenue of trees should help to define the East-West Green Corridor as it crosses Latton Park to create definition and legibility for the route. Species will be selected that reach a minimum mature height of between 12-17m in height to provide the planted horizon line as per the site sections. Native planting and grassland will further strengthen the route as a wildlife corridor.
- Landscape design for biodiversity to include conversion of arable land to meadow grassland with native tree planting, ornamental plants for pollinators in formal areas, wetland habitats, and to consider potential for green wall and roof design in buildings and structures.









- Neighbourhood Equipped Area of Play (NEAP) Amently gress/Kox-about area Sustainable Trateport Station
- Community Gardans Quiet park area with seating for residents and
- 6 informal parkland, tree planting follows contours.
- Cafe with views out to Harlow Town Centim
 SuDs features form integral part of park
- 9 Latton Avenue 10 Existing PRoW ===
- informal recreational routes 2. Sustainable Transport Comidor
- Frontage onto Park for natural surveillance
- Est-West Grown Link
- Long views to Harlow Town Centre with potential for sealing, harmnooks or swings usee Make Space for

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development



Multi-use facilities for all ages

Illustrative vignette of Latton Park

LOWER RYE HILL SOUTH **CHARACTER AREA 2A**

Located in the north west of the site, this character area fronts Rye Hill Road and the existing public recreation ground to the north. The key characteristic within this area is the East-West **Green Corridor and the SuDs** features on the northern boundary

RYE HILL ROAD





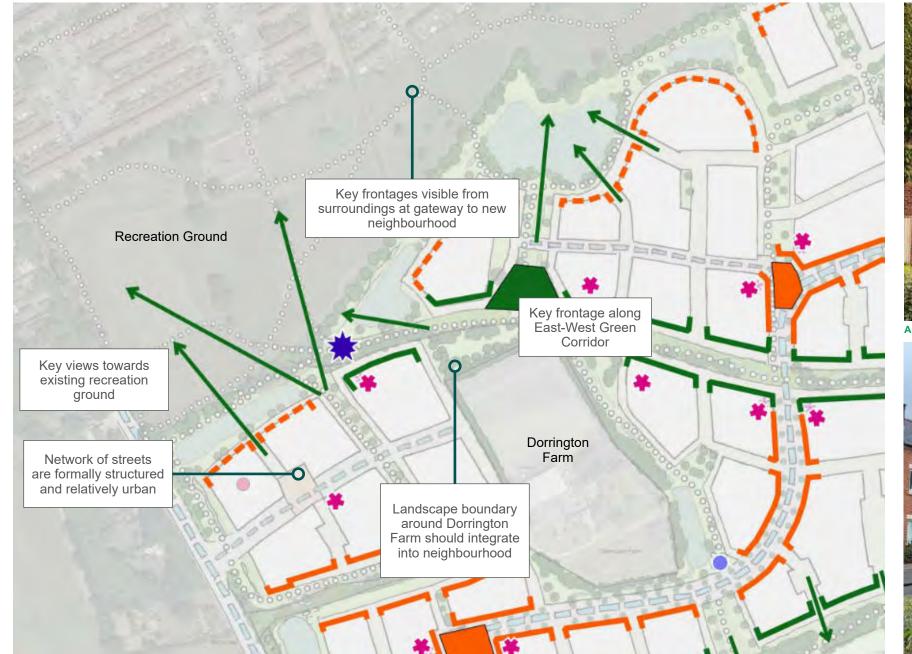






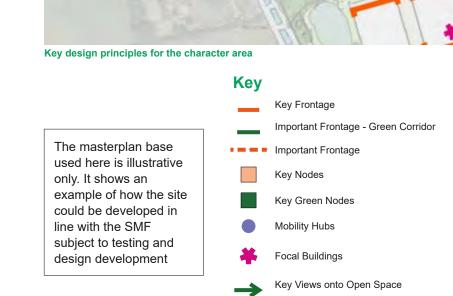
Key Principles & Features

- Situated on Rye Hill Road and adjacent to the existing recreation ground to the north, this character area is the 'front door' to the new neighbourhood and it also marks the start of the East-West Green Corridor
- This will be a key gateway for pedestrians and cyclists arriving in the neighbourhood. It is also opposite the structured terraces of Stewards on the other side of the existing public open space
- Because this area is the main 'gateway' of the neighbourhood, the character of this area is structured and relatively formal with strong frontage onto the public open space and SuDS features to the north and onto the East-West Green Corridor to the south. Focal buildings along this frontage will be particularly important as they will be highly visible from the surroundings.. It also is a gateway to the neighbourhood from Rye Hill Road. The development is set back from Rye Hill Road with a wide linear open space with planting which enhances the existing
- Within the lowest lying northern parts of this area the SuDS basins and swales will be a dominant landscape feature, they will be designed as integral wetland habitat that forms a part of the northern waterways landscape character along the northern, lower lying fringes of the development.
- Dorrington Farm is located within this character area. Addressing the boundaries of the farm is an important component of the landscape approach to satisfactorily integrate it from the surrounding development.
- There are strategic views to be considered in this character area such as views from Harlow Town centre and views to the landmark poplars at Dorrington





Green fingers incorporating SuDS features



Main Gateways

Architectural and design character

- As the gateway character area and the area closest to Harlow, there should be an element of formality in the structure of the streets and planting.
- The East-West Green Corridor, that begins within this character area, must be successfully framed by consistent and strong frontage
- The character area also slopes down to proposed SuDS ponds on the northern boundary. It will, therefore, need to work closely with and address these landscape elements as well as the recreation ground to the north
- It has a strong physical and visual connection to the existing south Harlow neighbourhoods. The built form and character should be more modern and in keeping with the post-war, New Town context
- The proximity to South Harlow should also mean that the grain of this neighbourhood is more urban in character
- A mix of predominantly terraced and townhouses with some apartments and some semidetached dwellings. An element of detached houses may be included in the mix and within the density assumptions





Strong frontage along Rye Hill Road



Jrban form should reflect gateway characteristic of the area





Housing at Newhall which references New Town architecture

Landscape character

- Tree lined East-West Green Corridor running through the character area.
- Formal planting should be as a key component of a strong structured network of streets
- Swales and SuDs basins should integrate into the landscape area. They are designed to maximise biodiversity, providing a wetland landscape character and form a key setting for housing.
- The N/S green corridor within this character area leading to the SuDS basins will also have a wetland park character.
- Lined SUDs make an attractive waterside setting
- The EW Green Corridor provides a key wildlife corridor across the character area with habitats to maximise biodiversity.



Tree-lined East-West Green Corridor



Simple dry swale running along street



Planting as key component of strong formal street structure



High quality streets and outdoor spaces



Illustrative vignette of nodal space on East-West Green Corridor

- 1. E-W Greenway
- 2. Native hedgerow and tree planting around Dorrington Farm 7. Sociable seating
- Orchard trees
- 4. Community gardens
- 5. Focal feature (doorstep play and/or public art)
- 8. Swales (formal)
- 9. Swales (informal)
- 10. Views along the Greenway

shows an example of how the site could be developed in line with the SMF subject to testing and design development

The masterplan

base used here is

illustrative only. It

LOWER RYE HILL NORTH **CHARACTER AREA 2B**

Located in the north of the site, this character area also fronts the existing public open space. The key characteristic within this area are the SuDS basins which give it its character.

This character area plays an important role in facing towards Harlow to the north but also the Heart of Latton Priory to the east.



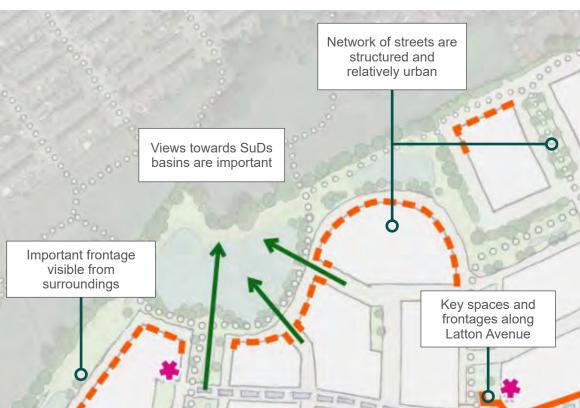
Key Principles & Features

- Situated within one of the lowest points of the site, this area contains many of the proposed SuDS ponds and it will have a distinctly wetland feel.
- Green fingers running north south are also important recreational and wildlife corridors within this character area
- Views towards the existing open space and SuDS basin will be an important feature.
- Located in the north of the site and with a strong physical and visual connection to the existing south Harlow neighbourhoods, the urban grain in this part of the neighbourhood will be formally structured and relatively urban.
- The frontage onto the northern boundary will be especially important as it is highly visible from the existing recreation ground and the existing neighbourhoods.
- Part of Latton Avenue runs through this character

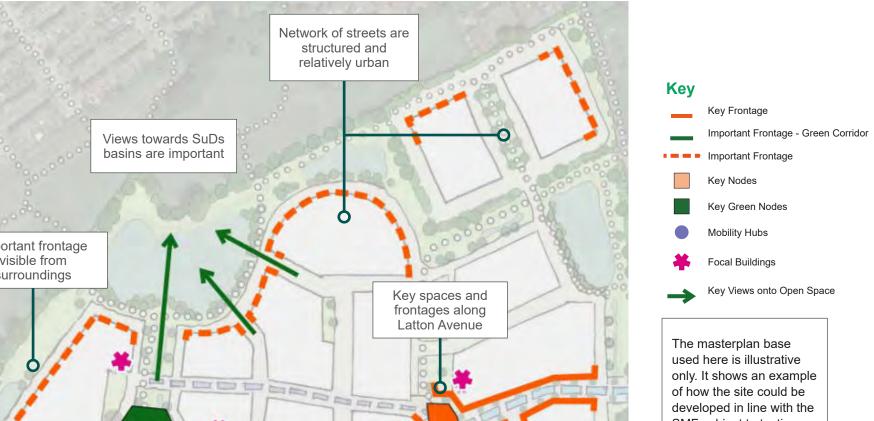




Existing context: the existing neighbourhood of Stewards and the existing recreation ground



Key design principles for the character area



The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development



Views towards SuDS basins are an important feature of this area



Landscape and housing working with the topography



Green fingers will be key spaces within the area

Architectural and design character

- A strong and fairly formal structure of streets across the area
- Dwellings front onto SuDS basins and the built form character will need to work closely with and address these landscape elements as well as the recreation ground to the north.
- The built form character area should be more modern and in keeping with the post-war, New Town context
- The proximity to south Harlow should also mean that the urban grain of this neighbourhood will be urban in character
- A mix of predominantly terraced and townhouses with some apartments An element of semi-detached and detached houses , may be included in the mix and within the density assumption
- Due to it being one of the lowest part of the site, there is potential here for taller buildings and higher density



Housing overlooking attenuation ponds and landscaped green space



Houses framing green fingers





Strong structure and enclosure to streets



Integration of swales and SuDS within housing area

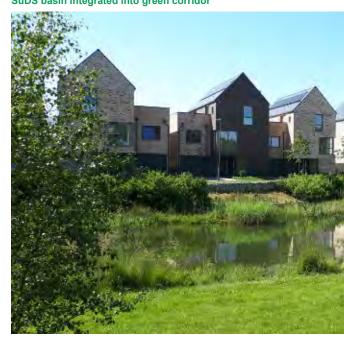
Landscape character

- Overlooking wetland and existing recreation grounds to the north
- Network of north-south links accommodating swales, wildlife and existing vegetation with habitats to maximise biodiversity
- Wetland / SuDS landscape along northern edge, designed to maximise wildlife bio-diversity
- Tree lined East-West Green Corridor running along southern edge. is also a wildlife corridor through the site.



Green corridor running through housing development at Beaulieu Housing set around SuDS pond







- Swales (informal)
 Native wetland planting
 SuDS/ wetlands
 SuDS/ wetlands

is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development

UPPER RYE HILL CHARACTER AREA 3

Bordering new public open space and open countryside to the south, this character area is the gateway area for Latton Avenue.

