

3.6 NON-RESIDENTIAL DESIGN

Objective:

Non-residential buildings must be designed to accommodate a mix of uses to facilitate a self-sustaining village, alongside appropriate outdoor spaces, storage and ancillary facilities. They must be flexible and accessible and include elements of character according to neighbourhoods and reflect their distinct uses.

Local Plan Policy: PC01, PC03 and PC11

Guidance

1. Within areas of mixed uses, such as the Village Centre and Neighbourhood Hubs, ground floor uses should be designed to be flexible, adaptable and accommodate a full range of uses without compromising the amenities of residents.
2. School buildings must be well designed, attractive, landmark buildings, with clearly legible entrances, high quality internal spaces and child friendly internal and external environments. Vehicle free "school zones" must be provided around schools with the area around the main pupil entrances attractive spaces that are entirely traffic free to facilitate social interaction and connected by safe and direct walking and cycling routes to the community/neighbourhood they serve.
3. Non-residential buildings should be designed to reflect the architecture of their neighbourhood, and aid neighbourhood legibility.
4. All non-residential buildings must have attractive and well-designed entrances which promote passive surveillance and a sense of place.
5. The buildings in the village centre and neighbourhood hubs must have uncluttered human scale shop fronts with attractive and clear signage.
6. Non-residential buildings must be designed to incorporate ancillary features and spaces to ensure good relationships with the public realm and avoid unacceptable amenity impacts. They must also include cycle storage in addition to end-of-trip facilities for cyclists.
7. All buildings (including residential, commercial, community etc) must be designed and provided with Full Fibre to the Property (FFTP).

Flexible and adaptable ground floor spaces for mixed use buildings

3.6.1 The Land Use Key Plan explains how non-residential uses will be distributed throughout the garden village to create a self-sustaining neighbourhood. Some buildings will be mixed-use with community or commercial uses at ground floor and either residential or office use above. In order to ensure that the required commercial and community uses to support the Garden Village are provided, planning applications will need to explain how those buildings will be designed to accommodate their uses.

3.6.2 The treatment of the ground floor of mixed-use buildings should offer opportunities to create distinctiveness and a welcoming environment where clearly legible entrances are accessible to both resident and visitor. They should provide ceiling heights of at least 3m for all publicly accessible areas and at least 85% of the internal net area of the non-residential unit to allow adaptability for different uses in the future. It is recommended that these spaces should have unit sizes which would facilitate subdivision, broad spans between columns with consolidation of mechanical and electrical services, floor-to-ceiling heights that allow a variety of uses and potential for mezzanine floorspace, floors with higher specifications for loading and vibration, doors / lifts that facilitate loading and unloading of goods and plant, and security measures conducive to storage of high value stock and plant. It should also be noted that not all floorspace needs to have the same level of flexibility.

3.6.3 Planning applications for mixed use developments should demonstrate the anticipated uses needed to create a self-sustaining village and minimise trips to other locations. They will also need to demonstrate how the design of units would accommodate those uses. For example, if no dedicated places of worship are provided, the community centre will need to be designed to accommodate a multifaith place of worship that accommodates the design requirements for religions which are not otherwise catered for within walking and cycling distances.

3.6.4 Community facilities such as the community centre will need to explore the possibility of providing small-scale sports facilities which cater to the specific needs of the community. In particular, opportunities for providing a small swimming pool and a health/ fitness suite should be explored.



Figure 47. Flexible and adaptable ground floor spaces.



Figure 46. Lakes Estate, Milton Keynes - HTA Design

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3.6.5 Restaurants, cafes and drinking establishments will also be needed to create a vibrant social life. These will require ventilation and flues which should be designed into the building fabric to avoid retrofitting or prejudice the potential for these uses to come forward. Any service-related ventilation should be designed with louvered openings which incorporates architectural screening. No flu exhausts are allowed to the streets and public spaces.

3.6.6 A village pub or café may require a garden or outdoor seating which should be designed in. Other restaurants and cafés should explore opportunities for outdoor seating to further increase the livelihood of neighbourhood centres.

3.6.7 Mixed use buildings should also be designed to ensure compatibility between uses. Residential uses above noise-generating uses should be avoided. Planning decisions may need to include restrictions on noise levels and operational hours, and sound-separating floors between uses.

3.6.8 Nurseries should have dedicated secure outdoor space. These should include open air zones and weather protected zones and be fenced and away from general public overlooking.

Well-designed Schools

3.6.9 Guidance for school design is subject to change dependent on funding models and education providers. The schools within the village will need to be designed in accordance with the most up-to-date standards.

3.6.10 Approaches to schools should be designed to create safe, child-friendly environments. No private car parking spaces will be permitted outside schools in order to create safer environments and discourage car journeys to schools. Cycle parking must be provided.

3.6.11 Schools must have two separate vehicular entrances, away from the pedestrianised frontage. One entrance should be for staff parking and deliveries and the other for emergency access and grounds maintenance.

3.6.12 All schools within the Garden Village should be designed to respect the design of the neighbourhood in which they are located. Their entrances, frontages, boundaries, and primary elevations should be designed to address the locality and should be inspired by similar buildings located within typical Essex villages. Their elevation materials should also be related to those set out in sections

5, 6 and 7 of this SPD depending on the neighbourhood in which they are located.

3.6.13 In terms of height and volume, schools should have storey heights which are taller than those of residential buildings, which will create some distinctiveness and identify schools as important community buildings.

3.6.14 All school fencing should also adhere to the neighbourhood character and ensure security and no overlooking is maintained at all times. It should also be noted that if school buildings are used as part of the actual boundary, they cannot include windows, as this can cause a privacy and security risk. Emergency access should be provided to school playgrounds. Further guidance on this matter can be found in the ECC Developers' Guide to Infrastructure Contributions.

3.6.15 All educational amenity spaces, including soft and hard landscapes, should be of a very high quality.

Contextually designed community and employment buildings

3.6.16 Other non-residential buildings in the Garden Village, for example those related to employment, community or mobility hub uses, should be designed to create active frontages and should be legible with clearly defined and accessible entrances. Building designs should reference the design standards set out in sections 5, 6 and 7 of this SPD to reflect their neighbourhoods and should take inspiration from similar building examples within typical Essex villages.

3.6.17 Applicants are advised to engage with end users during the design process for community buildings, to build a comprehensive understanding of their needs to inform the proposals.

Clearly defined and accessible entrances

3.6.18 Mixed use buildings require several entrances at ground floor level which should be well designed to accommodate all users.

3.6.19 Within mixed use buildings, all residential lobbies should be highly visible and accessed from the public realm giving clear and well-defined entry points. All residential lobbies, commercial units, non-residential and service access points should be easily accessed at grade.

3.6.20 Buildings which are designed for one use only should benefit from legible and clearly defined entrances which are easy for visitors to use and be of human scale.



Figure 48. Treatment of ground floor to reflect activity.



Figure 49. Legible entrances

Figure 50. Ground floor should provide ceiling heights of at least 3m.

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3.6.21 Within the village setting, warehouse style buildings should be avoided in favour of buildings which reflect the site's character and the design qualities of similar buildings within other Essex villages. Double-height entrances should be avoided, unless the façade and entrance are at a human scale.

3.6.22 The service access points such as bin stores and cycle stores should be expressed but not to be confused or compete with the main entrances. Service and storage entrances should be screened from view through recesses in facades, landscaping and architecturally finished doors which are integral within the facade design and appear secondary to the main entrance. Service entrances should be located off secondary or tertiary streets and oriented to minimise disruption of the public realm.

Clearly designed shop fronts and signage

3.6.23 Retail and commercial units contribute to the street frontage within the Village Centre. They should be setback from the street to allow for sufficient room for pedestrian routes and landscaping and clearly advertised through well-designed signage that is consistent across all units within a single frontage.

3.6.24 Windows should form a large visual element in the shop front. Shop fronts should make sure that signage, fascia lines, illumination, advertisement and security features are designed as an integral part of the rest of the shop front. Signage size, location style and design should be consistent across all units within a single frontage to avoid clutter.

3.6.25 For retail and commercial units, frontages should be embedded within the building and should be set back to allow for sufficient spill-over space and generate street activity (for example, outdoor seating associated with cafes). Canopies and awnings can be integrated with the design to reinforce legibility for retail development uses and building entries. These may be fixed or retractable. Ancillary features and spaces

Ancillary features and spaces

3.6.26 Service spaces for the commercial units should preferably be located away from primary routes and be designed with the use of decorative screens to avoid negative impact on the façade, and in locations that respect the design of the building, including arrangements of bays and window openings.

3.6.27 Commercial units should accommodate sufficient space for their servicing, delivery and plant needs. Storage spaces will be required to avoid delivery cages or bins being stored in public spaces and should be located within buildings or in screened service yards. Waste storage will need to be designed to be easily accessible by collection operatives.

3.6.28 Delivery, collection and servicing strategies will also be required to accompany planning applications for non-residential units.

3.6.29 For specialist facilities, such as schools or nurseries, additional internal storage space may be required for items such as children's backpacks, buggies, etc... In the village centre and neighbourhood hubs a delivery, servicing and collection strategy will be required which will need to demonstrate how these activities can safely and conveniently take place without causing obstruction or congestion.

Cycle and pedestrian facilities

3.6.30 Places where people work and visit will be required to include short-stay cycle parking for visitors, and longer-term cycle parking for workers alongside end-of-trip facilities to promote cycling as a way of transport. Specialist uses, such as schools, will need to accommodate suitable cycle parking and ensure that space is available to store other items such as scooters, as appropriate to the use of the building.



Figure 52. Savoy Circus, London - HTA Design



Figure 51. Winstanley Estate, London - HTA Design



Figure 53. Illustrative sketch showing the non-residential area - HTA Design

3.7 ADAPTABLE AND CONNECTED COMMUNITIES

Objective:

Buildings should be located and designed to be suitable for people's changing needs. Building design should create safe communities.

Local Plan Policy: HP06, BE01, BE12, BE15 and R01

Guidance

1. Specialist Accommodation should be provided close to the village centre with easy access to services and transport.
2. Homes and buildings should be adaptable to accommodate those with disabilities.
3. Homes should be designed to accommodate all sections of the community.
4. All homes should have internal space to enable working from home.
5. All buildings (including residential, commercial, community etc) must be designed and provided with Full Fibre to the Property (FFTP).
6. New buildings should achieve Secured by Design accreditation
7. Buildings and places should be designed to create passive surveillance.
8. Car-free places should be created in vulnerable locations to achieve good highway safety.

3.7.1 Buildings in the Garden village should be located and designed to be adaptable and accessible by:

Locating Specialist Accommodation within walking distance of facilities

3.7.2 Specialist accommodation will be required in the Garden Village. This form of accommodation includes, but is not limited to, housing for older people such as Independent Living schemes for the frail elderly, homes for those with disabilities and support needs, and residential institutions.

3.7.3 A specific location has not been allocated, because it should be well integrated within the residential parts of the development and avoid segregated communities.

3.7.4 However, it should be located within 400m (5 minutes) walking distance of local facilities to avoid isolation and minimise car dependency. Supported accommodation should be provided to allow people to live independently and play a role within a vibrant community.

3.7.5 To further encourage the integration of specialist homes, opportunities to provide specialist accommodation within market housing should be considered, wherever possible. Specialist accommodation with communal facilities could also be designed to share spaces with other services such as community centres.

The public realm must be aligned with the principles of inclusive design, as set out in section 3.9, to ensure that people with physical or sensory impairments are able to freely move around safely and with confidence.

Providing accessible and adaptable places

3.7.6 Buildings should be designed to provide high levels of accessibility. Streets should be designed to have unique characteristics and distinctive design features which mean they are recognisable and dementia friendly. Design features may include scented planting, distinctively coloured entrance doors, and legible signage, to differentiate streets.

3.7.7 Publicly accessible buildings should provide accessible facilities, and community buildings should include a Changing Places WC facility.

Adaptable homes

3.7.8 Homes should be designed to allow intergenerational living and adaptation over time. Peoples' needs change regularly, and homes should be designed to be adaptable to changing circumstances. Larger homes with 3 or more bedrooms should be designed to allow the separation of kitchen and living spaces, and homes with garages or lofts should be designed to allow future conversion to allow households to grow. A range of house types should be provided, including single storey homes, M4(3) housing with wheelchair accessibility, and Building Regulations Part M4 Category 2 (Accessible and Adaptable Dwellings). These will allow people to move to more suitable homes within their community, if their homes are no longer suitable for them. Communal gardens, play spaces, and other facilities such as cycle and bin stores should all be wheelchair accessible to ensure that all sections of the community have equal access.

Housing Choice

3.7.9 A range of house types should be provided to allow for mixed communities and changing needs. Older people downsizing may create opportunities for families to grow if flats are located near houses, and self-build homes offer opportunities to create unique homes which suit a wider range of needs. Engagement with ECC is required to ensure specialist accommodation is provided at the right scale, location and design.

Enabling home-working

3.7.10 All homes should be designed to facilitate working from home, which can assist in reducing the need to travel and accommodate those who are less mobile. Spaces for home-working, in particular in smaller homes, and fast broadband connections, should be provided to demonstrate how homes can be suitable for home working.

3.7.11 To create safe places, buildings should:

Achieving Secured by Design accreditation

3.7.12 Secured by Design (SBD) works to improve the security of buildings and their immediate surroundings to provide safe places to live, work, shop and visit. Achieving accreditation means buildings have been designed to sensible, achievable standards which create safe places both within vulnerable parts of buildings (for example, communal entrances), but also within public spaces. Good lighting, building orientation, and landscape design which creates accessible, visible spaces which achieve a sense of ownership, create safe places.

3.7.13 Developers are recommended to engage early on with the Designing Out Crime Officers (DOCO)/ Essex Police, to ensure that all new developments have integrated SBD guidance to ensure the safety of all users.

Creating passive surveillance

3.7.14 The Garden Village will be a landscape-led development with vibrant, busy community spaces, and quiet residential streets. On quieter streets it will be particularly important to embody the principles of passive surveillance to ensure that open spaces, play spaces, and routes, are well overlooked and lit (avoiding excessive light pollution) which avoid creating opportunities for crime.

3.7.15 Wherever possible, consideration should be given to the layout, orientation and positioning of homes fronting onto public rights of way or accessible routes, to increase opportunities for passive surveillance, community interaction and engagement, and environmental control.

Creating car-free places

3.7.16 Buildings within the garden village which will be visited by large numbers of children, for example the entrances to play spaces, schools, and nurseries, should have car-free zones which allow pedestrians to dominate and avoid clashes between people and cars.

3.8 SUSTAINABLE DESIGN

SD1. Future Proof Design

Objective:

Building must be designed to be future proof. They must be resilient, prioritise health and well-being and must be adaptable to the changing needs of the population.

Local Plan Policy: BE01 and R01

Guidance

1. Building designs must be easily adaptable and flexible in order to respond to the changing needs of users.
2. Design must take into consideration the needs of different users and their health and well-being.
3. Buildings must be adaptable to allow the use of new technologies.

3.8.1 Building designs must be flexible and must allow for adaptive reuse. The designs of buildings should allow for future upgrades and retrofitting, for example where lofts or garages are provided, they should be designed to be easily converted to habitable accommodation. Non-residential buildings should be designed to be fit-for purpose, but adaptable to accommodate future changes in the way that buildings are used. As the needs of the community change, the buildings must be able to respond and to adopt new uses. Flexible floor plans and the use of durable, high-quality materials will facilitate this and will prevent buildings from becoming redundant.

3.8.2 Similarly, buildings must be able to allow the use of new technologies as they arise, with built-in void spaces for cabling, pipework, or plant which may be associated with future technologies. These do not need to be dedicated separate spaces, but sensible design which allows flexibility. Smart infrastructure and renewable sources of energy should be integrated into communal areas. Such measures should be incorporated during the detailed design stage and should accommodate the necessary infrastructure not only at the scale of individual buildings, but within the wider community layout.

3.8.3 Planning applications must also consider the future needs for buildings within the development and allow sufficient flexibility within road and building layouts. For example, anticipating the potential for increased electric vehicle use and allowing for sufficient substation capacity, or future potential for 'last mile' delivery services with space for convenient drop off, storage, and loading facilities for autonomous delivery vehicles as they are adopted.



Figure 54. SuDS / Rain-gardens

3.8 SUSTAINABLE DESIGN

SD2. Low Carbon Development

Objective:

The development as a whole must aim to be Net Zero Carbon for buildings on completion of the development. This means that upon completion, an equivalent amount of energy is produced on the site as is used on the site in an average year.

Local Plan Policy: BE01, BE02 BE03, BE04 and R01

Guidance

1. Buildings must demonstrably reduce CO2 emissions in use.
2. Buildings should incorporate technology to monitor energy efficiency.
3. Homes must be designed to avoid the use of fossil fuels in the early stages, and to be completely fossil-fuel free in later stages, as technology progresses. No gas fuelled technology is allowed at the outset of the development.
4. Buildings should incorporate renewable energy technologies. Large buildings and those with several units should use centralised heating systems where feasible.
5. Provision should be made for battery storage to recover excess renewable energy for later use
6. The development as a whole must consider the path to Net Zero Carbon from the beginning. This must be outlined in a roadmap which sets out how this will be achieved.
7. It must be ensured that opportunities to design in renewable energy are taken wherever possible.
8. The operational energy of buildings must be reduced by using efficient systems and appliances and providing guidance to residents on an energy efficient lifestyle.
9. The use of Electric Vehicles charged from home must be encouraged to lower the transport footprint and to maximize the benefits of renewable energy.
10. Purchasers must be offered upgrades to their homes to make them cheaper to run.

3.8.4 Sustainable Design should achieve the following:

Demonstrably reduce CO2 emissions in use.

3.8.5 All homes should follow a hierarchy in design of maximising the thermal performance of the envelope first, then implementing efficient fossil-fuel free services and finally using renewable energy systems.

3.8.6 Building services should be hidden from view from the street where possible, while being accessible for servicing, maintenance and replacement.

3.8.7 Renewable energy systems should be incorporated into the architecture of the building and not installed as an afterthought.

Achieve a fossil fuel free future.

3.8.8 The Local Plan sets out that developments which incorporate renewable, low carbon or decentralised energy systems will be supported.

3.8.9 The FutureHomes Standard due to be implemented in 2025 will signal a move away from gas boilers for new homes. This site should be designed from the outset to take be completely fossil free from the outset and to take advantage of new fossil fuel free heating systems.

3.8.10 Heat Pumps are likely to become the primary method of heating new homes and should be considered in the early stages of the design of homes.

3.8.11 The development must be designed to be completely fossil free from the outset. This will mean early consideration of the impact on the local Grid of the long-term electricity demand for Heat Pumps and providing Electric Vehicle charging points for all parking spaces. Additional substations may be required to accommodate the increased electric capacity, and sites should be identified for these.

3.8.12 New gas connections through the site are likely to become redundant after a short period of time and should be avoided. As a new development site which requires new utility infrastructure, designing buildings to avoid gas use will obviate the need for gas connections anywhere within the site, reducing the infrastructure costs.

3.8.13 Larger buildings, or those with several units (such as low rise blocks of flats) should use centralised heating systems because it is more energy efficient to have one central source of heat rather than for each home to have its own boiler or heater. It is also easier to improve energy performance in the future by replacing centralised heating systems than individual heaters.



Figure 55. Low carbon, energy efficient development

3.8 SUSTAINABLE DESIGN

SD3. Adaptation to Climate Change

Objective:

All buildings must incorporate measures to adapt to climate change and avoid overheating.

Local Plan Policy: BE01, BE03, BE04 and R01

Guidance

1. The overall design and layout of the development must incorporate measures to adapt to climate change and give consideration to how the wider site level renewable energy is integrated.
2. Buildings must be designed to adapt to climate change and avoid overheating
3. Passive cooling should be used rather than mechanical ventilation or cooling

3.8.14 Building must be designed to avoid overheating risks and avoid need for cooling.

3.8.15 Passive design can avoid overheating risks and the need for mechanical cooling. Buildings should be designed to take advantage of sunshine in the winter months and to provide shading in summer.

3.8.16 Planning applications should be accompanied by a risk assessment for overheating using current best practice. Solutions to avoid overheating may include:

- a. Taking advantage of low winter sunlight to bring heat into homes.
- b. Using shading from buildings, overhangs and trees to reduce overheating in summer.
- c. Designing windows to be easy to use to maximise natural ventilation and avoid overheating.
- d. Large trees outside windows which allow light through in winter and shading in summer

3.8.17 Buildings should also be dual aspect to allow natural ventilation, including overnight purge ventilation which can release heat built up during hot days. Homes which are single aspect must have ventilated corridors, to avoid corridors acting as heat sinks and preventing cooling.



Figure 57. Air Source Heat Pumps



Figure 56. Shading

3.8 SUSTAINABLE DESIGN

SD4. Building Fabric

Objective:

All buildings must be designed to be energy efficient and to use materials with low carbon footprints.

Local Plan Policy: BE01, BE03, BE04 and R01

Guidance

1. Homes must be designed to conserve energy through their design.
2. Buildings should take a fabric first approach to energy efficiency.
3. Homes must incorporate renewable energy systems in a way that enhances their design.
4. The choice of materials must take into consideration the circular economy. A roadmap document setting out the steps to support the circular economy must be prepared before beginning construction.

3.8.18 Sustainable Design should achieve the following:

Design homes to demonstrably reduce CO2 emissions in construction

3.8.19 The energy taken to construct buildings is significant and can be reduced in simple ways if these are considered early in the design stage. Designers should consider:

- a. Renewable materials like wood for major structural elements of the building, or internal fittings.
- b. Materials which are capable of being recycled or reused when replaced.
- c. Prefabrication techniques to improve productivity and reduce embodied energy.
- d. Materials which have a long lifecycle rather than needing frequent replacement.

3.8.20 Building services should be robust, easily maintained and simple to operate.

3.8.21 Planning applications should demonstrate how low carbon technologies, materials and methods of construction will be used within the Garden Village.

Design Homes to incorporate renewable energy systems in an integrated way

3.8.22 New buildings should avoid using renewable energy systems on the front facades which look like an afterthought. Instead, systems can be used which blend into the architecture, for example using photovoltaic tiles on roofs which mimic roof tiles or are the same colour as the roofing material, or which are not visible from the street. External building systems, for example heat pumps, should be unobtrusively located (but accessible for servicing) and designed-in to the development rather than treated as an afterthought.

Materiality to consider circular economy

3.8.23 New buildings should consider the lifespan of materials used in their construction. Careful consideration should be given to how the materials used can be reduced while eliminating unnecessary waste, and eventually reused or recycled once the building approaches the end of its lifespan. Materials such as plastic, metal and timber can be easily recycled or reused if the initial design of the building facilitates and supports a circular economy.

3.8.24 Planning applications will also need to demonstrate how the transport and manufacturing impacts of materials have been minimised, for example through re-using materials (such as soil, aggregates and timber) on site, or using the railway line for deliveries to reduce the use of lorries.

3.8.25 A roadmap document must ensure that the materials used reduce waste, ensure a long and functional lifespan, with easy maintenance when necessary, and finally can be reused or recycled into other useful purposes. Planning applications must be accompanied by a construction waste management strategy which clearly sets out how construction waste will be sustainably managed.



Figure 58. Solar / PVS

3.8 SUSTAINABLE DESIGN

SD5. Electrical Vehicle Charging

Objective:

Electric Vehicle charging points must be provided for parking spaces throughout the village.

Local Plan Policy: BE11 and R01

Guidance

1. Electric Vehicle Charging infrastructure must be provided for all homes with on-plot parking.
2. Passive provision for Electric Vehicle Charging must be provided for all parking spaces.
3. Communal cycle stores should include provision for the charging of electric bicycles.
4. Sufficient substation infrastructure should also be planned for to ensure the electrical load requirements arising from vehicle charging demands can be met.

Design Streets to incorporate Electric Vehicle Charging

3.8.26 Government policy signals that Building Regulations will soon require all new on-plot parking to have Electric Vehicle (EV) charging points. This development should lead the way by providing it as standard per household where possible.

3.8.27 All street parking should have an EV charging point in each group of parking spaces, with the charging point located to serve the maximum number of vehicles. The charging stations should be unobtrusive and chosen for their simple appearance or incorporated into street lighting.

3.8.28 The design of electric charging points should ensure that they are located off the highway and do not result in cables potentially trailing over a footway or cycle route obstructing the highway. The incorporation of charging points into highway adopted lamp columns will not be permitted by the Highway Authority. Further to this, the design of electrical charging points must be futureproofed. The location of charging points, maintenance, replacement, and upgrades should be considered as part of the overall design and layout of development.



Figure 60. Electric charging point integrated with street furniture.



Figure 59. Electric charging point for vehicles.

3.9 INCLUSIVE DESIGN

Objective:

All areas of the public realm of the Dunton Hills Garden Village must be designed to be as inclusive and accessible for as many people as possible.

Local Plan Policy: BE14 and BE15

Guidance

All aspects of design within the Dunton Hills Garden Village must apply the guidance outlined in the Principles of Inclusive Design (CABE, 2006). These include the following standards:

1. Place people at the heart of the design process;
2. Acknowledge diversity and difference;
3. Offer choice where a single solution cannot accommodate all users;
4. Provide for flexibility in use, and;
5. Provide buildings and environments that are convenient and enjoyable for everyone, regardless of any form of disability or impairment.
6. Similarly, all proposals, including the public realm, should seek to integrate the principles of active design.

3.9.1 A well-designed public realm can contribute significantly to the quality of the built environment and play a key role in the creation of sustainable, inclusive, mixed communities. The public realm must provide a clear and inclusive environment that is suitable and safe for everyone, including people with disabilities, anyone with mobility limitations, multi-generational families, the elderly population (which is likely to increase and need support), those who are neurodiverse, people with mobility and sensory impairments, the sick and children in pushchairs, scooters etc. Inclusive design promotes greater social cohesion, reducing loneliness and increasing integration.

3.9.2 The public realm must be designed and planned to cater for as many people as possible. As an example, legible and varied signage, scent trails provided by plants, wayfinding, coloured front doors and cohesive urban design are not only good principles for any design but support the

freedom of people living with dementia. Paths should be at a maximum gradient of 1:21, handrails should be provided where possible and steps and ramps provided only where absolutely necessary and level access cannot be provided.

3.9.3 All civic and social spaces must be as inclusive as possible. A range of seating options must be provided - although they will be from the same family of furniture to provide a coherent feel. In particular play areas should allow children of all ages to learn, play and exercise together. Inclusive play items should not exclude children who are likely to use it. As an example, inclusive swings can be specified but they should be located near other items of play. Baskets swings are the best option since they support people of all ages and abilities to enjoy the swinging motion. Local disability groups should be contacted at an early phase of the design to support as inclusive a public realm as possible.

3.9.4 Healthcare facilities, in specific, should be as accessible as possible. The NHS should be consulted and engaged in early discussions around design and location of healthcare facilities.

3.9.5 Passive surveillance will promote a sense of safety and increase social cohesion. Secured by Design principles must also be implemented with key routes being well lit and well overlooked. Street furniture must also provide resting points, passing places and a comprehensive suite of wayfinding to support active lifestyle choices.

3.9.6 All proposals, including those relating to the public realm and landscaped areas, should seek to integrate the principles of 'Active Design' which encourage residents to lead active lifestyles. The ten principles of active design are:

- a. Activity for all neighbourhoods: Enabling those who want to be active, whilst encouraging those who are interactive to become active;
- b. Walkable communities: Creating conditions for active travel between all locations;
- c. Connected walking & cycling routes: Prioritising active travel through safe, integrated walking and cycling routes;
- d. Co-location of community facilities: Creating multiple reasons to visit a destinations, minimising the length of trips and increasing the awareness and convenience of opportunities to participate in sport and physical activity;

e. Network of multifunctional open space: Providing multifunctional spaces opens up opportunities for sport and physical activity and has numerous wider benefits;

f. High quality streets and spaces: Well designed streets and spaces support and sustain a broader variety of users and community activities;

g. Appropriate infrastructure: Providing and facilitating access to facilities and other infrastructure to enable all members of society to take part in sport and physical activity;

h. Active buildings: Providing opportunities for activity inside and around buildings;

i. Management, maintenance, monitoring & evaluation: A high standard of management, maintenance, monitoring and evaluation is essential to ensure the long-term desired functionality of all spaces; and

j. Activity promotion & local champions: Physical measures need to be matched by community and stakeholder ambition, leadership and engagement.



Figure 62. Inclusive play design should allow children of all abilities to play together and be complemented with sensory planting



Figure 61. Inclusive planters support residents who find it more comfortable to sit as well as those in wheelchairs

3.10 LANDSCAPE DESIGN

LD1. Biodiversity

Objective:

Any application brought forward must achieve Biodiversity Net Gain.

Local Plan Policy: NE01, NE03 and R01

Guidance

1. Thorough and complete ecological survey information for the entirety of the site and for appropriate adjacent habitats must be provided and used to inform ecological strategy through the application process.
2. Ancient and broadleaved woodlands and veteran trees within the site must be retained. Existing grade A and B trees must be retained wherever practical. Losses must be mitigated, including the planting of at least two native trees for every tree removed
3. Existing hedgerows must be retained wherever practical. Losses must be mitigated, including the planting of two native hedgerows for every hedgerow removed.
4. The location of such features should be informed by the need for suitable space and environments to establish, thrive and survive, avoiding negative effects on the highway and properties from potential root damage, and visual impairment and safety compromise.
5. Site conditions and details of previous land use must inform habitat creation strategy with a emphasis on restoring existing habitats where practical.
6. Proposals must promote a rich matrix of habitat types.
7. Tree pits planted in hard surfaces should be provided appropriate recommended rooting volumes and a cellular root system installed as required by the Local Authority.

3.10.1 Survey information should include investigation of badger setts in the wider locality. A 500m buffer zone is recommended around the railway line and mitigation corridors to enable badger movement alongside provision for foraging

3.10.2 Existing habitats including reptile and bat foraging areas should be retained or replaced. A European Protected species licence is required to ensure the sustainability of the great crested newt population strategy.

3.10.3 The quantum of on-site reptile receptor areas should be appropriate and proportional to habitats lost. These should include areas which dovetail existing hedgerow buffer zones as part of the agreed overall site strategy. A strategy to address invasive weed species in existing watercourses should be proposed.

3.10.4 Developers must consider opportunities to integrate features of benefit to wildlife at all stages of development, including construction. These could include habitats for swifts, house sparrows, bats, and pollinators, alongside well considered areas of planting for pollinators in urban areas, habitat panels, bee posts and suitable areas of substrate for burrowing bees, etc.

3.10.5 A minimum of 6 barn owl nesting boxes should be provided for.

3.10.6 The proposals should acknowledge the important contribution which existing trees make to ecology and placemaking. The tree retention strategy should be informed by an arboricultural survey information. Steps should be taken to retain veteran, grade A and B trees where ever possible. Where trees are removed, planting should be provided to mitigate the loss. Steps are to be taken to ensure hedgerow habitats are retained, with particular emphasis on ecologically rich or historic hedgerows. Fragmentation of hedgerows is to be avoided wherever possible. Where hedgerows are removed, planting should be provided to mitigate the loss.

3.10.7 A detailed understanding of previous land use and soil investigation work should be undertaken to identify whether proposed habitats are achievable and ensure that habitat creation is targeted to the ground conditions and soil composition.

3.10.8 Wetland habitat creation should be appropriate for target species. Public amenity function should be balanced with successful habitat creation.



Figure 63. Native Hedgerows



Figure 65. Village Pond

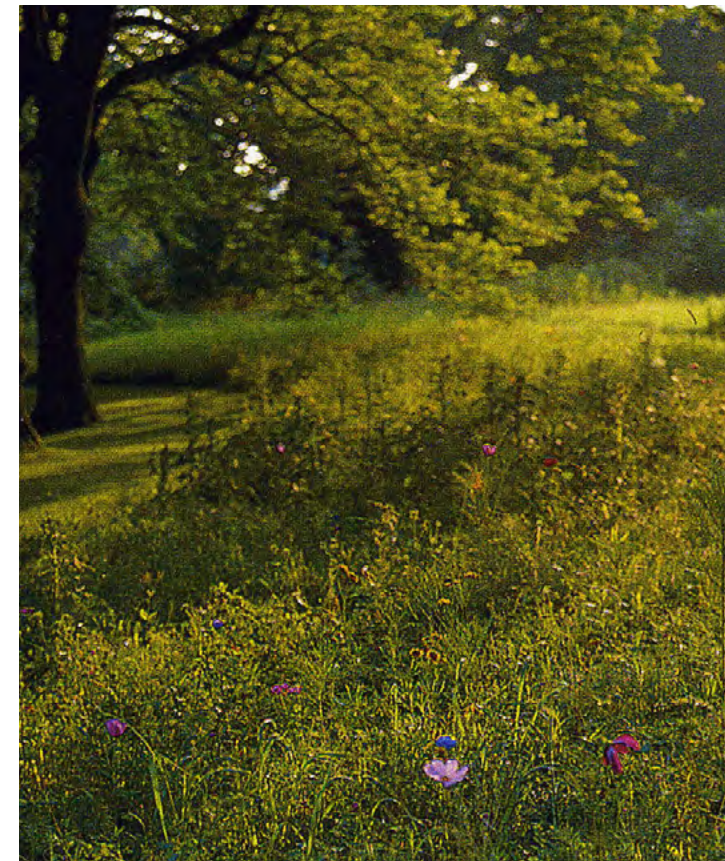


Figure 64. Meadows and grasslands



Figure 66. Orchards within meadows

3.10 LANDSCAPE DESIGN

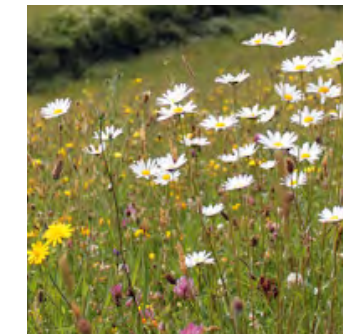


Figure 67. Meadow habitat

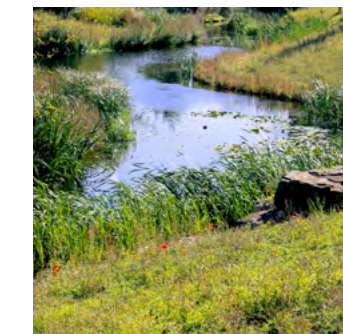


Figure 68. Riparian habitat

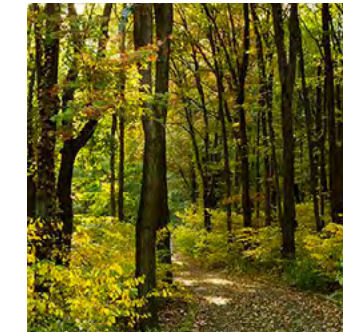


Figure 69. Woodland habitat



Figure 70. Wetland habitat

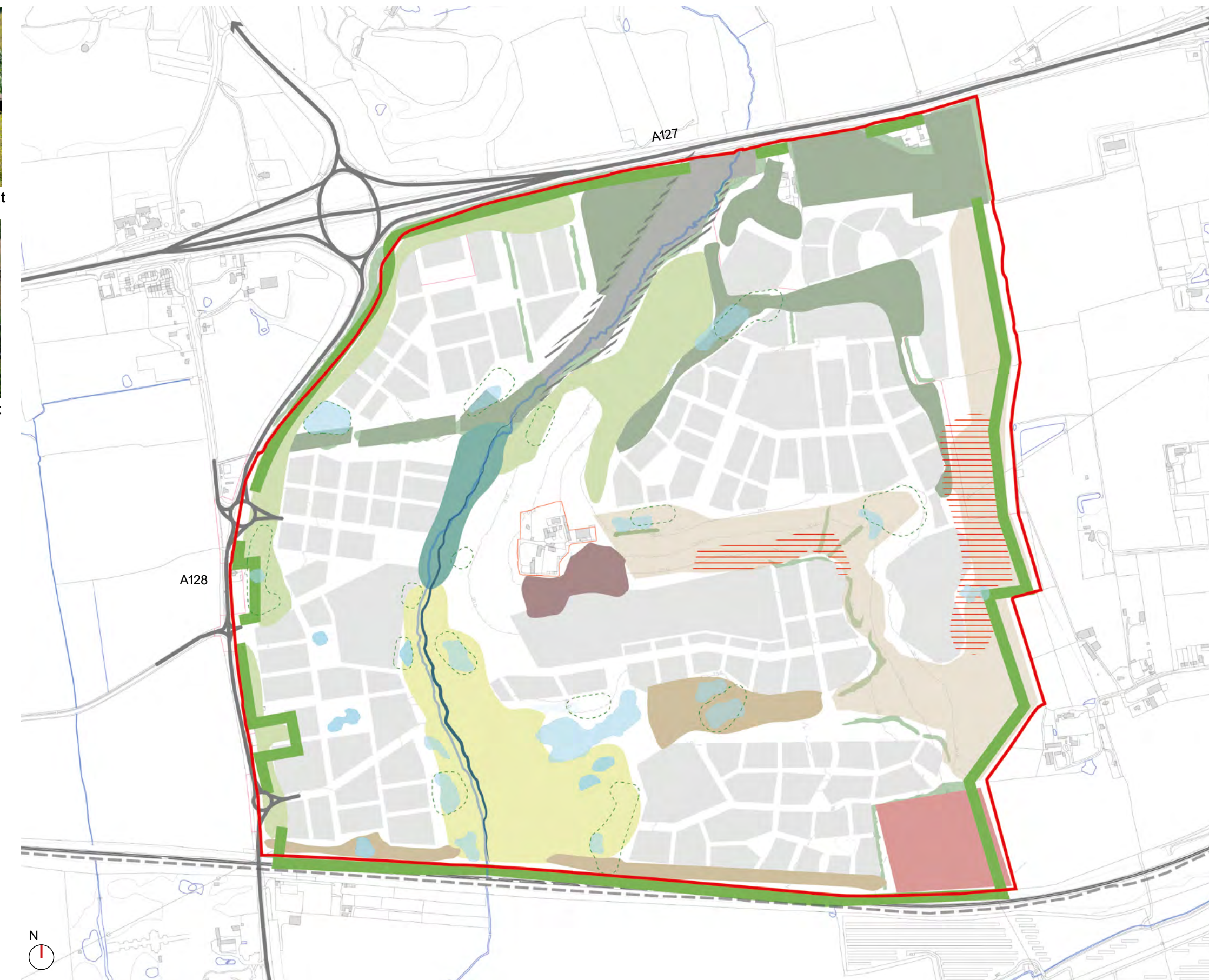


Diagram 32. Indicative Biodiversity Plan - Habitat Types

3.10 LANDSCAPE DESIGN

LD2. Leisure Routes

Objective:

A wellness and fitness trail must be introduced to bring active connections between the three character neighbourhoods, which facilitates movement for pedestrians and cyclists only. The wellness and fitness trail must be well signposted and accessible for all residents.

Local Plan Policy: NE05 and R01

Guidance

- At least three different routes should be accommodated with a range of total lengths. These should be roughly 3km, 6km and 10km in length.
- All existing Public Rights of Way and Public Byways must be either improved or retained.

3.10.9 Leisure, wellness and fitness trails are intended to support active lifestyle choices, offer the opportunity for social cohesion and promote interaction with the natural environment. A range of routes will be provided with a variety of total lengths. All existing public rights of way should be protected. Leisure routes are intended to complement the regular footpaths and pathways that are an integral part of the general movement network. They provide the opportunity for weekend walks with the family, for a group of friends (of any age) to explore their surroundings and educational opportunities for children.

3.10.10 It is vital that these routes serve the entire population of the village. These routes offer the ability for multigenerational families to explore their local area. They therefore should be as accessible as possible with regular opportunities to rest, gentle inclines, good path detailing and a consistent lighting strategy.

3.10.11 Biophilic design research proves that access to high-quality open space has a diverse range of positive health benefits. Access to open space has been proven to reduce stress and anxiety, reduce loneliness, speed up recovery times from illness or operations and support better social cohesion. These impacts are felt across all generations. These benefits are also cumulative; meaning the greater the variety of open spaces and habitats, the greater the benefit felt by the individual. The 3km circuit, for example, takes in existing hedgerows, the new community park, extensive new wetland planting, Eastlands Spring, the Village Green and the Productive Space.

Figure 75. 30% of cases of depression can be prevented by spending 5 hrs. a week gardening, people who are inactive are 3 times more likely to be depressed

[BUILD BETTER, BUILD BEAUTIFUL COMMISSION]



Figure 74. Adults with access to good quality open spaces are 25% more likely to be active than those without good quality open space

[NHS]



Figure 73. Biophilic design research has been proven that natural environments have a positive impact on mental and physical health

[Kellert & Wilson, 2008]



Figure 71. Dunton Waters: pond dipping and board-walks with interpolation signs and regular rest areas



Figure 72. Dunton Woods: natural play areas linked by woodland trails with understorey planting and natural paths



3.10 LANDSCAPE DESIGN

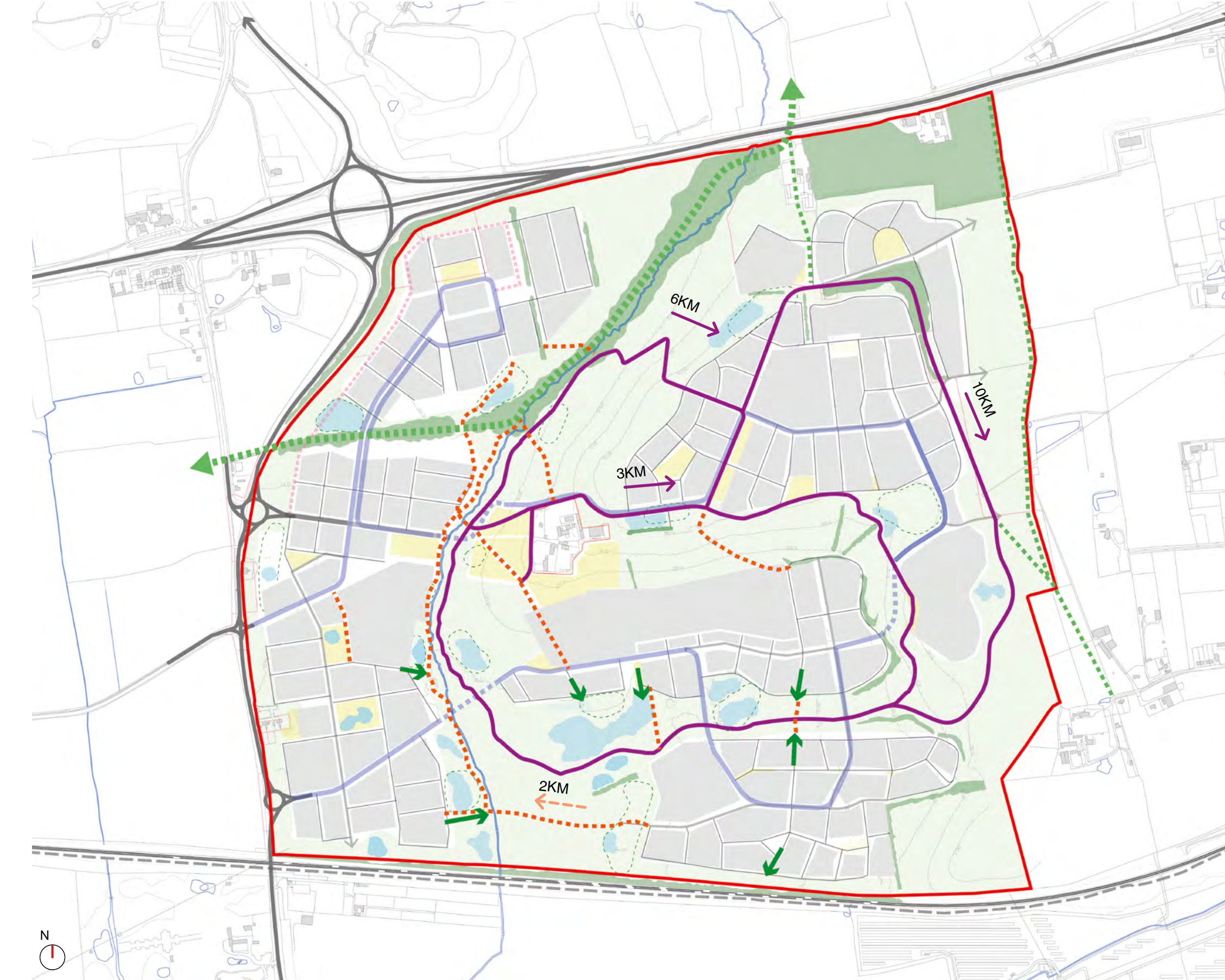


Diagram 33. Indicative Leisure Routes Plan

3.10 LANDSCAPE DESIGN

LD3. Play Strategy

Objective:

Play and recreation must be adequately provided to support children of all ages in order to promote a healthy and active lifestyle, encourage learning through play and support inter-generational integration at a neighbourhood level.

Local Plan Policy: NE05 and R01

Guidance

1. Play facilities must be designed to meet the needs of children and youth of different age groups and abilities.
2. Locally Equipped Area of Play (LEAP) must be at least 400m², 10m from any dwelling and all homes must be maximum 400m from one.
3. Neighbourhood Equipped Area of Play (NEAP) must be at least 1000m², 30m from any dwelling and all homes must be maximum 1000m from one.