Key Principles & Features

- Despite being on the edge of the development, the block structure here retains an element of formality, picking up on the urban form of the edges of the surrounding villages (such as North Weald Bassett, as shown in Section 4 and Appendix 2). The intention here is to avoid curved and winding streets which are out of character with the surrounding area.
- The blocks within this character area are largely orientated in a north-south direction to enable breaks in the urban form when viewed from Harlow to the north. Care will also be needed to ensure that sufficient frontage will face onto Latton Avenue.
- Within the relatively formal block structure, the urban grain can be broken down, allowing for lower density housing (e.g. semi-detached and detached).
- Rye Hill Rd runs along the western boundary of the site which is the main vehicular access point. This character area is therefore a gateway area to the new neighbourhood and the built form will need to reflect this, through landmark buildings and strong frontages.

- The southern branch of the East-West Green Corridor runs along the southern edge of the development and then along the western edge of the school pitches to meet the main East-West Green Corridor,
- To the south of the development is Rye Hill Park, which is centred on Rye Hill Moat Scheduled Monument, with public open space, public playing fields, allotments and community orchards.
- Building heights within this area will be controlled to ensure that within views from Harlow Town Centre development will be back-clothed by structural planting
- The southern boundaries of Dorrington Farm in this area will need to be carefully addressed through landscape treatment so that it is fully integrated into the surrounding environment.

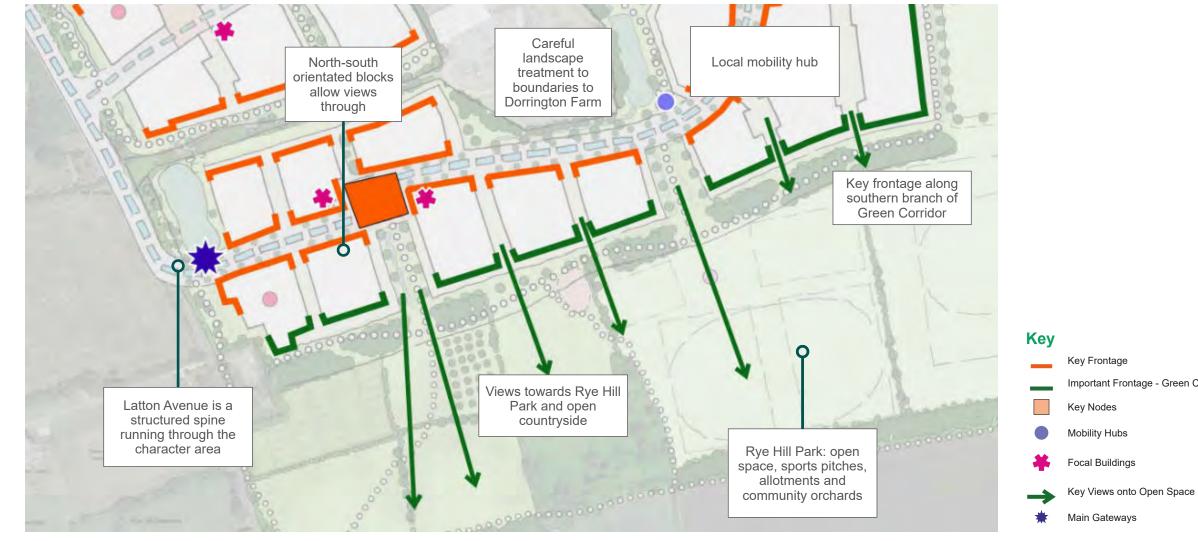








Existing context: Rye Hill Road , Dorrington Farm and the high point in the south western area of the site



Key design principles for the character area

The masterplan base only. It shows an line with the SMF design development

used here is illustrative example of how the site could be developed in subject to testing and

Key Frontage

Important Frontage - Green Corridor

Architectural and design character

- The urban form is formally structured in keeping with local settlements.
- To reduce the impact of development on long views from Harlow and from Epping, development close to the plateau will be generally limited to two storeys and with a lower density which will translate into housing typologies which are likely to be detached, semi-detached and bungalows.
- The built form character of this area can be flexible but it is most likely to take cue from traditional Essex vernacular but with a contemporary twist
- Latton Avenue is a structured tree-lined spine running through the area.
- Housing here must overlook Rye Hill Park to the south and ensure passive surveillance of this space.





The Latton Avenue is a tree-lined avenue running through this character area





Pockets of lower density housing within landscape



Larger properties which front on to open space with access lanes

Landscape character

- Landscape to form a key role as a buffer to the Scheduled Monument
- Southern edge overlooks wider countryside
- Network of north-south links accommodating wildlife and existing vegetation
- Tree-lined Latton Avenue and tree-lined southern branch of East-West Green Corridor running along the development edge
- Formal and semi-formal open space including allotments, community orchards, a play area, informal open space and sports pitches
- Rye Hill Park will incorporate new meadow habitats, reinstated historic hedged field boundaries and native woodland belts that connect existing habitat islands within the vicinity of Rye Hill Moat and the remnant field boundaries.



- 1. Sports Pitches (not floodlit)
- 3. Kick-about Area
- 4. Orchard 5. Allotments
- 6. Reinstatement of Historic field boundaries
- 7. Rye Hill Scheduled Monument
- 8. Views to the South
- 9. Footpath Link to ForestWay/Stort Valley Way
- 10. New Bridle route & Historic connection between Rye Hill & Latton Priory reinstated
- 11. School Sports Pitches
- 12. Planting to link existing woodland blocks
- 13. Woodland planting on high point to provide backdrop to residential development
- 14. Natural surveillance from residential frontages
- 15. N-S Greenway foot/cycle path (3m width)
- 16. Potential Pavilion and Parking

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development



Community orchards as meeting spaces for residents



Interpretation boards provide a high quality visitor experience at Rye Hill Moat



Allotments: a community focus and encourage healthy lifestyles Sports pitches are part of the public open space



LATTON PRIORY WOODS CHARACTER AREA 4

Surrounded by woodland, close to the SANG and Latton Park this character area takes its character from the unique natural settings in this part of

Key Principles & Features

- This area is influenced by Mark Bushes to the east and the strong linear tree belt to the west. These features create a sense of enclosure. Even though there are wetland areas, the predominant characteristic of the area is one of woodland character
- This character area also benefits from framed views north towards Harlow.
- Latton Park is also adjacent to this character area, albeit only the north western corner fronts onto it.
- The SANG is located to the south and is also another key landscape feature and influence in this area
- The northern part of the area is adjacent to the existing Harlow neighbourhood of Latton Bush and the building form will need to address this so that the neighbourhood is well integrated with its surroundings.
- Riddings House is located within the character area and its boundaries will need careful landscape treatment to screen it from the surrounding area or ensure an otherwise appropriate relationship









Tree belts in the eastern part of the site and views towards Harlow town centre



Architectural and design character

- The housing here should address, respect and front onto its surrounding woodland setting with a built form character and use of materials reflecting this more natural setting.
- Opportunity for taller (3 storey buildings) in the north on lower lying land close to the urban edge with lower two storey buildings on the higher ground to the south.
- Potential for a more formal structure in the north, adjoining Harlow and a more informal layout in the south, adjacent to the SANG.



Housing set against the woodland with a material palette which com



Housing facing on to woodland tree belt





Strategic hedgerow planting to screen housi



Housing set within mature woodland landscape

Landscape character

- Southern edge overlooks suitable alternative natural greenspace (SANG) whilst northern edge overlooks wetlands.
- Eastern and western edges overlook existing woodland, with intervening landscape buffers.
- Tree lined East-West Green Corridor running through the centre.
- The SANG provides a new defensible boundary to the green belt along the southern boundary of the site and a buffer to the Latton Priory heritage asset.
- It comprises 28.8ha of naturalistic landscape with new meadow, scrub and woodland habitats to support biodiversity and provide alternative accessible open space in order to avoid placing pressure on existing sites of international and national importance including Epping Forest. The detailed design will consider fire-risk as this is understood to be a concern.
- The SANG will be designed to incorporate specific habitats, vegetation and ecological features to support and enhance the flora and fauna recorded within the site, being informed by the results of all ecological surveys.
- Heritage features as a key component of the SANG, with reinstatement of the former Drover's route (as a bridle / cycle way) between the Rye Hill Moat and Latton Priory scheduled monuments, and re-creation of historic field boundaries and meadows.
- Panoramic views will be available from the SANG, south towards Epping and towards the scheduled monuments.
- The SANG acts as a connecting hub between existing and new bridleways, providing connections north and west from the existing east / south bridleway, supplemented by a circular walking route.
- Interpretation signage, and dogs bins will be included.
- The detailed design will be informed by the guidance provided in the Council's adopted Green Infrastructure Strategy and by Natural England.
- Discussions to take place between the relevant organisations regarding local byelaws and Public Space Protection Orders (PSPOs) relating to the governance of the SANG. These could cover a range of anti-social behaviours such as dropping litter, lighting fires and dog control all designed to keep this area safe and attractive to all users.



Natural meadow with circular walking route



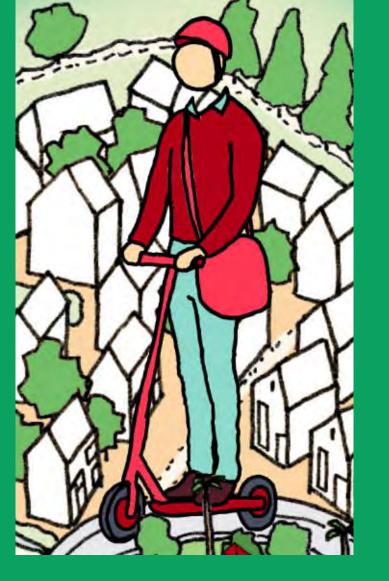
Housing fronting on to SANG



- Circular walking route (2.9km) Reinstatement of historic field boundaries
- . Views to Latton Priory
- . Marshy / wetland creation
 - Reinstate former Drover's route (bridle & cycle way) = =
- Desire line footpath connections
- 7. Native woodland planting

- Scrub planting / foraging
 Panoramic views to the south and to Rye Hill Moat
- 10. Car park
- 11. Latton Priory Scheduled Monument 12. Existing PRoW - -
- 13. New concessionary bridle & cycle way == ==
- 14. Panoramic view to Harlow Town Centre

The masterplan base used here is illustrative only. It shows an example of how the site could be developed in line with the SMF subject to testing and design development

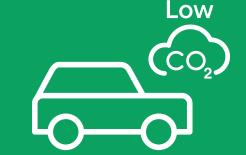


Sustainability,
Phasing &
Stewardship

10









LATTON PRIORY

HARLOW & GILSTON

GARDEN TOWN

INTRODUCTION

Introduction

This section of the report addresses sustainability, phasing and stewardship.

In terms of sustainability, the Harlow and Gilston Garden Town Sustainability Guidance and Checklist is used as a basis to assess the scheme against. This covers first principles (e.g. landscape led design, sustainable movement etc) before addressing the individual quality checklists in more detail. It concludes with a section addressing the socio-economic checklist. Detailed questions (particularly the topic based checklists) will be addressed at the appropriate outline, detailed or reserved matters planning applications stages. Nevertheless, the responses in this section seek to provide as much information as is possible at this stage in the process.

The section then includes a phasing plan for Latton Priory, showing how the development and infrastructure could come forward over time and in a planned way. The final section addresses stewardship and the potential approach that could be taken to ensure that arrangements are in place for the long term management and care of the site's assets, places and people having regard to the emerging HGGT Stewardship Charter.



High quality green spaces incorporating sustainable urban drains



Attractive pedestrian friendly streets



Infrastructure designed to encourage sustainable travel



Photovoltaic cells used where suita



High quality recreational spaces



Good design contributing to reducing energy demand

Sustainability Phasing & Stewardship

DESIGN APPROACH: HGGT FIRST PRINCIPLES

HGGT SUSTAINABILITY GUIDANCE

1. LANDSCAPE-LED DESIGN

Harlow and Gilston Garden Town is characterised by a number of different landscape characters areas and assets. Study of existing strategies, analysis, survey and mapping should be undertaken of existing green infrastructure and ecological value of features. These include; topography, trees, hedgerows, woodland, grasslands, wetlands, meadowlands, farmlands, hills and lowlands, scarps and valleys, flood plains, views and vistas. Drawings, surveys, site photographs, and precedent images should be utilised.