Figure 76. Outdoor classrooms and pond-dipping decks

Play Spaces

3.10.12 The proposals should offer significant opportunities for children of all ages to play, interact with nature and learn about the environment. The approach to play should be innovative so that it creates an exciting experience and educational opportunities that interplay with the landscape through a variety of trails, incidental, equipped and natural play areas as well as more conventional sports pitches.

3.10.13 Play facilities must be provided for children of all ages. In particular, children too old for play equipment but too young for paid community facilities should be considered. Play provision for such children could include skate-board facilities; jam stands (where musicians can congregate and play), or outdoor gyms.

Play Space Style

3.10.14 Play space design will be fully integrated within the landscape so that its character enhances the sense of place. This means each character area should be reflected in its play space. The use of high-quality natural materials such as timber and stone and incorporating the landscape setting will help to bring nature into the play spaces through the inclusion of biodiverse planting, play swales and the use of topography.



Figure 77. Trails throughout site to include equipment and natural play elements



Figure 78. Adventure play



Figure 79. Playable landscapes immersed within nature

3.10 LANDSCAPE DESIGN

Playable Landscape

3.10.15 The design of the open spaces should be multi-functional incorporating imaginative, versatile elements such as boardwalks and bird watching screens and timber crossings in which children can play, interact and learn.

Community Facilities

3.10.16 A community sports provision, school sport provision, football and a cricket pitch should all be provided and add to the play and activity options within the village.

3.10.17 The cricket pitch should be accompanied by a clubhouse, practice nets and car/cycle parking provision. A ball strike risk assessment should be prepared to inform the proposals in this area and appropriate measures implemented.

Indicative Layout

3.10.18 The adjacent diagram indicates a suggested distribution of these facilities across the site. This layout has been informed by a number of constraints including topography and existing ecological features. Where detailed ecological and topographical constraints allow, facilities should be grouped further to create larger multi-pitch sites with dual use pitches supported by shared ancillary facilities.

KEY

- SITE BOUNDARY
- WATER BODIES
- DEVELOPMENT PLOTS
- WOODLANDS
- LOCAL EQUIPPED AREA FOR PLAY (LEAP)
- MULTI-USE GAMES AREA (MUGA)
- COMMUNITY SPORTS PROVISION
- SCHOOL SPORTS PROVISION
- NEIGHBOURHOOD EQUIPPED AREA FOR PLAY (NEAP)
- FOOTBALL PITCHES
- CRICKET PITCH

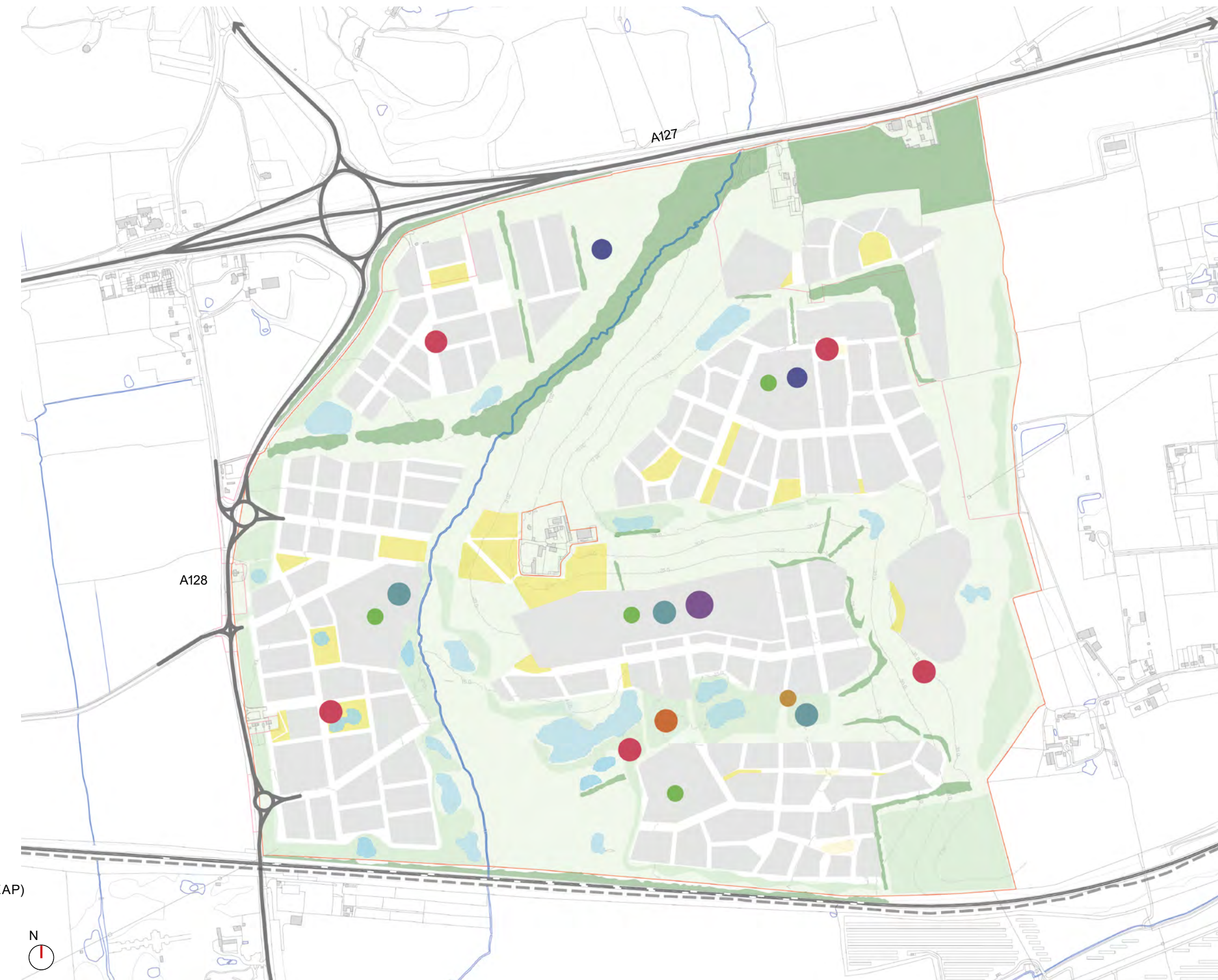


Diagram 34. Indicative Play Provision Plan

3.10 LANDSCAPE DESIGN

LD4. Sustainable Drainage

Objective:

The implementation of a village-wide Sustainable Drainage System (SuDS) must create a fully integrated drainage strategy that celebrates the inclusion of water within the landscape, deepens the types of habitat on offer and future-proofs against high intensity rainfall events.

Local Plan Policy: BE05, NE02 and R01

Guidance

1. The SuDS strategy must be fully integrated into the natural water cycle.
2. Natural watercourses must be respected and utilised within the SuDS strategy.
3. The water cycle must be celebrated with a range of new water courses and features that use rainwater to benefit nature and residents alike.

Fully integrated water cycle

3.10.19 A fully integrated SuDS strategy requires urban and rural environments to cooperate with each other to catch, process and store rainwater runoff. It will provide a resilient blue infrastructure network that promotes ecological and environmental sustainability.

Existing watercourses

3.10.20 The existing watercourses, ponds and wetland areas form a key characteristic of Dunton Garden Village. These features should be enhanced through the detailed proposals within each character area to reinforce the sense of place and character. These should include The Eastlands Spring and current existing surface water features such as ponds and lakes.

New watercourses

3.10.21 A new damp meadow will be created within the floodplain of the Eastlands Spring. Existing ponds should be retained and enhanced through a diverse planting palette to promote biodiversity. Within this meadow a series of new ponds will allow for the translocation of Great Crested Newts and promote a wetland habitat for migrating birds.

New SuDS features

3.10.22 All SuDS features should work within the wider SuDS drainage strategy. Surface water should be accommodated in a series of attenuation basins, raingardens, swales and ditches positioned to suit gradients across the site. Within residential and neighbourhood areas, surface water management will be expressed in the design through the use of rain gardens, swales and permeable paving, green/blue roofs, bioretention areas, and the encouragement of water reuse for irrigation, cleaning, or flushing toilets. The SuDS strategy should be informed by the ECC Sustainable Drainage Systems Design Guide, or latest relevant document.



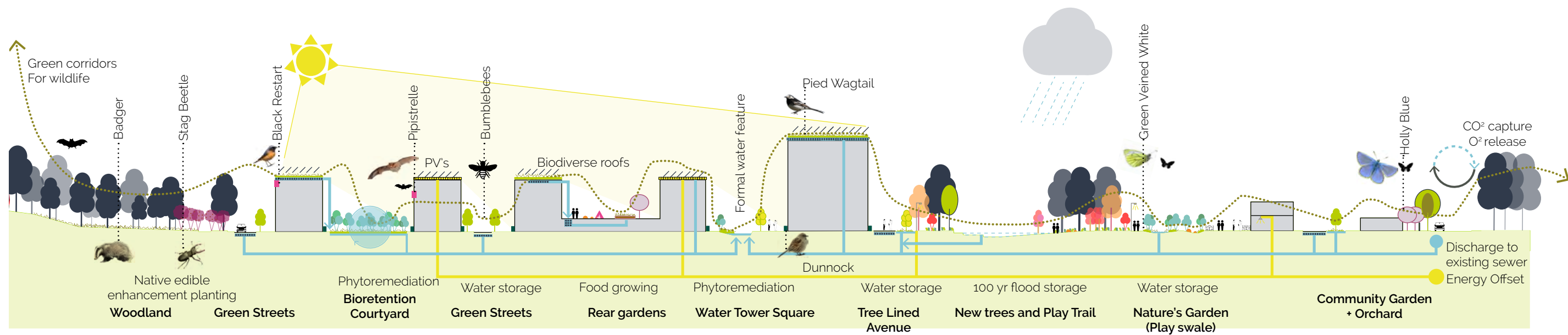
Figure 81. Rain gardens in streets



Figure 80. Swale landscape features

3.10.23 This should incorporate opportunities for people to play, interact and learn about the SuDS feature. Larger features such as swales and retention ponds should also incorporate both formal and informal crossing points, interpretation, decking and timber platforms. All interactive SuDS features should comply with health and safety best practice.

3.10.24 Wherever possible, rainwater harvesting for non-residential developments and mixed-use areas should be considered. Harvested water could then be used for a number of uses, which would reduce the overall water consumption of developments.



3.10 LANDSCAPE DESIGN

LD5. Art Strategy

Objective:

There must be an art and installation strategy developed that engages, excites and works for the local community.

Local Plan Policy: R01

Guidance

1. Art and sculpture are integral aspects of the public realm that must form part of the design approach.
2. Installations should reflect their location within the garden village.
3. Local art groups and communities should be used to promote community co-design of the art programme.
4. Art should be used as a draw within open spaces and must be linked by leisure routes.

3.10.25 Art and community installations offer great opportunities for increasing the cohesion within new neighbourhoods. As such they should be planned throughout the Garden Village. These should be focussed on key civic spaces and within the public realm. Although an allowance should be made for community lead ideas and codesign of the art strategy.

3.10.26 Art must be used throughout the Garden Village to create focal points and represent the character area it is found in. As an example, bird sculptures within the Dunton Waters character area not only reflect the character of the area they also offer the opportunity for education.

3.10.27 Local art groups can support the art strategy in a number of ways. Not only can they design the works, but they can also help locate them within the Garden Village. Additionally, they can undertake walks and sketching/painting events that change with the seasons. These events can support a feeling of cohesion between residents and promotes a sense of place.

3.10.28 An art trail could be signposted to support a walking or cycling loop to take in the Dunton Hills public art and form part of the wellness trail. This should be designed in conjunction with local events.



Figure 82. Installation art should reflect it's location: Dunton Fanns (bottom right), Water (top left) and Woods (top right)



Figure 83. Opportunities to work with local art organisations



Figure 84. Public Art Trail

3.10 LANDSCAPE DESIGN

LD6. Wayfinding and Signage

Objective:

A full suite of wayfinding and signage must be developed that provides an inclusive and consistent experience of the public realm.

Local Plan Policy: R01

Guidance

1. Street signs must be fully coordinated with the local authority.
2. Wayfinding must provide a suite of options that includes finger posts and interpolation boards.
3. Wayfinding will also support leisure routes which help to promote active travel options.
4. All wayfinding and signage must be as inclusive as possible to promote social cohesion and as much independence as possible.

3.10.29 It is important that street signs be consistent across all sites and neighbourhoods. The approach must be coordinated with the local authority to ensure they adhere to adoptable standards.

3.10.30 Informal wayfinding promotes way-markers and gateways within the built and natural environments. It requires a considered approach to urban design and architectural language that allows new residents to navigate themselves. Within the landscape design this mean gateways into key civic spaces, the use of tree variations to indicate hierarchy and promoting variation in planting species.



Figure 87. Wayfinding should support trails and leisure routes

3.10.31 A formal wayfinding strategy including signs, finger posts, route markers, interpolation boards, explanation boards and distance markers. An integrated formal wayfinding strategy must be worked up with a suitably qualified specialist. It must integrate into the three character areas, using suitable materials for the neighbourhood as well as explaining the key landscape, heritage and natural features. It will also support active lifestyle choices by signposting the wellness trail. Opportunities to integrate with the art and heritage strategy should also be sought.

3.10.32 Finally, information must be provided for all residents. This means that signage must be inclusive, provide suitable colour variation, braille boards and use non-character methods of communicating routes (colours, shapes or symbols).



Figure 86. Inclusive wayfinding must be included



Figure 85. Integrated suite of wayfinding





DUNTON HILLS
GARDEN VILLAGE



NEIGHBOURHOOD: DUNTON FANNS

4.1 DUNTON FANNS VISION

4.1.1 Dunton Fanns is located along the western boundary of Dunton Hills Garden Village and will be the first neighbourhood to be brought forward in phase 1. The name of the area is derived from its natural landscape which is mostly fenland. Historically, this area was comprised of fens, forests and farming land.

4.1.2 The vision for Dunton Fanns is for a community-led neighbourhood which retains the qualities of openness and long views which were observed in the original landscape. It will become an urban area with long views, openness, straight layouts and contained townscape forms. It will be the most vibrant and most urban area of the Garden Village.

4.1.3 The neighbourhood of Dunton Fanns will:

- A. Be characterised by a mix of uses and homes of medium to higher density focused around the village centre at its heart.
- B. Provide a mixed-use village centre, as a focus for the new Garden Village that is easily accessible from all neighbourhoods within the site via pedestrian, cycle and public transport routes.
- C. Be the gateway to the Garden Village, connecting the site to A128 and to the West Horndon Station.
- D. Provide a market square that is fronted by active uses and connected to the landscape, creating a vibrant and interesting place to meet and gather.
- E. Have long views towards the Farmhouse from many of its straight streets particularly from the Boulevard and also from the Market Square.
- F. Provide a range of employment spaces to serve the local and wider community.
- G. Provide a primary school that is accessible by safe green walking and cycling routes as well as public transport.
- H. Provide a mix of dwelling types, including apartments and houses, towards the village centre to increase the density and critical mass of people at the village centre.
- I. Deliver lower densities fronting onto wetland and woodland landscapes, with typologies such as semidetached houses.
- J. Be sheltered from noise from the nearby roads with landscape buffers and greened noise bunds.



Figure 88. Illustrative View of Dunton Fanns

4.2 NEIGHBOURHOOD OVERVIEW

4.2.1 Dunton Fanns will play a vital role in the new village. It will contain the Village Centre and the Market Square which will be the hubs of social, commercial and cultural life for the new community. This area will also be the village's main access (from the A128) and will act as a gateway to the village. This gateway will lead to two large avenues connecting the village centre to the A128. Dunton Fanns also includes the innovation park to the north-western edge, which will be the largest employment area within the Garden Village.

F1. Neighbourhood Design

4.2.2 The urban structure of Dunton Fanns is inspired by Garden Cities with their formal centres and tree-lined avenues. Plots are laid out formally to ensure that long views are preserved, and the sense of openness can be felt throughout the neighbourhood. This approach is unique to Dunton Fanns.

4.2.3 The strong structure of the avenue and the civic spaces along the north-south secondary roads forms the spine of Dunton Fanns, from which residential streets branch out to create an interconnected grid. The nature of the formal grid gradually changes from an urban and dense grid near the avenue towards a more suburban and dispersed grid towards the edges. This transition will be reflected in both the composition and density of the blocks. The use of marker buildings further emphasises this transition.

4.2.4 The urban form within this area has been influenced by the village green and the historic Farmstead, as well as Nightingales Lane and the Church of All Saints. The proposed alignment of blocks not only preserves but highlights the key views to these heritage assets. Near Nightingales Lane in particular, the development should set back and create a buffer zone to maintain views. Vehicular accesses facing the lane are to be avoided as they may compete and compromise the legibility of the lane as a sheltered historic byway through the landscape.

KEY

- SITE BOUNDARY
- ▬ C2C RAIL LINE
- STREAM
- ▬ 20M BASE OF RIDGE
- WATER BODIES
- DEVELOPMENT PLOTS
- INFORMAL LANDSCAPE - WOODLANDS
- INFORMAL LANDSCAPE - OPEN LAND
- FORMAL SPACES
- PRIMARY STREET
- SECONDARY STREET
- TERTIARY STREET
- LANDSCAPE EDGE STREET
- SERVICE ROAD
- BUS ROUTE ALONG PRIMARY STREET
- BUS ROUTE ALONG GREEN EDGE
- BUS STOP
- PEDESTRIAN/ CYCLE CAR FREE ROUTE
- WELLNESS TRAIL
- ✳ MARKER BUILDING - GATEWAY
- ✳ MARKER BUILDING - PUBLIC AREA
- ✳ MARKER BUILDING - LANDSCAPE
- HERITAGE ASSETS
- WIDER CONTEXT VIEW CORRIDORS
- INNOVATION PARK
- GYPSY AND TRAVELLER SITE
- PRIMARY SCHOOL
- MOBILITY HUB
- AVENUE

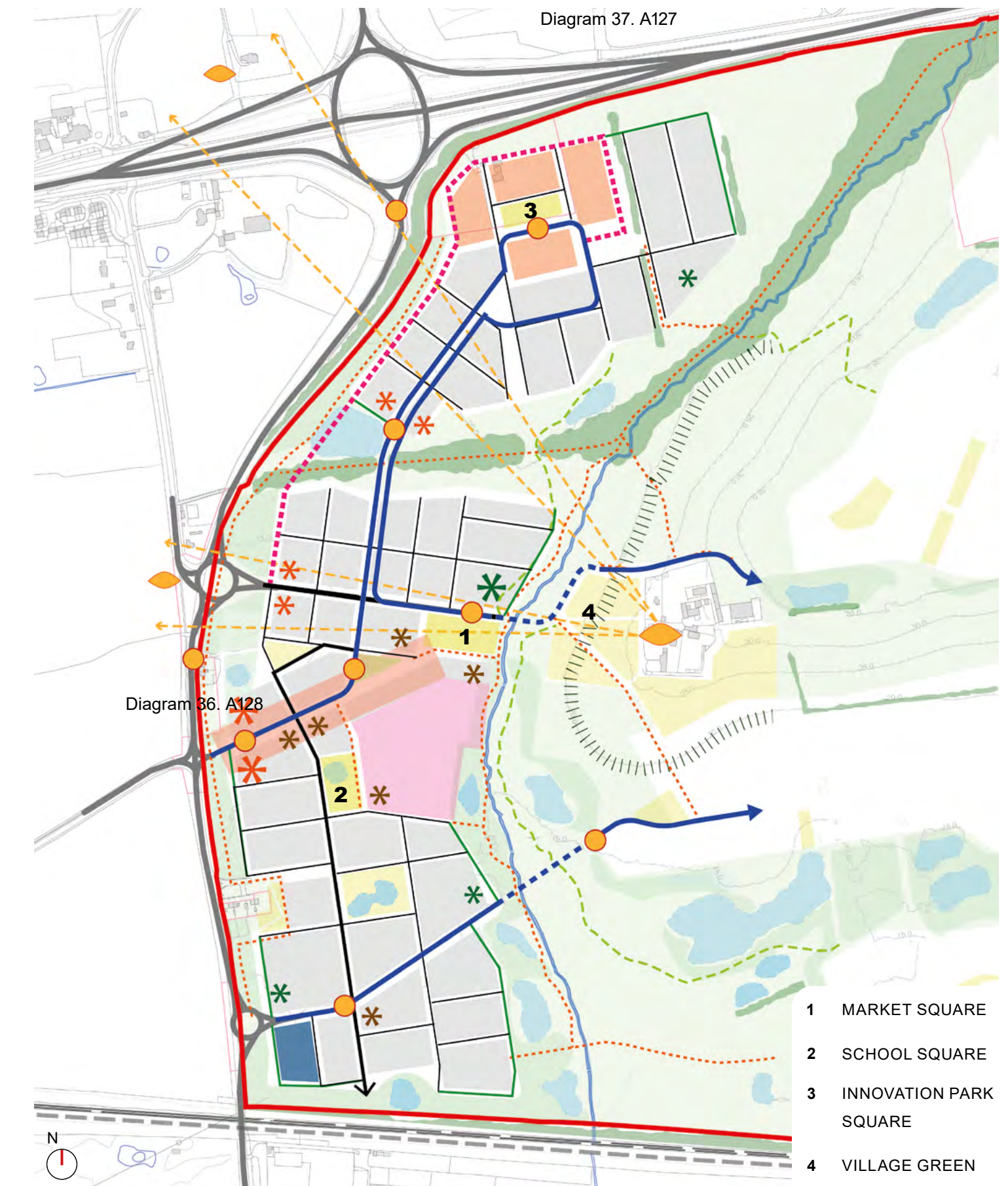


Diagram 35. Dunton Fanns neighbourhood design plan

4.3 LANDSCAPE DESIGN

Overview

4.3.1 Dunton Fanns is the main arrival point from West Horndon and the A128. It sits on the edge of the fenland to the west and draws upon this character to be more rectilinear in form with open views and specimen trees. It marks the entry to the Garden Village and contains its most formal spaces. The Market Square and School yard Square will set the tone for the character and quality of the wider development.

FL1. Play Strategy

Objective:

Play and recreation must be adequately provided to support children of all ages in order to promote healthy and active lifestyles and to encourage learning through play.

Local Plan Policy: NE05 and R01

Guidance

1. Play provision should be in accordance with Brentwood policy standards
2. The site contains a school of which the sharing of sports and leisure facilities with the community must be considered.
3. The site must contain a suitable area for informal football matches (to a UK recognised size and standard).

4.3.2 The Dunton Fanns character area is defined by its large expansive views and formal character. The Fanns (or Fenland) is also characterised by alkaline soils which promote growth of mix-species grass and tree belts. The playable landscape concepts look to promote the landscape within play areas much as the play items themselves. Therefore, large clearings, gently undulating topography, tree clumps and structural grasses will be used to theme the play spaces.

4.3.3 Schools traditionally have large amounts of both equipment and space for sports provision during school hours. However, the use of these spaces is generally limited, outside of school hours. Community use of school facilities

will be explored in order to unlock their potential outside of school hours – late afternoons/evening, weekends and outside of term time.

4.3.4 Space should be provided for informal football matches – the intended user is not a full-time sports team. The site should be easily accessible by bike or foot.

4.3.5 Play streets (streets that are closed off to through traffic, for a few hours, usually during the evening or at the weekend, to give local children an area to play in) should be considered in order to widen the range of play opportunities on offer and promote a strong sense of community.

KEY

- SITE BOUNDARY
- STREAM
- 20M BASE OF RIDGE
- PONDS AND ATTENUATION BASIN
- DEVELOPMENT PLOTS
- PARKS AND OTHER OPEN SPACES
- MEADOW
- HEDGEROWS
- ANCIENT WOODLANDS
- EASTLANDS SPRING
- WETLAND AREA
- A128 INTERFACE
- INNOVATION PARK SQUARE
- GYPSY AND TRAVELLER SITE
- SCHOOL SQUARE
- MOBILITY HUB
- AVENUE
- MARKET SQUARE
- LEAP
- MUGA
- SCHOOL SPORTS PROVISION
- FOOTBALL PITCHES



Diagram 38. Dunton Fanns landscape design key characteristics

4.3 LANDSCAPE DESIGN

FL2. Sustainable Drainage

Objective:

The Dunton Fanns SuDS strategy must work with the existing nature of the site and the existing water courses.

Local Plan Policy: BE05, BE09, NE02 and R01

Guidance

1. As with the site-wide strategies, the SuDS design must work with existing topography, geology and hydrology.
2. The character area must respond to Eastland Springs, respecting the existing water course.
3. The neighbourhood contains a number of new attenuation features which must be used as part of the rainwater runoff strategy and will be integrated sensitively into the landscape with marginal planting, a varied bank profile and habitat variations.

4.3.6 Existing ponds and surface water ponds provide an insight into the natural hydrology of the neighbourhood. Rather than working against this natural water cycle it should be enhanced and utilised within the SuDS strategy. The banks of these existing features should be enhanced using planting, natural materials and reprofiling if the sides are particularly steep.

4.3.7 Existing hedgerows will be retained where feasible and help to enrich the SuDS strategy. Reminiscent of drainage within natural fen landscapes, these linear features will provide attractive, biodiverse and efficient drainage options reminiscent of historic field boundaries.

4.3.8 New SuDS features should be provided following a study by drainage specialists. They should contain elements that are permanently wet with shallow edges that provide the opportunity for greater attenuation during peak rainfall events. The formality of the public spaces within the Fanns requires more structured SuDS features such as raingardens and permeable paving. Development should seek to provide not only centralised SuDS attenuation features to serve multiple adjacent residential parcels, but also additional spaces for SuDS within land parcels to allow source control measures and water quality improvements. They should also address rainwater/storm water reuse as a potential option/solution to manage surface water flooding. SuDS solutions may vary across depending on factors such as topography and infiltration.

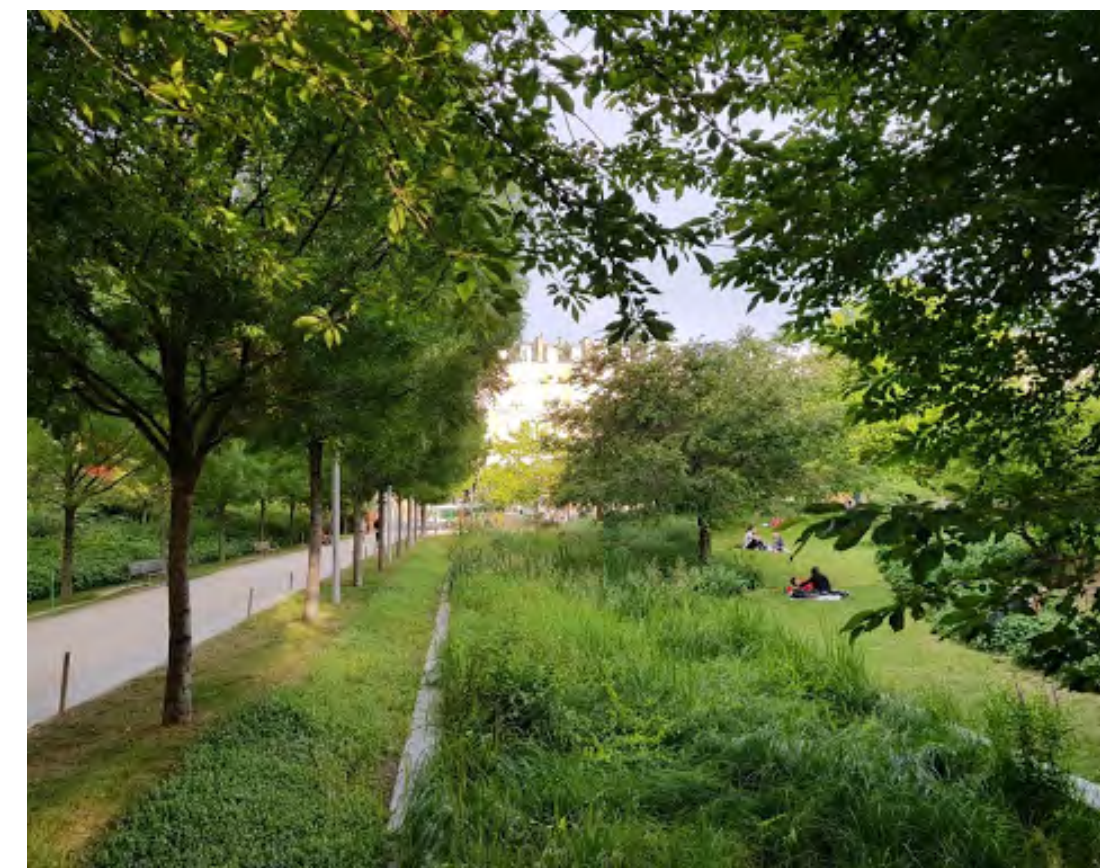


Figure 89. Avenues and linear water management landscape features



Figure 90. Long, open views



Figure 91. Doorstep Play



Figure 92. Formally arranged trees in the Market Square

4.4 LANDSCAPE INTERFACE

FI1. Eastland Springs

Objective:

The Eastlands Spring must be preserved and views towards it must be maintained. The Eastlands Springs should be separated from the neighbourhoods fronting onto them by using appropriate landscape buffers.

Local Plan Policy: NE01, NE02, NE03 and R01

Guidance

- Views from the nearby homes will be maintained over open areas of meadow planting and footpaths.
- The existing woodland along the stream corridor be retained.
- An enhanced ecotone buffer on either side of the existing woodland should be provided.
- Enhancements to the channel are required to enhance habitats.
- Street trees are required to line either sides of the residential road with defensible planting in front of the residential units
- As with the site-wide strategies, the SuDS design must work with existing topography, geology and hydrology.

4.4.1 The Eastlands Spring is a unique feature in Dunton Hills and a main component of the Dunton Fanns neighbourhood. The spring should be subject to a range of ecological improvements to enhance biodiversity including riparian habitat creation. These enhancements need to be carefully balanced with the opening up of the stream to allow for improved visual and physical connection to the watercourse for people in appropriate locations. Selective thinning of the woodland on the banks of the watercourse is permitted to allow light to reach the water. However, the majority of trees must be protected, and steep banks should be profiled. Adjacent proposed habitats should be complimentary to further menace biodiversity.

4.4.2 An enhanced 15m minimum ecotone buffer on either side of the woodland should be provided in order to improve structure, create an understory edge, protect the existing woodland and to provide a buffer to the new development.



Figure 98. Open meadow habitat



Figure 101. Enhanced 15m Ecotone Buffer [between red dashed lines]

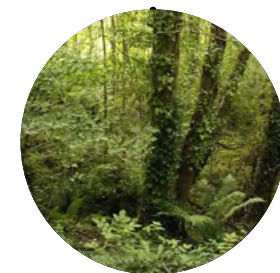


Figure 100. Existing Ancient Woodlands

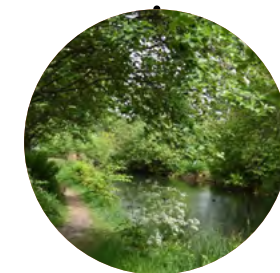


Figure 99. Eastlands Spring

Figure 102. Illustrative Section A



Figure 93. School playground

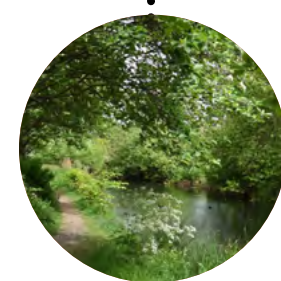


Figure 94. Eastlands Stream



Figure 95. Woodlands understory



Figure 96. Enhanced 15m Ecotone Buffer



Figure 97. Tree-lined street

Figure 103. Illustrative Section B

FI2. School Interface

Objective:

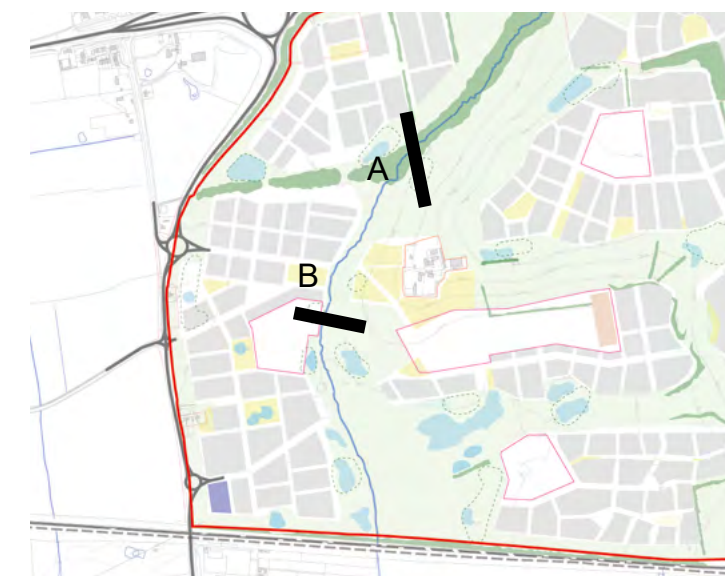
An appropriate interface between the school and Eastlands Spring, the woodlands and the residential neighbourhoods must be provided.

Local Plan Policy: PC11 and R01

Guidance

- A 2.4m boundary to the school playground with additional planted boundary buffer must be provided.
- A secure boundary must be provided to the side of the school grounds not contained by buildings.
- The outside of the boundary must be heavily planted with a mix of evergreen and deciduous planting. The additional planting must be outside of the school boundary so as not to encroach on the school site area.

KEY PLAN



4.4 LANDSCAPE INTERFACE

FI3. Key Interfaces and Heritage along A128

Objective:

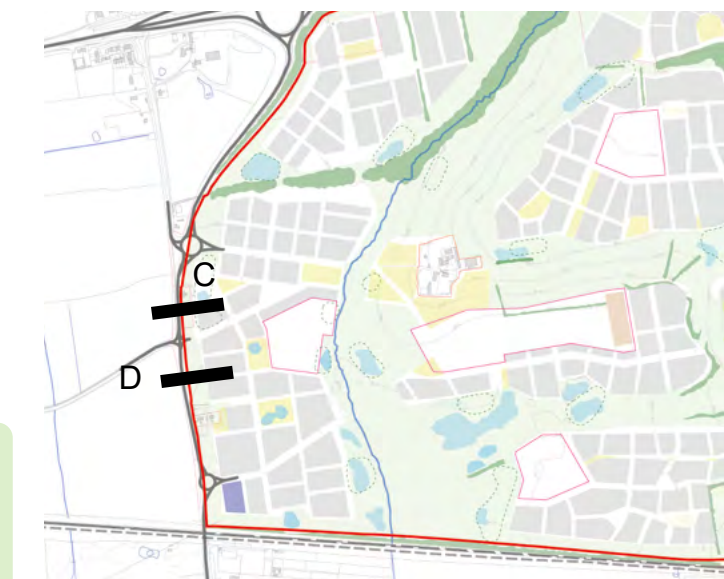
The Green frontage to key areas near the cottages is a broad green corridor that shadows the A128. It acts as a barrier to the road and provides a movement route for people and nature alike. It provides a buffer to the heritage assets, the existing Cottages and the Windmill site (if archaeological remains are found).

Local Plan Policy: BE16, NE01 and R01

Guidance

- Existing trees and hedgerows along the A128 must be retained and complimented with additional trees and understory planting.
- A footpath through this green corridor must be created, providing a pedestrian and cycle connection that is set back from the road.
- Street trees must be utilised to any homes facing the green frontage to provide additional screening.
- Existing buildings along the A128 and other key areas where development interfaces with cottages must be provided with buffer planting to screen development and create a comfortable interface.
- The buffer surrounding the cottages currently at the entrance to the Golf Course must balance between making the distinctiveness of the cottages clear due to their heritage value and integrating them well in the new residential development. Back gardens to back gardens are the preferred design approach at the south, and front elevations facing front elevations to the North. Side garden must face to new plot immediately to the east of eastern cottages to ease transition from old to new.
- Development in this area must be preceded by an archaeological assessment in the Windmill site to determine the survival or not of any buried remains. If any remains are found their value will need to be assessed, and subsequently options must be considered for this buffer zone.

KEY PLAN



4.4.3 The green frontage to the A128 is an important edge to the site. It is therefore vital to ensure that the appropriate interface between key areas such as existing cottages and the new development is done as sensitively as possible.

4.4.4 Any existing trees and hedgerows to the boundary must be retained. They provide a rich ecological benefit as well as a buffer from the road. Any proposed homes facing this green corridor must be provided with street trees. These will serve to enrich the green buffer, provide additional canopy cover for birds and invertebrates and further screen the road from the new homes. It will also support the blending of the new and existing development with the natural environment.

4.4.5 Existing buildings adjacent to the development must be provided with a secure boundary and structural evergreen planting to soften the interface and create a buffer. Tree planting should be utilised at an appropriate distance to screen and filter views.



Figure 104. Main Road A128



Figure 105. Strengthened Woodland Buffer

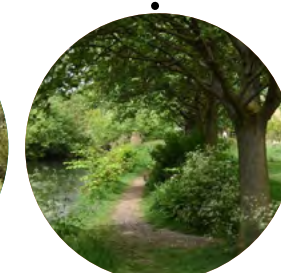


Figure 106. Woodland Footpath



Figure 107. Tree-lined Street

Figure 112. Illustrative Section C



Figure 108. Existing cottages & gardens



Figure 109. Planted buffer



Figure 110. Tree-lined street

Figure 111. Illustrative Section D

4.5 KEY ZONES

FK1. Village Centre

Objective:

The Village Centre is the heart of the Garden Village and therefore it must include a range of facilities, retail, health facility and flexible spaces which will provide for all residents' needs. It must also deliver a variety of fully accessible public open spaces which will play a vital role in creating a sense of community.

In the Village Centre a strong sense of place must be created, through the network of high-quality public spaces and with good views towards the heritage assets throughout. The design of the Village Centre must facilitate and encourage the use of sustainable and healthier transport modes for accessing its facilities and in connection with the entire village as the preferred lifestyle choice. This includes the main gateway to the site linked to a good direct connection to the nearby station, a new mobility hub and good provision for walking and cycling.

Local Plan Policy: MG02, BE08, BE09, BE10, BE12, BE13, BE14, BE15, HP03, NE01 and R0

Guidance: Layout

1. The village centre must create a diverse mix of uses and concentration of activity to serve the Garden Village, with a focus on community uses, education, retail, health facility and workspaces.
2. A range of flexible spaces must also be provided which are able to adapt to future community needs.
3. A higher density of up to 70dph must be designed along primary streets and key spaces of the Village Centre, with a straighter urban grid.
4. Towards the edge of the Village Centre medium density of up to 50dph must be provided. These areas can be characterised by a less straight block structure and allow for incidental public open spaces.
5. The main avenues of the centre must be straight streets lined with trees, have a sense of openness and offer long views. Other streets may be less straight to respond to constraints or create more variation, but long views and openness must still be maintained for most areas.

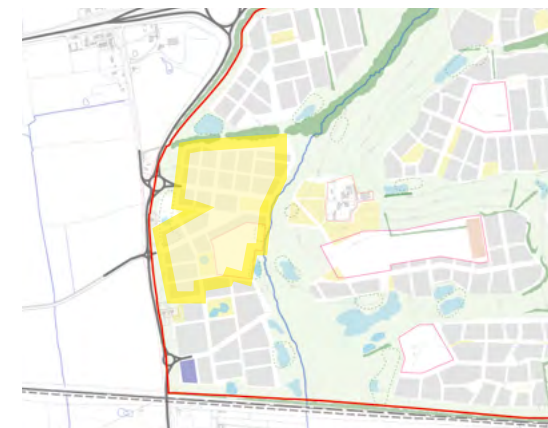


Diagram 39. Illustrative Detailed layout of the village centre.

KEY CHARACTERISTICS

- | | |
|--------------------|---------------------|
| ① MARKET SQUARE | ⑤ MOBILITY CORRIDOR |
| ② PRIMARY SCHOOL | ⑥ MOBILITY HUB |
| ③ SCHOOL SQUARE | ⑦ VILLAGE AVENUE |
| ④ COMMUNITY CENTRE | ⑧ GATEWAY |

KEY PLAN



4.5 KEY ZONES

6. The Village Centre must be fully accessible to all and include priority and supporting facilities for sustainable and healthier transport modes such as cycling, walking and public transport.

7. A public transport interchange (the mobility hub) must be designed as part of the Village Centre, easily accessible and close to the Market Square.

8. The Village Centre must deliver the 'Gateway' to the Garden Village, which is connected to the link towards the Railway Station. This effect can be obtained through a change in materials, roof shapes, or openings, but not through excessive height, as this could block views to the Grade II listed Farmstead.

9. Deliveries to non-residential uses in particular must be considered from the outset. The layout design must include bays for front loading for small units at designated times of the day and larger bays at the rear or well sheltered from the public realm for larger units such as the Village supermarket. Concealed storage for trays and boxes resulting from deliveries must be provided near servicing areas, so that no clutter is left on the public realm.

10. Rear courtyard parking can be provided for apartment blocks and combined with unallocated on-street parking. Parking provision within the terraced and semi-detached houses can be incorporated within the front or lateral private areas of the houses.

Guidance: Urban Form

1. Urban blocks must be compact and orthogonal. Blocks must be uniform in scale, massing and height.
2. Key long views into and out of the centre and to the heritage assets must be preserved and enhanced. Massing of buildings must be carefully designed in order to avoid obstructing the key long views.
3. Buildings along the main avenues must front onto the street with their primary elevations and be accessed from the street. This naturally activates the avenues and creates passive surveillance.
4. The market square must be fronted by active uses on all sides and connected to the landscape to the East, creating a vibrant and interesting place to meet

and gather. Other open spaces must also be activated by front doors whether from residential or non-residential uses and be well overlooked. Rear and side elevations are not allowed fronting onto open spaces.

5. Taller ground floors must be provided along main avenues and key public open spaces to accommodate non-residential uses in phase 1 or be adapted in the future.

6. Consistent roof heights and roof line must be maintained. Variations in roof profiles must be considered carefully and used only to highlight change of uses or landmarks.

7. The mix of residential types in the Village Centre must include apartments at the main avenues and key public open spaces to deliver building forms and townscape which visually mark its centrality function. Terraced and semidetached houses are preferred at the edges fronting onto the landscape appearing less dominant in the townscape than the mixed-uses areas.

8. The heights in the main avenues must stand out from the secondary areas in the Village Centre to create a distinct urban scale and reflect its central function.

9. Flats and houses must be designed to provide reasonable levels of privacy to habitable rooms. Particular attention must be given to the ground floors of residential units located at ground floors, where a green privacy edge must be designed in.

10. Service rooms, such as plants, need to be well concealed and preferably not located on the main avenues to ensure high-quality public realm and active frontages.

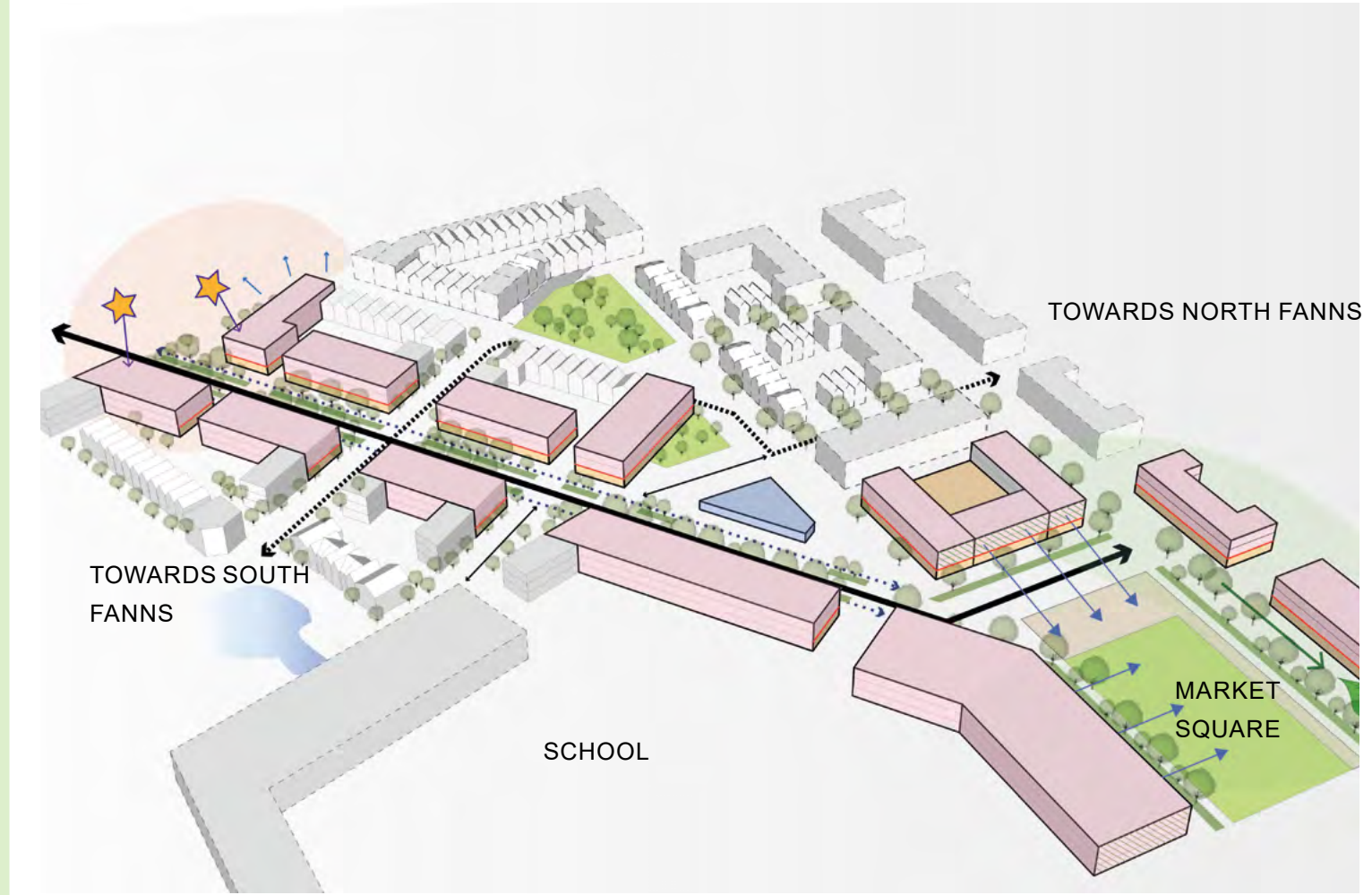


Diagram 40. Illustrative diagram of the Mobility Corridor within the village centre

KEY

- VIEWS TOWARDS MARKET SQUARE
- TOWARDS DUNTON WOODS
- PRIMARY STREET
- SECONDARY STREET
- CYCLE LANE
- PUBLIC OPEN SPACE
- MOBILITY HUB
- MIXED USE (RESIDENTIAL ABOVE)
- GF COMMERCIAL
- ★ URBAN VILLAGE GATEWAY

4.5 KEY ZONES

FK2. Village Centre: Market Square

Objective:

The Market Square should provide a large flexible open space which will be used by the community for a variety of outdoor activities. The square must be attractive, accessible and engaging.