Design should be landscape led from the start and across all design stages. The best design and development outcomes will be delivered by engaging landscape and ecology consultants at an early stage. Additional spending on design fees will be very likely outweighed by the speed and ease of securing planning permission.

2. SUSTAINABLE MOVEMENT

The Garden Town has ambitious sustainable travel mode shift targets, as set out in the HGGT Transport Strategy. To achieve this, sustainable movement must be considered as a first principle in design, alongside landscape and ecology.

Key destinations and active travel desire lines for journeys to work, schools, shops and leisure should be mapped, to be direct, inclusive, attractive and safe. Opportunities to knit communities together with movement routes and green infrastructure should be maximised.

Follow the HGGT User Hierarchy on routes and access points; ensure walking and cycle networks connect to the Sustainable Transport Corridors and wider networks, and prioritise travelling to further destinations by public transport over private cars.

SMF Response

The masterplan for Latton Priory is landscape led. As described in the EFDC Green Infrastructure Strategy, green infrastructure has been an integral element of he masterplan from the outset.

It is also based on a thorough understanding of the topography, trees, hedgerows, drainage, views and vistas. Having analysed the site and its context, the masterplan approach is green and blue infrastructure led, with key strategic open spaces provided (extension of the Green Wedge, a new neighbourhood park, a new SANG, multi-functional green space in Rye Hill Park in the south west and wetland in the north).

This is complemented by more intimate green spaces and pocket parks within the development which form spaces for gathering, doorstep play and place-making.

A number of green fingers permeate through the scheme, helping to form the basis of active travel corridors as well as sustainable drainage swales.

SMF Response

Planning transport provision is an integral part of the scheme. The approach is to consider the movement of people and the journeys they need to undertake on a day-to-day basis. A hierarchy approach is being taken to movement, as set out in the HGGT Transport Strategy:

- Reducing the need to travel (especially at peak times);
- Containing trips within the masterplan area through a mix of uses:
- Walking and cycling;
- Public transport; and
- The private car.

With a mixed-use development such as this there are significant opportunities for people to undertake many of their day-to-day activities within the site, reducing external trips. This is likely to include a great majority of primary and secondary education trips and some trips to local retail, leisure, employment and community uses. A further way of reducing the need to travel is through home working. Encouragement for this will be given through high quality digital connections and the opportunity for coworking hubs.

Walking and cycling will be at the top of the transport

hierarchy and, in the design of infrastructure, will be given priority over other modes. This will be through pro-active design (dedicated footways, cycle routes, safe crossings, shared streets) as well as education and encouragement.

For longer journeys public transport should be the next favoured option. A detailed bus strategy will be prepared to encourage the use of public transport. This is likely to focus on routes to key destinations such as Harlow Town Centre, Harlow Town rail station and Epping London Underground station.

Use of the private car will be at the bottom of the hierarchy. However, it must be remembered that people do need to use cars for daily business, often because of the location travelled to, the time of travel or because of the need for linked trips. Therefore, a balanced approach needs to be taken that encourages a switch to sustainable modes whilst recognising the role of the car.

Movement Strategy will be the delivery of on-site mobility hubs. Mobility hubs serve an important role in the local transportation system as the origin, destination or transfer point for a significant proportion of trips and will be incorporated into the design of the development. It is likely that there will be one primary hub within the local centre, with smaller hubs at the east and west of the development.

The masterplan is being designed to facilitate the delivery of the Sustainable Transport Corridor that forms part of the HGGT Transport Strategy.

Another key component of the Sustainable Transport and

HGGT SUSTAINABILITY GUIDANCE

3. ORIENTATION AND FORM

Solar orientation must inform the topography, scale and massing of development at early stages of masterplanning, with south-facing buildings, fenestration, and amenity being orientated to take advantage of passive solar gain – absorbing the sun's heat energy to warm buildings and spaces. Building axis' can be orientated in the east-west direction to take advantage of maximum daylight and heat from the sun which significantly reduces the energy consumption of a building, and can reduce a homes' heating and cooling costs by up to 85%.

To stay cool in the summer months and avoid overheating, external shading provisions should be made to the buildings and surrounding areas, including the use of green infrastructure.

4. FOLLOW ENERGY HIERARCHY

When determining energy strategies for new developments and masterplans, the Energy Hierarchy is to be followed:

1. BE LEAN: Use less energy: minimising the energy demand of new buildings through fabric performance: This step requires design that reduces the energy demand of a development. Energy Strategies need to demonstrate how energy efficiency measures reduce the energy demand in line with performance targets highlighted in this document.

2. BE CLEAN & GREEN: Supply energy efficiently: utilising energy efficiently in buildings including for space heating & cooling: Consideration must be given to how heat and energy will be provided to the development using low-carbon heating networks.

3. BE SEEN: Monitor & Report performance: for at least 5

This requires all major developments to monitor and report their energy performance post-construction to ensure that the actual carbon performance of the development is aligned with the Garden Town ambitions of a net zero-carbon target.

years post-completion to remove the performance gap:

DESIGN

Building strong communities is aided by giving people and families the opportunity to have accommodation that can adapt to respond to their changing needs and abilities.

This means looking at the macro-scale of large scale green and blue infrastructure and management for climate adaptation, future-proofing infrastructure for technological innovation, provision of a range of house types, adaptable facilities and meanwhile use spaces. And through to the micro-scale; for example the space and ease in ability to extend homes and facilities (physical and digital) to work from home.

While technologies will change, the homes built here will exist for decades - 60+ years, and it is important that strong communities are not broken due to the lack of adaptable design.

5. ADAPTABLE & FUTURE PROOF

SMF Response

The masterplan for Latton Priory seeks to get the right balance between orientation and good urban design. The urban blocks within the scheme allow for flexibility within them and the precise details of layout will come forward as part of future detailed or reserved matters applications.

It is acknowledged that south-facing buildings maximise passive solar gain and all of the blocks within the masterplan allow for an element this. However, basing the layout of a scheme entirely on south facing buildings has led to developments of poor urban design and place-making elsewhere in the UK as the basis of good urban design (perimeter block structures) are formed around buildings that address the streets around them, whether they are north, south, east of west.

The green infrastructure led approach, the existing vegetation on site and the new trees that will be planted will all help avoid overheating and provide shade.

SMF Response

The scheme is being planned to accord with the relevant policies on low carbon as set out in the recently adopted Local Plan. However, there is recognition that net zero carbon may increasingly be a requirement as the development is undertaken. For this reason the Latton Priory scheme is being made ready for the potential requirement for net zero.

In line with the energy hierarchy, the development will look to reduce the energy demand of the site through good design and improvements to the building fabric of dwellings in order to achieve a 75% reduction in energy demand in line with the emerging Future Homes Standards. Heating will be provided by Air Source Heat Pumps (ASHP) to efficiently heat the houses and to mitigate the residual electrical demand. Renewable energy generation through photo voltaic cells, being building mounted, is also anticipated where suitable. Technologies could be considered as and when they become available. For example, carbon sequestering through the widespread planting of trees throughout the site will also contribute to reducing the overall carbon footprint of the development.

Further initiatives will be explored, evaluated and integrated into the proposed development where feasible to ensure a robust sustainability strategy for the site.

Further carbon emissions will be mitigated with Sustainable Transport Initiatives, as set out (see response to 2). All proposals and initiatives set out in the emerging development material will reduce the greenhouse gas emissions through lowering demand while improving energy efficiency.

Ensuring compliance with current and emerging legislation (as implemented) will unlock a sustainable development that will result in tangible benefits to the environment and to occupiers of the development. Sustainable principles, underpinned by relevant national and local policy, will be embedded throughout all phases of development, inclusive of both the construction and operational phases.

SMF Response

The masterplan for Latton Priory aims to be adaptable and future proofed.

Large scale green and blue infrastructure is abundant across the site - with large areas of green space across the neighbourhood, supported by sustainable drainage and SuDs.

Technological innovation has also been front and centre of the thinking, particularly in terms of transport, with the introduction of a mobility hub catering for all forms of transport including demand responsive travel and e-bikes/scooters.

The illustrative masterplan provides flexible urban blocks to accommodate both housing now and also in the future (including modular). The units in the local centre can also be flexible to respond to changing circumstance in community requirements.

HGGT SUSTAINABILITY GUIDANCE 6. FABRIC-FIRST APPROACH

super insulated, airtight, and wind-tight.

A fabric-first approach requires the building envelope to be a high-performance thermal envelope, reducing energy waste. This means the proposed buildings must have external walls, roofs, floors, windows and doors that are:

A fabric-first approach includes the windows and doors – which provide significant heat loss and heat gains depending on solar orientation. Windows and doors must therefore incorporate high-performance glazing to provide comfortable internal temperatures. A high-performance thermal envelope delivers exceptional indoor comfort and building energy efficiency.

7. VENTILATION & OVERHEATING

A mixed-mode (natural and mechanical) ventilation strategy is encouraged for excellent indoor air quality. This involves the incorporation of passive and/or whole-house mechanical ventilation with heat recovery system (MVHR) - which is key to delivering radically energy efficiency and exceptional comfort, through providing clean, filtered air into habitable spaces.

Early stage overheating analysis will be expected to be carried out at design stage to identify key factors contributing to overheating risk; where developments are at risk of overheating, additional detailed assessment and mitigation measures will be expected to be incorporated.

8. EMBODIED & OPERATIONAL ENERGY

Embodied energy is the total energy required for the extraction, processing, manufacture and delivery of building materials to the building site, and the construction

All design teams are expected to think about, and reduce the embodied energy required to develop their schemes. For example, depending on location, height, and site suitability, materials like timber could be favoured over less sustainable alternatives such as concrete.

Operational Energy is concerned with the amount of carbon emissions associated with the building's annual operation. Developments should be aiming for net zero carbon - where energy on an annual basis is zero or negative. A net zero carbon building is highly energy efficient and powered from on-site and/or off-site renewable energy sources.

Developments should be designed using realistic predictions of operational energy to avoid performance gap in a building's energy use.

9. RENEWABLE TECHNOLOGIES

Renewable energy uses natural resources such as sunlight, wind, tides and geothermal heat which are naturally replenished. Most forms of renewable energy are cheap to operate, but can be expensive to install.

Examples of technologies include; PV's, solar thermal, biomass, ground/air source heat pumps, wind, hydro. The choice of renewable technologies should be dependent on an assessment on site and development suitability.

SMF Response

The masterplan is a high level guide setting out a framework for how the site should be developed in the future. Precise building method and materials will be provided at later stages of the planning process.

However, a fabric first approach will be encouraged in any future development, to ensure a high performance thermal envelope in buildings is achieved and energy waste is minimised.

SMF Response

As with the fabric first approach (in 6), details of ventilation and addressing the issue of overheating are matters of detail, to be addressed in future detailed or reserved matters applications.

SMF Response

As with the fabric first approach (in 6) and ventilation and overheading (in 7), details of embodied and operational energy are matters of detail, to be addressed in future detailed or reserved matters applications.

SMF Response

The masterplan provides the framework for the development of the site and the buildings within. Although a matter for future detailed and reserved matters planning applications, it will be expected that, where necessary beyond fabric first measures, technologies such as PVs, ground and air source heat pumps and wind are likely to provide opportunities for renewable energy generation that would further support the creation of a sustainable development at Latton

HGGT SUSTAINABILITY GUIDANCE

10. AIR-TIGHT STRATEGY & THERMAL-BRIDGE FREE

An air-tight strategy focuses on the internal comfort of a building, and will be required to develop a draughtfree building envelope. The draught-free building ensures high energy efficiency, internal user comfort, and protects the building envelope.

The airtight strategy must be continuous to ensure there are no unintended gaps in the building envelope that allow uncontrolled air to leak in and out of the building.