Local Plan Policy: BE14, NE01 and R01

Guidance: Layout

1. The geometry of the Market Square must be simple and bold.
2. The northern side of the square must be lined with trees set in large areas of low planting. This will create a defined space and a buffer to the road.
3. Benches should be situated to make the most of the south facing aspect. This will allow people to enjoy watching activity within the square.
4. Trees must be set in hard landscape to the south to create a more permeable edge.
5. High quality materials must be used
6. Large-scale semi-mature trees (minimum size 30-35cm girth) must be planted. Shrubs shall be supplied in 10l pots and herbaceous planting in a combination of 5l and 3l pots.
7. Attention to detailing is required.
8. Surfacing and kerbs should be in natural stone with a bond, unit size and must highlight details that suit the character of the location.
9. Particular attention must be paid to interface between materials, high quality tree pit surrounds and furniture.
10. A dynamic water feature is suggested to the east of the square to give it a focus, provide an engaging and interactive playable feature and point of interest, a foreground to the views beyond.

4.5.1 The Market Square is a key component of Dunton Hills. It is a space which provides a large flexible area where events and community activities will take place. It will be one of the key gathering spaces in the village and will be central to creating a sense of community.

4.5.2 Historically, market squares are key to the social life of a village and are spatially sophisticated to accommodate a variety of uses which reflect the community's needs. At Horndon on the Hill, the Market Square recalls the history of the village's local centre. Building lines are setback to generate a sense of enclosure.

4.5.3 Similarly, the Market Square at Dunton Fanns should be a main node in the garden village. Its layout should reflect its significance and should allow for adaptability and a mix of uses.

4.5.4 The Market Square is framed on three sides by the neighbourhood blocks and provides spill-out spaces for café tables and chairs. One the fourth side, it overlooks Eastlands Brook and the Village Green with Dunton Hills Farm set in the background – drawing the countryside character and the site's heritage into the centre of development.

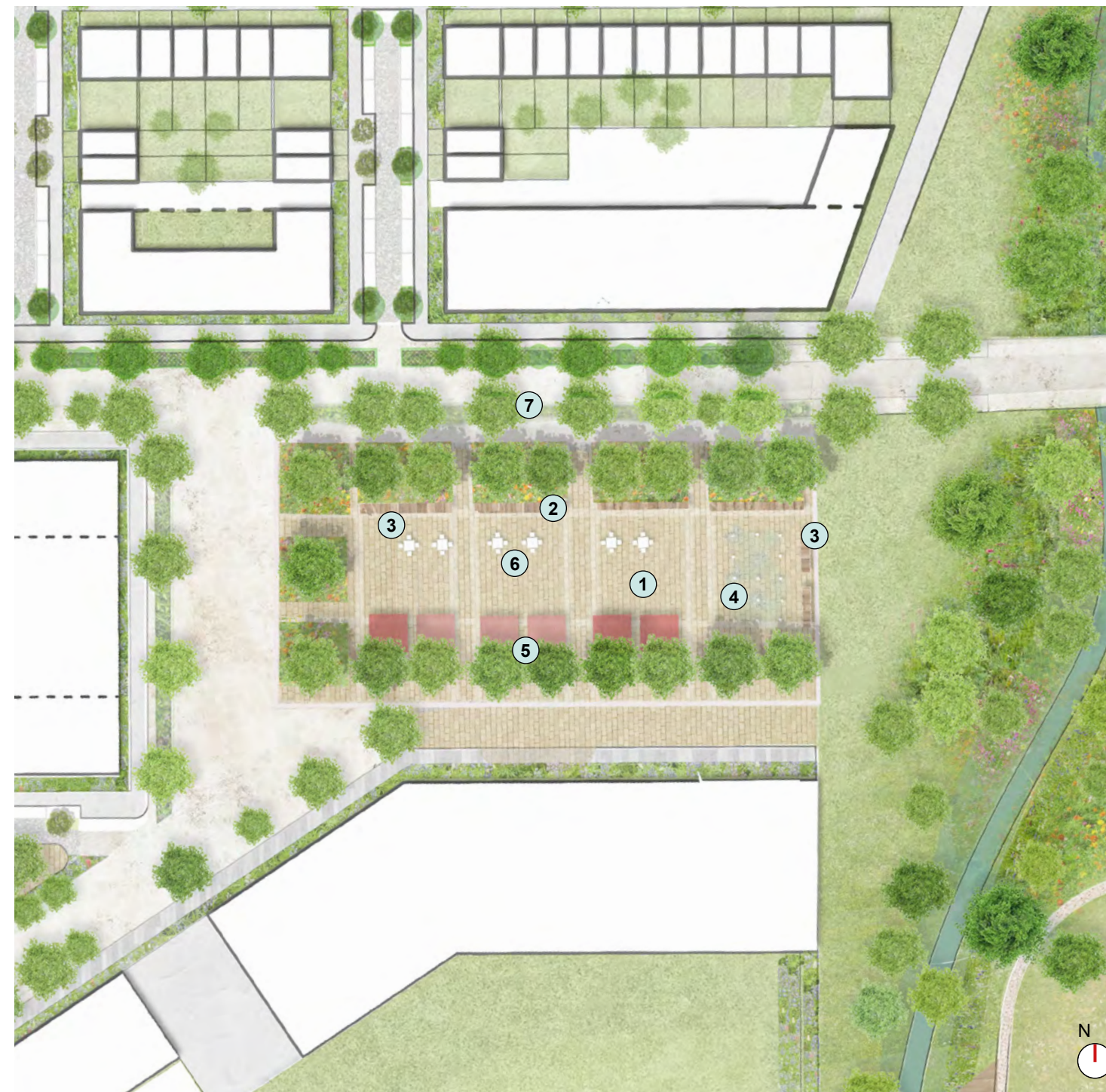


Diagram 41. Illustrative Detailed layout of the Market Square.

KEY CHARACTERISTICS

- | | |
|---|---------------------------------|
| ① LARGE FLEXIBLE HARD SPACE FOR EVENTS , MARKETS ETC. | ④ WATER FEATURE |
| ② SOUTH FACING SEATING OVERLOOKING SQUARE | ⑤ TREES IN HARD PAVING |
| ③ SEATING OVERLOOKING VILLAGE GREEN AND EASTLANDS SPRING. | ⑥ MOVABLE FURNITURE |
| | ⑦ PLANTING BUFFER TO CYCLE LANE |

4.5 KEY ZONES

FK3. Village Green and Growing Space

Objective:

The Village Green should be a key space which will host community events. It is intended to be an open space with long and open views, with key pedestrian routes which are overlooked and illuminated to create a safe space at night. The Village Green must provide an appropriate setting for the historic farmstead and must be visible from the Market Square. An area for allotment plots should also be provided as part of the Village Green.

Local Plan Policy: BE14, BE16, NE01, NE05, NE06, NE11 and R01

Guidance: Layout

1. The Village Green should have a simple, flexible layout which accommodates community events
2. It should provide an appropriate and sensitive context to the Farmstead.
3. It should be visible from the Market Square along a formal tree lined route.
4. It should be framed by trees and hedges which allow long views and scattered vegetation to allow for natural overlooking, particularly of the pathways.
5. It should also contain occasional feature trees within the open space.
6. Pathways must be well illuminated at dusk and after dark, and visible from the surrounding buildings.
7. A growing space should also be provided on the south facing slopes.

4.5.5 The Village Green, Farmstead and Growing Space will provide the civic and communal heart of the settlement.

4.5.6 With long views, good connectivity and its central location between all three neighbourhoods, it will form the heart of the village. It should be a flexible and highly accessible place which supports community events. To enable flexibility, the Village Green must be laid out simply, framed by trees and hedges, with a large flexible amenity grass space that complements the Market Square and provides a natural setting to Dunton Hills Farm to the east. An informal multifunctional space, which could be used as a community event space or for informal sports and games, should be provided.

4.5.7 Occasional feature trees within the Village Green should be used to create accents and provide occasional shade. A formal tree lined route should be provided from the Market Square to frame views of the Dunton Hills Farmhouse.

4.5.8 An area of productive landscape should be provided on the south facing slopes flanking Dunton Hills Farm, reflecting the site's heritage and historic orchard location. The orchard will provide an opportunity to replant traditional local varieties selected to reference the area's heritage, which should be detailed within a landscape plan.

4.5.9 The southern aspect provides as much sun light as possible to the benefit of food production. This productive landscape may include beehives, self-growing and community growing spaces. Allotment plots may also provide opportunities for residents to grow their own produce and engender community spirit. To support food growing, associated community facilities, such as potting sheds, room for hire, outdoor kitchens and picnic areas, should also be provided.

KEY CHARACTERISTICS

- | | |
|--|-----------------|
| ① COMMUNITY EVENT SPACE | ⑧ POND |
| ② AREA OF HARD STANDING WITH SCULPTURE | ⑨ ORCHARD |
| ③ RIPARIAN HABITAT ALONG SPRING | ⑩ PICNIC AREA |
| ④ MEADOW | ⑪ GROWING SPACE |
| ⑤ EXISTING HEDGEROWS | |
| ⑥ PROPOSED HEDGEROWS | |
| ⑦ GARDEN SPACE | |



Diagram 42. Illustrative Detailed layout of the Village Green and Growing Spaces

4.5 KEY ZONES

FK4. Village Centre: Primary School

Objective:

The Primary School at Dunton Fanns must be a well-designed, attractive landmark building. It must create an excellent learning environment for children with an emphasis on innovation.

Local Plan Policy: BE09, BE12, BE14, BE15 PC11 and R01

Guidance

- School buildings must be well-designed, attractive, landmark buildings.
- School design must be innovative and must create excellent learning environments for children.
- The character of the primary school must adhere to that of Dunton Fanns.
- The building must allow for flexible uses and must provide generous floor to ceiling heights.
- Generally, schools should be 2 storeys in height.
- The Primary School Square must be vehicle free with the area around the main pupil entrances an attractive space that is entirely traffic free to facilitate social interaction and connected by safe and direct walking and cycling routes to the community / neighbourhood they serve.
- Sports provision must be provided. This must be primarily for the use of the primary school, but should also be designed to support community uses, if needed in the future.
- Areas surrounding the school must be car-free to ensure safe zones for children. Schools must be accessed by foot or cycling.
- Schools must organise shared travel to and from school, in order to reduce the use of private cars.
- In addition to a primary school, at least one early years nursery must be provided in the neighbourhood hub and/or the innovation park.
- Schools must be easily accessible to users with different abilities.

- Opportunities for outdoor learning must be explored.
- Schools must be designed carbon zero by 2022 and carbon positive by 2030
- Schools must act as key community facilities. Consideration should be given to how some spaces within the school, including the sports pitches, could be utilised for community uses both during off hours and during school hours, if needed. Separate entrances to supporting buildings/ spaces could help facilitate this.
- Community uses provided within schools, must explore methods of funding and suitable management arrangements, as well as securing formal community use agreements, which will ensure that the community uses are well managed in the future.
- Any pedestrianised squares and areas surrounding the school should seek to include public art, soft landscaping, play equipment, seating and local history information boards to create a sense of place and offer learning opportunities.

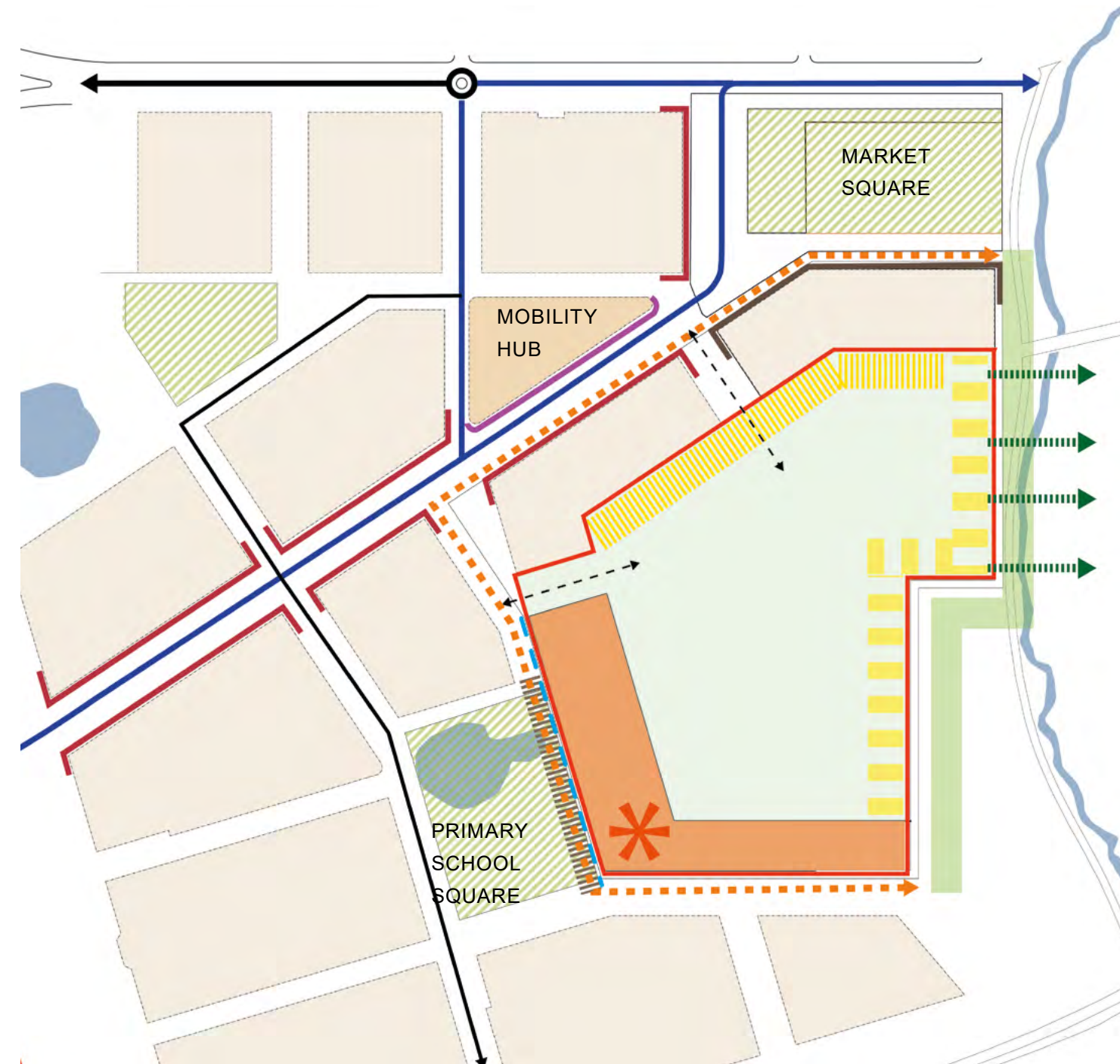
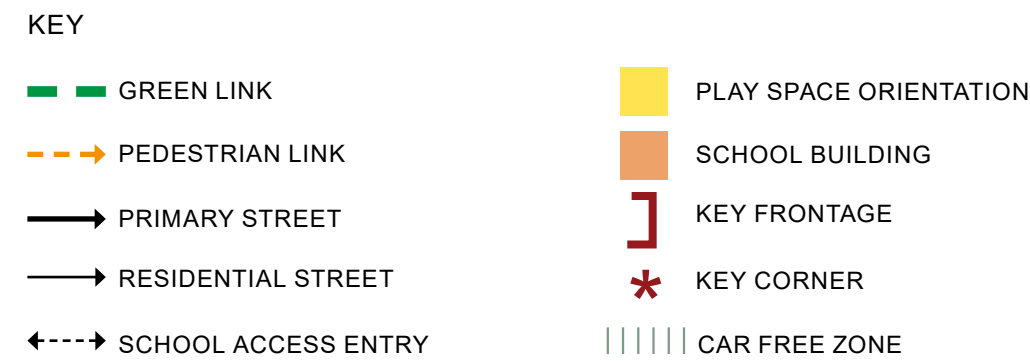


Diagram 43. Illustrative diagram of the primary school.



4.5 KEY ZONES

FK5. Village Centre: Primary School Square

Objective:

School Square is designed as both a garden square and usable space at school opening and closing times. It must contain seating, cycle parking, a play area and be defined by clear boundaries. It also contains an existing pond that is retained as part of the SuDS strategy.

Local Plan Policy: BE09, BE12, BE14, NE01, NE05, PC11 and R01

Guidance: Layout

- The School Square must be a car free space.
- The square must be well designed and connected with safe and direct walking and cycling routes to the communities served.
- The Primary School Square must be vehicle free with the area around the main pupil entrances an attractive space that is entirely traffic free to facilitate social interaction and connected by safe and direct walking and cycling routes to the community / neighbourhood they serve
- The square must have soft landscaping, attractive play and a seating area which is opposite to the school.
- The square and surrounding areas could also include art and local history information boards to create a sense of place and offer learning opportunities.
- Paths should be located along key desire lines and structured around the retention of existing trees.
- Lawns must be enclosed with low hedges and railings to the south. This will help provide a safe environment
- The existing pond needs to be retained. The edges must be re-profiled to allow for a greater diversity of planting species to the south and east. The northern and western edges are constrained by a retaining wall and railing.

- The design of the ponds should follow best practice in relation to public health and safety and appropriate measures implemented to ensure that these features remain safe for the lifetime of the development
- Natural stone must be used for the plaza. This will provide a sense of coherence with the Market Square.
- Resin bound paths with metal edging should be used within the lawned areas.
- In the southern area, trees with a 30-35cm girth and instant mature hedging should be planted.

4.5.10 The primary school at Dunton Fanns could front onto the School Square. The Square will be the main arrival to the school and is expected to be car-free. This will help create a safe and healthy environment for school drop-offs. It will be a garden square with soft features, play spaces and seating opposite the school.



Diagram 44. Illustrative Detailed layout of the Primary School Square.

KEY CHARACTERISTICS

- | | |
|-------------------------------|--|
| SEATING AREA OPPOSITE SCHOOL. | BOUNDARY DEFINED BY HEDGES (RETAINING WALL FOR SUDS FEATURE) |
| PLAY SPACE | LAWNS |
| RETAINED TREES | SPECIES RICH MARGINAL PLANTING |
| SUDS FEATURE RETENTION POND | |

4.5 KEY ZONES

FK6. Village Centre: Mobility Hub

Objective:

A mobility hub must sit at the heart of the scheme and must be provided from the outset of the development to co-ordinate and promote sustainable and healthier travel choices. A range of services ranging from technology to aid travel planning to physical infrastructure must be provided in the Hub. Given its importance and centrality to the Garden Village, the mobility hub must be fully accessible to all and be designed as a landmark with a unique and contemporary design.

Local Plan Policy: E09, BE10, BE11, BE12, BE13, BE14, BE15, NE01, NE08 and R01

4.5.11 The mobility hub must form a key node of the mobility corridor (part of the main entrance to the site running from the Station Road entrance towards the Market Square). It must provide users with travel planning advice and must assist with sustainable transport support. The hub must also provide a joined-up approach to travel planning and must combine different approaches dealing with active travel, public transport and delivery services.

4.5.12 The hub must be located prominently within the mobility corridor, with good access to the market square, and other shops and amenities in the village centre. It must be located so that its bus stop can offer pedestrian or car free access towards Dunton Fanns School, whilst also being close enough to the nearest car parking facilities for residents and other visitors using cars.

KEY CHARACTERISTICS

- 1 BUS AND DRT STOPS WITH COVERED WAITING AREA
- 2 CAR CLUB BAYS AND ELECTRIC CHARGING SPACES
- 3 CYCLE PARKING AND CHARGING
- 4 CYCLE STORE AND MAINTENANCE
- 5 DELIVERY STORAGE
- 6 COMMUNITY CONCIERGE RECEPTION
- 7 CAFE, SHOP AND WORKHUB
- 8 EXTERNAL SEATING

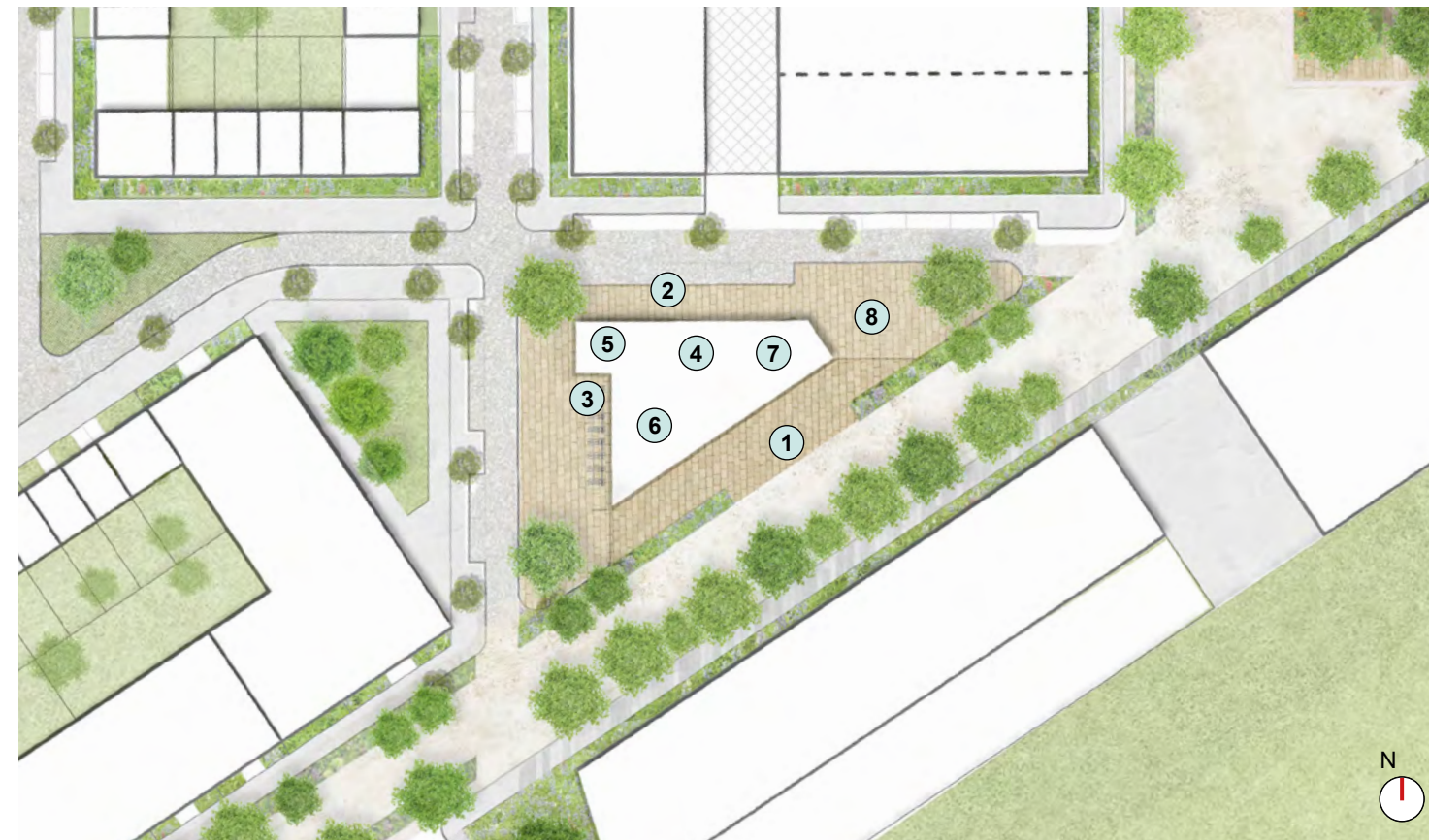


Diagram 45. Illustrative Detailed Layout of the Mobility Hub



Figure 113. Mobility hub with a range of services ranging from travel planning to physical infrastructure

Guidance

1. The mobility hub must be an interface of various travel modes and provide advanced travel planning services (DRT timetable, site maps, connections to West Horndon, etc...), physical infrastructure support (rented car and cycle parking, cycle maintenance services, car clubs) and commercial services such as parcel delivery lockers which will minimise delivery vehicles within the village.

2. Particular attention must be given to the design of bus movements and delivery vehicles through the hub to avoid negative impact to cyclists and pedestrians.

3. High quality and wide footways, or fully pedestrianised areas must be designed in and around the mobility hub, including access to the landmark building zone. The hardscaped zones must be softened by trees and green elements.

4. The building must be multi-faceted with active frontages and edges all around. It must be designed as a key landmark building within the Village Centre, standing out from its immediate context. It can include a large or distinctive canopy feature.

5. The mobility hub must be well designed. The design must ensure that the mobility hub is safe and well-lit

6. Good signage must be provided through the Mobility Hub to aid residents finding their way.

4.5 KEY ZONES

FK7. Gypsy and Traveller Site

Objective:

The site must allow the provision of 5 Gypsy and Traveller pitches. The provision must be safe and well designed and must be provided with a direct access from the A128 and into the village centre.

Local Plan Policy: BE12, BE13, BE14, BE16, HP07 and R01

Guidance

1. Five Gypsy and Traveller pitches must be provided within the Dunton Fanns neighbourhood, by 2033.

2. Direct access to the A128 must be provided via primary/ secondary street links.

3. The layout of the site must allow safe and well-designed access, and each pitch must be appropriately positioned to benefit from good external amenity spaces.

4. The site must include communal spaces (including play space) that benefit from passive surveillance.

5. Essential services must be made available on the site, and waste collection must be convenient and accessible.

6. The site access and boundary design must follow the principles within this design guide, and whilst creating well-defined defensible spaces, must avoid cutting the Gypsy and Traveller site off from the rest of the community.

4.5.13 Policy HP07 of the Brentwood Local Plan sets out that a minimum of 5 serviced Gypsy and Traveller pitches must be included as part of the Dunton Hills site allocation and delivered in the first five years of development.

4.5.14 The Framework Masterplan Document for the development includes the provision of a site for Gypsy and Traveller pitches within the period of the Local Plan. The location of this site has been chosen to allow a defined space which provides a high-quality living environment, and similar access to local facilities, services and transport links to those enjoyed by permanent homes.

KEY PLAN



Figure 114. Day room materiality. Old Damson Lane



Figure 115. The site must provide communal spaces including play areas. Old Damson Lane



Figure 116. The layout of the site allowing safe and well designed access. Bristol Road Traveller Site, Bath

4.5 KEY ZONES

FK8. Edge Fanns

Objective:

The Fanns Edge must be characterised by a sense of openness, long views and connections to the natural setting. The neighbourhood must be legible and must have a varied mix of house types with shared and private amenity space.

Local Plan Policy: R01

Guidance: Layout

1. The layout must deliver a clear hierarchy of streets and spaces that contributes to the legibility of the area.
2. The layout design must provide connections to the ponds and wetlands via paths and trails.
3. The residential area must provide medium density of up to 50dph and must comprise of a mix of walk-up flats, terraced and semi-detached homes.
4. Homes along the residential street must have a direct relation between their frontages and the street. It is recommended that in wider streets homes are arranged as terraced blocks to provide more continuous frontage. Towards the landscape edge a less formal relationship between their frontage and the street is allowed.
5. Houses must be designed to provide reasonable levels of visual privacy to habitable rooms with provision of green edges and landscaped edges as privacy buffers.
6. Frontage zones that create opportunity for planting to soften the street scene with maximised opportunities for trees within the private areas must be provided. Car dominated frontages must be avoided.
7. Terraced and semi-detached houses must be provided with back gardens to allow sufficient private amenity space.

KEY PLAN



Guidance: Urban Form

1. The form and scale of development must reflect its proximity to infrastructure and landscape - i.e. house types should be based on street types and spaces they front onto.
2. Block roof lines should be continuous, except at corners which can be emphasised, or when different functions or uses are to be highlighted.
3. Sufficient distance between the fronts of houses should be provided to allow adequate daylight and sunlight into the internal spaces. This will vary according to the orientation and massing of the built form and should be considered specifically in relation to each.

KEY CHARACTERISTICS

- | | |
|----------------------------|----------------|
| ① PRIMARY STREET | ⑤ RAIL EDGE |
| ② GREEN EDGE - STREET TYPE | ⑥ POND |
| ③ RESIDENTIAL STREET | ⑦ COACH HOUSES |
| ④ LANDSCAPE EDGE - WETLAND | |

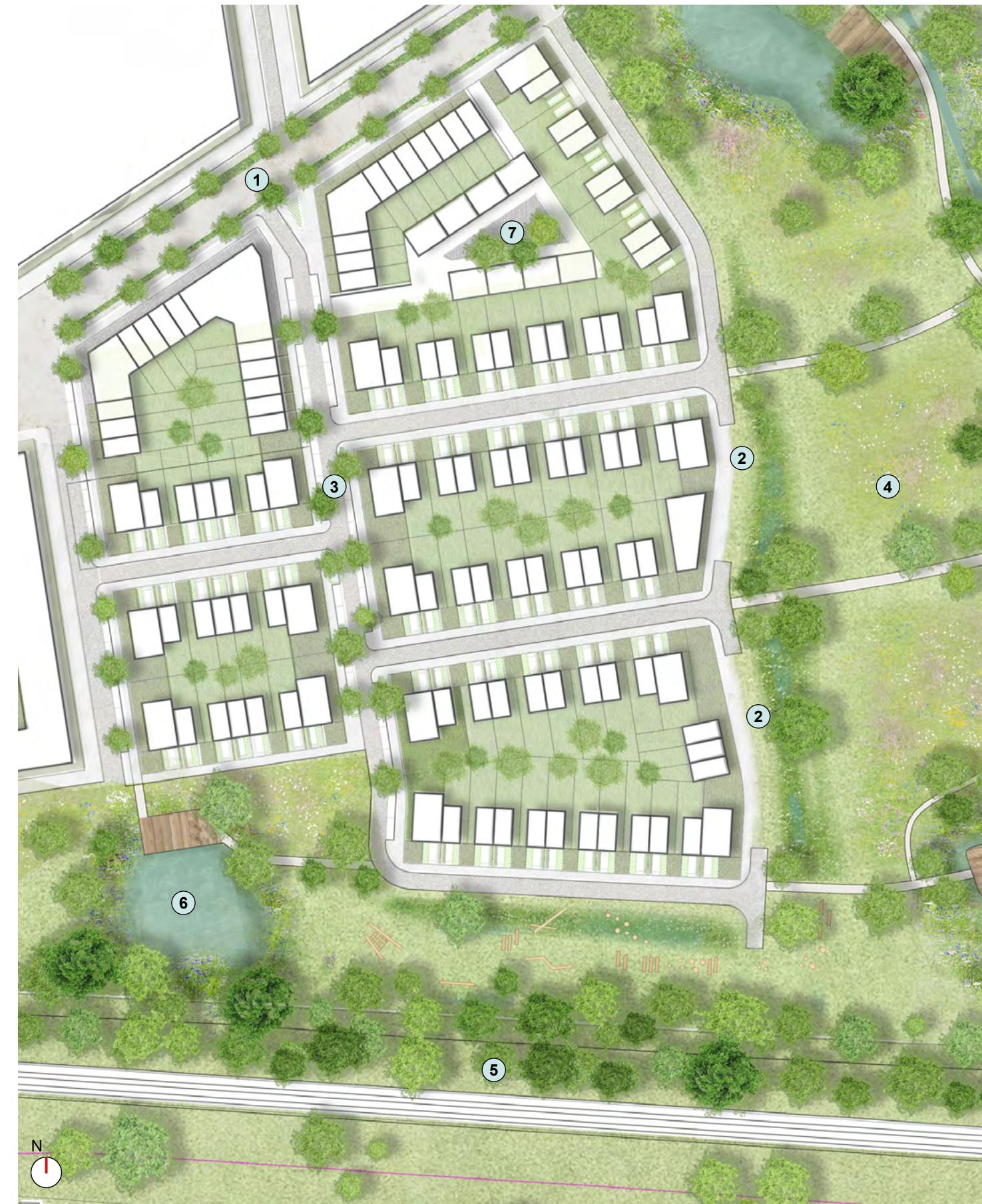
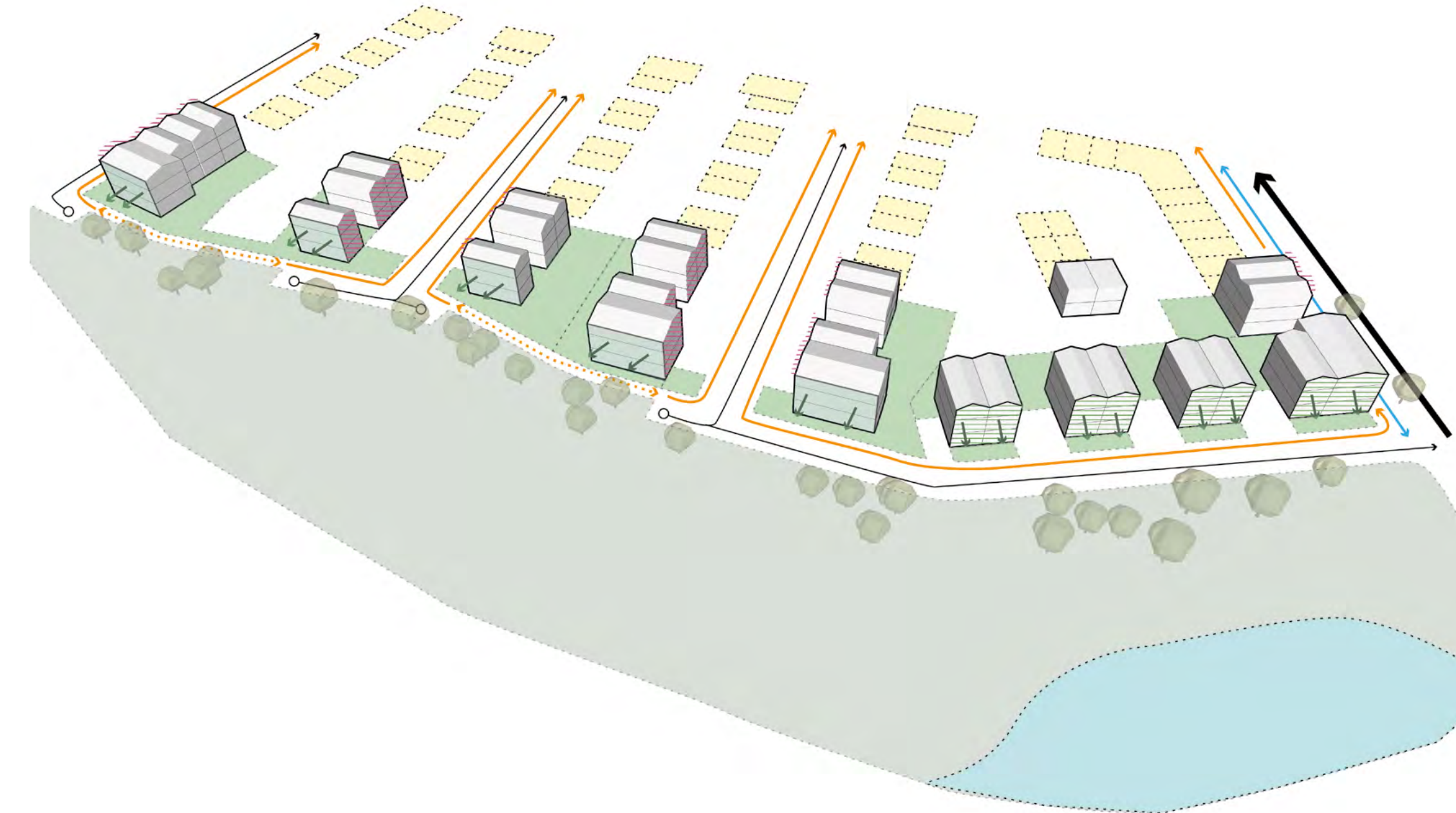


Diagram 46. Illustrative Detailed layout of the Fanns neighbourhood

4.5 KEY ZONES



KEY

- VIEWS TOWARDS LANDSCAPE
- PRIMARY STREET
- TERTIARY STREET
- CYCLE LANE
- PEDESTRIAN PATH
- - - PEDESTRIAN/ CYCLE PATH ONLY
- PRIVATE GARDENS
- LANDSCAPE EDGE
- POND

Diagram 47. Illustrative diagram of the Fanns neighbourhood.

4.5 KEY ZONES

FK9. Innovation Park

Objective:

The Innovation Park will be the largest employment hub within Dunton Hills. It must provide a range of flexible, adaptable employment and sustainable spaces which will respond to the market needs. It must be designed to deliver a high quality, vibrant, legible and economically viable employment zone.

Local Plan Policy: SP03, PC01, BE07 and R01

KEY PLAN



Guidance: Layout

1. The Innovation Park should be partially visible from the adjacent roads, to boost its popularity and attractiveness. This can either be part of the buildings or signage.
2. The Innovation Park should provide a mix of workspace types (traditional office space, coworking space, shared facilities such as meeting rooms and reception areas, distribution/ logistics, light manufacturing).
3. Flexible buildings should be provided to better support the requirement of the innovative of businesses. These can be amalgamated or subdivided according to business models.
4. Opportunities for innovation stemming from cross influences and collaborations across businesses should be provided through designing in shared internal or external areas.
5. The area should be designed around one primary central space which acts as a meeting and networking point. The space should be safe after hours, well lit, include green elements and seating, good wi-fi, and potentially a small coffee point or pop-up kiosk.
6. Main entrances should front onto the central public open space. Sites and signage should be arranged so that it is easy for visitors to find their way around and can easily see the main entrances to the buildings.

7. The Innovation Park must be easily accessible by sustainable and healthier transport modes, including public transport, and safe pedestrian and cycling routes.
8. The Innovation Park must be serviced through a separate route to the rear which must allow for all movement of larger vehicles at all times without impact to homes, front entrances to business and without threat to cyclists and pedestrians.
9. Negative impacts of service roads on the environment and amenity for residential uses must be mitigated by good design, and addressed in detailed proposals
10. Servicing access to buildings and supporting infrastructure like storage compounds, and plant should be located away from the main public space and with screening.
11. Car parking must be provided and needs to be located unobtrusively. Routes from the car park and footpaths should be defined to provide safe and clearly identifies points of access.



Diagram 48. Illustrative layout of the Innovation Park.

KEY

- | | |
|--------------------------|-------------|
| ① INNOVATION PARK SQUARE | ⑤ HEDGEROWS |
| ② SERVICE ROAD | ⑥ A127 |
| ③ NOISE BARRIER | ⑦ BUS STOP |
| ④ SERVICE YARD | |

4.5 KEY ZONES

Guidance: Urban Form

1. As individual plots come forward, a coordinated approach (such as an area specific design code) should be adopted to deliver cohesive urban and building forms.
2. Where possible buildings should include a degree of transparency. Buildings with features such as atriums should be expressed in the elevations facing towards the central public space.
3. Large scale buildings should be sheltered with landscape elements such as trees.
4. A good relationship between the height and scale of the Innovation Park buildings and those in its immediate surroundings should be provided. For example, when employment buildings back on to houses, their height should not exceed one and a half times the height of the houses.
5. The perceived scale of the buildings must be moderated by the articulation of the building line or roof line, grouping elements on the elevations to influence rhythm and proportions and the use of colours or materials.
6. The view corridor towards the Church of All Saints running across the innovation park from the Farmstead must be enhanced. The employment buildings cannot obstruct this key view. All roofs within the view corridor must be discrete and have no advertisement or any other structures that compete visually with the asset.
7. The buildings should integrate sustainability features to address energy, resource and water efficiency. These features may include green and brown roofs.

KEY

- | | |
|---------------------------|------------------|
| → VIEWS TOWARDS LANDSCAPE | ■ SQUARE |
| → PRIMARY STREET | ■ LANDSCAPE EDGE |
| → TERTIARY STREET | |
| → CYCLE LANE | |
| → PEDESTRIAN PATH | |

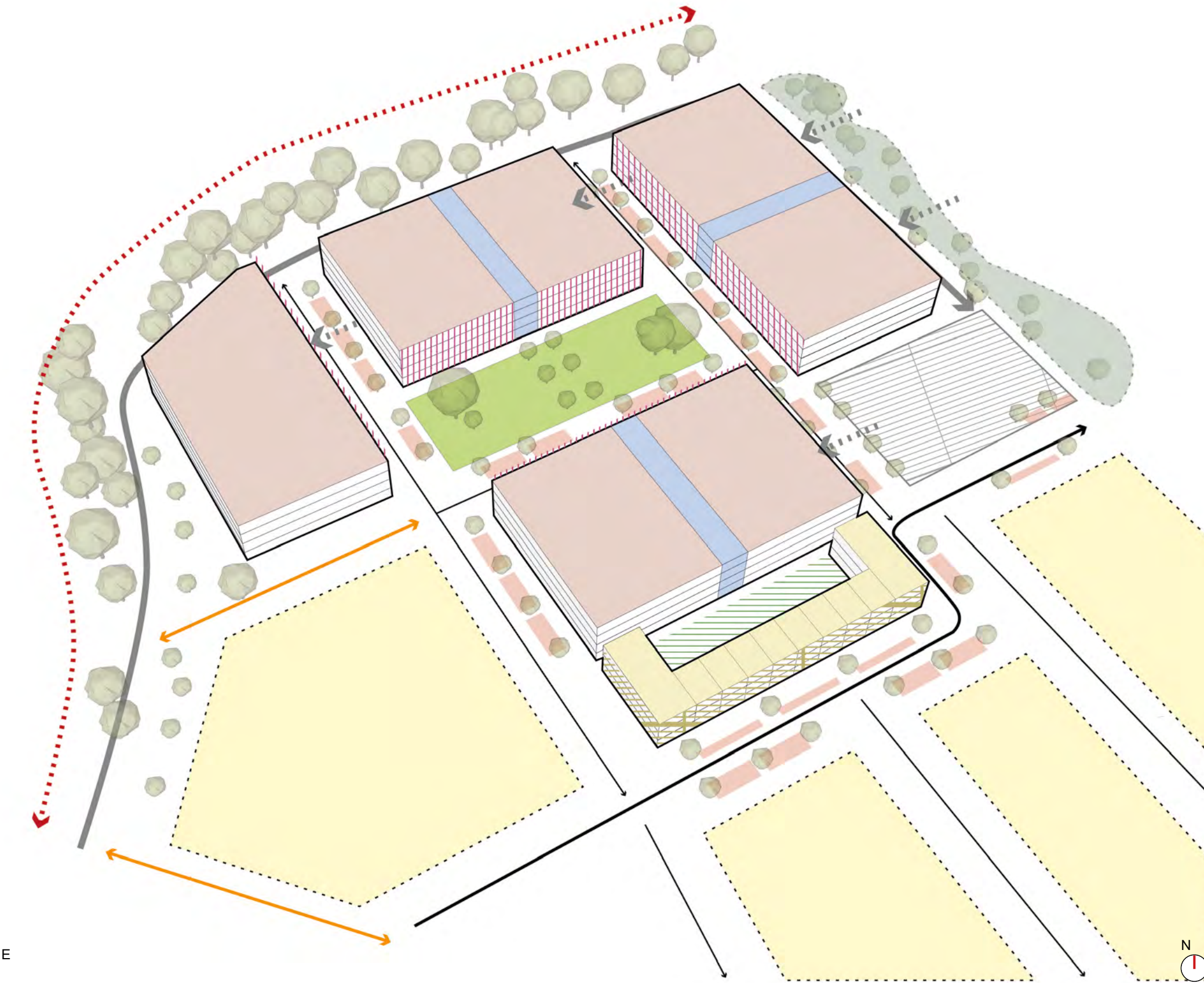


Diagram 49. Illustrative diagram of the innovation Park.