Internal comfort is affected by heat loss through the building fabric, and poor thermal bridging – any gaps or thinning of the insulation. Therefore, the design approach must be to design them out.

Post-occupancy evaluation enables air tightness and thermal bridging to be measured, to help close the known performance gap in these areas.

RETROFITTING

Design Principles for Retrofitting of existing buildings has not been addressed in this guidance. This is in anticipation of the emerging HGGT Sustainability Guidance for Retrofit. This document will signpost to industry standards and guidance regarding retrofitting.

SMF Response

As with some of the previous responses, this topic is a matter of detail, to be addressed in future detailed or reserved matters applications.



ENERGY EFFICIENCY & CARBON REDUCTION

Future planning applications (Outline/Reserved Matters/Full) will be accompanied by the Sustainability Checklist with the appropriate level of response provided relative to the stage of application and as indicated along the right hand side of the checklist (as per the extracts on the following pages).

HGGT Sustainability Questions

	QUALITY CHECKLIST	Minimum Requirement	Net Zero-Carbon by 2050	Net Zero-Carbon by 2030
En.I	What Operational Energy target does the development aim to achieve (KWh/m2/y)	146	< 70	< 0 - 35
En.2	What Embodied Carbon target does the development aim to achieve (kgCO2e/m2)	1000	< 450	< 300
En.3	Space Heating Energy Demand (KWh/m2/y) of net living space	54.26	25	15
En.4	Airtightness (air changes/ hr @ n50)	5	3	≤ 0.6
En.5	Ventilation Strategy (m3/hr/person)	Natural - extract fans	Mechanical - with extract fans	Mechanical Heat Recovery (30)
En.7	What is the on-site reduction in CO2 emissions against Building Regulations Part L (2013)?	0-34%	35%-50%	≥ 50%
En.8	For applications greater than 99no. units, what BREEAM Communities Level is met?	Very Good	Excellent	Outstanding
En.9	Thermal Bridging y-value (W/m2K)	0.0051	0.0039	0
En10	What Fabric U-Values has the proposal been designed to meet? W/(m2K)			
	External Walls	0.30 - 0.16	0.15 - 0.11	< 0.1
	Floor	0.25 - 0.11	0.10 - 0.08	< 0.07
	Roof	0.20 - 0.13	0.12 - 0.10	< 0.1
	Windows (triple glazing) & Doors	2.00 - 1.4	1.3 - 1.00	< 0.9
	Attach Whole Life Carbon Assessment Attach Overheating Design Assessment			
	Attach certification of the above chosen sta	ndards, and use 'State	ment' page for addition	al information

SMF Response

En.1-10

The site will adhere to the principles of sustainability supporting energy efficiency and carbon reduction.

Care will be taken to ensure that roof heights do not overshadow neighbouring buildings unnecessarily and the relationship between buildings and open spaces creates quality public realm and a comfortable microclimate for people using outdoor spaces.

Buildings will be well positioned and will create spaces that maximise natural light.

Well placed deciduous trees can increase the shading and natural cooling of buildings and spaces during the summer months and allow more natural light and heat to be received during the winter months after the leaves have fallen and when demand for heating and lighting is highest. Tree planting can also be used to shelter buildings from the wind and minimise unwanted cooling.

The developer will look to integrate the following building design measures within buildings to reduce energy demand including but not limited to:

- Energy-efficient highly insulated building fabric to all floors, walls and roofs.
- High-efficiency windows throughout.
- High quality build achieving good air-tightness results throughout.
- Efficient-building services including high-efficiency heating and ventilation systems.
- Low-energy lighting throughout the building.
- Bespoke psi values to limit thermal bridging

The specifications of these measures are to be provided at detailed application stage and are subject to change based on the housing stock and associated technologies deliverable by the selected house builder.

RENEWABLE ENERGY

HGGT Sustainability Questions

	QUALITY CHECKLIST	Minimum Requirement	Net Zero-Carbon by 2050	Net Zero-Carbon by 2030
Rn.I	What on-site renewable energy technologies are planned to be included in the development?	PV's + EV charging / CHP's	Low-temperature District Heating	Electric Heat Pumps / Solar Thermal
Rn.2	What percentage of CO2 emission reduction is planned to be provided from on-site renewable energy sources? (SAP 10 carbon emission factors to be used for calculation)	> 20%	> 50%	> 70%
Rn.3	What percentage of regulated household electricity will on-site renewable technology provide? (net zero operational carbon does not burn fossil fuel and is 100% powered by renewables)	> 35%	> 50%	100%
Rn.4	Have any government incentivised schemes been taken advantage of? i.e. Non-Domestic Renewable Heat Incentive (RHI)	None	N/A	Non-Domestic RHI
Rn.5	Photovoltaic Energy Demand (kWh/m2/yr)	-854	-2,563	-2,563
Rn.6	Domestic hot water (kWh/m2/yr)	42	20	6
	Please attach Energy Assessment			
	Please attach relevant certification of the above standards you have chosen			
	Please use 'Sustainability Summary' pages wh	here you are adding ar	ny further information	

SMF Response

Rn.1-6

The sustainable heating and hot water strategy will be produced by Low Carbon & Zero Carbon (LZC) or renewable technologies wherever possible. In particular, communal Air Source Heat Pumps, Wastewater Heat Recovery Systems and Photovoltaics (or similar) will look to be included within the energy strategy at the detailed application stage.



GREEN INFRASTRUCTURE

HGGT Sustainability Questions

QUALITY CHECKLIST	Low Quality	Medium Quality	Garden Town High Quality
Gr.1 Has a Landscape-led approach been demonstrated, as set out in the HGGT Vision / Gilston Area Charter SPD / EFDC Green Infrastructure Strategy?	No	Some landscape analysis undertaken	Ecology, topography, vistas, landscape character & features leading design
Gr.2 What % of Biodiversity Net Gain (BNG) will be delivered?	0-9% BNG	10-15% BNG	15%+ BNG
Gr.3 Does Ecology Report show process of mitigation and location hierarchy, with Stewardship and Maintenance strategy provided for green infrastructure and BNG?	No strategy	Yes - Outline strategy provided	Yes - hierarchies followed, and 30 year strategy with input from community
Gr.4 Have play, community amenity and food production opportunities been maximised? All new homes should be within 800m of allotments, and Fields in Trust distances should be followed for play spaces.	No	Yes - locations mapped with walking isochromes	Yes - locations mapped, character of spaces defined, strategies for play / food / active frontages
Gr.5 Have you used recognised tools to assess the value/ quality of green infrastructure? E.g. Natural Capital Tool/ Ecometric/ Building With Nature/ Green Flag Award/ Social Value Calculator	No	Yes - qualitative assessment undertaken	Yes - qualitative assessment/ value calculated with exemplary score
Gr.6 Has an overheating assessment or modelling been provided, as set out in UKGBC's Housing Standards Playbook, taking into account impact of green infrastructure?	No	Yes - some assessment	Yes - UKGBC Playbook followed
Gr.7 Has green infrastructure been proposed at different scales to reinforce the Garden Town Vision indicators, access and inclusive design principles?	Different scales not explored	Yes - Different scales shown, roles/ function undeveloped	Yes - Different scales designed, with qualities and roles defined, and inclusively designed

SMF Response

Gr.1

A landscape-led approach has been undertaken throughout the evolution and masterplan design process. This has been based on extensive desk and site-based study of landscape character and visual resources, along with extensive heritage and ecological assessment work and stakeholder consultation, over many years. The design approach follows the guidance set out in the HGGT Vision, Gilston Area Charter SPD and the EFDC Green Infrastructure Strategy. The masterplan design responds to the place, natural character and function, and focuses on expansion of the Harlow Green Wedge network, countryside connections, green belt enhancement, and provision of a positive relationship with and access to the green network. A diversity of high-quality recreational spaces and excellent walking and cycling routes is proposed to support healthy and active lifestyles. The masterplan design retains and incorporates landscape, heritage and biodiversity features within the green infrastructure and sensitively responds to topography, with the highest ground retained and subject to woodland planting and habitat creation to provide an extensive semi-natural greenspace asset and ecological corridor between Long Green Lane and Marks Wood, and a substantial SANG at the rural edge. Design for biodiversity, climate change and SuDS are integral components of the proposals.

Gr.2

We are not currently in a position to determine the actual BNG for the site as this will be based on the post-development habitats/landscape plans and details. We follow the current best practice guidance and all relevant policy requirements in respect of BNG and therefore would provide recommendations and input in response to those as a minimum.

Gr.3

Again, we are not yet in a position to determine the mitigation details, with ecological surveys still ongoing, however, as for Gr2 above, we would follow all relevant policies and guidance to ensure that all mitigation recommendations and strategies are compliant and meet all necessary requirements as a minimum. The ecology report will demonstrate these processes.

Gr.4

The green infrastructure plan and strategy ensures quantitative provision of the traditional types of open space to meet the national standards (as required by Policy DM6 EFDC Local Plan and the EFDC Infrastructure Delivery Plan 2017). The proposals substantially exceed these standards. They include provision for public parks, semi-natural greenspace and amenity areas that incorporate multi-functional pocket parks, sociable streets and greenways, with play incidents and opportunities for food growing. Key locations are mapped on the proposed Green Infrastructure plan and the principles are set out within the SMF, providing the framework to be developed further at the reserved matters planning stage. All new homes will be within 800m of existing or proposed allotments. Fields in Trust distances will be followed for formal play spaces.

Gr.5

The masterplan proposals follow the 12 Building with Nature (BwN) standards and could seek accreditation for the 'Design' award component of the accreditation. The applicants aspire to the Green Flag Award. The developers will be required to take forward the green infrastructure proposals at the reserved matters stage and subsequently the completed scheme to gain the 'Full' BwN Award and the Green Flag Award.

GREEN INFRASTRUCTURE

Gr.6

The proportion of green infrastructure proposed within the Masterplan is substantial. Development blocks are divided by a network of green spaces and green ways planted with street trees, tree groups, and new and retained woodland. Green infrastructure will contribute substantially to address the heat island effect and to reduce the carbon footprint of the development through sequestration.

Gr.7

The masterplan provides green infrastructure at a range of scales to reinforce the Garden Town Vision indicators, access and inclusive design principles. Green streetscapes and amenity spaces comprising a variety of elements such as street trees, pocket parks, hedgerows, green roofs and swales are integrated with a green corridor, green fingers, Latton Park and SANG to provide placeshaping benefits and enhance climate resilience. This network of green and blue infrastructure responds to the distinctive landscape setting; expands and enhances Harlow's Green Wedge network; improves access to, and the quality of, the surrounding Green Belt; and supports a sustainable and biodiverse environment.

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Please use 'Sustainability Summary' pages where you are adding any further information

SMF Response

Tr.1

The masterplan has been designed to maximise the opportunities for walking as per the HGGT Transport User Hierarchy. For example, a green corridor will be provided in a broadly east-west alignment through the site to provide a traffic-free connection across the development. In addition, cycle lanes and footways will be provided along Latton Avenue through the development.

The masterplan facilitates connections by active travel modes to wider destinations. Connections are provided to existing PROW's that abut and route through the site (such as PROW footpath 52 and footpath 1). In addition, new routes are being developed to provide active links from the development to Harlow Town Centre via the existing pedestrian and cycle route from Paringdon Road adjacent to St James' Church of England Primary School.

Tr.3

Within the allocated site the STC and transport interchange will be designed in accordance with the STC Placemaking principles where practicable.

Tr.4

The bus stops and mobility hubs will be designed in locations with appropriate shelters for waiting that are modern and attractive. Encouraging the use of public transport will be a fundamental part of the sustainable transport strategy. The Transport Assessment will include a detailed Bus Strategy that will provide details of the level of service that will be provided to key destinations.

Tr.5

The provision of high quality, safe and secure cycle parking will form an integral part of the design. This will include mixture of long stay parking that is covered and secure but also short stay parking in convenient locations close to on-site facilities in the local centre.

Sustainable movement routes will be designed to accord with inclusive design principles / accessibility for all where practicable.

Tr.7

A detailed Transport Assessment will be submitted in support of the application for the development. The Transport Assessment will set out details of the measures being implemented to help achieve the mode

Tr.8

A thorough Sustainable Travel Plan will be submitted in association with the planning application for the proposed development. The Travel Plan will include a package of measures and actions designed to encourage safe, healthy and sustainable travel options.

HGGT Sustainability Questions

WATER MANAGEMENT

	QUALITY CHECKLIST	Minimum Requirement	Net Zero-Carbon by 2050	Net Zero-Carbon by 2030	
W.I	What water collection or recycling measures are likely to be used?	75% provision of water butts	100% provision of water butts	Rainwater harvesting systems	1
V.2	How much of the hard surfaces within the development and conveyance systems will be permeable (i.e streams, swales)	50%	75%	100%	- -
W.3	Potable Water: What is the expected internal water use (litres/person/day)?	110	95	75	=
W.4	Will water saving devices be installed in the development? e.g. low flush toilets, smaller baths, taps and showers with flow regulators	N/A	N/A	Yes	
W.5	What additional Sustainable Urban Drainage (SUDs) measures have been proposed? (i.e. permeable surfaces, rain gardens, green roofs, ponds/wetlands, soakaways)				
	Please use 'Sustainability Summary' pages wh	nere vou are adding a	ny further information		

SMF Response

W.1-5

It is proposed that all new dwellings will meet the water efficiency standard of 110 litres per person per day.

The development will be designed to incorporate water efficiency into the scheme by the following measures, which are all subject to confirmation by the selected housebuilder:

- Low flow aerated kitchen taps
- Low flow aerated basin taps
- Dual flush cisterns to WC's
- Low flow aerated shower heads
- Tapered baths

In addition to the measures above, the buildings will be specified with water meters on the mains water supply. This will facilitate water consumption management and monitoring to reduce the impacts of inefficiencies and leakage. Flow control devices that regulate the supply of water to each WC area/facility will be also considered as an installation across the site in order to reduce water wastage.

It is proposed to target water use during construction through the following measures:

- Closed loop wheel washers,
- Waterless wheel washing using angled steel grids to remove debris,
- High pressure low volume power hoses,
- Recirculating water where possible,
- Limiting the water used for flushing building services by stopping it as soon as the flush water turns clear, and
- Employing a regime for monitoring water use and water waste.

The landscaping will specify drought resistant planting to ensure their longevity in spells of warmer weather and reduce demand for watering. Rainwater harvesting could be incorporated into the scheme using rainwater gardens within the public areas providing irrigation water for landscaping purposes and reducing surface water run-off from the site by collecting water run-off from hard surfaces.

Each of the homes will be designed with down pipes carefully placed so that water collection and use is convenient for residents. Rainwater collection vessels to collect surface water will be provided for residents to water and maintain their gardens and vegetable patches (via water butts).

The Masterplan will be designed to respond to potential flooding due to climate change. The site benefits from an interconnected Sustainable Urban Drainage System (SUDS). The SUDS will collect surface water and manage stormwater locally (as close its source as possible), to mimic natural drainage and encourage its infiltration, attenuation, and passive treatment. SUDS will be designed to both manage the flood and pollution risks resulting from urban runoff and to contribute wherever possible to environmental enhancement and place making. A Flood Risk Assessment (FRA) will be carried out. The FRA takes consideration of climate change by catering for the 1 in 100 annual exceedance probability plus an increase of 40% due to climate change rainfall events in line with current Government advice. All built development is sited in Zone 1 outside allowing for climate change.

CIRCULAR ECONOMY

HGGT Sustainability Questions

	QUALITY CHECKLIST	Minimum Requirement	Net Zero-Carbon by 2050	Net Zero-Waste by 2030
CE.I	How much of the materials used are expected to be 'reusable'	10%	50%	>80%
CE.2	How much of the materials used are expected to be 'reused'	10%	30%	>50%
E.3	How much of the materials used on site are sourced from ethical and responsible supply chains?	80%	95%	100%
CE.4	How much of the materials used are non-toxic?			100%
CE.5	How much of the materials used can be easily extracted, recycled, and manufactured?	80%	90%	95%
CE.6	The new buildings are circular-by-design to what amount?	20%	40%	65%
CE.7	How much biodegradable and recyclable waste will be diverted to landfill?			0
	Please attach Circular Economy Statement (see guidance Here)			
	Please use 'Sustainability Summary' pages wh	nere you are adding a	ny further information	

SMF Response

CE.1-7

Difficult to enforce during operation of the site, targeted towards construction of it. However, Management Company (or other party responsible for ongoing facilities maintenance and operations) could have these KPIs within contract.

A Materials Management Plan (MMP) should be created for the entire site, to then be modified on a parcel basis to ensure all material arisings are minimised, planned for, and sustainably and legally reused.

Any existing buildings should be considered to extend their lifespan, whilst new buildings should be appropriately designed for efficient use, through

- Existing buildings demolition should be the last resort and reuse through retrofitting should be considered first.
- Increasing intensity of use to ensure that buildings are efficiently used with multipurpose areas.
- Materials and products chosen should be longlasting. All new product requirements should ensure that due consideration is given to the design and manufacture of construction products to ensure that they aim to be more durable, repairable, recyclable, and easier to re-manufacture.
- All materials and products should be efficiently specified at appropriate lengths, volumes, and rates, as appropriate, to minimise wastage (see waste links).
- Materials content should be considered to maximise recycled content rather than relying on raw virgin materials, so long as safety and durability are not compromised.

- Material reuse from previous uses should be considered.
- Full consideration for MMC using prefabricated volumetric and modular components should be considered.

Unnecessary damage to soil should be minimised. This would include the creation of a Soil Strategy to avoid unnecessary loss, erosion, damage, compaction, or other deleterious effects.

CE.1

To accompany, full consideration of Modern Day Slavery, ethical producers, and quality marks (e.g. FSC timber), and the third sector should be considered.

CE.2

Full COSHH compliance should be mandatory to ensure that all hazardous materials are known about. However, their use should be minimised and suitable alternatives used where possible. Lead use should be minimised and all checks for asbestos (e.g. in crushed materials, imported materials, etc.) should be made to ensure non is present.

HGGT Sustainability Questions

WASTE MANAGEMENT

	QUALITY CHECKLIST	Minimum Requirement	Net Zero-Carbon by 2050	Net Zero-Waste by 2030	
W.I	Has early engagement been undertaken with LPA waste management teams to ensure due processes are taken into consideration?	No: LPA not engaged		Yes: demonstrated	Outline Planning
W.2	Have developments been designed to encourage ease in waste recycling?	No		Yes	Outline
W.3	How much construction, demolition and excavation (CD&E) waste will be recycled? This is to be incorporated in your Construction Management Plan			≥ 95%	
W.4	How much municipal waste (operational waste) will be recycled or composted vs sent to landfill or energy recovery?			65% : 35%	
	Please attach: - Construction, Demolition and Excavation Waste Strategy - Operational Waste Strategy				
	Please use 'Sustainability Summary' pages wh	here you are adding ar	ny further information		

SMF Response

W.1-4

Appropriate targets and objectives will be set in relation to the minimisation and recycling of any waste materials. The developer will be responsible for setting and reviewing waste targets from the outset to ensure that high standards are maintained, with an emphasis being placed on waste minimisation and continual improvement.

It is proposed to:

- Recycle demolition material (crush and reuse aggregate in road bases and concrete production)
- Incorporate and use site waste management plan (SWAMP)
- Implement waste segregation of specific building materials that can be reused i.e. Gypsum recycling partners
- Use pallet recovery service (and reuse and recycle delivery pallets)
- Connect with a network of approved waste partners
- Specify (where possible) from the BRE's Specifiers Green Guide
- Reduce plastic packaging from our component suppliers
- · Carefully use the design and pre-fabrication stage to reduce material usage and offcuts
- Design in segregated household waste bins/compost
- Consider recycled insulation such as glass wool made from recycled glass bottles.

Where possible the developer will reuse recycle material. Appropriate materials will be segregated into waste streams to separate any hardcore, timber and metal products. The separated materials will be loaded as required for off-site recycling or disposal or on-site reuse. The demolition contractor will work closely with the Principal Contractor to ensure full compliance.

All demolition arisings are to be crushed on-site and then left in a central stock-pile for use in the construction process. Whilst our aim is to have a balanced cut and fill strategy, any surplus would be removed by licensed waste carriers and sent for reuse at another development site or sent for disposal at appropriately licensed facilities.

Where possible unused mineral waste (i.e. brick cuts) will be recycled on site. The aim is to have a balanced on-site cut and fill material strategy. This reduces offsite construction traffic movements. Any clean excavated mineral waste material that cannot be reused on-site would be removed by licensed waste carriers and sent for reuse at another development site or sent for disposal at appropriately licensed facilities.

The site will benefit from a Site Waste Management Plan (SWMP). A SWMP will be created to enable managers on the construction project to plan and strategise how any waste from the site will be reused, recycled and managed or disposed of. The SWMP will be produced at the start of the project and monitored throughout it construction phases.

Non-mineral waste such as timber, brick, gypsum will be segregated into wastes streams and put into colour-coded skips or containers. This material will be recycled or reused.

Locally sourced materials will be used where possible.

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HGGT Sustainability Questions

QUALITY CHECK-Minimum LIST Requirement No: LPA not Yes: A.I Have mitigation measures as described in engaged each relevant District's Air Pollution Mitigation Strategy been adhered A.2 Where the development No: assesshas the potential to ment not den impact on air quality, has undertaken strate an air quality assessment been undertaken to ensure present and future occupants are not exposed to unacceptable levels of air pollution? A.3 Have tree species been No: tree chosen based on their species not ability to reduce air identified strat pollution in line with requirements from the Woodland Trust Urban Air Quality Report? Please attach relevant documentation, and use 'Sustainability Summary' pages where you are

adding any further information

Response

A.1-3

Any Air Quality Assessment (AQA) must follow due process, which first requires development traffic flows to be generated against the fixed masterplan. The transport consultants are currently working through the model parameters and protocols with Essex Highways. An AQA will then be carried out in full compliance with applicable national and local policies and will accompany a future planning application.

In accordance with policy DM22 Air Quality, potential air pollution risks will be properly considered and adequate mitigation included in the design of the new development to ensure neither future, nor existing residents, workers, visitors or environmental receptors including the Epping Forest SAC are adversely impacted.

The baseline starting point for the AQA is to review local receptor data and reporting into which the site development traffic will be added. The baseline research has shown no fundamental concerns in Harlow or Epping.

ASSURING PERFORMANCE

Through future planning applications there will be commitment to monitor performance and quality, following the guidance and principles below where appropriate:

HGGT OBJECTIVES & REQUIREMENTS

Post-construction energy and quality monitoring is required to bridge the 'performance gap' found in new developments and move towards net zero-carbon. Achieving this requires a true understanding of a buildings' operational energy.

The performance gap is the difference between predicted design and as-built performance of a building.

Addressing the performance gap in new homes and buildings is critical, as this affects both the 'happiness' of residents, as well as the performance quality through; residents comfort in terms of poor thermal comfort, indoor air quality, health challenges such as respiratory issues. Furthermore, a poor performing building leads to higher energy bills due to poor building fabric, and exasperating challenging health conditions.

Findings from studies undertaken by Innovate UK and the Zero Carbon Hub consisting over 300 homes, showed that none met their intended performance targets when tested, with the majority falling even short of Part L and Part F of the Building Regulations by a margin of over 50% post-completion.

The main challenges found in the studies are highlighted in the green box, and design teams and applicants are therefore required to undertake Post Occupancy Evaluation (PoE); assessing both performance standards and quality of life, to address these issues.

All major developments will therefore be required to monitor and report on residents' wellbeing, and the actual operational energy performance in order to close this performance gap and meet the net zero carbon by 2030 targets committed to by each partner authority. Applicants are expected to use the BUS Methodology or similar industry recognised monitoring templates for submission.