4.5 KEY ZONES

FK10. Innovation Park: Square

Objective:

The landscape design of the Innovation Park must provide an attractive amenity space for employees and must encourage interactions and outdoor meetings.

Local Plan Policy: BE14, NE01, NE02, NE05 and R01

Guidance

1. At the centre of the Innovation Park, a green should provide an attractive outlook and tranquil area for people to relax and enjoy.
2. Generous lawns should be framed by formal trees and hedges to the south, east and west. A central planted garden with raised edge seating should provide a focus.
3. Clay pavers should be used with metal edging within the central garden area. 30- 35cm girth trees and instant mature hedging need to be planted with multi stemmed specimen shrubs providing an accent, minimum 3m in height. Shrubs should be supplied in 10l pots and herbaceous planting in a combination of 5l and 3l pots.



Diagram 50. Illustrative layout of the Innovation Park Square.

KEY CHARACTERISTICS

- | | |
|---|------------------------------------|
| ① CENTRAL RAISED PLANTERS WITH INTEGRATED SEATING | ④ MULTI-STEMMED SPECIMENS |
| ② GENEROUS LAWNS | ⑤ SEMI-MATURE TREES FRAMING SQUARE |
| ③ HEDGES ENCLOSING GREEN | ⑥ NOISE BARRIER |

FK11. Innovation Park: Noise Barrier

Objective:

Well-designed noise barriers must be provided against the A127 and 128 in the innovation hub.

Local Plan Policy: BE14, NE01, NE03 and R01

Guidance

1. A noise barrier must be established against the A127 and A128 within the north west corner of the site.
2. This barrier must be sensitively integrated into the landscape with a bund, tree and shrub planting being utilised to minimise noise pollution spreading further into the Garden Village.
3. The built form of the Innovation Park should also take into consideration its role as a noise barrier.

4.5.15 A detailed noise assessment recorded the highest noise in the north east corner of the site, with the A127 creating more noise than the A128. This area exceeded the 55dB threshold for habitable buildings. The mitigating factors therefore will be the location of non-residential buildings within this zone, alignment and height of these buildings to act as noise barrier and the use of natural features to satisfactorily reducing the noise pollution from both roads.

4.5.16 The layout of the Innovation Park should be informed by its role as a noise barrier which prevents excessive noise from permeating into the rest of the Garden Village. In particular this will support not only new homes but increase tranquillity within natural habitats such as Nightingale Woods. Where buildings cannot act to suppress noise pollution natural options should be explored such as bunds and tree planting. Physical noise barriers and fences should be the last option explored.

4.6 ARCHITECTURAL DESIGN

FA1. Entrances

Objective:

Entrances to all properties must be clearly defined, legible and accessible. They must positively contribute to the character of Dunton Fanns.

Local Plan Policy: HP06 and BE14

Guidance

1. Entrances must be clearly visible with defined points of entry.
2. They must be located and designed to be welcoming, secure and must maximise overlooking.
3. Architectural detailing, such as porches and recessed zones, should be utilised to further emphasise entryways.
4. Main entrances need to be provided with external light for night time.
5. Service and storage doors must be screened from view through recesses in facades, landscaping and architectural detailing. They must appear secondary to the main entrance and where possible be in secondary elevations.
6. Meter chambers located near entrances must be well concealed and their details must be considered by designers to avoid cluttering and negative visual impact to the front of the building.
7. Post boxes on doors and front gates must be between 700 mm and 1700mm at midpoint of the mail slot (letter box), to ease the work of the postal delivery worker.
8. Entrances should reflect the character of Dunton Fanns with a prevalence of warm shades of yellows or reds and blend well with brick tones.



Figure 117. Clearly marked entrances with architectural detailing. Horsted Park, Kent - Proctor & Matthews



Figure 119. Use of recess to emphasize on the entrance, and projects of windows/ balconies on key frontages. The Avenue, Saffron Walden Essex - Pollard Thomas Edwards

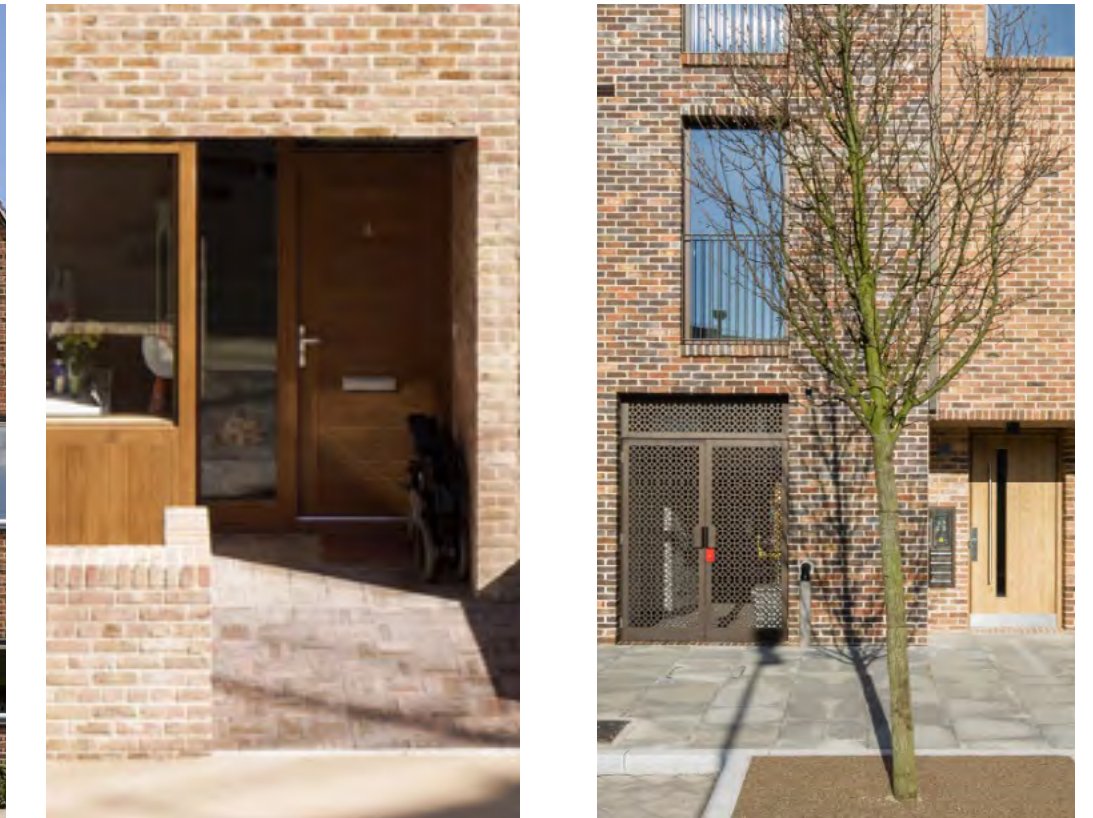


Figure 118. Use of architectural detailing and materials to differentiate entrances from service and storage access.



Figure 120. Use of varied material to emphasize on entrance to apartments. Mulberry Park, Bath - HTA Design

4.6 ARCHITECTURAL DESIGN

FA2. Frontages

Objective:

Frontages must be designed to create a streetscape with a distinct character that provides a safe and secure environment. There must be a clear distinction between the public and private areas, and where non-residential uses are provided the frontage must clearly address the public realm. Boundary treatments must be designed to contribute positively to the character of the Dunton Fanns.

Local Plan Policy: HP06, BE04, BE13, BE14, BE15 and NE01

Guidance

1. Relationships between building lines, setbacks, landscaping and continuity of frontages must be considered carefully.
2. A continuous frontage must be provided in the main boulevards and secondary streets. More articulated and broken frontage is only permitted in residential streets and edges.
3. Frontages must be located and designed to appear welcoming and must maximise overlooking to the streets and public spaces.
4. Dark hidden corners must be avoided.
5. Frontages of all main roads must be activated by the use of front doors or active non-residential ground floor uses.
6. All frontages must include some elements of soft landscape, in addition to well-designed hardscape, and must be designed to discourage its use as parking for vehicles.
7. Boundary treatments must include detailing which is high in aesthetic quality. This includes low brick walls, painted posts, railings and picket fences with planting.
8. Building elements such as bays and porches are allowed on frontages when they do not obstruct direct

long views as intended as part of the Dunton Fanns neighbourhood character.

9. Frontages may be used to accommodate parking spaces, waste and recycling storage and utilities boxes.
10. Continuous frontages must be utilised in all nonresidential uses, higher density areas and primary streets and boulevards.
11. Design must create a streetscape that feels safe, has activities concentrated along main streets and public spaces and provides users with a sense of enclosure.
12. Gaps between houses/flats must be avoided along primary streets and public open spaces.
13. Setbacks in residential development must generally take the form of a front garden which:
 - Are clearly defined as private spaces belonging to a particular dwelling;
 - Relate to the street type and volume of traffic in terms of treatment and depth. Frontage depths preferred are 2.5-3m for terraced houses, 5.5-6m for semi-detached houses and 1.5-2.5m for apartment blocks.
14. Setbacks in non-residential development must generally take the form of a front open zone which:
 - Is clearly defined as a transition zone from the public realm to the internal use of the building;
 - Relate to the street type and volume of traffic in terms of treatment and depth. Frontage depths should align along the street, and not detract from continuous views or create clutter and obstruct pedestrian flow, particularly at primary streets.
15. Continuous frontages must be utilised.
16. Design should create a streetscape that feels safe and provides users with a sense of enclosure.
17. Strong hedgerows and planting should be used to tie otherwise discontinuous built form to create a well-defined and connected streetscape.



Figure 121. Gaps between houses to accommodate parking, creating a stronger relationship with the streets. Cane Hill, Croydon - HTA Design



Figure 122. Use of landscape and boundary treatments to create continuous frontage Trumpington Meadows, South Cambridge

4.6 ARCHITECTURAL DESIGN

FA3. Elevations

Objective:

Elevations must be designed to positively contribute to the street environment and to the Dunton Fanns character, while creating high quality internal spaces which will be enjoyed by users. Proportions, character, materiality and provision of daylight to interior spaces must be considered simultaneously.

Local Plan Policy: HP06, BE04, BE14 and BE15

Guidance

1. Elevations of groups of buildings must be considered in order to create a coherent street elevation in terms of building proportions, materials, roofing and placement of doors and windows.
2. Elevations must be well proportioned, providing a balance between privacy, internal natural light and internal overheating.
3. Building façades must use the material palette of the neighbourhood.
4. Double height articulation could be used to reinforce vertical expression particularly in conjunction with openings along the primary streets and where non-residential uses are included.
5. There must be a clear and consistent placement of windows, doorways, shop fronts and façade signage such as retail.
6. The front of the building must be clearly oriented towards the more dominant streets.
7. Elements such as bay windows, and projecting parts of facades or even balconies allowed on frontages only when they do not obstruct direct long views as intended as part of the Dunton Fanns neighbourhood character.
8. Balcony designs are preferred recessed. Metal balustrade detailing must reinforce vertical rhythms. Recessed balconies create more usable spaces that offer protection from the prevailing winds and would not obstruct long views.
9. The use of windows on the roofs for houses located along the landscaped edges is encouraged.
10. Facades oriented south or west, where risk of overheating is anticipated, the use of external shading elements above openings as passive design measures is encouraged but they must be designed so as not to obstruct long views.



Figure 123. Extrusion of elements combined with material change can create visual interested and provide a varied roof-line expression. Hobson Road, Trumpington, Cambridge



Figure 124. Larger openings to capture long views within Dunton Fanns, Ansell Court, London. PRP Architects.

4.6 ARCHITECTURAL DESIGN

FA4. Roofscape

Objective:

The roof design must respond to the intended character of the Dunton Fanns neighbourhood and to the street, public space or landscape setting where it is located. Roofs of adjacent buildings must form a repeating composition in terms of their type, scale, pitch, orientation and projecting elements such as bays, porches, with only few exceptions.

Local Plan Policy: HP06 and BE14

Guidance

1. Building design must create ridge lines which are parallel to the long side of the building or the building block.
2. Buildings must be well proportioned with less dominant roofs.
3. It is preferable that roofs are continuous and avoid unnecessary stepping or staggering of building line.
4. Exceptions to continuity must only be used at corners, ends of rows or terraces to emphasize corners and/ or to highlight change in building functions.
5. Roofs of semi-detached houses must be designed as a symmetrical building.
6. Gables can be used at key building as they have a stronger presence in the streetscape.
7. At apartment blocks, recessed roof or flat roof articulations are encouraged. The top of the block can be articulated and can be distinct from the floors below. If an architectural massing solution is not employed on the top floor, then the differentiation must occur through a change in material and/ or architectural expression.



Diagram 51. Varied roof lines for the apartment blocks .Bruyn's Court, South Ockendon, Essex - Bell Phillips Architects



Diagram 52. Gables creating a stronger presence along the streetscape. Marmalade Lane, Cambridge - Mole Architects



Diagram 53. Continuous roofing along a continous building line. Horsted Park, Kent - Proctor & Matthews



Diagram 54. Differentiation of the roof through architectural detailing and materials.

4.6 ARCHITECTURAL DESIGN

FA5. Materials

Objective:

The use of materials in Dunton Fanns must reflect the building uses. In addition to aesthetic value, materials must allow homes to last longer, perform efficiently and have low maintenance requirements. The use of materials must clearly demonstrate a design rationale, and be used to distinguish key elements or functions of buildings or within buildings.

Local Plan Policy: HP06 and BE14

Guidance

1. Tones of red brick are recommended, and the occasional use of yellow is permitted.
2. Complementary materials may also be used for limited detailing where it complements the primary materiality.
3. Metalwork railings should be used for boundaries.
4. Entrance doors should use colours which blend well with the red or yellow brick dominant tones.
5. Entrances of non-residential uses can have other more contrasting colours in key elements such as shop fronts and signage. However these need to be considered together as a composed elevation along the street.
6. Material selection should contribute to the longevity of buildings and to their efficient performance. This should be reinforced by high quality, local availability and robust detailing.
7. Ground treatments such as stone or tiling should be used to create subtle delineation between semi-private areas of non-residential uses and public realm.
8. Materials used should be low-maintenance and durable. Attention should be given to the elements of the home which experience the most use.
9. Sustainability and performance (such as thermal retention) of materials should be considered.



Figure 125. Use of varied materials/ tones for detailing. Horndon on the Hill



Figure 126. Tone of red brick at the primary material. Horsted Park, Kent - Proctor & Matthews



Figure 127. Materials to reflect a domestic character within the residential areas. Trumpington Meadows, South Cambridge



Figure 128. Materials to reflect a domestic character within the residential areas. Horndon on the Hill

4.6 ARCHITECTURAL DESIGN

FA6. Innovation Park

Objective:

The architectural design of the Innovation Park must be unique and contemporary. The choice of high-quality materials must reflect its innovative character and express well its function as an employment area. It must be well integrated within the view corridor from the Farmstead to the Church of All Saints.

Local Plan Policy: BE14 and R01

Guidance

1. Buildings must utilise a contemporary materiality with fittings and fixtures which are industrial or business-like in style. These must reflect the aspiration of the Innovation Park as a modern village in Essex.
2. An emphasis on verticality and rhythm in the façades must be designed in, with some or no secondary horizontal elements. This will help create a character that is unique to the Innovation Park. Exposed rainwater pipes, panel joints and other vertical features must be considered to emphasize verticality and modernity in elevations.
3. Buildings must be set within landscape, where possible, to accommodate additional services, heights or mass.
4. Consistency of materials and design quality must be maintained across all sides of the buildings, including sides and back elevations as these will be visible from nearby roads and landscape.
5. Large windows and/ or curtain walls of floor to ceiling glazing is encouraged for office buildings and office elements of industrial buildings to maximise visibility between built form and adjacent public realm, and to seek to maximise internal natural light in the workspaces.

6. Add prominent and carefully detailed elements to the façade, such as entrance lobbies and canopies.

7. Facades oriented south or west, where risk of overheating is anticipated, the use of external shading elements above openings as passive design measures is encouraged.

8. Roofs must be clean with strong edges. Plant screens and visible external plant areas must be avoided but green roofs are encouraged.

9. The roof design must be discrete and not obstructive nor visually competing with the key dominant view element, the grade II listed Church of All Saints. For example, advertisement or structures which obstruct or dominate the view to this heritage asset will not be allowed.

10. Services and refuse areas must be screened and secured, especially when they front onto public areas.



Figure 129. Buildings set within landscape. Harlow Science Park



Figure 131. Emphasis on verticality with the use of curtain walls. Alconbury Incubator - AHMM Architects



Figure 130. Large windows that maximise internal light. North-west Cambridge Business Park - Stanton Williams Architects



Figure 132. Emphasis on the entrance lobbies and canopies. Sky Campus, Osterley London



Figure 133. Consistency in design across all the buildings. ake/ Grow Alconbury Weald - AHMM Architects

4.7 PUBLIC REALM

FP1. Trees

Objective:

The development must respect existing trees, promote their health and new trees should be selected for form, character and seasonal interest. Within Dunton Fanns, trees with a formal habit will be chosen for the Squares with large scale specimen trees used elsewhere.

Local Plan Policy: NE01, NE02, NE03 and R01

Guidance

1. Street trees should be installed with a minimum girth of 20-25cm.
2. Trees within open spaces will vary, with a mixture of 20-25 and 25-30cm girth.
3. Within the Market Square, Mobility Hub and School Square trees should be installed with a minimum girth of 30-35cm.
4. Ancient woodland should be protected and conserved whilst access should be maintained for new and existing residents.
5. Tree pits planted in hard surfaces should be provided appropriate recommended rooting volumes and a cellular root system installed as required by the Local Authority.
6. The location of such features should be informed by the need for suitable space and environments to establish, thrive and survive, avoiding negative effects on the highway and properties from potential root damage, and visual impairment and safety compromise.

4.7.1 Tree girth will vary across the character area and must be used to provide instant impact and a sense of place where these will be most beneficial. Large, formal spaces such as the Market Square and the Mobility Hub, as well as the key entrances to the neighbourhood, will receive standard size trees. Open spaces and street trees will vary by location and include a mixture of standard and semi-mature size trees. Trees will be selected for their form, character and seasonal interest. They should vary by location and be suitable for their place. This includes considerations of aspect, soil type and immediate habitat.

4.7.2 The Ancient Woodlands should be protected and conserved with an additional buffer of native woodland implemented along the ancient woodland boundaries.



Figure 134. Carpinus betulus



Figure 135. Betula pendula



Figure 136. Prunus avium 'Plena'



Figure 137. Prunus cerasifera 'Nigra'



Figure 138. Pyrus calleryana 'Chanticleer'



Figure 139. Acer campestre 'Elsrijk'

4.7 PUBLIC REALM

FP2. Streetscape Materials

Objective:

Materials used in the streetscape and hardscape of Dunton Fanns should reflect the formal character of the neighbourhood and its importance as the gateway to the rest of the village.

Local Plan Policy: BE05, BE12, BE14, BE15 and R01

Guidance

1. High-quality materials should be used for open spaces with natural stone surfacing and edging in the square and resin bonded paths in the softer areas and clay pavers in the greens.
2. Within the residential streets and neighbourhood areas, tumbled block pavers should be used for footways, parking areas and shared surfaces. Parking bays will be delineated by flush textured kerbs or block in contrasting colours and not painted lining.
3. All paths which provide a key link between areas must be hard surfaced and lit.
4. Paths which are surfaced in self-binding gravel with no edging or unmachined log edging through to informal self-binding gravel paths, through woodland areas, must only be for lightly used leisure and recreational use.
5. A palette of sandy colours will be used in the neighbourhood areas.



Diagram 55. Dutch clay brick



Diagram 56. Resin bound paths with metal edging



Diagram 57. Natural stone - use of small format and textured units beneath trees



Diagram 58. Concrete block

FP3. Street Furniture

Objective:

The design of the street furniture should reflect the formal nature of Dunton Fanns. All street furniture must be well designed and should take into consideration accessibility, the principles of inclusive design and must complement the surrounding landscape character and architecture to enhance the sense of identity and place.

Local Plan Policy: BE14 and R01

Guidance

1. Street furniture should be predominantly powder coated metal in dark greys with timber highlights.
2. Materials and furniture should be selected from a coordinated palette in order to create a coherent identity. Furniture and materials must complement the surrounding landscape character and architecture to enhance the sense of identity and place.
3. Furniture should address the needs of all, be accessible and inclusive.
4. Trees within the Market Square, School yard and Mobility Hub must be uplift.
5. Within a standardised range, there must be related forms, repeated key features and consistent materials, finishes and colours.
6. Furniture and signage should be selectively placed so that they are an attractive addition to the scene and avoid clutter.
7. Products must be robust in construction, elegant in style and use component parts that are easily replaceable.
8. Furniture should be constructed from sustainable sources, timber from accredited sustainable forests and recycled materials used if appropriate.
9. Engagement with the Highway Authority is required when designing and locating street furniture.

4.7 PUBLIC REALM

Entrances

10. Furniture and materials must be used to highlight entrances from open spaces. Interpretation and seating must be placed at key locations, so they also become orientation and meeting places.

11. Entrances must be configured so that they are accessible to wheelchair users.

Resting Places

12. Resting places must be provided at regular intervals along linear routes in compliance with accessibility advice.

13. Locations must be chosen to maximise the enjoyment of views, provide focal / destination points along the route and create places of interest.

14. Sufficient and well-designed cycle parking must be provided at key points.

External Lighting

15. External lighting must be kept to a minimum with light fittings that minimize intrusive light spillage beyond the intended area of public realm to be lit.

16. Open spaces must be lit only, if necessary, to provide safe identifiable routes or to provide feature lighting.



Figure 140. Landscape Forms Parc Vue Seat



Figure 141. Bollard



Figure 142. Tree grille - contemporary



Figure 143. Cycle stands - Edge tyre STE310 with powder coated colour



Figure 145. Litter bins - Metalco Box Wood and Steel 100L litter bin



Figure 144. Tree uplighting



DUNTON HILLS
GARDEN VILLAGE



NEIGHBOURHOOD: DUNTON WATERS

5.1 DUNTON WATERS VISION

5.1.1 Dunton Waters is located in the southern area of the Garden Village. Its character is defined by the historic ponds and wetlands (blue infrastructure) which will be largely retained in the new neighbourhood.

5.1.2 The vision for Dunton Waters is for a community-led neighbourhood which maintains a close relationship with its water bodies and allows residents easy access to those assets. It will become an area with bright buildings aligned along green streets, leading on to ponds and lakes. It will be the most tranquil area of the Garden Village.