A template PoE form should be used to show compliance.

Broadly; evaluation will be required at the following

- 1. Planning: predicted performance assessment
- 2. As-built: performance assessment
- 3. In-use: quality of life / happiness assessment Further information can be found on the GLA website and the Zero Carbon Hub website.

PRIORITY ISSUES

- Energy Literacy
- 2. Improving Quality Output
- 3. Demonstrating Performance
- 4. Evidence Gathering and Dissemination

QUALITY STANDARD

In line with the RIBA Post Occupancy Evaluation is expected for submission and should cover these key areas of Building in Quality:

- 1. Build Quality: performance of the completed buildings
- 2. Functionality: how useful the building and place is in achieving its purpose
- **3. Impact:** how well these developments add social, economic, cultural, and environmental value and improves human wellbeing

HGGT OBJECTIVES & REQUIREMENTS

Sustainable and future digital infrastructure will be a key component to the success of Harlow and Gilston Garden Town.

DIGITAL SUSTAINABILITY

The local communication exchanges situated in south Harlow provide both 5G and ultra-fast broadband capability. Therefore immediate and direct access to this essential infrastructure is possible from the phase 1 buildout onwards. There are four ultra-fast broadband providers within south Harlow which will present choice for the future residents.

Future-proof and wide-ranging digital infrastructure to enable HGGT to achieve its sustainability goals is crucial and an opportunity for HGGT to champion new delivery models. It will also enable HGGT to achieve the Garden Town principles of becoming net zero-carbon by 2030, with strong and connected communities. The opportunity to use sensor and 5G technology will make wireless internet possible everywhere, from smart cars to the Internet of Things (IoT).

The speed, capacity and connectivity of 5G will also provide many opportunities to enhance, protect and preserve the environment through increasing energy efficiency, reducing greenhouse gas emissions, minimising waste and enabling more use of renewable energy. It can also expand our understanding of, and hence improve, decision-making about weather, agriculture, pests, industry, waste reduction and much more.

COVID-19 pandemic has tested (and demonstrated) the importance of efficient, fast and reliable communications networks and other digital infrastructure. However, there is a clear challenge to ensure residents have the access and skills to enable them to take advantage and use new technologies. Focus must be given to ensure the reduction of the digital divide and ensure access by all residents.

HGGT also is part of the Essex & Hertfordshire Digital Innovation Zone (DIZ), which has one of its aims to ensure future digital infrastructure in new developments. A Digital Vision has been produced, setting out the opportunities and challenges including a set of principles to achieve the sustainability by ensuring future proof digital infrastructure.

Developers are invited to present their plans for the individual sites and are encouraged to sign up the Vision and its principles to be used in their procurement of telecom providers.

PRINCIPLES

Health and Wellbeing - Using digital technologies to provide excellent access to services to helping people helping themselves through self-testing and monitoring.

Sustainable Movement - Utilising appropriate digital technology to enable deployment of innovative technologies and public transport solutions in order to minimise greenhouse gas emissions and local traffic congestion. Also, to ensure the connectivity with Harlow town centre and the wider connectivity.

Promoting a Circular Economy - Developing a circular economy aimed at eliminating waste and the continual use of resources.

Smart Energy and Utilities - Utilising appropriate digital technology to minimise the use of natural non-renewable resources and maximise the use of renewable resources, to protect the environment

Smart Public Realm - Utilising appropriate smart technology to maximise the safe, inclusive and enjoyment use of the public realm; to make it safe and enrich people's lives, and to minimise energy use.

Economy - To ensure the latest digital technology is available in all new homes to facilitate working from home and in new flexible workplaces to maximise productivity. Also, to ensure ease of movement of goods through smart transport infrastructure and monitoring.

Community and Social Infrastructure - To digitally connect people across HGGT to create a strong sense of community, enrich people's lives, and empower residents and businesses to harness digital opportunities for social mobility and equality.

Smart Data Sharing - Utilising appropriate smart technology to digitally collect/monitor data to manage and maintain the function and quality of the village for the users and protect the wider environment.

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SOCIO-ECONOMIC CHECKLIST

QUALITY CHECKLIST

Answer each question within the sustainability statement and/or identify Details on submitted plans. (250no. Words per question max)

Has an audit (social mapping) of existing local amenities (shops, parks, school, pubs, playspace) been undertaken? Demonstrate how the outcome informed the development of compact neighbourhoods including provision of a wide range of amenities (employment & retail spaces, community facilities and spaces) designed to be accessible by walking and cycling and encourage community interaction, cultural and civic life; and the variety of uses to be accommodated in a post Covid-19 society. Essex Map offers a good tool to assist with finding local services, groups, and activities available in the local area.

Response

Section 3 of this report provides mapping of the existing local amenities and facilities in the south of Harlow. This maps a 10 minute and 20 minute walking distance from the site to the surrounding services and the Public Transport map includes 400m and 800m isochrones. The existing 'neighbourhood centres' at Staple Tye and Bush Fair provide a fairly wide range of local walkable facilities for their surrounding communities. The mapping exercise shows that whilst the local centres are in relatively close proximity to the site, they are at least 15 minutes walk away and as such, there is a role for a local centre to be included within the site which will be situated at the heart of the neighbourhood, linked by excellent east-west pedestrian and cycle routes and which will be accessible within a 10 minute walk (800m distance) for nearly all residents. Easy walkable access helps the success of local centres and the local centre at Latton Priory will provide flexible space to contain local shops, cafes, community facilities and employment to meet the needs to the local community and create a central hub for the development and which is located alongside a plaza space to promote informal dwell time, green space and a new primary and secondary school.

Demonstrate how proposals have been informed by key stakeholders (including: youth, unemployed, ethnically diverse groups, local support organisations) to contribute to a more integrated Harlow community. (include in response: the stakeholders you have engaged with, the findings from these sessions, and how you have implemented stakeholder recommendations). Include community activation strategy (Ref: HGGT Engagement Strategy) produced as part of planning process to secure community engagement and cohesion.

Response

Through out the masterplanning process, engagement has been held with a full range of stakeholders. This has included stakeholder workshops, site visits, public exhibitions and meetings. Fuller details of how this process has shaped the masterplan are contained in Appendix 1. A Statement of Community Involvement will accompany any future planning application for Latton Priory.

Se.3

Demonstrate how your proposal has provided health and care assets or support the delivery of health and care priorities as set out in the local Health & Wellbeing Strategies. (include the ease of accessibility for existing Harlow communities to use new facilities and networks). Use of the Essex Map offers a good tool to assist with finding local services, groups, and activities available in the local area.

Response

Latton Priory has the potential to accommodate a health centre as part of the mixed use centre which may include a GP surgery as well as community and mental health and well-being services. Discussions are ongoing with the Hertfordshire and West Essex Integrated Care Board (ICB), the body responsible for healthcare and with EFDC to ascertain what the requirement is and if existing provisions will be adapting/extended or improved to ensure that residents will have access to the appropriate healthcare services. Proportionate financial contributions towards off-site provision would therefore, be negotiated as part of any future planning application.

The masterplan for Latton Priory seeks to create a healthy environment in which to live and work in. The development has been planned as a compact neighbourhood, with nearly all homes within a 10 minute walk to the local centre which is also the focal point for public transport. Bus stops are provided within a 5 minute walk of most homes too. Active travel corridors have been designed into the masterplan, with very strong east-west and north-south corridors across the site (many of which are off-road). This will encourage walking and cycling.

Se.4 What early wins / meanwhile uses are planned for existing Harlow residents during construction stage of strategic sites? And how are they to be implemented?

Response

The intended phasing of development is indicated later on in the document with the mixed use centre and schools to be provided within the earlier phases to create sustainable travel patterns and facilities to serve the new and existing population. These may include meanwhile uses such as affordable co working space and pop ups ahead of more permanent uses being developed. A skills and employment plan will also be secured as part of a Section 106 agreement associated with an outline application which will seek to include measures to encourage and promote local employment during construction.

Demonstrate how your proposal includes allotments and community gardens that are easily accessible from homes and spaces for fresh food markets; and how your development has connected with local Harlow food partnerships to agree strategies and actions to enable community accessibility to these assets.

Due to opportunity for anti-social behaviour, applicants are encouraged to engage with Essex / Hertfordshire Police Design out Crime Teams around allotment allocations across new developments.

Response

A large allotment / community orchard site is planned for Rye Hill Park, which is located in the south west of the site. This site is located on the rural edge and is overlooked by the adjoining houses. Existing allotments are located to the north east of the site (off Riddings Lane). Both will provide opportunities to provide fresh food. There will be the opportunity to connect through Harlow food partnerships as plans for Latton Priory evolve. The Stewardship Strategy to be developed as part of an outline application will set out an appropriate stewardship model which will also provide opportunities for community led projects and meanwhile uses to reflect community interests and to link into food production which will be taking place on site. As the design and layout of the development evolves during the planning process, the applicants will engage with Essex Police Design Out Crime Teams to ensure community safety is embedded into the designs.

Demonstrate how your proposal supports of deliver initiatives (physically and/or socially) which focus on integration between new and existing communities (including Harlow Town Centre, and network of existing local centres) - this to include your engagement with LPA Community Liaison Officers, and Community Representatives (i.e. Discover Harlow Ambassadors).

Response

Latton Priory integrates with the surrounding existing community to the north (in Harlow). Numerous foot and cycle links have been identified to connect the communities, ensuring that the existing residents gain access to the new facilities and open spaces at Latton Priory, whilst also ensuring that Latton Priory residents can access (and support) existing services in south Harlow. The anticipated STC will also facilitate access to the town centre and the events and services there. The provision for a secondary school within the site to serve a significantly wider catchment than Latton Priory will further serve to deliver enhanced education facilities in Harlow and to foster integration between existing and new communities.

Demonstrate how the Harlow Economic Development Strategy have been incorporated in this scheme through; design stage, construction stage, and post-completion (identify what jobs have been created / will be created through this development)

Response

Harlow Economic Development Strategy focuses on the themes of; business and jobs, place and people setting out priorities and ideas for delivery which lead to new jobs in Harlow, new homes in Harlow and neighbouring areas and a higher quality of life.

The development will also bring new homes to Harlow on a site identified in the local plans providing high quality homes for Harlow's growing population creating new places for people to live. It will also help support the ability of Harlow and its environs to deliver space for quality businesses and employment and will be well connected into Harlow and its employment sites and Enterprise Zone. It represents a significant investment to the area which will boost the local economy through the creation of construction jobs and post-completion within the development and will also help attract further investment in line with the objectives and themes set out in the Harlow Economic Development Strategy.

See also response to Se 9

Se.8 Demonstrate how the design enables business and workers to function? Is there good telecoms and digital infrastructure that support new business and work patterns.

Response

High quality digital communications technology will be provided at Latton Priory to facilitate 21st century working requirements. Both Harlow and Epping are 5G enabled and are both served presently by Three, O2 and EE. 5G is available through compatible mobile devices. South Harlow also has an existing ultrafast broadband network to which the development can readily connect into. This infrastructure will ensure that businesses and workers will be supported to work flexibly and efficiently.

Demonstrate how spaces and buildings support the economic activity of businesses and workers. What type of business space contributes to the local economy? Can homes support working and learning? Can community spaces support economic activity, social enterprises, individual entrepreneurs and skills provision? How will the needs of different business sectors, sizes and circumstances be met (including the need for grow-on space, taking into account current economic trends, moving towards higher value economic uses)? What measures will promote cooperation and collaboration between businesses in the development and with those in other areas?

Respon

Latton Priory will provide new job opportunities. At this stage in the masterplanning process, it is not possible to identify exactly the types of jobs that will be on offer, but the proposals demonstrate that a mixture of office and workshops can be provided within the local centre. This is in addition to the jobs that will be available in the local centre in the shops, cafes, mobility hub and schools.

In terms of community spaces, the masterplan for Latton Priory can provide numerous spaces for economic activity, social enterprises and local entrepreneurs. These include the flexible employment premises on site, the co-work facility provided within the mobility hub and the community centre provided in the heart of the local centre. The plaza will also provide opportunities for outdoor working, as will areas within the numerous green spaces within the site – which will require shelter and high quality wi-fi

The size and balance of uses within the local centre will be market driven and be of a scale to serve the local population and complement access available to the surrounding amenities and facilities.

How will you work with the local authorities and local education providers to develop and deliver employment and skills plans that support local employment and skills activities through construction and where appropriate occupation phase? Provide an explanation of how on-site employment will be maximised taking into account strategic target of providing one job per home. For the construction phase, produce a high level strategy to raise construction skills (including for NVQ Levels 3+) and employability levels. Outline the proposed approach to supply chain engagement (during construction and in the lifetime of the development), and how use of local suppliers will be maximised.

Respons

The developer is willing to commit to providing a skills and employment strategy which would be secured via the Section 106 Agreement to be agreed as part of an outline planning application. This strategy will include working with and linking up with relevant institutions to support local employment and skills activities during the construction of the development and once it is occupied. This could include liaison with local colleges, local authorities, Harlow Chamber of Commerce and maximising opportunities from the Central Government Apprenticeships programme to support the raising of skills locally. The use of local suppliers will be maximised.

Where applicable, what is the overall quantum and breakdown of proposed employment uses by accommodation type/economic sector, including any proposed sector focus? How will the layout, buildings and work spaces in the development provide the flexibility to adapt to changing circumstances? What is the approach to delivery to ensure timely provision of employment uses alongside residential and other uses?

Response

This report provides details of the local centre (which caters for offices, workshops and retail/ community facilities employment), but is illustrative only at this stage. As stated above, it will need to remain flexible to future changes in demand. Further details of quantum and breakdown of uses will be provided through future planning applications and which will be informed by market research at the time to help inform the appropriate balance of uses to reflect market conditions, customer demand and behavioural trends. The local centre is also shown flexibly and could include small live/work units, and residential uses above commercial uses to create a vibrant and successful local centre.

ustainability, nasing & ewardship

INDICATIVE PHASING STRATEGY

Indicative Phasing Plan

The plan (right) shows an indicative phasing plan for the site. It should be noted that the final phasing plan will need to be agreed as part of a planning application. The indicative phasing is broken down into three possible phases, as follows:

Phase 1

Movement:

- Part of the East-West Green Corridor
- Minor mobility hub (west)
- Secondary and tertiary road infrastructure (for Latton Avenue see below)

Green space:

- SuDs and swales for drainage
- Rye Hill Park
- First phase of the SANG (accessible from both a link along the western side of Latton Park and the existing Public Right of Way)

Housing:

Circa 500 homes

Phase 2

Movement:

- Part of the East-West Green Corridor
- Secondary and tertiary road infrastructure (for Latton Avenue see below)

Green space:

- SuDs and swales for drainage
- Latton Park
- Second phase of the SANG

Housing:

• Circa 680 homes in the north and north-east parts of the site

Phase 3

Movement:

- Part of the East-West Green Corridor
- Minor Mobility hub (east)
- Secondary and tertiary road infrastructure (for Latton Avenue see below)

Green space:

SuDs and swales for drainage

Housing:

Circa 320 homes in the north-east parts of the site

It is recognised that flexibility needs to be retained in setting out the proposed phasing and sequencing in order that the development can respond to changing circumstances over time, including changes to planning policy and market conditions. A coherent and coordinated approach to residential and infrastructure delivery, construction management and development phasing will be undertaken, to create a coherent place and to avoid the creation of parcels of land or pockets of development that are isolated from each other.

Associated Infrastructure

Associated Infrastructure

The local centre, primary school, secondary school, the main mobility hub, Latton Avenue between Rye Hill Road and London Road, STC connector or other sustainable active travel measures will be provided for by certain population size triggers with the goal of early delivery where feasible and reasonable to support the sustainability and cohesion of the new community. It is expected that access from the east should be delivered early in the development. A limit will be agreed on the number of homes able to be served off Rye Hill Road, before Latton Avenue access through to London Road is made available.

Construction and Logistics

It is expected that the vast majority of the construction traffic will access the site from London Road, via the farm track or a haul road. A Construction Management/Traffic Plan will be provided as part of the outline planning application to explain how the construction traffic will access the site to ensure the existing highway network is not unduly impacted

Associated Phase **Phasing Concept Plan**

INFRASTRUCTURE

DELIVERY AND NEXT STEPS

Utilities

Utilities play a key role in the economic and social success of a place. Utilities provide critical infrastructure to enable day to day activities to take place and for the development to function properly. They will also play a key role in promoting environmental sustainability across Latton Priory ensuring that there is sufficient capacity to deliver the roll out of new technologies such as electric cars. A high-level utilities layout should be established through future outline planning applications, with more detailed / final layouts relating to specific development parcels being provided and secured through reserved matters planning applications.

It should be noted that energy efficiency and renewable energy initiatives continue to evolve alongside Government legislation and policy, as well as potential changes in how residents may use their homes in the future, and for these reasons, any energy strategy for Latton Priory will need to enable changes to be made in response to these external factors.

Electricity

National policy and standards evolution suggest the use of a high efficiency electrical network will ultimately eliminate the need for gas (which is now considered to be a high carbon technology) for heat and power. In this scenario, residential homes will not directly be connected to the gas transmission grid, whilst the reduction in the demand for gas in other buildings at Latton Priory will also be considered, ensuring that environmental impacts of non-reusable energy is minimised and the transition to a low carbon development is facilitated.

Through use of an Independent Distribution Network Operator (IDNO), the loads required for the residential dwellings charging and heating requirements will be substantially diversified, therefore, minimising the overall impact on the surrounding electrical network. Threephase electricity supplies will be considered rather than single-phase, which will allow for a more stable connection as well as providing more load at peak times to facilitate the wide scale use of Electric Vehicle Charging Points (EVCP). The use of three-phase would

also allow for smart grids to be considered or later retrofitted as technology and electrical usage changes, whilst also allowing for maximum exploitation of renewable energy sources on properties, if used.

High efficiency electric heating methods could include:

- Ground source heat pumps
- Air source heat pumps

To assist with the above, the placement of houses should, where possible from an urban design perspective, be orientated for solar gain with roof mounted solar panels maximised, whilst placements will try to minimise shadowing. This approach could result in there being no need for a gas network to be installed for residential homes, although it is noted that there will be some circumstances where land uses within Latton Priory may require the use of gas. However, this may be offset in the future as National Grid explores the conversion of the gas transmission grid to use hydrogen instead.

As we move towards a future with electric cars replacing those powered by petrol or diesel engines, it will be important that the site's electrical capacity supports a single 7kW EVCP at each residential dwelling (with dedicated parking) within Latton Priory, plus additional charging facilities within the mobility hub.

In addition to the need to provide for sustainable energy within Latton Priory developers should look to integrate the following building design measures within buildings to reduce energy demand, including but not limited to:

- Energy-efficient highly insulated building fabric to all floors, walls, and roofs.
- High-efficiency windows throughout.
- High quality build achieving good air-tightness results
- Efficient-building services including high-efficiency heating and ventilation systems.
- Low-energy lighting throughout the building.
- Bespoke psi values to limit thermal bridging.

Potable Water

It is proposed that all new dwellings at Latton Priory will meet the enhanced water efficiency standard of 110 litres per person per day. Furthermore, the development will be designed to incorporate water efficiency into the scheme by the following measures, which are all subject to confirmation by the selected housebuilder:

- Low flow aerated kitchen taps
- Low flow aerated basin taps
- Dual flush cisterns to WC's
- Low flow aerated shower heads
- Tapered baths

In addition to the measures above, the buildings will be specified with water meters on the mains water supply. This will facilitate water consumption management and monitoring to reduce the impacts of inefficiencies and leakage.

Broadband

The instillation of broadband technology will be vital to the success of Latton Priory, particularly with more and more people working from home. Fibre to the Property (FFTP) should be delivered to ensure that all domestic and commercial uses are served, thus ensuring that business within the site can operate efficiently, working from home is enabled (also helping to ensure that the residents of Latton Priory have the opportunity for a work - life balance) and to ensure that smart homes can be enabled to support multiple devices within the home. It also helps with the reduction in the need to travel, thus helping to achieve modal transport shift.

Transport

The package of transport infrastructure to be delivered in association with Latton Priory will be determined as part of a Transport Assessment prepared in association with a planning application for the development.

There are also two relevant Infrastructure Delivery Plans (IDP) to consider as background, albeit not forming part of the development plan itself. These are the HGGT IDP (2019) and the Epping Forest District Council IDP (September 2020).

Table 20 (section 5.3.6) of the HGGT IDP summarises the infrastructure requirements identified for Latton Priory. It should be noted that Latton Priory has been identified to contribute only a proportion of the total cost of delivery of the majority of the items.

The Epping Forest District Council IDP provides an infrastructure schedule for District Wide measures (Table 4.1), combined strategic sites (Table 4.2) and those related to Latton Priory (Table 4.7).

In relation to transport infrastructure, there is a significant overlap between the measures included in each of the IDP's.

The transport related infrastructure as set out in the HGGT IDP is summarised below along with the proportion of the total cost sought from Latton Priory as a

- TR5: Minor upgrades the M11 Junction 7 (70%)
- TR6: Link Road and B1393 junction from Latton Priory to M11 Junction 7 (100%)
- TR9: Velizy / Second Avenue works (5.94%)
- TR20: Second Stort Crossing including realignment of Eastwick Road (6.11%)
- TR28: Sustainable Transport Corridors and Town Centre Transport hub (5.01%)
- TR33: Public and active transport support (5.92%)

In addition to the above, the Epping Forest IDP includes the following items relevant to Latton Priory:

- DW5: More Significant Improvements to Junction 7 of the M11
- DW6: Mitigation of Impacts on EFSAC

DW8: Explore the potential and viability of new bus services and increased frequency of existing services

• DW9: Installation of Real Time Travel information and train stations and bus stops

The HGGT Latton Priory Access Strategy Assessment Report (July 2020) prepared by the HGGT partners identifies a number of suggested mitigation options, as

- "The eastern link road design will need to respond to the historic field patterns to south-east and setting of Latton Priory SM & listed buildings.
- Impacts on CWS tree belt and important hedgerows & Ancient Woodland will need careful consideration.
- Works to Rye Hill Road to downgrade the road to the south of the site, to prevent its use by through traffic, potentially through the use of modal filters.
- Provision of a parallel or adjacent walking and cycling link between Latton Priory and Paringdon Road on Rye Hill Road to the north of the site.
- Consideration to the implementation of a Low Traffic Neighbourhood to the existing residential areas accessed from Paringdon Road through implementing further traffic calming or modal filters.
- Significant attention paid to the landscaping and screening of the junction of the eastern link road and London Road with the opportunity to consider the longer-term introduction of an extension to the BRT service to Epping."

These mitigation options will be considered in detail as part of the Transport Assessment prepared in support of the planning application. An appropriate package of transport infrastructure will be agreed and secured through a section 106 and or section 278 agreements.

Other Infrastructure Provision

The Illustrative Masterplan has sufficient flexibility to allow for provision of facilities on site if demonstrated it is required at application stage. The delivery and timing of any on-site facilities will be discussed with the HWE ICB and the Council and will be agreed and secured via a S106 agreement. Necessary and proportionate contributions will be negotiated as part of an outline planning application and secured via a S106 agreement

Development of the proposals at Latton Priory are expected to take place over a period of approximately 10 years, taking the build out just beyond the end of the life of the Epping Forest Local Plan which ends 2033. It will be supported by an early application for the principal part of the SMF proposals.

This Strategic Masterplan Framework, along with the Epping Forest District Local Plan, provides a strategic framework for future planning applications at Latton Priory and for delivering a high quality and sustainable place, including the provision of appropriate infrastructure at the right time. Co-ordination between the Council, landowners/developers and key stakeholders will be required.