5.1.3 The neighbourhood of Dunton Waters will:

- A. Have a village atmosphere of quietness and tranquillity.
- B. Allow for local views towards the blue infrastructure.
- C. Provide connections from housing plots towards the ponds, community spaces and playing fields.
- D. Have a well-connected landscape framework.
- E. Provide architectural compositions and materiality that will be reminiscent of water. Material palletes will reference reflections and brightness.
- F. Have a primary and secondary school that are accessible by safe green walking and cycling routes as well by as public transport.
- G. Provide a range of homes of different typologies which respond to the ponds and open spaces surrounding the development plots
- H. Have a range of densities, including medium to higher densities, with more terraced house typologies and non-residential uses along its primary avenue, with medium densities towards the edges.



Figure 146. Illustrative View of Dunton Waters

5.2 NEIGHBOURHOOD OVERVIEW

5.2.1 Dunton Waters will be a predominantly residential neighbourhood with a local hub, a primary school, a secondary school and community spaces arranged around water bodies of varying scales and histories. The neighbourhood hub will be surrounded by medium to high-density development and be designed with direct connection to the larger water bodies. Lower density housing should then surround the denser areas and include incidental open spaces, most of them also to be designed around water features. The setting of the neighbourhood must facilitate reaching out to these landscaped spaces. Additionally, there will be other local views to nearby heritage and woodlands and long views towards London.

W1. Neighbourhood Design

5.2.2 The urban structure of Dunton Waters is illustrated in the adjacent diagram. The landscape and topography allow plots that are varied in their character and layouts. These plots should be developed in relation to views and vistas towards the water bodies.

5.2.3 Detached and semi-detached houses must be the main house types in Dunton Waters with the exception of Waters Avenue, where terraced houses are more appropriate to create a more continuous street edge.

5.2.4 The suggested entrance to the school also marks the location of the neighbourhood hub which will be characterised by a more compact urban grain with smaller plots and gardens.

5.2.5 The bus routes along the primary and secondary streets will act as a spine for the neighbourhood, from which residential streets flow into the landscape. Marker buildings can be used to improve legibility within the neighbourhood, particularly at corners, as illustrated in the adjacent diagram.

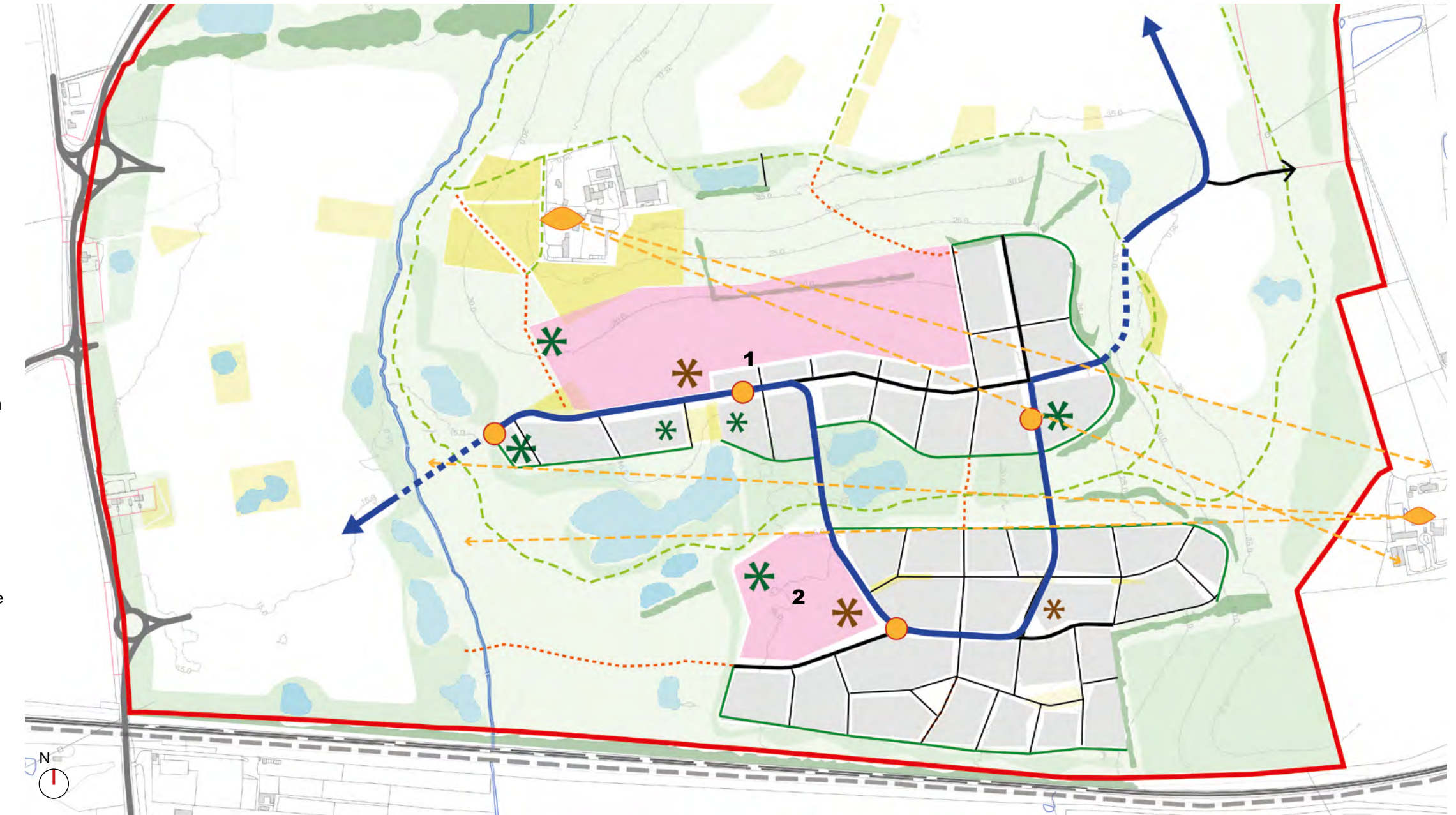


Diagram 59. Dunton Waters neighbourhood design plan

KEY

SITE BOUNDARY	PRIMARY STREET	MARKER BUILDING - GATEWAY
C2C RAIL LINE	SECONDARY STREET	MARKER BUILDING - PUBLIC AREA
STREAM	TERTIARY STREET	MARKER BUILDING - LANDSCAPE
20M BASE OF RIDGE	LANDSCAPE EDGE STREET	HERITAGE ASSETS
WATER BODIES	BUS ROUTE ALONG PRIMARY STREET	WIDER CONTEXT VIEW CORRIDORS
DEVELOPMENT PLOTS	BUS ROUTE ALONG GREEN EDGE	SCHOOLS
INFORMAL LANDSCAPE - WOODLANDS	BUS STOP	SECONDARY SCHOOL
INFORMAL LANDSCAPE - OPEN LAND	PEDESTRIAN/ CYCLE CAR FREE ROUTE	PRIMARY SCHOOL
FORMAL SPACES	WELLNESS TRAIL	

5.3 LANDSCAPE DESIGN

Overview

5.3.1 Dunton Waters is located in the south east corner of the Garden Village, framed by the ridge line to the north and east and the wetlands area to the west. The Eastlands Spring marks the low point and the transition from the Fenland landscape in the west to the hills, and woodland in the east. The watercourse itself provides a legible feature within the landscape being clearly identifiable through the willows and poplars that line its banks.

5.3.2 Dunton Waters is more informal and natural in character incorporating a variety of landscape types from the Village Green to the Eastlands Spring corridor and Wetlands in the lower lying area to the south, naturalised re-wilding area to the south east, productive landscape by Dunton Hills Farm to the more open grasslands of The Ridge.

5.3.3 The landscape vision for Dunton Waters is to celebrate the intrinsic hydrology of the site through imaginative sustainable drainage, planting and ecological enhancements. Dunton Waters provides a tangible link to nature throughout the neighbourhood bringing riparian features to the forefront of the scheme.

WL1. Play Strategy

Objective:

Play and recreation must be adequately provided to support children of all ages in order to promote healthy and active lifestyles and to encourage learning through play.

Local Plan Policy: NE05 and R01

Guidance

1. Play provision should be in accordance with Brentwood policy standards
2. The site contains a secondary school which must be capable of supporting community sports events and share pitches and changing facilities.
3. The site must contain a suitable area for football and cricket.

5.3.4 The Dunton Waters character area is defined by a number of existing features. The ridgeline wraps the northern and eastern edges which forms a natural bowl that falls to the Eastland Spring in the west. This fluvial feature includes a wide, flat floodplain and bankside tree planting. The play areas will lend heavily from these two dominant features and the theme of water. Play spaces should include playful SuDS features such as swales, water play and include planting suited to these conditions. Informal play opportunities should be explored throughout the character area; especially in the wetlands, adjacent to the pond and along the Eastlands Spring.

5.3.5 Schools traditionally have large amounts of both equipment and space for sports provision during school hours. However, the use of these things is generally limited. Community use of school facilities will be explored in order to unlock their potential outside of school hours – late afternoons/evening, weekends and outside of term time.

5.3.6 Space should be provided for both football and a cricket pitch in different locations. These should both be located outside of the wetland area to ensure they are playable in all weathers and conditions.

5.3.7 The cricket pitch should be planned so that the cricket square is at least 80 metres away from sensitive uses such as residential and roads in order to avoid ball strike risk. The cricket pitch should be supported by a clubhouse, practice nets and car/cycle parking to ensure that it is fit for purpose and responsive to user needs. A ball strike risk assessment should be prepared to inform the masterplan for this area.

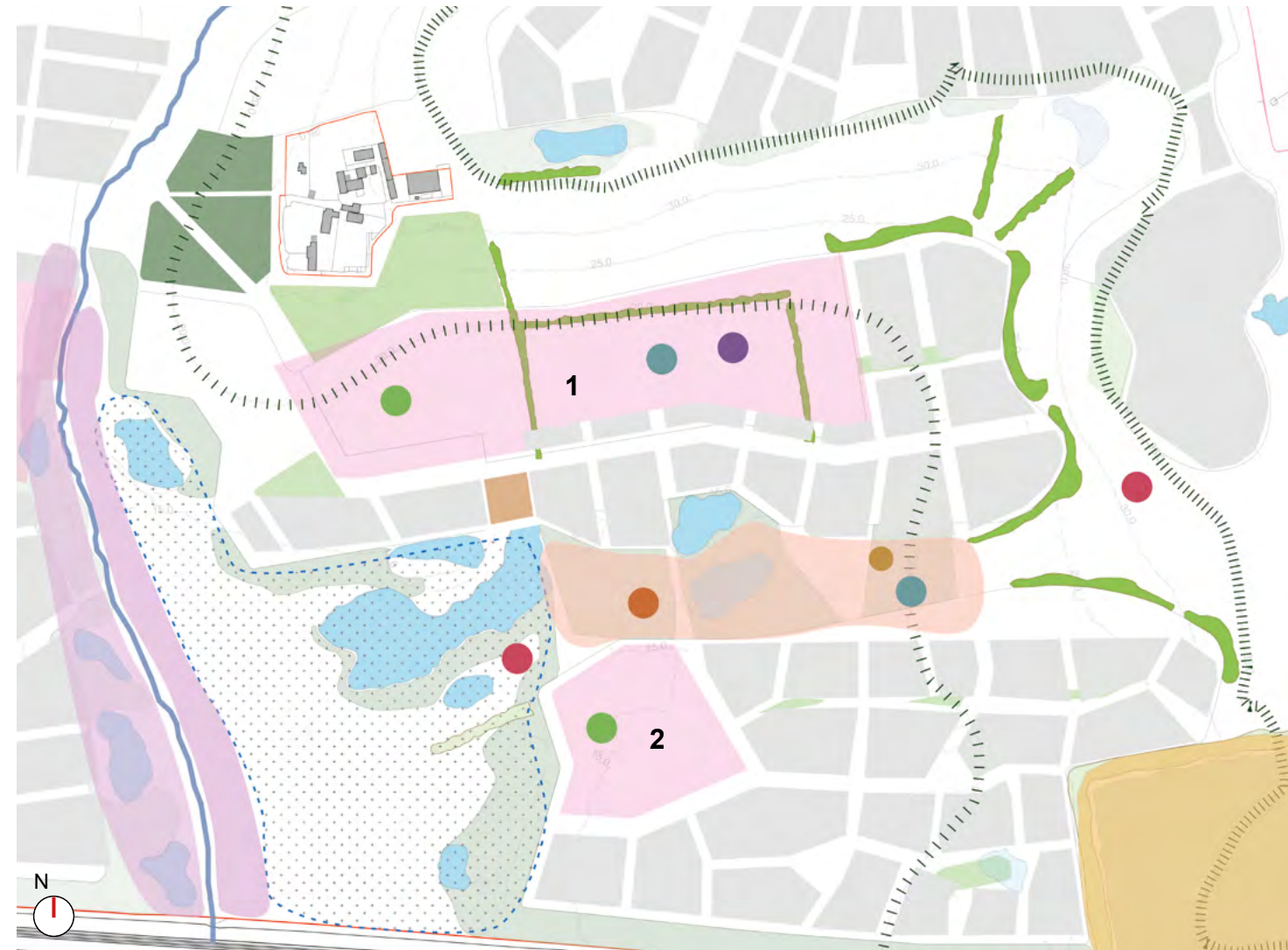


Diagram 60. Dunton Waters Landscape Design Plan

KEY

	SITE BOUNDARY		WETLAND AREA
	C2C RAIL LINE		COMMUNITY PARK
	STREAM		LEAP
	20M BASE OF RIDGE		MUGA
	PONDS AND ATTENUATION BASIN		SCHOOL SPORTS PROVISION
	DEVELOPMENT PLOTS		COMMUNITY SPORTS PROVISION
	PARKS AND OTHER OPEN SPACES		NEIGHBOURHOOD EQUIPPED AREA FOR PLAY (NEAP)
	MEADOW		CRICKET PITCH
	HEDGEROWS		1 SECONDARY SCHOOL
	ANCIENT WOODLANDS		2 PRIMARY SCHOOL
	EASTLANDS SPRING		

5.3 LANDSCAPE DESIGN

WL2. Sustainable Drainage

Objective:

The Dunton Waters SuDS strategy must utilise existing water bodies as well as new surface features to celebrate the water cycle and provide a range of surface water features helping to strongly define the character area.

Local Plan Policy: BE05, NE02 and R01

Guidance

1. As with the site-wide strategies, the SuDS design must work with the existing topography, geology and hydrology.
2. The character area should respond to Eastland Springs, respecting this existing water course.
3. The neighbourhood contains a large area of wetlands which should be used as part of the rainwater runoff strategy and will be integrated sensitively into the landscape with marginal planting, a varied bank profile and habitat variations.

5.3.8 The landscape vision for Dunton Waters is to celebrate the intrinsic hydrology of the site through imaginative sustainable drainage, planting and ecological enhancements. Dunton Waters provides a tangible link to nature throughout the neighbourhood bringing riparian features to the forefront of the scheme.

5.3.9 New Fenland meadows will enhance the Eastlands Spring and blend the Fanns and Waters neighbourhoods. Existing ponds and surface features will be enhanced, with additional wet meadow planting. A suitable habitat should also be provided for the translocation of Great Crested Newts.

5.3.10 Swale, attenuation ponds, raingardens and filter strips will all be used to enhance the water cycle. Where existing hedgerows are retained (mainly in the east of the character area) any adjacent linear drain will also be retained as part of the natural water cycle. Development should seek to provide not only centralised SuDS attenuation features to serve multiple adjacent residential parcels, but also additional spaces for SuDS within land parcels to allow source control measures and water quality improvements. They should also address rainwater/storm water reuse as a potential option/solution to manage surface water flooding. SuDS solutions may vary across the site depending on factors such as topography and infiltration.



Figure 147. Neighbourhood play - landscape treatment and materiality integral to design



Figure 148. Meadows



Figure 149. Board-walks and wetlands



Figure 151. Allotments

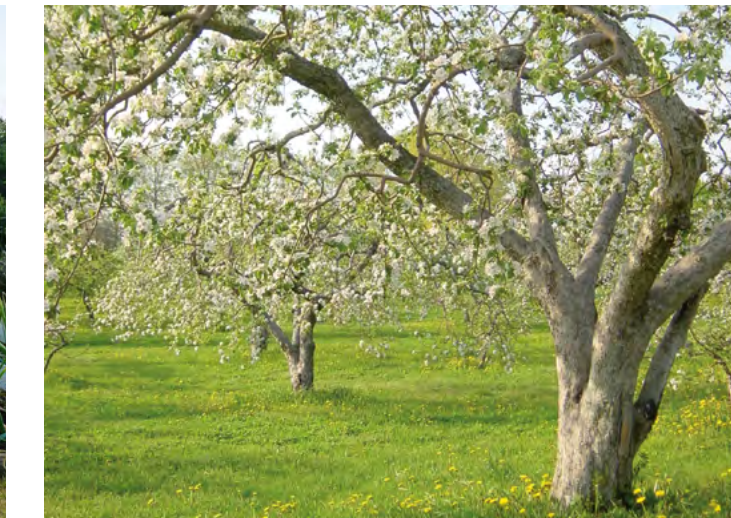


Figure 152. Orchards



Figure 150. Watercourse crossing points



Figure 153. Bird screens and viewing areas

5.4 LANDSCAPE INTERFACE

WI1. Wetlands

Objective:

Enhancements to the existing watercourses at the wetlands must be implemented.

Local Plan Policy: NE01, NE02 and R01

Guidance

1. Enhancements to the existing watercourse must be provided. These include modifying its channel to introduce a more natural and varied profile with marginal shelves and banks.
2. A strategy should be developed that permits regular management and access whilst introducing greater biodiversity.
3. The grasslands should provide important habitats as well as new walking and recreational trails.
4. The design of all trails should incorporate a combination of accessible areas for people of all ages and abilities.
5. A series of interconnected wetland basins, scrapes and promontories should be introduced.

5.4.3 Grasslands will provide important habitat as well as new walking and recreational routes which form part of the wider Dunton Green Village Wellness Trail. These areas will incorporate opportunities to play and learn and a network of boardwalks, bridges, bird hides and points of interest for visitors. The design should incorporate a combination of accessible areas for people of all ages and abilities.

5.4.4 A series of interconnected wetland basins, scrapes and promontories should be introduced to drain water and attenuate surface water drainage from the new development. These wetland features would be seasonally wet, in addition to the permanent water bodies. Development should seek to provide not only centralised SuDS attenuation features to serve multiple adjacent residential parcels, but also additional spaces for SuDS within land parcels to allow source control measures and water quality improvements. They should also address rainwater/storm water reuse as a potential option/solution to manage surface water flooding. SuDS solutions may vary across the site depending on factors such as topography and infiltration.

WI2. Re-Wilding Area

Objective:

New habitats in the re-wilding area must be provided for the benefit of local wildlife. Opportunities for outdoor learning must be explored however access must be limited and wildlife must be prioritised.

Local Plan Policy: NE01 and R01

Guidance

1. Enhancements to the re-wilding area to the south east of the site should be provided.
2. Habitats should be provided for the benefit of local wildlife.
3. Swales, tree clumps, native hedgerows, glades and wildflower meadows will be provided.
4. Outdoor learning opportunities should be explored. However, access should be limited and wildlife should be prioritised.

5.4.1 The Wetlands provide a new major recreational resource set within a mosaic of wetland habitats hung off the Eastland Spring. These habitats include the Eastland Spring itself as well as existing and proposed ponds, areas of SuDS, attenuation troughs and periodically wet grassland.

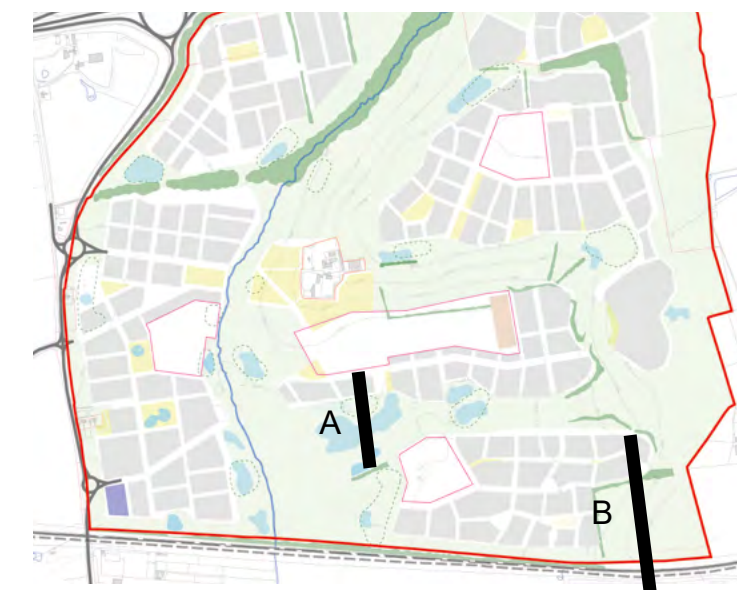
5.4.2 Enhancements to the existing watercourse is proposed by modifying its channel to introduce a more natural and varied profile with marginal shelves and banks which will enhance biodiversity and its visual appeal. These areas of habitat enhancement can be achieved in areas outside of the Root Protection Areas of existing trees to ensure their retention and continued good health. A strategy should be developed that permits regular management and access whilst introducing greater biodiversity. Habitat enhancements to the existing ponds will include creation of marginal shelves and planting.

5.4.5 The re-wilding area to the south east of the site is the final part of the ecology corridor (the others being the Plateau and the addition to North Woods). It sits adjacent to the Langdon Nature Reserve and acts to provide additional habitat creation for the benefit of local wildlife.

5.4.6 Opportunities for educational purposes should be explored especially for young people learning about natural cycles and habitats. However, access should be limited to ensure that wildlife is prioritised; this is not an amenity location for residents but a haven for nature.

5.4.7 Swales, tree clumps, species rich native hedgerows, glades and wildflower meadows will be provided. This will promote a broad range of habitats to encourage insects, invertebrates, birds and mammals.

KEY PLAN



5.4 LANDSCAPE INTERFACE



Figure 156. Defensible Planting



Figure 157. Proposed Pond



Figure 159. Boardwalks



Figure 162. Timber Jetty



Figure 161. Marginal habitats to pond



Figure 158. Play Area



Figure 160. Scrubland and Meadow



Figure 154. Swale



Figure 155. Enhanced existing hedgerow



Figure 163. New hedgerow and tree clumps



Figure 164. Glades

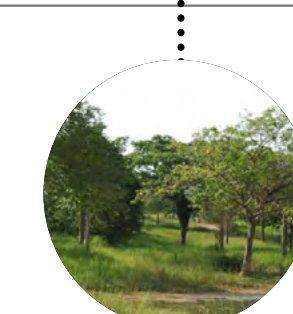


Figure 165. Re-wilding Zone