Future Planning Applications will:

- Set out the development parameters and detailed description of development including the scale, heights and uses for which permission is sought;
- Provision of appropriate level of supporting information in accordance with national and local planning policy and relevant Regulations which is expected to comprise of:
- A Design and Access Statement setting out the evolution of the design of the proposals and an explanation of the design decisions taken and made
- An Environmental Statement (subject to any Screening Opinion to the contrary) addressing the issues advised in the EIA Regulations and refined and further articulated in any Scoping Opinion;
- Information required in relation to the Habitat Regulations Assessment and the assessment of air pollution pathways to Epping Forest SAC and in accordance with the Council's HRA site specific review process or as may otherwise satisfactorily address the requirements of HRA
- Such other information as is agreed to be reasonable and necessary to allow consideration of the proposals
- The securing of and timing of delivery of mitigation measures and/or infrastructure which is in compliance with the infrastructure tests set out in Section 122(2) of the Community Infrastructure Levy (CIL) regulations which state that requests must be:
- Necessary to make the development acceptable in planning terms
- Directly related to the development; and
- Fair and reasonably related in scale and kind of development

Community assets can encompass a wide range of uses, such as parks and open space, community centres or sports centres; however, in general terms they are defined as buildings or land, which are primarily used for the wellbeing or social interests of a local community. At Latton Priory, these community assets include the green and blue infrastructure which will be created and enhanced and managed to improve and complement the natural environment and deliver net biodiversity net gain (such as Latton Park, SANG, SuDS and the East-West Green Corridor); other areas of public realm (such as the plaza within the local centre) and community buildings (potentially the pavilion building in Latton Park).

EFDC Local Plan Policy SP3 includes principle (iv) which advises; "agreeing appropriate and sustainable long term governance and stewardship arrangements for community assets including heritage assets, greenspace, the public realm and community and other relevant facilities prior to the determination of outline planning applications. Such arrangements will be funded by the development and include community representation to ensure residents have a stake in long term development, stewardship and management of their community".

Stewardship arrangements will therefore be developed for Latton Priory and will be set out in a Stewardship Strategy which will accompany a future outline planning application(s). This will draw on HGGT Stewardship Advice Stage 2 Final Report prepared for the Councils by Arup (June 2020) and also to the emerging HGGT Stewardship Charter.

Long term stewardship offers numerous benefits for:

Communities

- Long term maintenance and management of highquality facilities for new and existing residents
- Putting people at the heart of delivering successful places
- Moving towards social sustainability

Developers

- Adding value to development from the outset
- Creating confidence
- Placemaking and marketing

Council

- Minimising financial liabilities
- Enabling surpluses to be reinvested in the management and maintenance of community assets
- Greater value for the community

The HGGT Emerging Stewardship Charter also highlights that as well as developing, owning, maintaining and effectively managing the public open spaces, buildings and facilities, it can also initiate, develop, and deliver community and cultural activities to create and maintain a thriving, inclusive community and encourage communities to also participate in schemes linked to the stewardship of assets.

Successful long-term stewardship should be considered from the outset and if the developer delivers an asset, consideration needs to be given as to when assets are transferred to the stewardship body (and any interim arrangements).

There are many ways to achieve stewardship and the TCPA has produced a guide to Long Term Stewardship (2017) which sets out key principles that underpin stewardship success and which have been embedded into HGGT principles. This can include establishing a stewardship body responsible for undertaking such activities which can take many forms. The operation of a stewardship body is influenced by three key

interdependent elements:

Stewardship model, which determines organisational structure and the associated governance, objectives and regulatory requirements of the body and which depends on the asset, the place, and the people who will live in the community.

Legal form, which dictates the responsibilities and liabilities of the body and its members as good governance and investment in the right skills and capacity is crucial.

Funding sources available for capital and revenue expenses, which can be influenced by the stewardship model or legal form adopted. Capital is typically needed to set up the organisation which will likely by secured through payment through the planning system (Section 106) and revenue funding is essential for successful stewardship to cover every day running costs.

Encouraging a successful and active community is key and which will require an innovative approach to create the conditions for local resident participation and public engagement in the design and stewardship of their new communities.

The approach at Latton Priory will take into account the 18 emerging Stewardship Principles for HGGT to preserve the legacy of Latton Priory. These refer to ensuring the governance structure is appropriate and that stewardship is community-led with meaningful and inclusive engagement being ongoing and ensuring that activities are aligned with HGGT targets and place shaping achievements and practices. The strategy will need to be financially sustainable and enable creative, collaborative, and innovative projects, including meanwhile uses which generate community-led spaces and activities reflecting community interests and which themselves provide income generating opportunities to be re-invested in stewardship. HGGT Emerging Objectives also expects any service charge and/or estate charge to be set at and maintained at a reasonable level that is commensurate with the level of cost that is incurred in maintenance.

To ensure that the community is at the very heart of the management of Latton Priory, a charitable Community Trust could be created and established. This could take ownership of the community assets and be responsible for their ongoing management and maintenance. These community assets will primarily benefit the future occupiers of Latton Priory but will also be available to others to use, including those residents in both Harlow and the surrounding settlements within Epping Forest District.

A simplified structure for the Community Trust is provided on the adjacent page.

The Members of the Trust would be the residents of Latton Priory with a membership category also for the commercial occupiers (such as the businesses within the local centre).

The Trust could have a Board comprising representatives of the community - predominantly the residents at Latton Priory, albeit this is likely to take a period of time for the full complement to be established as the community grows and evolves. Other Board members could include representatives from North Weald Bassett Parish, Epping Forest District Council, Harlow District Council, the Harlow and Gilston Garden Town Board and Essex County Council.

The Board's role would be to primarily ensure that the community at Latton Priory has stewardship and oversight of how the development is planned and managed going forward. The Board will ensure that the community is at the forefront of decision making.

In this model, the following roles are envisaged:

- An Executive Director to manage the day-to-day activities and operations of the Trust.
- A Community Manager responsible for the community activities undertaken at Latton Priory (including all engagement activities such as a codesign process) and for the day-to-day internal and external communications.

A Community Concierge Manager - responsible for the day-to-day operations and management of the mobility hub within the local centre as well as the implementation of the wider travel and mobility planning initiatives. There could be oversight of the travel and mobility planning initiatives by an independent Transport Review Group whose role could be to monitor and review the operation of the mobility plan and advise the Trust how it is performing and what additional actions might be required or

amendments to reflect new ideas.

Transferred to the Trust, there is an assumption that the day-to-day management of the green and blue infrastructure would be undertaken by a contractor rather than direct employees.

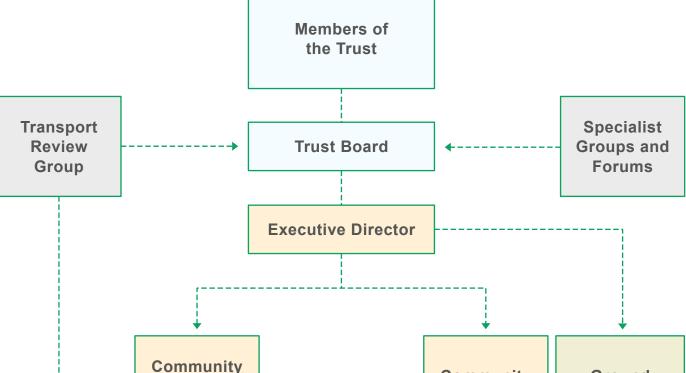
In this model, the land upon which the community assets are located would be owned by the Trust. The Trust's articles should include an 'asset lock' to ensure that the community assets continue for the common benefit of the occupiers of Latton Priory. In the event that a community asset is judged to be surplus to requirements, through the Trust, the community will have an input to its future use, including sale of the land or buildings. Other sources of income to the Trust will include a management covenant charge, rent from the community buildings, other fees/ charges such as parking and community growing space, grants and commission from other commercial activities.

It is envisaged that the Trust will be an important consultee for any planning applications at Latton Priory.

The Community Trust will have accommodation associated with the community building located in the local centre at Latton Priory. Initially, temporary offices may be used until the community space has been constructed.

Possible Assets any New Trust could Manage

- Strategic and local open space
- SANG
- Latton Park
- Rye Hill Park
- Green Corridors
- Sports pitches (e.g. sports pitches within Rye Hill Park)
- The potential leisure centre aspect of the secondary school
- The community hall in the local centre
- The plaza in the local centre
- Other small squares and spaces (e.g. dwell space outside the primary school)
- Car parking



One Possible Stewardship Model

Concierge

Manager

Community Ground Maintenance

PLANNING DELIVERABLES

Below is a non-exhaustive list, which should be read alongside the Council's validation list, which details what is intended to be produced as part of the subsequent Outline Planning Application(s) (OPAs). The final list will be determined by each application area's site-specific characteristics and the nature of the application proposals.

VALIDATION REQUIREMENTS FOR OUTLINE PLANNING APPLICATION

Drawings	Documents
Site location plan	Application form
Site plan	Consent form for the Payment of Council Related Costs
Topographical plan	Draft S106 Heads of Terms
Parameter plans:	Planning Statement to include Affordable Housing Statement
Land use	Design and Access Statement to include HGGT Vision assurance statement, meanwhile use strategy, landscape and lighting strategy
Access and movement	Consultation report/ Statement of Community Involvement
Green infrastructure and open space	Environmental Statement (further to EIA Scoping Process) and Non-Technical Summary (may incorporate other relevant reports listed below)
Maximum building heights	Transport Assessment and Travel Plan (Inclusive of Bus Strategy, Active Mode Strategy, Parking Strategy and Access Strategy)
Illustrative Masterplan	Flood Risk Assessment
Highways plans to enable determination of access details as part of outline	Drainage Strategy (foul and surface water) and including SuDS
application and associated landscape and drainage details	Ecological Survey and Report /BNG Statement
	Habitats Regulations Assessment (not a validation requirement and to be completed by Local Planning Authority)
	Aboricultural Survey and Report
	Archaeological Assessment
	Heritage Statement including Management plan for the moated site
	Sustainability Statement (and Checklist)
	Utilities Report (to include high level utilities layout)
	Agricultural Land Assessment
	Noise Assessment
	Air Quality Assessment
	Contaminated Land Assessment
	Health Impact Assessment

FOLLOWING VALIDATION OF OUTLINE PLANNING APPLICATIONS

Following validation of outline planning applications, further deliverables may or may not be required to inform preparation of an accompanying planning obligation(s) or at a later stage of the planning and delivery process, post outline, prior to the submission or approval of Reserved Matters Applications.

- Viability Assessment
- Outline Construction Management Plan to include indication of routing
- Design Code or Design Code Strategy (including Scalable Framework Plan, Design Code with design principles, Reporting of the Design Code Testing process, Design Code Compliance Checklist)
- Land Compliance Checklist for Schools (ECC)
- Statement of Delivery/ Delivery Strategy (as per HGGT 'How To' Guide to Planning Obligations, Land Value Capture and Development Viability).
- Stewardship Strategy (Inclusive of engagement strategy, delivery programme, community development/ social value strategy, quality assurance/ monitoring strategy, outline business plan, Shadow Stewardship Body governance/ terms of reference, as per emerging HGGT Stewardship Charter)
- Drainage Strategy Maintenance Plan

Below is a non-exhaustive list, which should be read in conjunction with the Council's validation list, of the details which will be produced as part of the subsequent Reserved Matters Application(s) (RMAs) or through the submission of details in relation to anticipated planning conditions or Section 106 provisions secured with any outline permission. The final list will be determined by each application area's site-specific characteristics and which will cover matters which have arisen through the planning process.

Drawings	Documents
 Site Location Plan Proposed Detailed Site Layout (Inclusive of Landscape Plan and Parking Plan) Building floor plans, elevations and sections Site Sections and Levels Landscaping Details Design Intent Details 	 Design and Access Statement (inclusive of HGGT Vision assurance statement, material palettes) / Design Compliance Statement (to refer to DAS and Design Code) Detailed Construction Management Plan to include Routing Management Plan Site Waste and Materials Management Plan Construction Skills and Training Strategy Meanwhile Use Strategy Lighting Assessment Refuse and Recycling Provision Statement of Community Involvement / Consultation Report